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सभी संपादकीय दायित्व पूर्णतः अवैतनिक हैं।

नोट- प्रकाशित आलेखों के विचारों से सम्पादक व प्रकाशक की सहमति अनिवार्य नहीं है। समस्त वाद का क्षेत्र कानपुर होगा।

स्वत्वाधिकारी, प्रकाशक एवं प्रबन्ध सम्पादक सर्वेश तिवारी 'राजन' द्वारा पूजा प्रिन्टर्स हमीरपुर रोड, नौबस्ता, कानपुर-208022 से मुद्रित एवं सुपर प्रकाशन के -444 'शिवराम कृपा', विश्व बैंक बर्रा, कानपुर-208027 से प्रकाशित। सम्पादक - Mkw Kkui Hkk vxoky eks 8707047802 A सम्पर्क - मो.- 08896244776, 09335597658 E-mail: super.prakashan@gmail.com, Website : www.abhinavgaveshana.com



From the Editor Desk

A part from the failure to redistributive land and the subsequent neglect of the Agricultural sector, neglect of human development etc. are the major factors that are involved to explain the economic decline of Kanpur. On another level, rampant corruption, the problem of traffics a dismal law and order situation, the breakdown of public infrastructure, the lack of proximity to major ports and labour current have thwarted the Industrial Development of the city Kanpur.

An insecure New Delhi too played a role to block the emergence of leaders in a promise that controlled nearly 120 seats in the house of parliament before the formation of Uttarakhand. The resultant lack of political stability meant insufficient attention to the problems of Uttar Pradesh that is more populous than Brazil; Hence no need to talk about Kanpur only.

The decline of this Old Industrial City, located in the Centralwestern part of the state Uttar Pradesh, was founded way back in 1803, and became one of the most important commercial and military stations of British India; started declining mainly after 1980s. Untill 1980s, some of the engineering graduates from the prestigious IIT, Kanpur used to find jobs in the city itself, but the scene changed with the advantage to globalisation, when no one stayed back. And, after the decline of its industries, Kanpur returned to seed with undue haste. It used to be a modern city equipped with a whole range of leading higher education and tertiary healthcare institutions, an array of railway stations, an airport, power plants, wide roads, a variety of cinema halls, libraries, a bustling philatelic bureau and a leading Hindi daily. A city so vibrant lost its glory, but it went unnoticed, or we can say no efforts have been taken to take care of the city. A city located very close to the capital city of Uttar Pradesh, i.e., Lucknow has been lagging for behind in the field of development. Kanpur, was treated mostly as a step child by the political power of the state, while the contribution of the city in the GDP of Uttar Pradesh comes under the top five cities.

We know, that the biggest setback in the development of Kanpur was the



labour unrest, which forced the industries to shut down. Labourers, became unemployed; Some of them got shelter in Rickshaw Pulling, Vending fruits vegetables etc., while others opted the path of theft, pickpocketing etc. Some of the industrialists, shifted their bases to other cities, while some stayed back. Many of the world Famous Industries closed down, and the city came to standstill. But the problem didn't affect Kanpur only, the neighbouring cities Unnao, Etawah, Auraiya etc. were also affected as the labourers from these cities used to work in the Kanpur, are forced to migrate to Agra, New Delh, Noida, Ghaziabad etc. for their livelihood.

Many of such problems are discussed in this volume of "Abinav Gaveshna". I hope that our learned readers will be benefitted by the articles published in this volume. And, hope that we'll come out with more such articles in the near future.

- Dr. Jaya Mishra
Associate Professor -
Department of Economics,
Juhari Devi Girl's (P. G.) College,
Kanpur-208004 (U.P.)



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Synthesis and Characterization of Reactive Diluents : Effect of Blending with High Molecular Weight Epoxy Resin



- Dr. Sandhya Srivastava
Assistant Professor -
Dept. of Chemistry,
D.A. V. College, Kanpur-208001
(U.P.)

E-mail:
sandhyaknp2jan@gmail.com

Abstract

Generally, diluent is an organic liquid which is added to resin formulations to reduce viscosity, to ease flow, to improve the consistency and applicability. The term reactive diluent refers to a diluent which acts in both way as a viscosity reducer and a reactive species within a chemical system. However, the addition of diluent is generally associated with a reduction in mechanical strength, modulus and glass transition temperature. Therefore, the amount of diluent must be optimized by critically analyzing the thermo-mechanical properties while keeping the technical specification for a particular application in mind.

Present work represents the synthesis of aliphatic and aromatic reactive diluents which acts as a chemical intermediate, completely compatible and participate in the reaction due to presence of terminal 1, 2 epoxy group in their chain. This group is very reactive and easily participate in the reaction by opening of the ring. If added in epoxy resin, it will not disturb the basic characteristic of backbone chain of epoxy, but it will transfer its own properties to epoxy resin and produce a system with more versatility. Well optimized synthetic route of aliphatic and aromatic reactive diluents preparation will be helpful for preparing different epoxy formulations. On the basis of applications for different Industries, properly formulated final product will be a good import substitute in corrosion resistant coatings, civil applications, and structural adhesives.

Keywords: Epoxy resin, Reactive diluents, Epoxide Equivalent Weight (EEW), Butyl Glycidyl Ether (BGE), Phenyl Glycidyl Ether (PGE) etc.

Introduction-

Reactive diluents are compounds that might be used to replace organic solvents in conventional high VOC coatings (Volatile Organic Compound). Reactive diluents function like solvents in adjusting coating viscosity for various applications. However, rather than evaporating like conventional solvents,



reactive diluents participate in a chemical reaction with the coating resin during the curing process and become incorporated into the cured coating. Earlier research had indicated the use of vegetable oil derived from the Vernonia plant as a reactive diluent but somehow it cannot be exploited much. Use of reactive diluent in thermoset like epoxy resin to reduce or minimize volatile organic component has opened another area of research for scientists. Diluents are used in epoxy resin technology to reduce the viscosity of the mixed resin. In addition to provide for viscosity reduction, the diluents may be divided into three basic categories-

- Non-reactive diluents.
- Epoxy containing reactive diluents.
- Reactive diluents containing functional group other than epoxy.

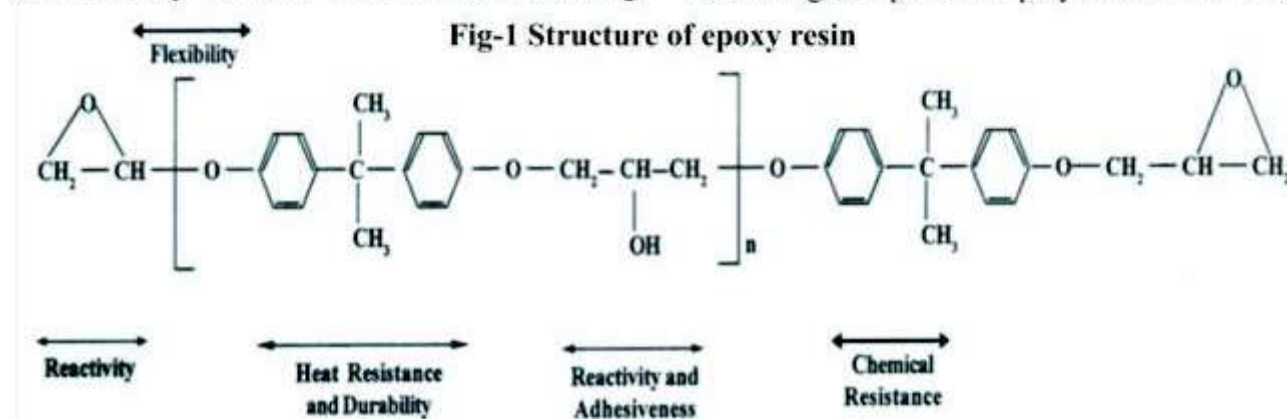
Epoxy containing reactive diluents are mono epoxide compounds, which participate in the curing reaction and reduce the crosslink density. However, the addition of diluent is generally associated with a reduction in mechanical strength, modulus and glass transition temperature. Therefore, the amount of diluent must be optimized by critically analyzing the thermomechanical properties while keeping the technical specification for a particular application in mind.

Compared to typical curing techniques reactive diluents allow the epoxy resins to be less viscous. This improves surface wetting and adhesion and also improves the pot life⁽¹⁾. The chemistry of epoxies and the range of commercially available variations allows curing

of polymers to be produced with a very broad range of properties. (See Figure - 1).

Epoxy resins are oxirane containing oligomers which cure through the reaction of epoxide group with a suitable curing agent. The epoxy groups at both terminals of molecule and the hydroxyl groups at the midpoint of the molecule are highly reactive, allowing wide range of modifications and room temperature as well as high temperature curing using suitable curing agent. The ether linkages included in the main chain improve the chemical resistant and flexibility. The benzene rings in bisphenol-A provide chemical resistance, adhesiveness, durability heat resistance and excellent electrical properties. The coexistence of hydrophilic groups with hydrophobic groups in molecule significantly increases the adhesion to various adherends⁽²⁾.

Time to time various modification done on the backbone chain like replacement of Bisphenol-A from other phenol like Bisphenol-F to enhance structural and thermal properties, Tetrabromo bisphenol to introduce thermal as well as flame retardancy and phenol-formaldehyde resin to enhance the adhesion as well as physico-mechanical properties etc.⁽³⁾. These modifications result modified resins for various sectors like aviation industry, automobile industry, civil construction, coating industry, ceramic and marble industry. Apart from above, several research work have also been done to incorporate the flexibility in the resin system by reacting long chain reactive hydroxyl group containing compound or polymers and to blend





different rubbers. By using this system at one direction we can increase some properties like flexibility, elasticity, spreadability and easy applicability but in other parts we reduce the properties like resistance to chemical, thermal and structural properties. To maintain these properties of the basic resin, reactive diluent containing oxirane ring in their backbone chain are developed after years of research by scientist and information available in patents. These materials are used in formulating epoxy resins to get the desired properties.

Bakar M and his coworkers⁽⁴⁾ studies the effect of reactive diluents and kaolin on the mechanical properties of epoxy resin. Nunez-Regueira L, et. al⁽⁵⁾ investigated the effect of reactive diluents on the curing and dynamo-mechanical properties of an epoxy-diamine system.

On the basis of application Multinationals like Huntsman, Dow and Hexion are using diluents in their system and formulating specific grades for specific applications on higher cost. The exploitation of correct reactive diluent, its synthesis and end product micro-macro property relationship still need research in this particular area.

Literature Review -

Epoxy resins itself are a broad class of versatile reactive compound. The need for a high degree of control over both network properties and resin processability make epoxy chemistry appealing for many applications. After its origin several work has been done to exploit the properties of epoxy resin, which is due to the various groups present in the backbone chain and their reactivity to various other groups. These groups convert epoxy resin to a thermoset resin by controlling the network properties and processability making epoxy chemistry appealing for many applications. Still various work on different labs is continuing to produce some different and advanced product.

Epoxy resins, Chemistry and Technology edited by C.A. May⁽⁶⁾ discusses a broad spectrum of work including fundamental research

regarding the reaction chemistry and cure of epoxies. A more recent review edited by Bryan Ellis⁽⁷⁾ also discussed the use of epoxy resin for various applications.

Epoxy resin chemistry was first reported in 1859 when Wurtz synthesized ethylene oxide from ethylene chlorohydrin using aqueous base⁽⁸⁾. The first production of epoxy resins occurred simultaneously in Europe and in the United States in the early 1940s.

Epoxy resin can be cured via addition reactions or homopoly-merizations. During the cure of epoxy resin there is initially linear growth with gain in a molecular weight⁽⁹⁾. These chains begin to branch and the gel point is reached when a sufficient amount of these branches interconnected to form a continuous three-dimensional network, which is insoluble and infusible. The viscosity increases with conversion until the gel point is reached along with increase of Tg. He also reported that at cure temperature above the glass transition of the system, the reaction is kinetically controlled.

Michael Vogel and Joeigvolle⁽¹⁰⁾ developed amino - amide epoxy adduct curing agent to enhance the pot life and the end properties of cured epoxy resin. They studied their system as adhesive, sealants and VP moulding compound.

Devendra Agarwal and Maithani Arun⁽¹¹⁾ enhanced the chemical resistance properties of epoxy resin by making vinyl ester resin, they first prepared multifunctional epoxy resin from novolac and reacting this resin with methacrylic acid to produce vinyl ester resin.

The main drawback of epoxy systems is their inherent brittleness. Most of the techniques for improving toughness are based on the addition of modifiers of an elastomeric or thermoplastic nature⁽¹²⁾. Among the toughening agents, reactive rubbers like liquid butadiene acrylonitrile⁽¹³⁾ or preformed rubber particles for example, core shell particles⁽¹⁴⁾ are widely used. These modifiers result in consistent improvements in terms of fracture resistance. However, their addition to epoxy system presents many limitations, especially in terms of the reduction of the glass



transition temperature and of the stiffness of the epoxy blends⁽¹⁵⁾ Lee and Neville⁽¹⁶⁾ in his book defined the diluent used in epoxy to decrease the viscosity of the resin system. S.J. Shaw⁽¹⁷⁾ also discussed the role of diluents and type of diluents used for epoxy system. According to him generally T_g are elevated when difunctional diluents are used to increase the network density. Yurugi Keige et. al⁽¹⁸⁾ discussed the reactive diluent composition and its effect on curing composition. They studied it from various angles like inducing photo radical polymerization and its effect on micro-macro properties. Smith et. al⁽¹⁹⁾ explain the role of reactive diluent in cycloaliphatic epoxy resin. According to him diluent having 3-12 carbon atoms between the glycidyl ether units is advantages. They also explained the role of epoxidized oil in the cycloaliphatic resin. Howard Kelin and Tom Marquies⁽²⁰⁾ of Huntsman corporation discussed on cyclic organic carbonates which serves the purpose of solvent as well the effect of different concentration on various properties of epoxy resin.

Piotr Czub⁽²¹⁾ studied the effect of modified natural oils as reactive diluents on epoxy resin. Piotr studied the viscosity behavior of epoxy resin and calculated the flow activation energy using Arrhenius equation. He also studied the water absorption and mechanical properties of the resin. Victor⁽²²⁾ studied the effect of diluent on the epoxy formulated for stone marble and stone. On reviewing the literature, it is observed that still work on synthesis and characterization of reactive diluent are required to understand its effect during curing of high molecular weight epoxy cured with polyamide resin, as well as the physical and

chemical properties.

Experimental -

Synthesis of Reactive Diluents Material Required-

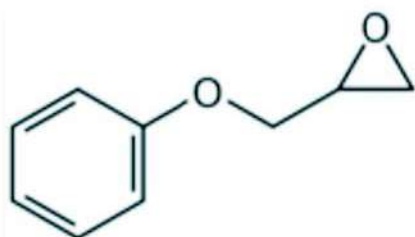
Normal butanol is decided for aliphatic glycidyl ether and phenol and cresol are decided for aromatic glycidyl ether. All these major ingredients like normal butanol, phenol, epichlorohydrin and caustic used in the reaction are AR grade, and arranged from Qualichem, SDS, and Merck etc.

Procedure-

The reaction was carried out in a three-neck flask equipped with condenser, stirrer and closing funnel especially designed for caustic addition. Normal butanol (1.5 mole) along with excess epichlorohydrin (8.0 mole) were taken in a flask and heated up to 50°C through heating mantle. At 50°C caustic was added in such a way that reaction temperature could not exceed above than 60°C. Total Caustic was added in four hours. During addition of caustic maintaining of temperature is very important.

After addition of caustic reaction was hold for 30 minutes at 55-60°C and reaction assembly was set for recovery of epichlorohydrin under vacuum. After complete recovery of epichlorohydrin the product was subjected for washing. Three washing with water was done and water was separated very carefully from the mixture.

After maximum separation of water, the product or glycidyl ether was subjected for distillation to remove the traces of water. The distillation was carried at 120°C - 150°C seeing the appearance of the product. During distillation vacuum was adjusted accordingly as soon as distillation was completed. The product was filtered through Buckner funnel containing cotton filter cloth of 30 mesh. The transparent very light-yellow tint product was collected and subjected for further analysis.



Butyl glycidyl ether



Phenyl glycidyl ether



The general structures of Butyl glycidyl ether and Phenyl glycidyl ether are as follows: (See Figure-2 in back page).

Characterization-

The synthesized material is characterized by chemical analysis like epoxide equivalent weight (EEW) and percent hydrolysable chlorine (ASTM standards). EEW is calculated by pyridinium chloride method which is reconfirmed by hydrogen bromide method.

The structure of synthesized material is confirmed by infrared and nuclear magnetic spectroscopy. Amount of curing agent will be calculated by evaluating amine value of the amide hardener and epoxy equivalent weight. The curing time and temperature is evaluated from dynamic and iso thermal scans of Differential Scanning Calorimetry. The optimized product will be subjected for physical as well as chemical resistance properties in different medium and environment at different temperatures.

Result & Discussion -

The chemical analysis like epoxide equivalent weight (EEW) and percent hydrolysable chlorine were evaluated to confirm the presence of epoxy group in a backbone and amount of free chlorine present as impurities in the product. The epoxide equivalent weight is calculated by using pyridinium chloride method and also reconfirmed by hydrogen bromide method as discussed in lee and Neville¹⁶. (See Table 1 & Figure-2) Depicts the results of the first trial of BGE (Butyl Glycidyl ether).

(a) EEW - Epoxide equivalent weight determination from pyridinium chloride method.

(b) EEW - Epoxide equivalent weight determination from Hydrogen Bromide method.

On the basis of the final result achieved it is decided to carryout few further reactions on the above parameters, using same molar ratio to reproduce the result. After getting the same result, trials will be planned for better recovery of epichlorohydrin because the economics of the production is dependent on this factor. Reduction

Table 1 - Summary of Chemical and IR Analysis

Product	Tested Parameter			
	EEW ^a	EEW ^b	% Hydrolysable Chlorine	IR Analysis Oxirane Ring Peak at
BGE (B1)	170	178	.31	1254 cm ⁻¹ 910 cm ⁻¹ 846 cm ⁻¹

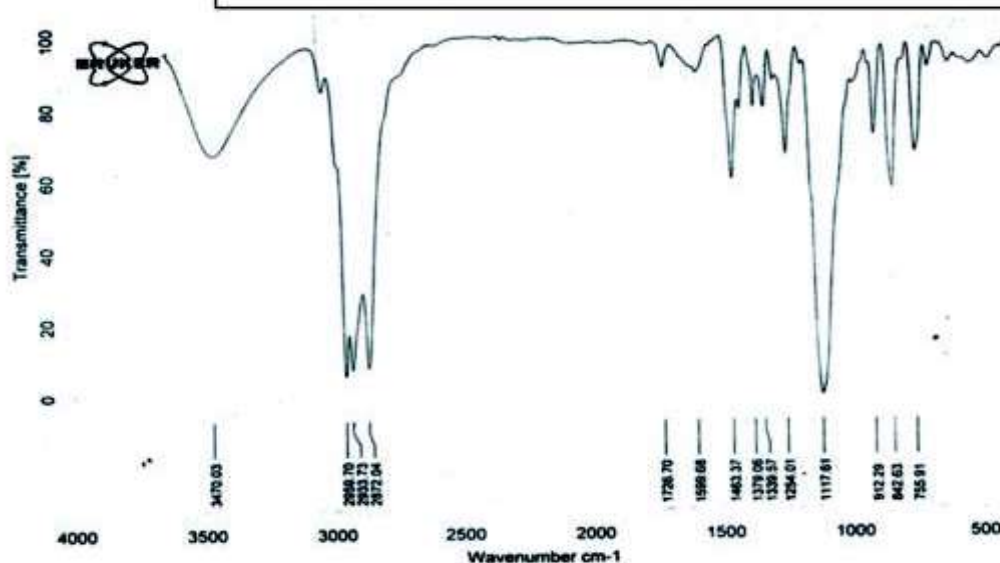


Figure-2 IR of Butyl Glycidyl ether (B1)



Table-2

Product	Sample Code	Reactant Molar Qty.			Reaction Parameter			
		Alcohol	Epichlorohydrin	Sodium Hydroxide	Addition Temp.	Addition Time	Recovery Tem.	Recovery Tem.
BGE	B1	1.5 mole	8 mole	.8 mole	50-60°C	4 Hrs.	120-150°C	10 Hrs.-14 Hrs.
	B2	1.5 mole	10 mole	to				
	B3	1.5 mole	12 mole	1 mole				
	B4	1.5 mole	15 mole					
PGE	P1	1.5 mole	8 mole	.8 mole	50-60°C	4 Hrs.	120-150°C	10 Hrs.-14 Hrs.
	P2	1.5 mole	10 mole	to				
	P3	1.5 mole	12 mole	1 mole				
	P4	1.5 mole	15 mole					

in percentage hydrolysable chlorine is also required. (See Table-2).

Table 2 shows the reactant ratios and parameters decided for the synthesis of BGE and PGE. All the samples will be prepared on the decided guideline and the well optimized product will be used further for blending in epoxy resin.

Synthesis of High Molecular Weight Epoxy-

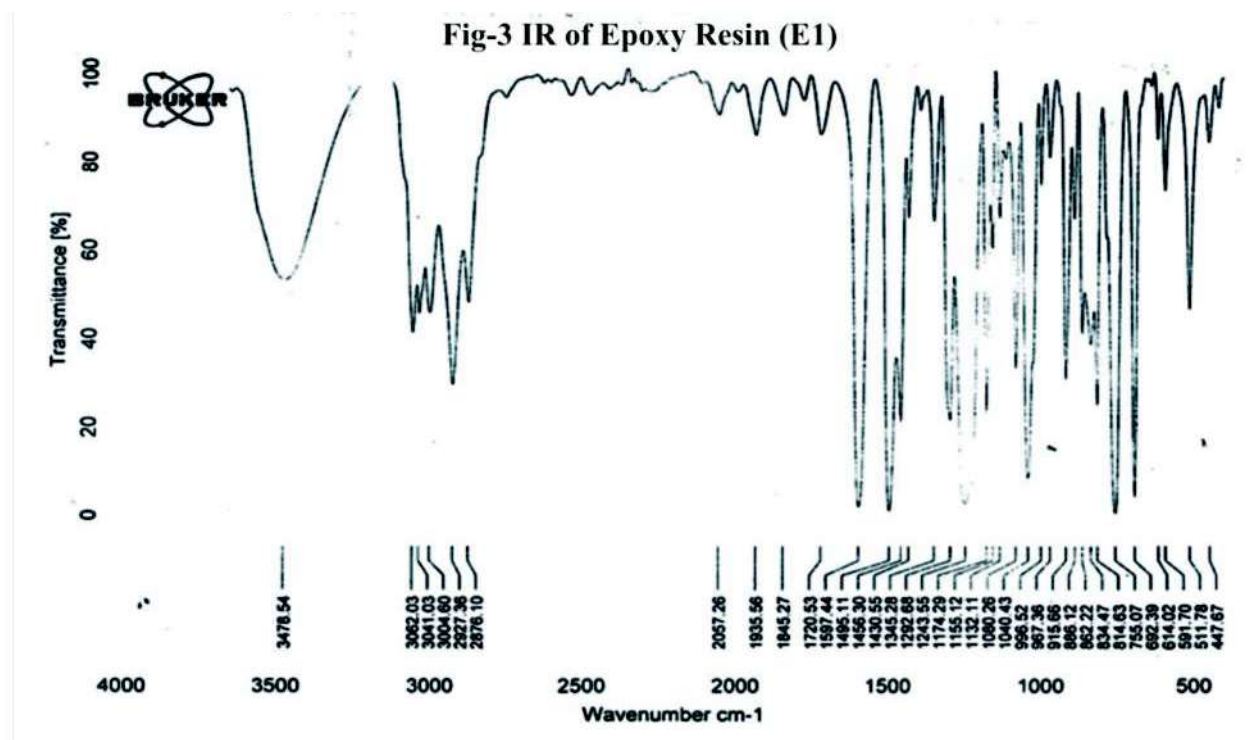
High molecular weight Epoxy resin will be synthesized in two steps, in the first step low molecular weight product will be synthesized which on further reaction with bisphenol - A gives high molecular weight epoxy resin. In first attempt one trial of low molecular weight epoxy is conducted. Table -3, depicts the reactant ratio and the reaction parameters of the trial. (See Table-3).

The prepared product is subjected for chemical as well as group analysis. The epoxide equivalent weight (EEW) and hydrolysable chlorine analysis were done according to method suggested in Lee and Neville⁽¹⁶⁾. The data is tabulated in Table-4, Figure-3 (See Table-4 & Figure-3).

The evaluated data of epoxy resin shows that reduction in percentage hydrolysable chlorine is very much essential and the recovery of epichlorohydrin which is about 30 percent has to be improved. Further reaction parameters are to be adjusted to get maximum recovery and less percentage hydrolysable chlorine i.e., in the range of .05 - .1%. In second step, after optimizing the low molecular weight epoxy resin, high-

Table-3

Product	Sample Code	Reactant Molar Qty.			Reaction Parameter			
		Bisphenol	Epichlorohydrin	Sodium Hydroxide	Addition Temp.	Addition Time	Recovery Tem.	Recovery Tem.
Epoxy Resin	E1	1.5 mole	12 mole	2 mole	50-60°C	6 Hrs.	120-150°C	10 Hrs.-12 Hrs.
	E2	1.5 mole	12 mole	2 mole				



molecular weight epoxy resin will be synthesized by adjusting the epoxide equivalent weight in the range 220-250.

Blending of Epoxy Resin and Reactive Diluent-

Well optimized reactive diluents and well optimized prepared high-molecular epoxy resins will be mixed in three neck flask under Nitrogen atmosphere at 70- 75°C. On the basis of the past findings of the patents 2.5, 5.0, 10 and 20% ratios of reactive diluents are decided.

By using these ratios sample will be

prepared and cured with polyamide curing agent. The quantity of curing agent will be decided on the basis of the values of epoxide equivalent weight and amine.

The curing temperature will be evaluated by dynamic DSC scan and the curing time will be evaluated by isothermal DSC scan running at temperature evaluated from dynamic DSC scan. The brief cure kinetics of the reaction will be discussed on the basis of data obtained from DSC

Table 4- Summary of Chemical & IR-NMR Analysis

PRODUCT	Tested Parameter			
	EEW ^a	EEW ^b	% Hydrolysable Chlorine	IR Analysis
poxy Resin (E1)	188	195	.31	895-915 cm ⁻¹ Oxirane ring 1220 ? ?? - ??- ?? 4000cm ⁻¹ ? Board Band due to hvdroxyl group
				NMR Analysis
				2.8-3.2ppm Due to Oxirane ring



scans. Medium.

The well cured system will be applied on panel and tested for water as well as chemical resistance in the following media at room temperature in different environment, like saline water, acidic solution (5 & 20%), basic medium (20% % 50% caustic solution) alcoholic medium and Glycol etc.)

Conclusion -

Present work is an effort to achieve low-cost reactive diluent which on blending with high molecular weight epoxy gives the following advantages-

Reduction in Viscosity -

- In turn offer easy applicability.

Good Penetration -

- Helpful in civil application where penetration up to micro cracks are required.

Better Wettability -

- Helpful in lamination and composites preparation. Lowering of exotherm -

- Less shrinkage, easy handling, reduction in Tg.

Improvement in 3D network-

- Improves dimensional and structural properties, improvement in adhesion.

Reactive diluents are used in coatings technology. The chemistry of diluents described here is the basic for a family of UV-Cure coatings that can be tailored to meet specification prescribed for a wide range of applications in aerospace and other industries. The amount of reactive diluents added to the formulations was very limited which favours environ friendly green composition.

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Child Labourers as Rag Pickers in India : A Sociological Investigation



- Dr. Preeti Dwivedi
Assistant Prof -
Department of Sociology,
Mahila Mahavidyalaya (P.G.)
College, Kanpur-208011 (U.P.)

E-mail:
preeti01@gmail.com

Abstract

Child labourers as rag pickers are gradually increasing in India showing an unfortunate scenario of any country. Shoulders on which school bags should be carried instead of sacks of garbage refrain them right to education. Such type of occupation make them more prone to different health hazardous ailments. With keeping concerns of child labourers as rag pickers the present study make an effort to access their working conditions and exploitation due to such occupation. The present study also explores their personal behaviour and perceptions towards rag picking.

For the same study 50 child rag pickers were selected for collecting information through purposive random sampling method from Kanpur city for collecting information. Result of the study shows that garbage picking harms children in all ways related to physically, mentally and emotionally. These innocent children who should spend more and more time studying and with their peers, most of the time they work for hours to earn their livelihood. Government and non - government agencies should educate these children and develop their personality in the best way. These agencies also make efforts to make these children free from drug addiction with the help of drug de - addiction centres by various. So that these children can become the best youth of tomorrow and society can develop in the positive way.

Rag pickers refers to the people who collect rags or waste or recyclable materials from roadsides, market places, a pile of waste dumping places in urban areas and sold them for money for their livelihood. In developing country like India more cases of children below 18 years are gradually increasing who are engaged in waste or garbage picking. In these countries industrialization are increasing continuously without using proper recyclable method of solid industrial waste (Furedy, 1990). Thus in developing countries more number of children are engaged in such type of neglected sector with their family members (Krishna and Chaurasia, 2016). Children involved in



rag picking are a worst form of child labour where children engaged themselves in a job or occupation which make them prone to different health hazardous diseases (WHO, 1988; Krishna and Chaurasia, 2016). Still less research work has been undertaken investigating the health risks involved in such type of work of rag picking (Kungnulskiti, 1991; Parasuramalu, 1993). It is very unfortunate that children who should spend time in school or with their play - mates spend more and more time in handling the garbage and keep their life busy with such type of risk prone job or occupation (Caroline, 1996). Rag pickers, on the one hand, are victims of many serious diseases due to their exposure with various pathogens during garbage picking, on the other hand they are also at equal risk of being pinched by many sharp and hazardous objects during picking of waste (Krishna and Chaurasia, 2016). In the same way the danger of being bitten by various stray animals like dogs or pigs remains the same (Krishna and Chaurasia, 2016).

Police harassment and negligence of people are severely faced by these children tremendously (Krishna and Chaurasia, 2016). Thus garbage picker children experience different physical, emotional and economic as well as sexual form of exploitation (Sekar and Kavitha, 2015). Different life-threatening difficulties and exploitation in childhood make their life tough there after they involve in different anti - social activities like stealing, drug abuse, pick - pocketing and prostitution (Pathwary et al, 2012; Bala and Singh, 2019). More frequency of children involved in anti - social activities as through picking of waste they are unable to fulfil even basic needs of life thus their involvement can be easily seen in different anti social activities to make money without efforts and hard work (Rauf et al, 2013).

Hard work demands a healthy diet, but in case of children involved in rag picking they cannot take a nutritious diet due to their lower economic conditions. Hence to fulfil the energy

of the body they seek for something else such as different illegal substances like narcotics and alcohol (Bala and Singh, 2019). Different illegal substances are consumed by child rag pickers e.g. marijuana, methamphetamines and ecstasy (Mathus, 2009). Smoking, chewing tobacco and alcohol consumption are most popular sources of enjoyment for garbage pickers (Yang, 2016).

Above review of literatures show that rag pickers children experience different life threatening difficulties and exploitation. This is a worse form of child labour in any country. Considering all above issues present study has following objectives:

- ☛ To access the socio - economic status of child rag pickers.
- ☛ To investigate the working conditions and exploitation of child rag pickers.
- ☛ To investigate personal behaviour and perceptions of child rag pickers.

Methodology -

For the same study 50 child rag pickers were selected for collecting information through purposive random sampling method from Kanpur city for collecting information. An interview schedule having both open and closed ended questions was framed for data collection. Collected data were tabulated and analysed.

Result and Discussion -

Age-wise data shows that 28% of the respondents have age between 6-12 years while majority of the respondents (72%) of rag pickers are teen agers between 13-18. Youth who is the backbone of the development of the country, but in such a situation we can see that these teenagers struggle hard for their livelihood by picking up garbage. This condition is a matter of great misfortune for a country. **(See Table-1 on next page).**

Analysis of data associated to house of rag pickers' children show that 36% of them were living in muddy house (36%) than Hut with thatched roof (34%). 16% of the respondents



Respondents' Household conditions are Classified in Table-1

Types of Household	No of respondents
Muddy House.	18(36)*
Hut with thatched roof.	17(34)
House with tin shade.	7 (14)
House made with tarpaulin and plastic cover	8 (16)
Total	50(100)

**percentage in parentheses*

Caste - Wise Distribution of Data are shown in Table-2

Caste-category.	Number of respondents
OBC.	18 (36)*
SC.	25(50)
ST.	7(14)
Total	50 (100)

**percentage in parentheses*

were living in houses made with tarpaulin and plastic cover (16%).

When the respondents were asked to told about how many rooms are in their house and whether they are ventilated, then 60% of them said that they have only one room house, while 40% live in two room house but everyone said that the room is not ventilated at all. Respondents also told that they fetch drinking water from

government tap or hand pump as their is neither tap nor hand pump in the house.

All the respondents lack materialistic comfort items like refrigerator, washing machine etc. Only 28% of the respondents told that they have TV which gives them some entertainment. (See Table-2).

Caste wise distribution of data shows that half of the children rag pickers belong to

Data associated to Educational status of the Respondents are shown in Table-3

Educational level	No. of respondents
Illiterate.	28(56)*
Primary.	18(36)
Middle school	3(6)
High school.	01(2)
Total	50 (100)

**Percentage in parentheses*



scheduled caste (50%) than Other Backward Caste (36%). (See Table-3 on back page).

Table -3 shows that more than half of the respondents (56%) are illiterate. On the other hand 36% of the respondents are primary educated. 26% of the respondents were found to have school dropout. These respondents said that their parents had enrolled them in the school, but due to financial constraints most of them started the work of collecting garbage with their parents and thus left school.

Thus from the above analysis, it is known that the children who pick up garbage come from very low socio - economic status. Due to the weak financial condition of the family, these children have to work as a waste picker, which is the most worst type of child labour.

When rag pickers children were asked about the working hours, then about 60% of them said that they work for about 8 to 10 hours daily while about 40% of the children simply said that their daily working hours are around 6 to 8 hours. In this way, in the present study the working hour of any child has not been found to be less than 6 hours. When rag pickers children were asked whether they use any safety measures like hand gloves, sticks etc while picking up garbage, most of them (67%) answered no. Because of this, many children get injured by sharp objects while picking up garbage. Despite being injured, no proper treatment is given to them.

It was also told by garbage pickers children that many times during the work they got injured by stray animals like dogs, pigs etc. Picking garbage from the garbage heap is also risky for the health of the children. Because children stay in the dirty place most of the time and pick up the messy garbage by hand. When children were asked about their health related problems in the last six months, then about 80% of the children replied that they had something health related issues during the last six months like jaundice, typhoid, dysentery, viral fever etc.

Intoxication tendencies have also been

observed in rag pickers children. When the children were asked whether they had consumed any kind of intoxicant, then about 65% of the children gave their answer yes. In most of the cases, alcohol, cigarettes and inhalants are most commonly used by these children. 10% of children admitted to using drugs.

All the children accepted that the work of rag picker brings inferiority in them but they have no other option to make a living. 40% of the children said that they want to study but due to weak financial condition in the house they help the family and bear the financial burden and thus are unable to go to school.

Conclusion-

From the analysis of above facts, it is found that garbage picking by children is a worst type of child labour. It harms children in all ways related to physically, mentally and emotionally. It is unfortunate that the shoulders on which the school bag should be carried are the sacks of garbage and those who should spend more and more time studying and with their peers, most of the time they work for hours to earn their livelihood. At its root is the spread of poverty and unemployment in the country. In this order government and non - government agencies should come forward. The work of rag picking, which is the only means of livelihood by these children for their family, slowly kills their childhood. Government and non - government agencies should educate these children and develop their personality in the best way. Children who have become addicted to drugs; efforts should be made to make these children free from drug addiction with the help of drug de - addiction centres by various Non - government agencies. So that these children can become the best youth of tomorrow and contribute to development our society in positive way.

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सुपर प्रकाशन

(विश्वविद्यालय स्तरीय लाइब्रेरी पुस्तकों के प्रकाशक एवं पुस्तक विक्रेता)

हम पुस्तकों को स्पष्ट शब्द सज्जा, डिजाइन एवं उत्तम कोटि की छपाई व अत्याधुनिक बाइंडिंग के साथ प्रकाशित करते हैं। विभागाध्यक्ष, एसोसिएट प्रोफेसर, प्रवक्ता, कवि, लेखक, रचनाकार - कहानीकार अपने संस्मरण, गीत, ग़ज़ल एवं कृतियाँ या अन्य किसी भी विधा पर उत्कृष्ट ग्रन्थ अथवा रिसर्च स्कालर (शोध कर्ता) थीसिस प्रकाशन हेतु तैयार हो तो मूल प्रति (Script) भेजकर एक माह में ही अपनी प्रति को पुस्तक के आकार में प्राप्त करें।

सुपर प्रकाशन देश-विदेश के समस्त शिक्षा जगत् से जुड़े डिग्री कालेजों (Higher Education) में यू जी सी के द्वारा उपलब्ध निर्धारित मानकों के अनुसार नेशनल एवं इन्टरनेशनल पियर रिव्यूड रिसर्च जर्नल में अपने शोध लेख (Research Paper) को 'दि गुंजन' एवं 'अभिनव गवेषणा' (मल्टी डिसिप्लिनरी क्वार्टरली इन्टरनेशनल रेफीड/पियर रिव्यूड रिसर्च जर्नल) के द्वारा प्रकाशित कराने का अवसर उपलब्ध कराता है।

सुपर प्रकाशन द्वारा हिन्दी साहित्य - कला संकाय, कामर्स संकाय एवं विज्ञान संकाय तीनों फैकल्टी की पुस्तकों एवं इनसाइक्लोपीडिया का प्रकाशन एवं विक्रय विश्वविद्यालय लाइब्रेरी स्तर पर किया जाता है। हमें एक बार सेवा का अवसर अवश्य प्रदान करें।

- सर्वेश तिवारी 'राजन'

(प्रबन्ध संपादक - 'दि गुंजन' एवं 'अभिनव गवेषणा')

(मल्टी डिसिप्लिनरी क्वार्टरली इन्टरनेशनल रेफीड/पियर रिव्यूड रिसर्च जर्नल)

के-444 'शिवराम कृपा' विश्व बैंक बर्ग, कानपुर-208 027 (उत्तर प्रदेश)

मो0- 09335597658, 08896244776 E-mail:super.prakashan@gmail.com



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A Study of Stock Market Theories : A Review



- Dr. Jaya Mishra
Associate Professor -
Department of Economics,
Juhari Devi Girls (P.G.) College,
Canal Road, Kanpur-208004
(U.P.)

E-mail:
profjayasharma@gmail.com

Introduction -

Return and trading volume are two prime indicators of trading activity in a stock exchange, jointly determined by the same market dynamics and may contain valuable information about a security. Most empirical research on stock markets focuses on stock price movements over time, which reflects investors' expectations about the future prospects of the firms. New information causes investors to change their expectations and is the main reason for stock price changes (Fama 1970).

Prices and Trading volume build a market information aggregate out of each new piece of information. Unlike stock price behavior, which reflects the average change in investors' beliefs due to the arrival of new information, trading volume reflects the sum of investors' reactions. Differences in the price reactions of investors are usually lost by averaging of prices, but they are preserved in trading volume. In this sense, the observation of trading volume is an important supplement of stock price behaviour. They observed that stock prices are noisy which can't convey all available information to the market dynamics of stock prices and trading volume. Therefore, studying the joint dynamics of stocks prices and trading volume improves the understanding of the microstructure of stock markets.

In literature, we have observed two types of relationships between return and volume: contemporaneous and causal relationships. The contemporaneous relationship between return and volume reveals information about asymmetry of trading volume in the market. The contemporaneous relationship between volatility (absolute return) and volume reveals information arrival patterns and observations about quality and dispersion of such information. Majority of empirical evidences in financial literature support the positive relationship between volume and volatility (absolute return). In contrast to contemporaneous relationship, analysis of dynamic (causal) relationship between return and volume, which entails an examination of potential causality from past values of volume to present returns, as well as from past returns to present volume, is concerned with issues relation to information efficiency of the market. An indication of causality from past values of volume to returns violates



assumptions of the weak-form efficiency hypothesis, since it carries the implication that an investor is able to make systematic profits. Further, causal relationship between volatility and volume can help to discriminate between different hypotheses about market structure.

Thus, keeping in mind the great need for investigating the contemporaneous and causal relationship between returns, volume and volatility, the current study attempts to explore theoretical explanations for the existence of relationships between returns, volume and volatility, which would surely strengthen the researchers in the empirical investigation of relationship between these dynamics. This paper has been organized into 3 sections. Section 1 discusses the importance of relationships. Section 2 provides various theories on contemporaneous and causal relationships. Section 3 concludes the paper.

1. Importance of Price-Volume Relationship-

Return-volume dynamics are of great interest as they may unearth dependencies that can form the basis of profitable trading strategies, and this has implications for market efficiency. Karpoff (1987) has cited four reasons for discussing price-volume relations. First, it provides insight into the structure of financial markets, such as the rate of information flow to the market, how the information is disseminated, the extent to which market prices convey the information and the existence of short sales constraints. Empirical relations between prices and volume can help differing hypotheses about market structure.

Second, the relationship between price and volume is important for event studies that use a combination of price and volume data from which to draw inferences. It means that this relationship can be used to examine the usefulness of technical analysis. If price changes and volume are jointly determined, incorporating the price-volume relation will increase the power of these tests. For example, Richardson et al.,

(1987) examined trading volume and price changes to tests for the existence of dividend clientele. Thus, the construction of tests and the validity of the inferences drawn depend on the joint distribution of price changes and volume (Karpoff 1987).

Third, the price-volume relation is critical to the debate over the empirical distribution of speculative prices. When sampled over fixed calendar intervals, rates of return appear kurtotic compared to the normal distribution. Two competing hypothesis to explain this are (1) rates of return are best characterized by a member of a class of distributions with infinite variance (the stable partisan hypothesis), and (2) the distribution of rates of return appear kurtotic because the data is sampled from a mixture of distributions that have different conditional variances (the mixture of distribution hypothesis). Price-volume tests generally support the mixture of distribution hypothesis. Price data are generated by a conditional stochastic process with a changing variance parameter that can be proxied by volume. Knowledge of price-volume relation can then be used in event studies to measure changes in the variance of the price process from non-event to event time.

Some researchers, have investigated the role of speculation to price volatility (stabilizing or destabilizing), where speculation is closely related to trading volume. Finally, as Cornell (1981) pointed out, the volume-price variability relationship may have important implications for fashioning new contracts. A positive volume-price variability relationship means that a new future contract will be successful only to the extent that there is enough price uncertainty associated with the underlying asset.

Thus, a good understanding of the relationship between price and volume has significant implications for regulators, hedgers, speculators and other participants in the market. An empirical examination of contemporaneous



and inter-temporal relationships between volume and (signed and unsigned) returns may reveal valuable information on different aspects of the dynamics and informational efficiency in equity market.

Therefore, the purpose of the current study is to shed light on various theoretical models for the relationship between return, return volatility and trading volume in both a contemporaneous and linear causality framework to improve the understanding of the micro-structure of the stock market. The study will enhance our understanding of market asymmetry, market efficiency and information processing in the stock market.

2. Relationship between Returns, Volatility and Trading Volume: Theoretical Framework-

Stock prices change when new information arrives. Thus, if the trading volume is linked to the information flow entering the markets, a relation of price-volume is obtained. Therefore, theoretical explanations mostly correspond to different views of volume related to the information flow. Most of the research has concentrated only on the study of contemporaneous relationship between return and volume. Only a few studies have examined the dynamic relationship between return and volume. Different schools of research have constructed different theoretical models to explain contemporaneous and dynamic relationships, which are further sub-divided into two stylized facts viz. (a) return per se and volume (b) return volatility and volume.

Theories of Contemporaneous Relationship between Return, Volatility and Volume-

The various theoretical models developed to explain contemporaneous relationships are given below :

☛ Short-Selling Constraint Model-

The positive contemporaneous correlation between volume and return per se in the stock market could be explained by the existence of a

short-selling constraint, in the form of either a prohibition or differential cost of taking short and long position. The key innovation is that short positions are possible but are more costly than long positions, which implies that the quantity demanded of an investor with a short position is less responsive to price changes than the quantity demanded of an investor with a long holding. Consequently, market activity (trading volume) differs with the direction of price movement, that is, the level of volume associated with a price rise is higher than that associated with a price fall.

☛ The Supply and Demand Model-

Crouch (1970) employed the basic supply and demand model to explain the positive relationship between volume and absolute return. Starting from the initial position of equilibrium, a price change occurs due to the change in demand. The related adjustment induces transactions to react to the change in demand until a new equilibrium is reached. Thus, trading volume increases as price changes, regardless of the direction of the changes.

☛ Differences of Opinion Model-

Models of heterogeneous trader behaviour assess the availability of different types of information or the existence of differing beliefs concerning the importance of information. Greater dispersion of beliefs creates excess price variability and excess volume, compared to the equilibrium value. A greater dispersion of beliefs is a lack of consensus about the true price that should result from revealed information. In particular, Shalen's model associates volatility with uninformed traders' dispersion of beliefs, incorrectly formed in response to the noisy liquidity demand of hedgers. This dispersion of beliefs model is relevant for comparing how informed and uninformed traders react to information.

Informed traders have relatively homogeneous beliefs, which they base on their knowledge of the market and the fundamental characteristics of the asset. Thus, informed



traders buy and sell within a relatively small range of prices around the fair value of the asset. Uninformed traders cannot observe the transaction of other traders to help them interpret the noisy signals from volume and price changes, resulting in a wider dispersion of beliefs. Therefore, uninformed traders are likely to react to all changes in volume and price as if these changes reflect information, despite their difficulty in differentiating short-term liquidity (hedging) demand from changes in overall fundamental supply and demand. Uninformed traders' frequent revision of their beliefs can also cause the price fluctuations resulting from their trading to disappear more slowly than those of informed investors after new information is revealed. Whostate that traders overreact to one another's trades. Therefore, less informed traders tend to exaggerate price movements, which result in a greater price variability.

However, traders differ in the way in which they interpret this information, and each trader believes absolutely in the validity of his interpretation. They refer to this as the assumption that traders have differences of opinion, and assume that traders start with common prior beliefs about the returns of a particular asset. As information about the asset becomes available, each trader uses his own model of the relation between the news and the asset's returns to update his beliefs about returns. Thus, the Harris and Raviv model predicts that absolute price changes and trading volume are positively correlated.

☛ **The Information Asymmetry Mode-** Wang (1994) claimed that investors are heterogeneous in their information and private investment opportunities. As the asymmetry of information increaes, uninformed investors require a higher discount in price when they buy contracts from informed investors to cover the risk of trading against private information. Therefore, trading volume is always positively related to absolute returns and the correlation

increases with the level of information asymmetry.

☛ **Market Microstructure Mode-** The theory of market microstructure suggests that price movements depend on the arrival of new information and the process that impounds this information into market prices. During the trading period, informed traders may arrive at the market with private information regarding the value of an asset. This private signal presents a profitable opportunity to trade at dealers' existing qoutes not yet reflecting this new information. The arrival of new private information induces a sequence of trades that reveal the pricing implication of the unannounced information. This dynamic process of incorporating private information into market price simultaneously affects price movement and trading volume (Chunchi and Xiaoqing, 2000). Consequently, a contemporaneous correlation between return volatility and volume is observed.

Theories of Causal Relationship between Return, Volatility and Volume-

Causality investigates whether the past of a one time series improves the forecast of the present and future of another time series. Testing for causality help to better understand the micro-structure of stock markets and can also have implications for other markets (e.g. options markets). The various theoretical explantions that predict a vausal relationship between return, return volatility and volume are given below:

☛ **Informational Role of Volume and its Applicability for Technical Analysis -** Another model to investigate the informational role of volume and its applicability for technical analysis. According to this model, prices are noisy and traders cannot obtain the full information signal from price alone. Aggregate supply is fixed and traders receive signals of differing quality. They showed that volume provides information that cannot be detected from price alone and demonstrate how sequences of volume and prices can be informative. Therefore, current trading



volume can be used to predict future price movements.

☛ **Tax and Non-Tax Related Motives for Trading-** Tax and non-tax related motives for trading are another explanation for dynamic relation. Tax-related motives are associated with the optimal timing of capital gains and losses realized during the calendar year. Non-tax related motives include window dressing, portfolio rebalancing and contrarian strategies. Lakonishok and Smidt (1989) show that current volume can be related to past stock price changes due to tax and non-tax related trading motives. The dynamic relation is negative for tax-related trading motives and positive for certain non-tax related trading motives.

☛ **The Noise Trading Volume-** The relationship of causality between return and trading volume can also be explained by the noise trading volume. In this model, noise traders are associated with excess volatility and can dominate a market. Their activities are not based upon economic fundamentals and therefore result in a temporary mispricing in the short run. The price, however, reverts to its mean value in the long run because of the disappearance of the transitory component. Hence, the positive causality relationship running from return to volume is consistent with the positive feedback trading strategy of noise traders who trade on the basis of past price changes. Moreover, the positive causality relationship from volume to return is consistent with the hypothesis made in this model that price change is caused by the trading strategies/ actions of noise traders.

☛ **Sequential Information Arrival Hypothesis-** This hypothesis suggests the gradual dissemination of information such that a series of intermediate equilibria exists. In other words, new information is disseminated sequentially to traders, and traders who are not yet informed cannot perfectly infer the presence of informed trading. Consequently, the sequential

arrival of new information to the market generates both trading volume and price movements, with both increasing during periods characterized by numerous information shocks.

☛ **The Mixture of Distribution Hypothesis-** The relationship between volume and absolute returns helps reveal particulars about information arrival, processing procedures and observations about the quality and dispersion of such information. One leading hypothesis in order to explain this relationship is the mixture of distributions hypothesis. The mixture of distribution hypothesis (MDH) implies only a contemporaneous relationship between volume and price volatility because they jointly depend on the rate of information flow to the market. Thus, under the MDH, there should be no information content in past volatility data that can be used to forecast volume (or vice-versa) since these variables contemporaneously change in response to the arrival of new information. Under the MDH, asset prices are modelled as a subordinate stochastic process with prices evolving at different rates during identical intervals of time according to the flow of information and evolving faster when unexpected information flows into the market. The interpretation of volume as a proxy for the unobservable directing process thus explains the observed positive correlation between the variance of price changes and volume. Further, volatility persistence in return series can also be explained by MDH. Using trading volume as a proxy for the rate of daily information arrival, volatility persistence vanishes under the presence of trading volume series in the conditional variance equation of GARCH model.

☛ **Rational Expectations Asset Pricing Model-** Speculative trading stems from disagreements among traders over the relationship between the announcement and the ultimate performance of the asset in question. Such disagreements can arise either because speculators have different private information or



because they simply interpret commonly known data differently.

Rational expectations model generates disagreement through private information. This model generally involves trading among privately informed traders, uninformed traders and liquidity or noise traders.

Wang (1993) developed an equilibrium model of stock trading in which investors are heterogeneous in their information and private investment opportunities and rationally trade for both informational and non – informational reasons. He used the model to study the behavior of stock trading volume and its relationship with returns and observed that different heterogeneity among investors gives rise to different trading volume behavior and return-trading volume dynamics. This implies that trading volume conveys important information about how assets are priced in the market.

Conclusion-

It is widely acknowledged in financial literature that trading in asset markets is mainly induced by the arrival of new information and the subsequent revisions of expectations by investors. Trading volume can therefore be thought to reflect information about changes in investors' expectations (McMillen and Speight, 2002). Thus, the major motivation for this study came from the fact that the trading volume plays a central role in the pricing of financial assets through the arrival of new information.

Hence, an interesting question arises how trading volume is related to price movements in the stock markets. Various flavors of the return- volume relationship are present in financial literature. Based on the above, it can be concluded that financial literature has documented the various theoretical models of the price-volume relationship especially in developed stock markets. In this way, the current study summarizes various theoretical models on return, volume and volatility relationship, which will support the empirical evidences of

researchers on the existence of this relationship.

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A Systems Approach : Metal to Plastic Replacements



- Dr. Varsha Srivastava
Assistant Professor -
Dept. of Chemistry,
D.A. V. College, Kanpur-208001
(U.P.)

E-mail:
varshasrivastava816.va@gmail.com

1. Introduction -

Plastic engineering is synonymous in almost all modern day industries due to versatility of plastic materials today. Right from transplants in the medical field to the soles in footwear industry, there is a plastic available to suit every possible requirement. All of these have been possible only due to the relentless research and development in the polymer science / plastic engineering field. Add to this, the blurring of lines between various engineering fields and we have a whole new dimension. Today we can say that plastic engineering is a mix of mechanical engineering and chemical/polymer engineering with various other facets of science and technology.

In the persistent search for cost reduction, plastics continue to advance in replacing metal parts. Performance benefits like weight reduction and corrosion resistance can be achieved other than lowering cost. However, plastics materials which are fundamentally different from metal in molecular structure are vitally different from metals not only in intrinsic short term properties but also in the way they react under application to the influences of time, temperature, and load. Failure to use techniques that consider the influence of these variables in the application of the part frequently leads to products that are either over- or under- engineered.

Today we can see metal to plastic replacements in industries like automotive, aviation, medical, lighting electrical, electronics, furniture and so on. Automotive industry has now shifted majourly from metals to plastics for many of their components, presently made in iron or aluminum alloys, which provide them with weight reduction opportunities, thereby leading to cost savings, energy savings and improving their carbon footprint. Metal to Plastic Conversion is now seen in automotive body parts, power-train, motor management, brake parts, fuel pump parts, etc. In the aviation industry, Plastic composites make up 25% of the total airframe on the Airbus A380, where composites replace aluminum [1]. In food processing industry, stainless steel food hoppers, used for the accurate dispensing of 'sticky' foodstuffs, have been substituted with metal filled accetal polymer thereby significantly improving the feeding of high-adhesion foodstuffs [2]. Examples of successful metal to plastic replacements are not



limited to the ones above.

(A) Benefits of Metal to Plastic Replacements-

Typically some of the main merits of plastics over metals are [3]:

- (1) Weight reduction since all plastic materials including composites are lighter than metals like steel and aluminium.
- (2) Fewer assembly operations may be achieved.
- (3) Reduced secondary finishing.
- (4) Reduction in total system costs.
- (5) Electrically non conductive, predominantly.
- (6) Ability to withstand temperatures to more than 500°F and most chemicals and corrosive environments.
- (7) Greater design freedom, e.g. part complexity may be worked upon depending upon requirement.
- (8) Opportunity for parts consolidation.
- (9) Broad range of properties tailored to meet specific applications.
- (10) Energy efficient since plastic part production is less energy consuming compared to metal part production or metal forming like die casting, sand casting, etc.

(B) Need for a Systems Approach -

Industries going for metal to plastic conversion today use many tools for this purpose. A fair amount of experience has been gained in this field with tried and tested methods developed by companies specialised in this area with the help of plastic raw material suppliers like DuPont, DSM, Sabic, Ticona, etc. However, metal to plastic replacement projects still have hurdles because of the continuing entry of new products and applications yet untried.

This sometimes leads to no proper direction to problem- solving, data insufficiency and lack of clarity on relationship between important parameters of new product which may ultimately lead to project failure. Hence a necessity is created to bring in a systems approach. By viewing metal to plastic replacement project as a system, we can actually

compute the various inputs that are required for the process and successfully achieve the output of substituting a metal component with a plastic one.

(ii) The Systems Thinking -

(A) Understanding a System and the System Approach -

A system is an assemblage of interrelated parts that work together by way of some driving process. These component parts, or elements of the system are intimately linked with one another, either directly or indirectly, and any change in one or more elements may affect the overall performance of the system, either beneficially or adversely.

(c) West Churchman provides an excellent discussion of the systems approach in his text [4].

Churchman begins by defining systems as, “sets of components that work together for the overall objective of the whole.” A systems approach is strongly associated with systems thinking, i.e. by viewing “problems” as parts of an overall system, rather than reacting to specific part, outcomes or events and potentially contributing to further development to unintended consequences.

Applying systems approach to metal to plastic replacement is all about seeing every factor affecting the project as a part of the whole. Every parameter is interlinked, be it relation between design modification and strength of the part, relation between plastic processing parameter and war page of the part or that between choosing right material for mould and mould life and soon.

The classification of systems into hard and soft represents an effort to draw attention both to the degree of knowledge about a system, and about the system's aims or purposes. P. Checkland developed this classification to represent two ends of a continuum [5]. The metal to plastic replacement project can be considered as a hard system. This is simple because, hard systems are easier to define and have more clear-cut aims or purposes. They are typically the subject matter of



engineers concerned with real-world problem-solving. Simplicity of purpose and clarity of boundary, however, do not necessarily mean ease of design, evaluation and manufacture. Hard systems can indeed be highly complex [6].

(B) A Systems “Model” for Metal to Plastic Replacement -

Fig. 1 shows a typical model of a system for metal to plastic replacement. This is a general model that could be used for any product. The boundary for this system will be the product's application requirements and working conditions.

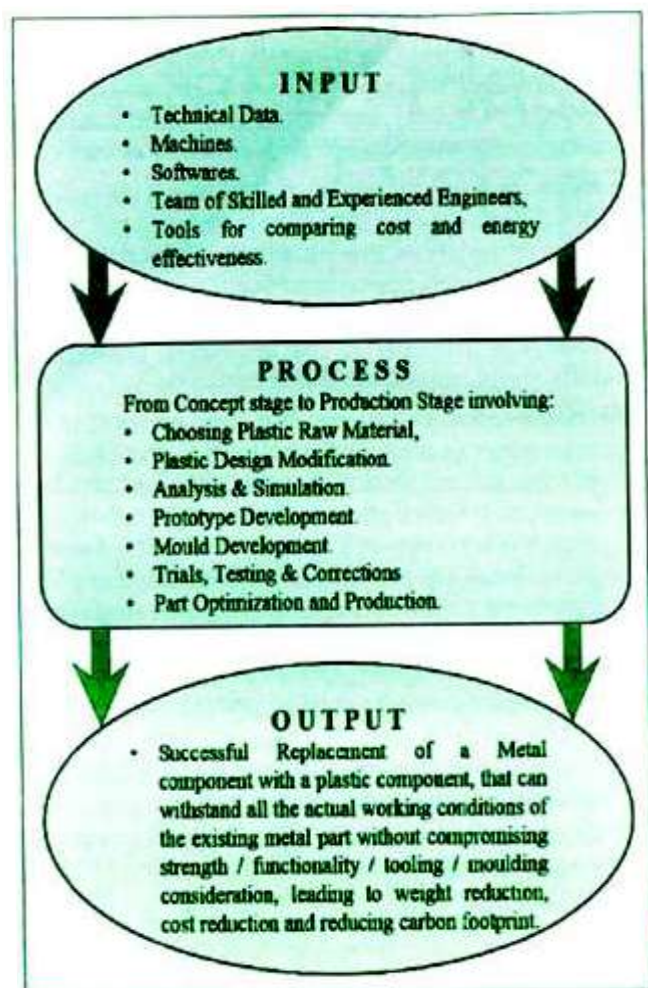
(1) Inputs to the system: For any project to materialise successfully, the input plays an important role. In case of a Metal to Plastic Project, where the technical data for different plastic materials alongwith the actual working conditions of the part help us to choose a specific plastic material that will suit the requirement. Availability of machines is another important input because this project involves machines for plastic processing, machining or mould/ die components, testing, etc. Similar to plastic materials, technical data of raw materials for mould / die components (steel, phosphor bronze, etc.) should also be available to choose between different grades for different mould/die components.

People with technical knowledge, skill, experience & expertise in the fields of plastic engineering, viz, plastic product design, mould design and plastic processing form a crucial part of the project team. Computer Aided Design / Engineering / Manufacturing (CAD/CAE/CAM) software's like Solid Works, ProE / Creo, Unigraphics NX etc. have to be available for various design, simulation and manufacturing requirement. Last but not the least, tools and data should be available to understand the feasibility of the metal to plastic replacement project based on cost and energy effectiveness. (See Figure-1)

(1) The actual process: Plastic material selection is the most essential step which will make or break the whole project since the plastic

has to withstand the existing metal parts conditions. After studying the existing metal design, possible modifications to the existing metal design will have to be applied using plastic product design principles.

Once the design is ready, analysis & simulations can be performed. Finite Element Analysis (FEA) helps in understanding how the part will behave with respect to the working conditions. Mould Flow simulations helps in understanding the approximate measure of the part under moulding conditions. A prototype can be created internally or externally by the company with the final design of the part and the plastic product can be evaluated for all basic criteria. After understanding the proper tooling considerations, the mould designing can be done



A Systems “Model” for Metal to Plastic Replacement (Figure-1)



and the mould manufactured. The trials of the parts can be taken, which after testing / inspection leads to mould correction, if necessary. Finally the part can be optimized and the actual plastic part production can be started.

(2) The output: Finally, the objective of the project equals as the output, i.e. to successfully replace a metal component with a plastic component, that can withstand all the actual working conditions of the existing metal part, i.e. temperature, pressure, corrosive environment, loading, etc. without compromising strength / functionality / tooling / moulding consideration, leading to weight reduction and cost reduction. Ultimately, since energy consumed per plastic part production is lesser than that of metal part, we can positively achieve lesser carbon footprint.

(iii) Systems Approach to Metal to Plastic Replacement -

Based on the generalized systems 'Model' for metal to plastic replacements, we can now easily associate every element of this system with its function and its interdependency on other elements, in detail. Thus, a systems approach is now developed for metal to plastic replacement projects as shown in Fig. (See Figure-2)

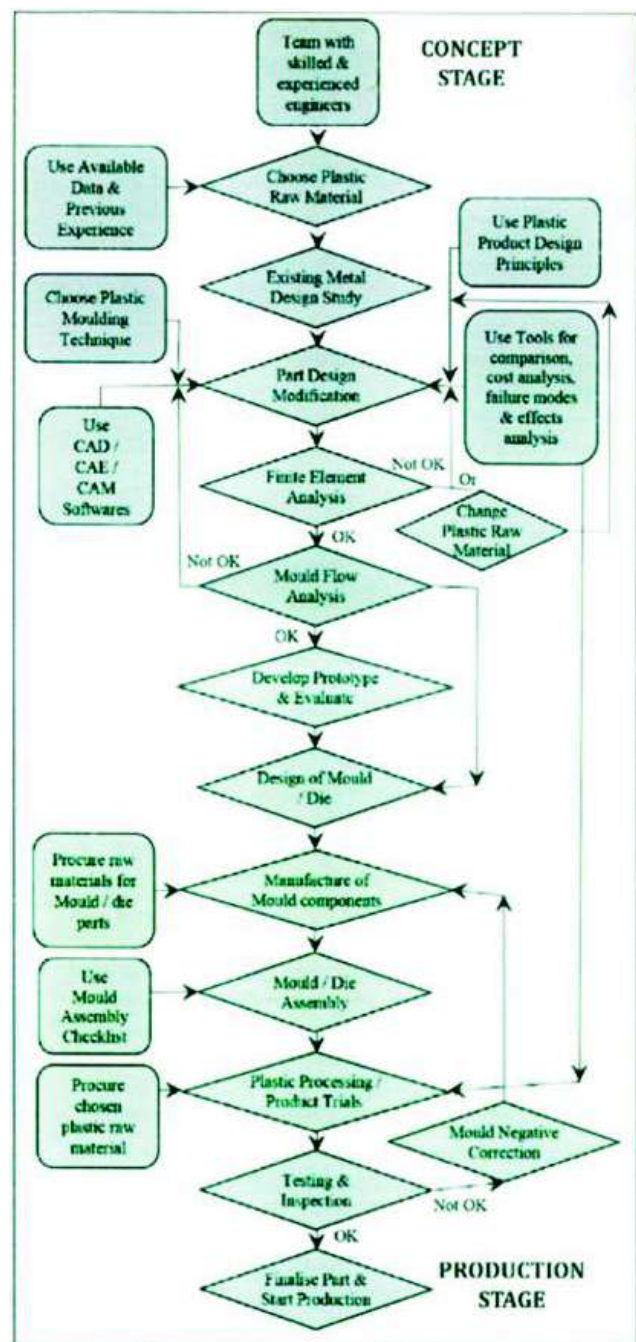
(A) Understand the basis & structure of systems approach-

Before the systems approach is dealt with in detail, it is of utmost importance to understand that the elements of this system are interlinked. Some interrelationships may be cyclic, while others may be one-way only. These elements may themselves be capable of further breakdown into other smaller components, and may thus be regarded as sub-systems of the overall system. These sub-systems are not mentioned in Fig. 2 since it would be too exhaustive. However, care is taken that examples of these sub-systems are explained in the forthcoming units along with their related elements.

(B) Begin with the Concept Stage -

For replacing metals with plastics, a strong team's expertise can make the process

more efficient by compressing the design cycle, reducing costs, and improving quality. Depending on the product, it can include representatives from production, design, engineering, research and development, sales, marketing, purchasing, and quality control, when required. The internal team manages all activities and defines design and performance requirements. Each player has a specific role to contribute to the system.





The external team acts as a sub-system here contributing to the overall system along with the internal team. The external team contains those who understand the entire process, such as a plastic supplier who can provide data on plastic properties and performance and can assist in preliminary or detailed design, prototype testing, fabrication, and pre-production evaluations.

The external team may also contain mould and tool builders (if mould / tool is not built in-house), experts from customers, industrial design firms and assembly equipment supplier. It is also prudent to select the plastic moulding technique that will be best suited for manufacturing the part. Most commonly used is the injection moulding technique.

(A) Choose the Plastic Raw Material correctly-

This forms the most important element in the system. In choosing the right plastic, it is significant to maximize system performance at the lowest possible cost. Material selection is particularly difficult because plastics offer literally thousands of options. The working conditions of the product need to be first understood. Plastic selection criteria must include, not limited, to the following:

- ☛ Heat resistance - covering upper & lower peak temperatures.
- ☛ Ability to withstand mechanical loadings and resist creep/fatigue.
- ☛ Stiffness and strength.
- ☛ Chemical resistance, that may cause cracking, crazing, discoloring, and softening.
- ☛ Melting - whether during handling, assembly, finishing, or use.
- ☛ Aesthetics to be achieved after moulding.
- ☛ Availability of the plastic raw material.
- ☛ Compliance to laws and regulations.

(B) Study, Design & Simulation/Analysis of the part -

The detailed study of the 2D drawings of

the existing part is essential to understand the tolerance specifications that are given for the metal part and analyse if these are acceptable & achievable with a plastic part. Further, the 3D models of the existing parts have to be remodelled and tweaked as per the Plastic Product Design Principles to take into consideration the part complexity, part strength & functionality and tooling complexity. Depending upon the number of plastic components or the assembly requirements, the possible assembly methods will have to be worked out.

As mentioned earlier, in the system of metal to plastic replacement, the element of part design and the elements of simulation / analysis have a cyclic link, since any change to the former affects the latter and vice-versa.

CAD software will have to be used for possible modifications to the existing metal design like reducing thick sections, removing complex features, providing tooling draft, giving additional ribs for strength, etc. Tooling considerations have to be deliberated during the plastic product design, so that elimination of any undercut features or complex mechanisms can be achieved to the maximum extent possible. In certain metal parts, self tapped threads are provided for mounting of bolts, which cannot be given in a plastic part since plastic threads would give way due to excessive torque and stress relaxations. Instead metal (brass or steel) inserts may be provided in the plastic design to take the load and torque of bolts [7].

CAE - Structural FEA is especially useful in evaluating stress and deflection in complex parts. It is an analytical prototyping process that starts with simple linear models and may proceed to more complex ones. As a staged process, it repeatedly refines and re-analyzes the part until confidence in its performance is attained. Thus FEA helps in re-tweaking the design and arriving at the best possible design. Sometimes it may even lead to changing the plastic raw material.

Mould Flow analysis (MFA) evaluates gate position and size to optimize plastic flow. It



also defines the location of weld lines, areas of excessive stress on the melt, effects of wall and rib thickness on flow, cooling analysis for mould temperature distribution and cycle time; shrink analysis for dimensional control; moulded-in stresses, and warpage predictions. Thus MFA reduces the time and cost to develop mould tools.

(C) Develop Prototype and Evaluate -

Prototyping can be done by using desktop manufacturing techniques, such as simple 3-D milling machines, selective laser, sintering, and stereo lithography (SLA). In testing prototypes, it is recommended to use the original design criteria. Most evaluations of exact prototypes have three areas of concern: mouldability, part performance, and assembly. Problems that arise during prototype evaluation can often be corrected by looking at the entire system.

Although many solutions can be found by studying the design, plastic, and process for a specific part, the best solution may involve other areas of the system. For example, it may be less expensive to alter a metal part that is joined to a plastic part by changing a control program on a numerically controlled milling machine than by making modifications to the injection mould for the plastic part.

(D) Design, Manufacture & Assembly of Tool/Mould -

MFA gives a lot of critical input for mould design as seen in the earlier unit. Often a mould concept is developed and a meeting is scheduled between the engineering, design and the production teams to streamline the design and arrive at the best possible concept. Mould / die is designed in the CAD software and checked for completeness. When mould is to be made in-house, the mould drawings and models may be released for manufacturing of individual mould components. Commonly used machines today for this purpose are the CNC milling machines, Wire EDM machines, Spark EDM machines among others. With the help of CAM software, machining of mould components can be programmed.

Common smaller mould components like ejector pins, shot counters, etc. may be ordered externally. It is always advised to use a checklist during mould assembly to eliminate problems like cooling water or oil leakage during production or damage to internal side cores.

(E) Plastic Moulding/Mould Trials -

As we know that Injection moulding is the most common technique used in metal to plastic replacement projects, this technique in itself is a system having many interdependent processing elements / parameters. A well- designed injection mould allows for the broadest possible processing window so that plastic and process variables can shift somewhat over time without loss of part quality. In the short term, for example, this allows for changes in plastic viscosity and for process variations in hydraulic pressure or barrel temperatures. It also allows for long-term variations, such as screw and barrel wear that affect melt quality.

Mould trials give us the parts that may have scope for improvement or help us in identifying the parameter in the machine or the system which can be tweaked for achieving better parts.

(F) Testing / Inspection, Corrections and Final Production Stage -

The parts produced in the trials undergo inspections including visual, to observe any defects such as sink marks, burn marks, flow marks, etc. which may be controlled by modifying process parameters. As per the specifications or customer requirements for the final part produced, tests are conducted, such as torque test for inserts; centre distances for mounting holes, etc. to find out whether the part is within specified tolerances.

Negative corrections on the mould may be required to nullify warpage or flatness characteristics on the part. Corrections may be done on the same mould component or another mould component may be manufactured to accommodate the changes. This gives another example of the influence of one element over the

**Table: 1 Elements of APQP developed by AIAG**

S.No.	Tools/Procedure	Significance
1.	Failure Mode and Effects Analysis (FMEA)	To understand the possible failure modes and their effects in process and in design.
2.	Statistical Process Control (S PC)	To monitor and control a process using statistical methods.
3.	Measurement Systems Analysis (MSA)	To evaluate the measuring systems and equipments for variation to eliminate measurement errors.
4.	Production Part Approval Process (PPAP)	To validate that the company has developed their design and production process to meet the customers requirements, by minimizing the risk of failure.

other in the system of metal of plastic replacement.

Once the part is optimized, production capability is established, and purchase order is released, production of the part can be started.

(IV) Tools for Comparison, Analysis & Quality Control -

Throughout the metal to plastic replacement project various analysis with respect to cost, design, production and quality will have to be performed. These tools help in reinforcing the project goals and choosing the right part when a problem is encountered. Though there are numerous tools available today, only a few critical ones used widely by companies today are covered here.

Cost-benefit Analysis and cost effectiveness analysis may be performed before the start of the project to understand economic feasibility. Also, Total Cost of Ownership (TCO) is a financial benefit analysis used to gauge the

viability of any capital investment. A company may use it as a product/process comparison tool. Technical feasibility study may be performed to eliminate ambiguity in later stages of the engineering project.

Process may be improved by incorporating Six Sigma techniques. ISO 9001 Quality Management System is a very good generalized system taking into consideration quality assurance and quality control. This may also be coupled with ISO / TS 16949 for continual improvement. Statistical Process Control (SPC) uses several basic and advanced statistical methods that to make manufacturing improvements more effective, resulting in products and services that improve value to both customer and supplier. A trade-off analysis helps in realizing if losing one quality or aspect of something in return for gaining another quality or aspect.

The Automotive Industry Action Group



(AIAG) has effectively developed tools / procedures for the automotive sector, which helps all companies in this sector to maintain the same procedures and quality. Advanced Product Quality Planning (APQP) developed by AIAG, shown in Table, is similar to the concept of Design for Six Sigma (DFSS), for product development system [8].

(V) Conclusion -

A systems approach to metal to plastic replacement brings to forth a concrete road map for any industry or any product without getting lost, in the quest for achieving better. As mentioned earlier, the boundary for this system can be set depending on the application of the product, its functionality, strength and mouldability. The three factors that drive metal replacement today are:

(i) Cost Out (ii) Performance Enhancement (iii) Product Differentiation or a combination of the three. Importance of each driver is highly dependent on the market segment [9].

Generally, metal replacement is made when plastics offer equal or better performance at a saving of at least 20 percent in finished part cost [3]. To find the saving, the company needs to define improvements in part performance and costs. Doing so means evaluating the materials, the assembly and manufacturing practices, and the application. In comparing an existing metal part with one of plastic, accounts for all real costs, including finishing and operating costs buried in overhead.

Although plastics may cost more per pound than metal they often are less expensive in the finished part due to parts consolidation and elimination of machining operations, among others factors. In addition they also reduce carbon footprint of a company, since plastic part production effectively reduces energy utilization than a metal part production.

“Systems approach” as a necessity gives a certain objective; to find ways and means for its realization requires the systems specialist (or

team of specialists) to consider alternative solutions and to choose those promising optimizations at maximum efficiency and minimal cost in a tremendously complex network of interactions [10]. This, as we have seen in metal to plastic replacement, requires elaborate techniques and obviously the computer systems for solving problems far transcending the capacity of an individual. However the results ultimately benefit the society.

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A Study of Environmental Ethics in Teacher Education



- Prof. Sandeep Shukla
Dept. of Zoology,
D. B. S. (P.G.) College, Kanpur-
208006 (U.P.)

E-mail:
sandeepshukla143@gmail.com

Introduction-

Learning and Education are a journey from the ephemeral to the durable from the perishable to the imperishable, learning is elucidative, evocative and inspirational and Education is edification much more than erudition. Learning is delightful adventure in to the world of ideas and ideals. Learning is an elevating process of self transformation. The learned is enlightened in thought and action, in attitude and disposition, full of love for all - everything and being of this seamless universe. Education can be viewed in one sense as the transmission of values and accumulated knowledge of society. With the help of Education and teacher education, we can also maintain the Environmental ethics.

Indian Value System-

The Indian value system is cherished throughout the world. The history of India is full of incidents and examples where the values were not taught but internalized by the learner. The aim of Indian philosophy is not the disinterested pursuit of truth and resolution of doubt [Samasya] but to serve as practical aid [Prayojana] to show the right way of living. Its aim is not just to unravel the mystery of life but to discover a way out of its misery. MOKSHA, or spiritual liberation, accordingly became the highest goal of life.

The philosophy of Mahatma Gandhi was built on the solid foundation of 'Ahinsa'. To the Mahatma all life is one and its sacredness is inviolable. Love of life in all its forms and believes sacredness is manifested in our festivals, rituals and other forms of social and cultural life. An appraisal certain basic components of Indian Ideology and value orientation, considered by themselves are essentially positive, optimistic and activist. The concept of Dharma might loss much of its social force when considered as just a means for spiritual liberation; but it is actually built on the values of 'devotion to duty and discipline' which are basic to a developing society.

Belief in an essential unity behind all diversity, the oneness of all human beings and the spirit of tolerance manifested throughout the cultural history of India are again basic to the practice of secularism and democracy. Pursuit of truth and practice of nonviolence are the other positive traits of the Indian mind that need particular emphasis in the context of



the national development; thanks to Mahatma Gandhi who has imparted distinctiveness to the image of India. It is however essential that these should not remain superficial symbols and follow clichés, but should penetrate deep into the through process and work-ways of the Indian people.

Socio-Cultural basis of Value Development-

Social system/socialization is also the chief course of value development. Socialization includes all the process by which anyone from infancy to old age acquires his or her social skills, roles, norms. Socialization results in what could be called internationalization of those values which are symbolic of a culture at a given point of time. Societies, since time immemorial, have followed the strategy of trying to get their members believe in and to accept inwardly those values which are felt to be vital to their survival and growth.

Development of values and ethical environment is thus an intrinsic part of the socialization process. Value are vital to any society because the serve as criteria for selection of action. Values are also act as the base for judgment, preference, choice or rejection. The fact that different cultures have different value systems and these value systems are conditioned by the development taking place in a cultural set-up prove that values have a strong social and cultural base. The more complex a society becomes, the greater is the need for the operation of the values.

Main Agencies of Value Education and Environmental Ethics-

The values that determine and direct our actions are acquired through a series of experiences which we would now make attempt to discuss the impact of these institutions /agencies like family, neighborhood, religion, educational institutions and mass media leading to development of values.

The family is the first unit with which the child has continuous contact and it is also the most powerful medium through which value systems develop. The family is thus the single-

most important channel through which values, considered conducive to individual and social good could be cultivated. The concept of neighborhood has both physical and social implications. Socially a neighborhood characterized by social similarities of the residents, often specially by similarities of social class or status and other identities. It is the neighborhood that one is likely to come under influences which may help or hinder the development of positive values. In a multi-religious society like that of India, the study of religion as a major base for value development assumes special significance. Children are inculcated into certain values through religion at a very young age, Thus religion is powerful factor inculcating as well as strengthening values. Values such as tolerance, love of truth, spirit of sacrifice, fellow-feeling and the refined sense to hold that the things of the mind and heart are higher than the various kind of material benefits, could be inculcated through prospects in a very effective manners.

The eminent sociologist Emile Durkheim sees - education as a process of methodical socialization of the young ones. Education has two important functions to perform, the first of which relates to maintaining 'social stability' and the other tends to ushering in 'social change'. When we make a reference to an educational institutions. We have to consider both the formal and informal agencies of education. Formal education which is represented by school, colleges and other institutions of learning covering a large section of common people, is of relatively recent origin and indispensable to the modern society. The school and college symbolize the hopes and aspiration of many in the modern world and formal education serves as the most important avenue for social mobility. Besides important knowledge, the formal educational institutions should also inculcate quality such as leadership, love for outdoor activities, peaceful coexistence, mutual tolerance and respect for others right. School/College also provides a suitable platform for learning and developing future, social as well as political



development. Teacher on their part often provide the most strong and stable source of support and encouragement to their students. In the early years, the tendency to emulate a eulogies a teacher is very strong. This tendency should be made by teachers to inculcate in their students, a strong commitment to those values which are good for the students as well as the society in general.

If school is a powerful base of formal education the mass-media are the most influential among the informal agencies of education. The communication imported through the mass media teach the individual the norms, the social position and the institutional functions of all the mass media, the impact of movies and televisions seems to be very powerful sources of value development . Because of their audio-visual impact, they capture the mind of the young and the old allies transmit both positive and negative values with the same amount of authority and intensity. So the mass media have to be used with utmost care and caution.

Present day Indian Society -

Let us take here the case of the present day Indian society itself. It is passing through a situation of turmoil and crises as was never seen before. Values such as violence, corruption, fundamentalism, self-centered interests, and desire for easy success without working for it are threatening our very social fabric itself. Some would say, complete erosion of values in the present day Indian educational practice is complaint, which has become a part of our folklore, academic as well as non-academic. It is as such critical time that values like forbearance, tolerance and hard work are needed to be emphasized.

Sources of Environmental Ethics-

The regular subject of the school curriculum, co-curricular programmes and the tone and atmosphere of the educational institution are very good sources of value education and environmental ethics-

School Subjects/curriculum -

Curriculum broadly refers to all the

planned experience that we provide to the learners in order to achieve our stated objectives of education. The idea of providing value education through the regular school subjects is a very attractive one and has been recommended by several educationists. According to Education Commission , "Teacher must ensure that in the teaching of his particular subject and his dealings with his pupils fundamental values such as integrity and social responsibility are brought out". Such a suggestion should be understood and implemented in its proper spirit.

It is certainly not the intension that the school subjects are to be treated as deliberate instruments/vehicles of value education. Should we do that we would be distorting the true nature of the discipline itself. The Education Commission itself has cautioned that "The teacher need not, we can even say that he should not try to draw out the underlying moral all the time. But if he has given some thought to the values underlying the scope of his subjects and his work as a teacher, they will imperceptibly pass into his teaching and make an impact on the minds of students."

Co-curricular Activities -

Co-curricular activities are another important source of value education. Co-curricular activities are those activities which are usually organized the classroom to provide opportunities for students to develop their special talents ad to creatively express themselves through various forms. They also help students to refresh, entertain and recreate themselves, strengthen and enrich curricular learning and develop leadership qualities. They are usually characterize by a healthy flexibility, informality and free and voluntary participation of the learners. This makes eminently suited for value learning. For the effective realization of the value potential of these activities they have to be organized democratically and with clearly defined objectives in teacher education programmes.

The School Atmosphere -

School atmosphere is another important



source of moral and spiritual education of children. Tagore and Gandhi Ji laid great stress on the creation of 'conductive atmosphere' in educational institutions for the wholesome development of the child's personality. In Shanti Niketan (abode of peace) he sought to realize his poetic dream of Tapovana. That the atmosphere of school and the personality of the teacher cast a powerful influence on children specially in their social and moral development. The school atmosphere may be described as the sum total of the influences by it, its setting, its traditions and ideals, the teachers, pupils and parents, in a word the overall ethos of the school. Where high ideals guide the working of the school, where teachers work with a sense of direction, where there is mutual respect, affection and love among all concerned- students, teachers, parents and the community- values are induced in the children in a natural way. But it should be noted that such an atmosphere is built up over a period of time and is the result of the cooperative and collective efforts of students, teacher and parents.

Environmental Ethics and Teacher Education-

In India and many other places today, religious fundamentalism and narrow loyalties have greatly disturbed the traditional social adjustment and understanding the young are growing in an atmosphere surcharged with tension and distrust. Religion itself through its accommodative spirit could resolve the present crisis.

Education is one of the basic institutions through which every society sustains itself as well as transmits its values to posterity. The present education system is drifting towards western ethos, which ignores the polishing and development of the inner instruments of man his mind and worse, it ignores the innate divinity, the self within and focuses only on the body, mind and intellect. The western culture, which we are now trying to ape, on the other hand is built around comfort and enjoyment of the body. Indian ethos talks of rhythm, natural harmony and being in true with this rhythm by a value-

oriented life. Education is the means to know and to experience this bliss and to give us the life skills for it, not just job skills. The entire system of education revolves around the teacher and the taught. It therefore becomes imperative for the teachers to function as role models.

What is the role-model which the teacher [this includes teacher-educator as well] has to present as ethical or value educator? This is a crucial question for the whole issue of value education in schools and training institutions. For our specific purpose here, which is to make explicit the role of the teacher. The teacher will have to provide learning experiences for holistic development of mind, body, intellect and emotions. So the challenge of teacher education will be to prepare such teachers as can take care of holistic education of children. This would require value oriented education for teachers before they can guide the youngsters.

In the Delors Committee Report [1996] "Learning : the treasure within, emphasis has been laid on re-orientation of pre-service and in service teacher education for enabling teachers in acquiring intellectual and emotional qualities that a nation wants to be developed by them in their pupils."

For this purpose some different sources, techniques and activities can be adopted in teacher education programme for developing environmental ethics. These are given below-

- ☛ Reading, listening and discussion activities.
- ☛ Visual and multisensory experiences.
- ☛ Enacting, modeling and role-play type activities.
- ☛ Dealing with value dilemmas and values clarification.
- ☛ Learning by living type activities.

All these efforts, techniques and activities can be adopted in teacher education programmes for developing environmental ethics.

Conclusion -

Modern education, based on partition between mind and matter, teaches us to know about everything except our inner being. We do



not know how much of a slave we are, to our selfish desires and passions. We may be performing some good acts, unaware that at the bottom of our motivation is a desire for reward, for recognition, for honor and for good return, on investment made in the form of a temporary sacrifice.

So, instead of serving others through these good acts, we end up by serving our own self. Consequently children ape these behavioral traits. For helping teachers and teaching educators internalizing values should be developed in children through the schooling process, making education in human values and integral part of the curriculum teacher education will be necessary.

The question of what specific values are to be developed in teacher education programme for environmental ethics? And how to go about introducing value education in teacher education programme? are to be answered. The available options are- the content of value education can be approached from two angles individual and social. And other options, a new course should be developed in value education for pre-service teacher education and the entire programme of teacher education should be value oriented.

Whatever may be the mode of including value education in teacher education, what needs to be ensured is that, these values are imbibed with lot of "Purushartha" and "Bhawna" are some of the ethical values that can be incubated in the teacher training programme through the practice of Dharma and Bhawna are :

- ☛ Sense of duty, social justice and cohesion, selfless action, honesty and discipline.

- ☛ Friendliness and kindness, love and respect for all lives.

- ☛ Spirit of tolerance and patience.

- ☛ Self dependence, truthfulness, reconciliation, gender and human equality, co-existence, patriotism/loyalty and mental equilibrium.

- ☛ Freedom from fanaticism, lust, conceit, fearless and avidity.

- ☛ Will power, self discipline, modesty,

forbearance and compassion.

What is required to use the techniques, sources and instrument of teacher education for ensuring that entrant teachers understand holistically, the concept of education I human values and are able to use direct and indirect techniques, formal and informal education for the development of values through the schooling process. The mass media and the most influential among the informal agencies of value education of all the mass media, the impact of movies and television seems to be very powerful sources of value development and environmental ethics.

It is sad that no one can rise above the level of teachers, teachers must 'glow in' their profession. They should never glow out become burnout teachers are to awaken the lives of others and work as superhuman. They can also make ethical environment with the help of PF suggested value oriented curriculum and different sources, approaches and new techniques. Inclusion of value education in teacher education is the need of the hour to bring out the desired glow in teacher trainees and to ensure that the never glow out when they become a part of the school system.

To conclude all one should know that the ideas and values in tradition are not sacrosanct in themselves. One must take on evolutionary and dynamic view of Indianness and not tie it down to any rigid model.

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A Brief Review on Biologically Active Hetrocycles



- Dr. Nidhi Vinod Singh
Assistant Professor -
Dept. of Chemistry,
D.A. V. College, Kanpur-208001
(U.P.)

E-mail:
ndh104580@gmail.com

The use of chemicals to protect plants from fungus diseases and to prevent deterioration of leather, plastics cellulosic materials and others articles of economic value has attained great importance these days. All those chemicals, which are employed to prevent growth from multiplication of fungi are termed as fungicides.

The early used fungicides were mostly the inorganic compounds derived from the elements like copper, calcium, mercury, arsenic and sulphur. Although, some of these compounds have been dominating the field of pest-control for quite a long time, yet they are now unpopular owing to inherent toxicity associated with many of them. Because of their residual toxicity it was often hazardous to consume the treated fruits and vegetables. Moreover, some of these fungicides had phytotoxic properties.

The organic fungicides, on the other hand, have been found to be safer, more specific in action and offer a wide range of choice to be made. Obviously, the chemistry of organic fungicides has attracted much attention in recent years. Quite a large number of organic compounds have been synthesised and evaluated as fungicides. A detail treatment of all these compounds is beyond the limit of this review hence attempt has been made in the following pages to give a concise account of more important types of organic fungicides.

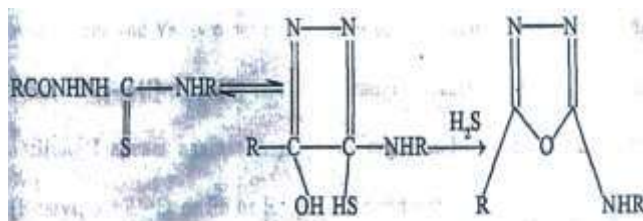
This review presents a brief account of chemistry of 1, 3, 4, oxadiazoles and 1,2 4-triazoles derivatives with chlorosulphonyl isocyanate (CSI) and B-D-glucopyranosyl, with special reference to their biological activity.

A brief survey of the literature on the chemistry of 1, 3, 4-oxadiazoles with special references to the uses of biologically active drivatives reveals that although 1,3,4-oxadiazoles have been known for about 90 years, it is only during last three decades that investigation in this field have been intendified. This is primarily due to enormous of 1,3,4-oxadiazoles in the most diverse areas, e.g. in pharmacology, acgriculture, production of polymers and dyestuff industries.

Compound having a five membered ring incorporating one oxygen and two nitrogen atoms are called oxadiazoles or in the other literature furodiazoles. The preparation of 2-amino-1,3,4-oxadiazoles from 1- aroylthiosemicarbazides using PbO1



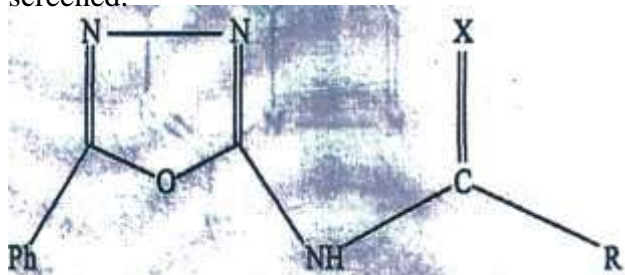
has often been modified 2-4. Thus, HgO , Pb_3SO_4 , CuSO_4 and iodine may also be used. The cyclisation of 5-alkyl-1-acythiosemicarbazides follow the similar course.⁵ Recently, 1-aryl / acythiosemicarbazides has been cyclised to 2-amino-1, 3, 4-oxadiazoles (1) using mercuric acetate in acetic acid⁶ or dimethylsulphate in an excess of 10% NaOH .⁷



The action of nucleophilic reagents on 2-amino-1, 3, 4-oxadiazoles leads to acyclic compounds which often cyclise immediately to triazoles 8-11. Various nucleophilic agents have been used to have 2-amino-1, 2, 4-oxadiazoles and these include alcoholic potash¹², primary amine¹³, hydrazine hydrate¹³, acid hydrazide¹⁴, semicarbazide¹⁵, thiosemicarbazide¹⁵, ammonium hydrogen sulphide and hydrochloric acid.

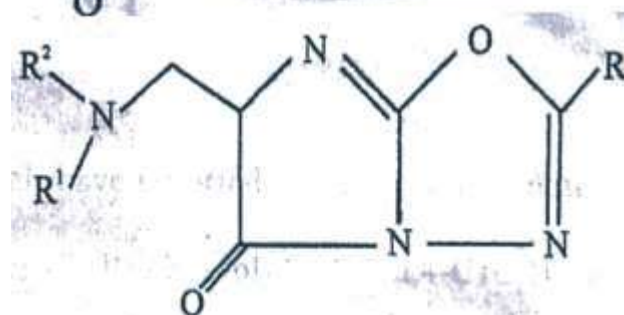
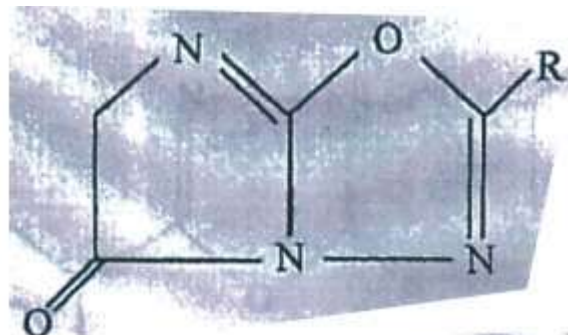
Under mild conditions, ring hydrolysis of 2-amino-1, 3,4-diazoles take place, if the ring nitrogen. (N-3) is alkylated making the neighbouring carbon atom positive, e.g. 2-amino-5-phenyl-1,3,4-oxadiazolium halides are cleaved by aqueous potassium carbonate even in cold or at slightly higher temperatures.

Some N-substituted 2-amino-5-phenyl-1, 1,3,4-oxadiazole derivatives (2) ($\text{R} = \text{Me}$, CH_2Cl , CH_2Ph , Ph , OEt , $\text{X} = \text{O}$, S) have been synthesised and fungicidal activity has been screened.

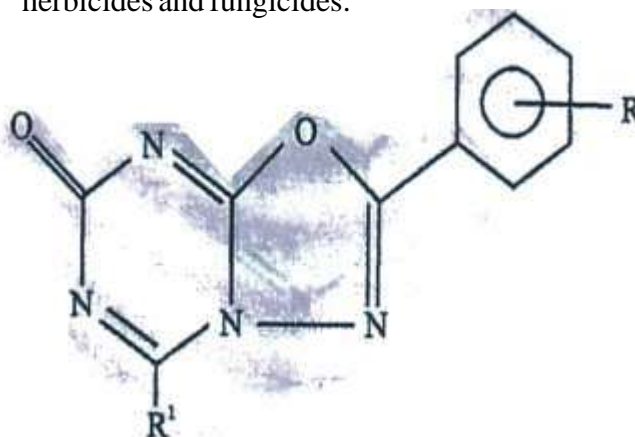


Singh and Yadav reported a number of 2-arylimidazol-[2,1-b]-1,3,4-oxadiazol-5-[6H]-

ones (3) and their mannich bases 21 (4) potential antifungal agents against *Aspergillus niger* and *Aspergillus flavus* [$\text{R} = \text{aryl}$; $\text{R}^1 = \text{R}^2 = \text{Et}$ or Ph or $\text{R}^1, \text{R}^2 = \text{piperidino}$]



Some 1,3,4-oxadiazolo-[2,3-a]-s-triazine-6-thiones (5) ($\text{R} = \text{H}$, 4- Cl , 3, 5-dibromo-2- OH , $\text{R}^1 = \text{Ph}$, 4- ClC_6H_4 , PhOCH_2 , 2- $\text{ClC}_6\text{H}_4\text{OCH}_2$, 4- $\text{ClC}_6\text{H}_4\text{OCH}_2$) have been recorded as active herbicides and fungicides.

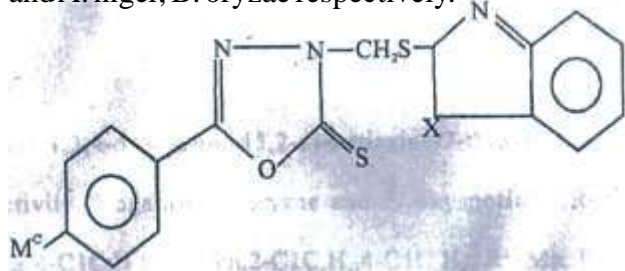


Some new heterocyclic 1,3,4-oxadiazoles (6) ($\text{X} = \text{O}$, NH) show antibacterial activity. The minimum inhibitory concentration of ($\text{X} = \text{O}$) against *E. coli* was 125 mg / lt.

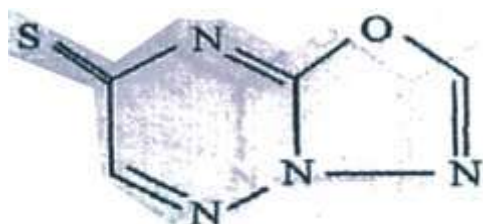
Singh et al. have reported several 1,3,4-oxadiazolo- [3,2-a] - 1,2,3, triazine 5-thioones (7) ($\text{R} = \text{Ph}$, o-toly 1; $\text{R}^1 = \text{Ph}$, 4- ClC_6H_4 , $\text{R}^2 = \text{Ph}$, 4- ClC_6H_4 , 3- 4- Br_2 -2- OH - C_6H_2) as fungicides.



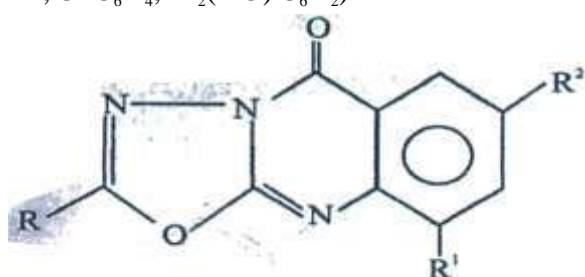
Similarly, oxadiazoloquinazolone derivatives of type (8) ($R = \text{Ph}$, $2\text{-C}_6\text{H}_4$, $4\text{-C}_6\text{H}_4$, PhOCH_2 , $2\text{-C}_6\text{H}_4\text{OCH}_2$, $R^1 = \text{H}$, Br ; $R^1 = R^2 = \text{Br}$) exhibited herbicidal and fungicidal activities against *Argemone mexicana*, *Cyperus rotundus* and *A. niger*, *B. oryzae* respectively.



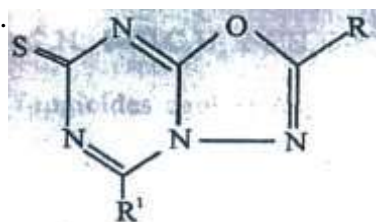
Some 1,3,4-oxadiazolo- [3,2-a] -s-triazine -7-thiones (9) also exhibit fungal activity against *H. oryzae* and *F. Oxysporium* ($R = \text{PhOCH}_2$, $2\text{-CH}_3\text{OCH}_2$, $4\text{-C}_6\text{H}_4\text{OCH}_2$, Ph , $2\text{-C}_6\text{H}_4$, $4\text{-C}_6\text{H}_4$; $R^1 = \text{Me}$, Ph).



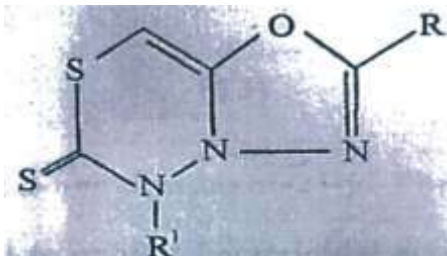
1,4-cycloaddition of azadienes to isothiocyanates and fungitoxicity of the resulting 1,3,4-oxadiazolo-[3,2,-a] -8-triazine-5-(6H, 7H) -thiones (10) ($R = \text{Ph}$, tolyl ; $R^1 = \text{Ph}$, C_6H_4 ; $R^2 = \text{Ph}$, C_6H_4 , $\text{Br}_2(\text{HO})\text{C}_6\text{H}_2$)



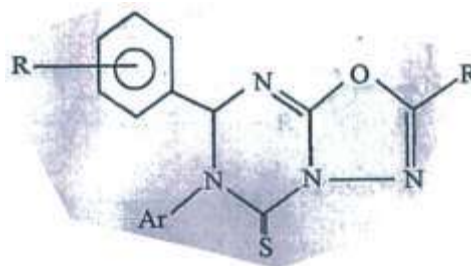
Singh et al claimed that oxadiazolo-[3,2-b]-thiadiazine (11) ($R = p\text{-C}_6\text{H}_4\text{OCH}_2$, $R_1 = o\text{-MeOC}_6\text{H}_4$) gave 100% kill of *H. oryzae* at 1000 ppm concentration.



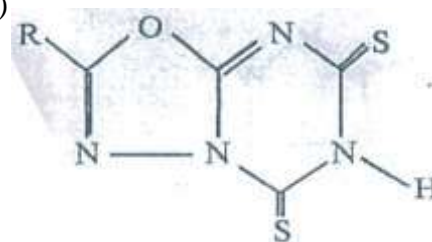
1,3,4-oxadiazolo-[3,2-a] -s-triazine -5-thiones (12) ($\text{Ar} = \text{C}_6\text{H}_5$, $2\text{-CH}_3\text{C}_6\text{H}_4$, $4\text{-CH}_3\text{C}_6\text{H}_4$; $R = \text{C}_6\text{H}_5$, $4\text{-C}_6\text{H}_4$, $2\text{-CH}_3\text{O-C}_6\text{H}_4$, $4\text{-CH}_3\text{O-C}_6\text{H}_4$) have been reported as useful fungicides against *Aspergillus niger* and *Fussarium oxysporium*.



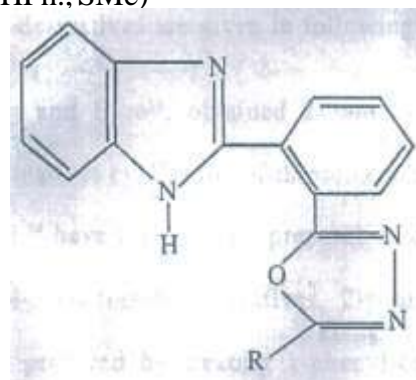
Some 1,3,4-oxadiazolo- [3,2-a]-s-triazine-5, 7-dithiones (13) have been claimed to posses antibacterial and antifungal activities (R , Me , Et).

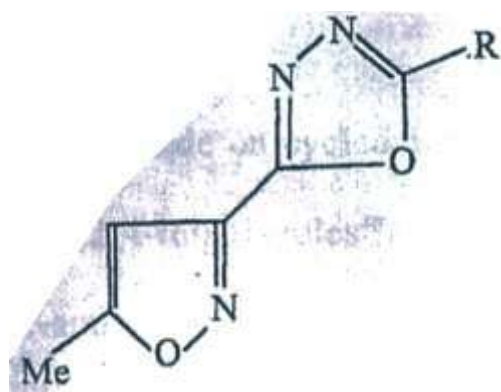


Some 2-aryl-5-(o-benzimidazol-2'-Phenyl)- 1,3, 4 - oxadiazoles (14) have been reported to exhibit bactericidal activity [$R = (\text{un})$ substd. Ph etc.)



Several 1,3,4-oxadiazole derivatives (15) have been synthesised to exhibit antibacterial activity. ($R = \text{NHPh.}$, SMe)





Compounds having a five membered ring incorporating one sulphur and two nitrogen atoms are called thiadiazoles. Several 1,3,4-thiadiazole derivatives have been synthesised by various methods. Only a brief reference of these derivatives are given in following pages.

Young and Eyre³³, obtained 2- amino-5-alkyl/aryl-1, 3, 4-thiadiazoles by oxidative cyclisation of thiosemicarbazides with FeCl_3 . Similarly, De et al. have reported the preparation of several 2-amino-5-substituted-1,3,4- thiadiazole derivatives, 2-phenylhydrazino-1,3,4-thiadiazoles were prepared by treating 1-phenylcabohydrazide with formic acid.

2-amino-5 - substituted -1,3,4-thiadiazoles with long chains in the 5-position were prepared by heating acylchloride with thiosemicarbazides directly. The reaction of 4-alkythiosemicarbazide with formic acid gave one formy-4 alkythiosemicarbazide which on heating with acetylchloride yielded 2-alkyl amino-1,3,4-thiadiazole. Using this method Meinedke has prepared 2-amino-1,3,4-thiadiazole.

The aroylthiosemicarbazide on cyclodehydration with cono. H_2SO_4 furnish 2-amino-5-aryl-1,3,4-thiadiazoles. Author has also used this method for preparing 2- amino-5-alkyl/aryl-1,3,4-thiadiazoles. Sulphuric acid, phosphorus tribromide phosphoric acid have generally been used for cyclodehydration of aroyl / acylthiosemicarbazides to give 2-amino-5-substituted-1,3,4-thiadiazoles.

A variety of chemotherapeutic and agricultural applications of 1,3,4-thiadiazoles have also been explored in recent years, 2-

sulphonyl amino-5-alkoxy-1,3,4-thiadiazoles have been patented as Coccidiostats and have been found quite useful in treatment of urinary trach infections.

Several 1,3,4-thiadiazole derivatives have been patented as effective herbicides. Some 2-chloro and 2,5-bis(acetylamino)-1, 3,4-thiadiazoles were reported as effective bactericides for controlling bacterial leaf blight of rice.

A number of 2-amino-5-aryl-1,3,4-thiadiazole derivatives (16) ($\text{X} = 2\text{-}3\text{-}$ or 4-NO_2 , Cl or Me ; $2,4\text{-Cl}_2$ or $3, 4\text{-Cl}_2$; 4-NH_2 or 4-OMe) have been recorded as bactericides.

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China's escalating aggressiveness in Ladakh and India's responses



- Dr. Pankaj Kumar Verma
Assistant Professor -
Department of Defence and
Strategic Studies,
Dharma Samaj College,
Aligarh-200201 (Uttar Pradesh)

E-mail:
1980pankaj@gmail.com

Abstract

Since the dawn of the 21st century spectacular economic rise of India and China has dominated the world's economical and political landscape. Judging from which many political pundits have forecasted that the coming century would be an Asian age. However, to its great dismay along with the spectacular rise of both countries – strategic competition between the countries has also seen a steady surge along its extended unsettled Line of Actual Control (LAC). China with its increased economic might has also increased its aggressiveness along the Sino – India LAC dragging India along with it. This aggressiveness has been particularly intensified along approximately 1600 km LAC in Ladakh after Xi Jinping's climb to power in China in 2013. India too has intensified its responses vis-à-vis Chinese aggressiveness during the Modi era. Thus the paper analyses the growing Chinese aggressiveness along LAC in Ladakh and India's responses during the Modi era. The paper is divided into two parts where in the first part it analyses the growing aggressiveness of China in Ladakh and in the second part it presents India's responses vis-à-vis Chinese aggressiveness.

Keywords: Ladakh, Line of Actual Control (LAC), Strategic importance, face-offs

Introduction-

Ladakh is situated between the trans-Himalayan mountain ranges of Karakoram Range, Ladakh range and Zaskar range at an average altitude of about 3500 meters above sea level. It is the largest Union Territory (UT) of India with an area of 59146 square kilometres under the effective administration of India which of course does not include Aksai Chin (39'000 sq. km) and Shaksgam Valley (5180 sq. km) under the People's Republic of China's illegal occupation and Gilgit-Baltistan (71'000 sq. km) under Pakistan's illegal occupation. Ladakh thus constitutes a vast border region situated at the tri-junction where three nuclear countries of Asia meet the viz



Islamic Republic of Pakistan, the People's Republic of China (PRC) and the Republic of India. In the yesteryears, the millennial kingdom of Ladakh was ruled by two dynasties which were known as the Lhachen dynasty and the Namgyal dynasty from around the 10th to 19th century. Their sovereignty ultimately collapsed when Gulab Singh's Dogra forces under its Wazir Zorawar Singh invaded Ladakh and took over it in the 1830s. Consequently, it became part of Jammu & Kashmir (J&K) when the principality of J&K was formed after the Treaty of Lahore in 1846 and afterwards with the integration of J&K with the Union of India on 26 October 1947 it became part of the Republic of India.

Ladakh during the Middle Ages as an independent sovereign kingdom not only shared contiguous borders with Tibet, Yarkand, Kashgar, Kashmir and Punjab and was an entrepot of Central Asian trade but an important feeder to the ancient Silk Roads. However, after its integration with India and the PRC's takeover of Tibet and Xinjiang in the 20th century Ladakh has not only been reduced to an isolated border region but its ancient trade routes have transformed into an invisible border line that now catches the limelight only as a border with PRC in the east and Pakistan in the west. This Sino-India border is also termed as Line of Actual Control (LAC) and it is divided into three sectors known as Eastern, Middle and Western Sectors. Arunachal Pradesh and Sikkim fall in the Eastern Sector, Middle Sector constitutes Uttarakhand & Himachal Pradesh whereas Ladakh falls in the Western Sector. Among the three sectors, the Eastern Sector has minor disputes from the Indian side as it almost falls in alignment with the McMahon Line of 1914, which was based on the principle of the Himalayan watershed except for Longju and Asaphila, however on the contrary Beijing disputes whole of Arunachal Pradesh and claims it to be 'Southern Tibet'. The Middle Sector has the least disputes between both countries as "The line in the middle sector is the

least controversial but for the precise alignment to be followed in the Barahoti plains" (Singh 2020). However, the bulk of the problem in the Sino-India border dispute lies in the Western Sector which comprises primarily of Changthang region in the newly carved UT of Ladakh.

Growing aggressiveness of China in Ladakh-

International law recognizes the fundamental significance of international boundaries; the boundaries not only define the territorial sovereignty of the nation-state but also help in containing illegal trade, arms trafficking and terrorism. Boundaries also symbolise the exclusive control of the concerned state and any infringement on it is taken as a challenge to its national sovereignty. United Nations taking note of this enshrines in its Charter "All Members shall refrain from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the purpose of the United Nations" (United Nations Charter). Any efforts to redefine the boundaries either through coercion or through an alternative representation of boundaries either by states or non-state actors through cartographic representation have always led to tense situations. As noted by Sharma in his paper *The India-China Border Dispute: An Indian Perspective* "Fundamental general community policies require that states do not employ coercion in the settlement of boundary disputes, but rather make positive efforts to honour reasonable demands and expectations of other states concerning their political independence and territorial sovereignty" (1965). However Sino-Indian Borders seldom observe the international laws of territorial sovereignty and mutual non-interference and are a constant source of threat not just to regional harmony but global power status quo. China and India share a total boundary of 4,056 km which includes a small International Boundary in the middle and the Line of Actual Control (LAC). The two countries do not share similar views as regards LAC as Shushant Singh



in his article, 'Line of Actual Control (LAC): Where it is located, and where India and China differ' writes "India considers the LAC to be 3488 km. long, while the Chinese consider it to be only 2,000 km." (2020). Out of the total length of Sino-India LAC i.e. 3488 km, Ladakh has the longest LAC of 1597 km followed by Arunachal Pradesh at 1126 km., Uttarakhand at 345 km., Sikkim at 220 km. and Himachal Pradesh 200 km.

The disagreements regarding the boundary began to surface as early as 1956 when Premier Zhou Enlai mentioned such a 'line', which was subsequently articulated to Prime Minister Jawaharlal Nehru through a letter in 1959 where he said LAC would consist of the McMahon line in the east and to the lines up to which each side enjoyed their effective control in the western sector. He further reiterated the same to Prime Minister Jawaharlal Nehru through another letter after the 1962 war as they claimed to have withdrawn 20 km behind the LAC "To put it concretely, in the eastern sector it coincides in the main with the so-called McMahon Line, and in the western and middle sectors, it coincides in the main with the traditional customary line which has consistently been pointed out by China" (Singh 2020). However India vehemently objected to the LAC in 1959 as well as 1962, Nehru unequivocally said "There is no sense or meaning in the Chinese offer to withdraw twenty kilometres from what they call 'line of actual control'. What is this 'line of control'? Is this the line they have created by aggression since the beginning of September" (Singh 2020)? Furthermore, Shivshankar Menon in his book "Choices: Inside the making of India's Foreign Policy", writes that the concept of LAC was rejected as "... the Chinese concept was a disconnected series of points on a map that could be joined up in many ways; the line should omit gains from aggression in 1962 and therefore should be based on the actual position on September 8, 1962, before the Chinese attack; and the vagueness of the Chinese definition left it

open for China to continue its creeping attempt to change facts on the ground by military force" (Menon 2016).

This contested and ambiguous LAC between the two rival powers of Asia which was one of the major reasons for the Sino-India border conflict of 1962 continues to haunt the present bilateral relations with PRC continuously increasing its aggression along it. China's escalating aggressiveness in Ladakh particularly constitutes frequent transgressions and intrusions resulting in frequent face-offs and skirmishes along the LAC in the Changthang region of Ladakh. This phenomenon has particularly seen an increasingly upward surge in numbers as well as intensity after the rise of President Xi Jinping as the head of the PRC. Within a few months after his climb to power Dapsang Incident of 2013 took place. This incident was particularly significant as it not only coincided with the change of power in the PRC but for the first time People's Liberation Army (PLA) intruded around 19-20 km inside the territory that was presumed to be Indian Territory. Moreover, the PLA soldiers pitched their three tents and remained there for around twenty days before re-establishing the status quo. After the resolution of this conflict, it was hoped such events would not be followed in the future although the terms on which the resolution was reached were not made public.

This positive atmosphere soon evaporated when within a year after Dapsang Incident (2013) in September 2014 another faceoff took place in the Demchok and Chumur villages of eastern Ladakh. This standoff started when some PRC workers started building a road inside the Indian Territory in Chumur sector. This was followed by the PLA and villagers of Demchoq (Chinese Demchoq) village who objected to Indian canal construction in the Demchok (Indian Demchok) village of Ladakh on the Indian side of the LAC. In this incident, PLA brought their villagers shouting slogans with placards in their hands and disrupted Indian villagers who were constructing



a village canal. Interestingly this standoff took place against the backdrop of President Xi Jinping's India visit when both the countries were signing deals on the one side and the standoff was taking place on the other side. The standoff was finally resolved after 16 intense days when Minister for External Affairs (MEA) Sushma Swaraj and her PRC counterpart met in New York.

This standoff was followed by Burtse incident almost a year later in September 2015. This incident which took place near Depsang at Burtse took place when Indian border security forces flattened a PLA-constructed Border Observation Post. Both the armies gathered at the point and again a standoff-like situation developed but the situation was quickly resolved after two flag meetings were held at Chushul and Daulet Beg Oldie (DBO) Border Meeting Points. This incident was followed by a 74-day major standoff in Doklam in 2017 when Indian forces entered Doklam to stop PLA from constructing a strategic road.

After Doklam no major incident took place between both armies till 2020 when the whole of the world was reeling under the Covid-19 pandemic. No person would have thought that when the whole world was under Pandemic PRC would embark upon aggression however it happened in the form of Galwan altercation. The Galwan valley is named after Ghulam Rassul Galwan a Ladakhi Muslim explorer and adventurer whose descendants still live in Leh and it is one of the numerous valleys that are present in the Changthang region of Ladakh. Galwan altercation started with a chain of events along LAC that started in the Pangong Tso (Lake) area on 5–6 May 2020. Violent clashes took place on the northern banks of Pangong Tso between the patrolling parties of the Indian army and PLA which were followed by confrontations reported from Sikkim and Galwan valley.

On May 19 China accused Indian troops of transgressing LAC amidst simmering tensions

in Galwan valley, Pangong Tso, and Hot Springs. On May 22 General Manoj Mukund Naravane visited Leh based 14 Corps to take review the situation. On May 30 Defence minister of India, Mr Rajnath Singh said India and China are trying to resolve the tense situation through military and diplomatic levels. On June 9 limited disengagements started by both sides in Galwan valley, Hot Springs and Patrol Point 15. 4th Round of talks between the Major General rank officers took place at Patrolling Point 14 of Galwan area on June 10 amidst disengagement at a few places despite more than 8000 troops, tanks, artillery guns, fighters and air defence radars deployed by the PLA across LAC. The tense situation took a new turn when on the intervening night of 15,16 June 2020 in a squabble on the ridgeline of Galwan valley around 20 soldiers of the Indian Army along with an officer died while 80 soldiers were injured. The casualties suffered by PLA have not been disclosed initially however later on after a gap of almost one year China admitted that four PLA soldiers were killed in February 2021. Although not even a single bullet was shot in the incident the deadly conflict since 1962 brought bilateral relations to an all-time low.

In July 2020 as reported by Hindustan Times in 'India, China complete troop disengagement at three friction points, focus now on Finger area', complete disengagement was achieved between the two forces in Galwan area (Patrolling Point 14) and Hot Spring (Patrolling Point 15) and Gogra (Patrolling Point 17A) areas in the Changthang region. It further stated that the disengagements were done as part of the agreements reached between the Corps Commander-level talks between the two armies and after these, the only area where disengagement was yet to reach was the Finger areas of Pangong Tso and Gogra. Prior to this the 17th meeting of Working Mechanism for Consultation and Coordination (WMCC) was held between the Joint Secretary, East Asian, Ministry of External Affairs (MEA) and Director



General Boundary and Oceanic Department of Chinese Military of Foreign Affairs and reviewed the situation along LAC and both sides decided to agreed to complete disengagements, de-escalation along the LAC as well as maintaining peace as the primary requirement for nurturing healthy bilateral relations.

In August 2020 a Tibetan soldier of the Special Frontier Force (SFF) also died when he stepped on a land mine. In the same month on August 30 in a pre-emptive move, Indian troops captured important posts on the southern bank of Pangong Tso which were either unoccupied or partly held by Indian forces. The captured posts include Rezang La, Rinchen La, Black Top, Hanan, Helmet, Gurung Hill, Gorkha Hill, Magar Hill etc providing a tactical advantage to overlook northern finger areas of Pangong Tso, China's Moldo Garrison as well as Spanggur Gap that covers Patrol Points 27 to 31. On 7 September 2020 however for the first time after the Sino-India conflict of 1962 gunshots were fired but later on both sides blamed each other. After a face-off of nine months, the disengagement in the Pangong Lake area was ultimately reached in February 2021 after which it was decided that disengagements in Depsang and Gogra will be reached however later in April 2021 China refused any disengagement before de-escalation and withdrawal of armies.

Thus China has consistently escalated its aggressiveness along the LAC in Ladakh. Various theories have emerged that try to substantiate China's aggressiveness which ranges from PRC's internal politics to exerting its regional dominance. However, the increasing strategic significance of Ladakh as it overlooks Chinese National Highway G219 and China-Pakistan Economic Corridor (CPEC) and India's infrastructure initiatives seems to be the reason behind PRC's behaviour. Whatever may the reason be the hard truth is that PRC's posture with respect to LAC in Ladakh has acquired this dominant trait of aggression and this

phenomenon is only appreciated with the increase in PRC's economic and military might.

India' responses vis-à-vis Chinese aggressiveness-

The Government of India (GOI) has taken a number of steps to counter China's escalating aggressiveness in the Changthang region of Ladakh in the Modi Era. This includes structural changes in the military and paramilitary administration as well as infrastructural improvements in the border regions of Ladakh. Though the GOI has been strengthening its positions along the LAC for a long time after PRC undertook extensive infrastructure development in the Tibetan Autonomous Region (TAR) in the form of the India-China Border Roads (ICBR) Programme, Border Area Development Programme (BADP) and score of other projects to augment India's defensive capabilities but after the landmark victory of National Democratic Alliance (NDA) spearheaded by Bhartiya Janta Party (BJP) in 2014 and 2019 not only the programmes were expedited but in the wake of increased Chinese threat and aggressiveness number of counter responses were undertaken which are as follows.

Creation of the Union Territory (UT) of Ladakh: The bifurcation of the state of J&K on 5th August 2019 and the formation of the Union Territory (UT) of Ladakh as a separate UT govern directly by the Central Government was one of the major administrative measures undertaken by the NDA government to meet the strategic challenges in Ladakh. PRC vehemently objected to this strategic step and GOI quickly responded to it by stating that the matter was truly internal and PRC need not interfere in the internal matters of India. Pakistan too took a quick note of the strategic step and stated recently that restoration of the status quo in J&K is the precondition of initiating talks between the two states. This was followed by Galwan altercation in Ladakh which brought both the Asian giants to the verge of a full-scale conflict. The bilateral relations between



both countries reached a new ebb and even after one year the border standoff is still to be resolved completely.

Col. Chewang Rinchen Setu completed: The Government of India even before the bifurcation was in the process of upgrading infrastructure as a result of which one of the longest bridges on the strategic Durbuk-Shayok-DBO (DSDBO) was completed and inaugurated in October 2019 by Defence Minister Rajnath Singh and named as Col. Chewang Rinchen Setu after the Col. Chewang Rinchen who played a pivotal role in safeguarding Ladakh during Pakistani invasion during 1947 and liberation of Turtuk and adjoining areas in 1971 and played an important role in the formation of the Ladakh Scouts.

Atal Tunnel and Zoji la Tunnel: Amidst the Covid-19 pandemic and PLA's escalating aggressiveness, the strategic Atal Tunnel on the 436 km long Leh – Manali Highway was dedicated to the nation by Prime Minister Narendra Modi in October 2021. The Tunnel not only reduced the distance between Leh and Manali by around 46 km but would provide round-the-year connectivity to Lahaul & Spiti valley which remained cut off from the rest of the country for around 4-5 months a year. The tunnel would also boost tourism in Ladakh and Lahaul valley and would provide strategic leverage to Indian security forces in safeguarding the frontiers of Ladakh.

Operational Helipads: As one of the biggest helipad projects in Ladakh, an initiative was undertaken to construct 36 new helipads in Ladakh. The initiative is particularly important as Ladakh not only remains cut off from the rest of the country for more than six months a year but within Ladakh, various villages remained cut off from the capital Leh for many months. The helipads would thus go in a long way to integrate each and every corner of Ladakh with Leh and the rest of the country. The helipads will also not only provide an impetus to the tourism sector but

would also provide strategic leverage to the security forces as many of the helipads would be constructed close to LAC. This project in Ladakh comes against the backdrop of the Indian Air Force (IAF) inducting attack helicopters such as Apache AH-64E and Chinook transport helicopters into its fleet.

North-West Frontier Headquarter of Indo-Tibetan Border Police (ITBP): The Government of India after successfully establishing the Army's Northern Commands XIV Corps in Ladakh after the Kargil Conflict of 1999 also shifted the North-West Frontier Headquarter of Indo-Tibetan Border Police (ITBP) to Leh in April 2019. The shift was particularly important as it will promote better coordination and interaction between the Army and ITBP who are deployed all along the LAC to safeguard the Sino-India frontiers. The newly established headquarter will administer ITBP personnel deployed along the longest Sino-India LAC in Ladakh which is near about 1600 km from DBO in the North to Chumuk in the South. With the establishment of ITBP headquarter at Leh the mechanised wing of ITBP with all its vehicles, weapons, communication systems, and artillery will be shifted to Leh so as to adapt the men as well as machines to the thin aired icy cold topography of Ladakh.

Central Industrial Security Force (CISF) taking control of the strategic Leh Airport: The GOI also handed over the security of strategic Leh Airport to CISF in August 2020 from the local Police. This comes after a new passenger terminal is also being built at a cost of 480 Crore Rupees in Leh. CISF takeover of the strategic airport located at an altitude of around 3300 meters above sea level would provide it with heightened security as the force not only consists of the Special Aviation Security Group (ASG) but the security personnel would be armed with assault rifles like AK Series.

Ladakh Police: After the bifurcation of the state of J&K and the formation of the UT of



Ladakh, Ladakh Police was formed for the enforcement of law and order in the UT. The separate UT Ladakh police was formed on 23 May 2020 and Ladakh Police Flag, Formation Sign and Epauettes were unveiled by Lieutenant Governor RK Mathur on 11 August 2020. Moreover with the PRC's escalating aggressiveness in Ladakh as reported by Namrata Ahuja in *TheWeek* the Ladakh Police is also planning of creating a separate arm of Ladakh Police dedicated to the security threats originating due to Ladakh's close proximity with LAC. Ladakh Police in this way will form the third line of defence after the Army and ITBP who are responsible for the security of the entire LAC.

Reorientation of 1st Strike Corps: On 14 January 2021 *The Print* in its article 'Strike Corps reorientation come for Ladakh but Army needs larger restructuring' informed that "1st Corps – one of the three mechanised forces, predominant Strike Corps focussed on Pakistan to be restructured and reoriented as the second Mountain Strike Corps for Ladakh" (Panag 2021). The article further stated that the move also suggested that the army has shifted its focus from Pakistan to China as the principal threat to Indian national security which was again reiterated during the army day celebration on 15 January 2021.

Conclusion

The Government of India has taken a number of steps to strengthen its boundaries with the PRC as mentioned earlier. However, the GOI also needs to improve the living conditions of the people living along the LAC as they play a pivotal role in the safeguarding of the boundaries along with the security forces. The Nomadic tribes living along the LAC who was once a supplier of dairy and animal products to the entire Ladakh are now unable to do it partly due to cheap and bulk supply from mainland India but partly because of the shrinking of pastureland which is either taken over by PRC or are not allowed to graze by the Indian soldiers as a precautionary measure that

would not be taken by PRC as provocative. The nomads without any incentives from the Government as well as due to lack of social amenities are forced to migrate to Leh which is again proving detrimental to the security of borders. Thus the GOI along with improving the infrastructure and military capabilities should try to empower the locals which will go in a long way to not only secure borders but stable border regions.

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Information and Communication Technology In Teaching Learning Process : A Review



- Dr. Seema Sharma
Assistant Professor -
Department of B. Ed.,
Dayanand Women Traing Centre,
Kanpur-208001 (U.P.)

E-mail:
roshitsharma69@gmail.com

Information and communication technologies (ICT) have become commonplace entities in all aspects of life. Across the past twenty years the use of ICT has fundamentally changed the practices and procedures of nearly all forms of endeavors within business and governance. Within education ICT has begun to have a presence but the impact has not been as extensive as in other fields. Education is a very socially oriented activity and quality education has traditionally been associated with strong teachers having high degree of personal contact with learners. The use of ICT in education lends itself to more student centered learning setting and often this creates some tensions for some teachers and students. But with the world moving rapidly into digital media and information, the role of ICT in education is becoming more and more important and this important and this importance will continue to grow and develop in the 22nd century. ICT is a force that has changed many aspects the way we live. If one was to compare such fields as medicine, tourism, travel, business, law, banking, engineering and architecture the impact of ICT across the past two or three decades has been enormous. The way these fields operate today is vastly different from the ways they operated in the past. But when one looks at education, there seems to have been lack of influence and far less change than other fields have experienced. A number of people have attempted to explore this lack of activity .

There have been a number of factors depend the wholesale uptake of ICT in education across all sectors. These have included such factors as a lack of funding to support the purchase of the technology a lack of training among established teaching practitioners, a lack of motivation and need among teachers to adopt ICT as teaching tools. But in recent times factors have emerged which have strengthened and encouraged moves to adopt ICT into classrooms and learning setting. These have included a growing need to explore efficiencies in terms of program delivery the opportunities for flexible delivery provided by ICTs: the capacity of technology to provide support for customized educational programs to meet the need of individual learners; and the growing use of the Internet and website as tools for information access and communication .



These factors and many others are bringing strong forces to bear on the adoption of ICTs in education and contemporary trends suggest we will soon large scale changes in the way education is planned and delivery as a consequences of the opportunities and affordances of ICT.

Importance of ICI in Education -

The integration of ICTs into teaching-learning process has the potential to enhance tools and environments for achieving these objectives of education and learning at schools. Using ICTs in education means more than simply teaching learners to use computers. Technology is a means for improving education and not an end in itself. Thus ICTs should be used to encourage students to explore. Research has shown that ICTs utilized in classroom allow pupils improved efficiency of learning.

ICTs have promised to expand the basic nature of education. Such as the ability to link written with audio and visual material that can enrich the full range of the learner's senses. The technology also creates a qualitative expansion in the means of education by taking a process rooted in the one way delivery of knowledge and making it more participatory and reciprocal. Computer communication takes a system of learning based in narrow linear, narrative forms, and opens it up to a wide range of nonlinear, exploratory processes that allow the learner to make full use of his or her own multiple cognitive maps. The students mutually constitute their learning environments which grow in the learning process. Similarly the incorporation of ICTs in education the training programs has profound influence in teaching and teacher preparation. The student accesses knowledge and information through Internet, TV, satellite and cable network and digital media to synchronize learning mediated through these multiple delivery mechanisms.

The modern world counts on ICTs in facilities the process of democratization of access to information and knowledge. This may lead to a

new more humanistic culture by advances in health and education empowering through networking small players such as NGOs interactive teaching and long distance education, attainment of new employable skills and access to a wealth of knowledge. To re-emphasize more than any other social institution, formal education is fundamentally about knowledge, information, and communication. It is the new information technologies that will help us to build up and open educational system. And in turn the open educational system will bring about dramatic change in the technology of obtaining knowledge owing to more efficient organization of students cognitive activities. The development of online courses, libraries and other information resources, and the marketing of distant or online education by businesses and schools eager to profit from opportunities to expand their horizons, is the beginning of what some see as a revolution in learning.

The role of ICTs is crucial in shaping the services for future in knowledge management. The knowledge management environment embraces the entire information transfer cycle.

Impact of ICT on what is learned : Conventional education has emphasized content. For many years, courses have been written around textbooks. Teachers have through lectures and presentations interspersed with tutorials and learning activities designed to consolidate and rehearse the content. Contemporary settings are now favoring curricula that promote competency and performance. Curricula are starting to emphasize capabilities and to be concerned more with how the information will be used than with what the information is.

ICTs are able to provide strong support for all these requirements and are now many outstanding examples of world class settings for competency and performance based curricula that make sound use of the affordances of these technologies. For many years, teachers wishing to adopt such curricula have been limited by their resources and tools but with the proliferation and



widespread availability of contemporary ICTs, many restrictions and impediments of the past have been removed. And new technologies will continue to drive these forms for learning further. As students and teachers gain access to higher bandwidths, more direct forms of communication and access to sharable resources, the capability to support these quality learning setting will continue to grow.

Expanding the pool of generic skills-

Another way in which emerging ICTs are impacting on the content of education curricula stems from the ways in which ICTs are dominating so much of contemporary life and work. Already there has emerged a need for educational institutions to ensure that graduates are able to display appropriate levels of information literacy, “the capacity to identify and issue and then to identify, locate and evaluate relevant information in order to engage with it or to solve a problem arising from it.”

The drive to promote such developments stems from general moves among institutions to ensure their graduates demonstrate not only skills and knowledge in their subject domains but also general attributes and generic skills. Traditionally generic skills have involved such capabilities as on ability to reason formally, to solve problems, to communicate effectively, to be able to negotiate outcomes, to manage time, project management, and collaboration and team work skills. The growing use of ICTs as tools of every day life have seen the pool of generic skills expanded in recent years to include information literacy and it is highly probable that future developments and technology applications will see this set of skills growing even more.

Impact of ICT on how students learn -

Just as technology is influencing and supporting what is being learned in schools and universities, so too it supporting changes to the way students are learning. Moves from content centered curricula to competency based curricula are associated with moves away from teacher centered forms of delivery to student centered

forms. Through technology facilities approaches, contemporary learning settings now encourage students to take responsibility for their own learning. In the past students have become very comfortable to learning through transmissive modes. Students have been trained to let others present to them the information that forms the curriculum. The growing use of ICT as an instructional medium is changing and will likely continue to change many of strategies employed by both teachers and students in the learning process. The following sections describe particular forms of learning that are gaining prominence in universities and schools worldwide.

Student centered learning - Technology has the capacity to promote and encourage the transformation of education from a very teacher directed enterprise to one, which supports more student centered models. Evidence of this today is manifested in :

- ☛ The proliferation of capability, competency and outcomes focused curricula .
- ☛ Moves towards problem based learning .
- ☛ Increased use of the Web as an information source, Internet users are able to choose the experts from whom they will learn.

The use of ICT in educational settings by itself acts as a catalyst for change in this domain. ICTs by their very nature are tools that encourage and support independent learning. Students using ICTs for learning purposes become immersed in the process of learning and as more and more students use computers as information sources and cognitive tools, the influence of the technology on supporting how students learn will continue to increase .

Supporting knowledge construction -

The emergence of ICTs as learning technologies has coincided with a growing awareness and recognition of alternative theories for learning. The theories of learning that hold the greatest away today are those based on constructive principles. These principles posit that learning is



achieved by the active construction of knowledge supported by various perspectives within meaningful contexts. In constructivist theories, social interactions are seen to play a critical role in the processes of learning and cognition.

Learning approaches using contemporary ICTs provide many opportunities for constructivist learning through their provision and support for resource based, student centered setting and by enabling learning to be related to context and to practice. Any use of ICT in learning settings can act to support various aspects of knowledge construction and as more and more students employ ICTs in their learning processes, the more pronounced the impact of this will become.

Impact of ICT on when and where students learn - In the past educational institutions have provided little choice for students in terms of the method and manner in which programs have been delivered. Students have typically been forced to accept what has been delivered and institutions have tended to be quite said and traditional in terms of delivery of their programs. ICT applications provide many options and choices and many institutions are now creating competitive edges for themselves through the choices they are offering students. These choices extended from when students can choose to learn to where they learn.

Educational institutions have been offering programs as a distance for many years and there has been a vast amount of research and development associated with established effective practices and procedures in off campus teaching. Use of the technology, however, has extended the scope of this activity an whereas previously off-campus delivery was an option for students who were unable to attend campuses, today, many more students are able to make this choice through technology facilitated learning settings.

In concert with geographical flexibility, technology-facilitated educational programs also remove many of the temporal constraints that

face learners with special needs. Students are starting to appreciate the capability to undertake education anywhere, anytime and any place. This flexibility has heightened the availability of just in time learning and provided learning opportunities for many more learners who previously were constrained by other commitments.

Through online technologies learning has become an activity that is no longer set within programmed schedules and slots. Learners are free to participate in learning activities when time permits and these freedoms have greatly increased the opportunities for many students to participate in formal programs. The wide variety of technologies that support learning are able to provide asynchronous supports for learning so that the need for real time participation can be avoided while the advantages of communication and collaboration with other learners is retained.

As well as learning at anytime, teachers are also finding the capabilities of teaching at any time to be opportunistic and able to be used to advantage. Mobile technologies and seamless communications technologies support 24x7 teaching and learning. Choosing how much time will be used within the 24x7 envelope and what periods of time are challenges that will face the educators of the future. The continued and increased use of ICTs in education in years to come will serve to increase the temporal and geographical opportunities that are currently experienced. Advancements in learning opportunities tend to be held back by the ICT capabilities of the lowest common denominator, namely the students with the least access to ICT. As ICT access increases among students so too will these opportunities.

Emerging Issues -

A number of new issues have emerged from the uptake of technology whose impacts have yet to be fully explored. These include changes to the makeup of the teacher pool, changes to the profile of who are the learners in our courses and paramount in all of this, changes



in the costing and economics of course delivery.

Expanding the pool of teachers - In the past, the role of teacher in an educational institution was a role given to only highly qualified people. With technology facilitated learning, there are now opportunities to extend the teaching pool beyond this specialist set to include many more people. The changing role of the teacher has seen increased opportunities for others to participate in the process including workplace trainers, mentors, specialists from the workplace and others. Through the affordances and capabilities of technology, today we have a much expanded pool of teachers with varying roles able to provide support for learners in a variety of flexible settings. This trend seems set to continue and to grow with new ICT developments and applications. And within this changed pool of teachers will come changed responsibilities and skills sets for future teaching involving high levels of ICT and the need for more facilitative than didactic teaching roles.

Expanding the pool of students - In the past, education has been a privilege and an opportunity that often was unavailable to many students whose situation did not fit the mainstream. Through the flexibilities provided by technology, many students who previously were unable to participate in educational activities are now finding opportunities to do so. The pool of students is changing and will continue to change as more and more people who have a need for education and training are able to take advantage of the increased opportunities. Interesting opportunities are now being observed among for examples, school students studying university courses to overcome limitations in their school programs and workers undertaking courses from their desktops.

Traditional thinking has always been that technology-facilitated learning would provide economics and efficiencies that would see significant reductions in the costs associated with the delivery of educational programs. The costs would come from the ability to create courses

with fixed establishment costs, for example technology bases courses, and for which there would be savings in delivery through large scale uptake. A number of virtual universities built around technology delivery alone. The reality is that few institutions have been able to realize these aims for economy. There appear to have been many understand costs in such areas as course development and course delivery.

The cost of Education- It has been associated with the development of high quality technology facilitated learning materials are quite high. It has been found to be more than matter of repackaging existing materials and large scale engineering has been found to be necessary with large scale costs. Likewise costs associated with delivery have not been found to diminish as expected. The main reason for this has been the need to maintain a relatively stable student to staff ratio and the expectation of students that they will have access to teachers in their courses and programs. Compared to traditional forms of off-campus learning technology course development and course delivery. We may have to brace ourselves for the advantages and affordances, which will improve the quality of education in the near future to also increase components of the cost.

Influence on stakeholders - While ICTs may not have had a impact to date their use will grow to play a significant role in many aspects of the design, development and delivery of educational programs in the coming years. The various influences that have been discussed provide examples of an agent that has the capacity to influence education at all levels and hence to be an agent supporting and encouraging considerable change. When the future of education is considered in this way, it is interesting to speculate among the stakeholders, for whom the change will be the greatest. Clearly the stakeholders for whom technology would seem to proffer the most influence and change are the students. So while institutions are pondering how they will be influenced in years to come, whatever



the outcomes, the beneficiaries of the activity and change will be the students.

Reforming Higher Education System in India-

India has 1000+ universities and equivalent institutions of 13 open universities. The number of students has reached the level of 6.75 million and there are 0.321 m teachers in the higher education system. But the future projection suggests massive requirement of infrastructure. This linear projection will be grossly invalidated by factors like success in secondary education, improvement in economic condition, etc. For the additional enrolment of about 4 million students, India will need a massive new infrastructure. Both center and states are at the end of their wit for more funds for education. The state will neither be able to provide facilities nor will be able to refuse places in higher education.

There is a great hope from ICTs in finding answer to the problems. The educational expertise was concentrated in a few islands of islands of excellence at a time when the country was struggling to build a huge educational infrastructure, find funds and appoint good teachers. ICTs provide answer to the problem and can help to take the lectures of expert educators to remote area, which did not have the required facilities or human resources.

Under CLASS project and in its modified version, all secondary and senior secondary schools are being equipped with modern computing facilities. All fee charging private schools have computers. More importantly, under Sarva Shiksha Abhiyan, Government of India is initiating a new program on computers in elementary schools during the 10th five year plan with simputers. Further, official policy and programs have decided to set up SMART schools on experimental basis.

The University Grants commission has equipped all universities and almost all colleges with computing facilities. Technical and engineering institutions are well equipped with computing facilities.

A digital unlinking facility has been set up at Indira Gandhi National Open University (IGNOU). Development and Educational communication Unit in Ahmedabad has facilities of Training and Development Communication channel for interactive mode. Similar facilities have been set up in Karnataka and Madhya Pradesh. Virtually, the districts in the country are either already connected or will be connected in the near future and together it will be capable of creating country wide virtual classroom. This virtual classroom facility through interactive television is being extensively used by several national organizational like the NCERT (National Council of Educational Research and Training) IGNOU etc. Nonetheless, the most important deterrent is cost of hiring the IGNOU uplink studio, pitched at USD 200 an hour that too not easily accessible due to programs in the Gyan Darshan. In a separate endeavor, IGNOU is equipping all its 1000+ study canter with digital reception facilities. It is likely to link its study centers with web based return path whereby learners can communicate through e mail.

The University Grants commission (UGC) has initiated a program to provide electrons access, which will provide the best current and archival periodical literature from all over the world to the university community. Under the initiative UGC is modernizing the university campuses with State of the art campus wide network and setting up its own nationwide communication network named UGC infonet. UGC Infonet will establish a channel for globalization of education and facilitate the universities in marketing their services and developments through INFLIBNET (Information Library Network) a body of UGC primarily to automate and network the university libraries and institution of national importance to share the resources effectively.

The National open school has set up a faculty for development digital multi media software on education curriculum at the school level. India is also working on micro-satellites



that can provide localized service on open school programs through uplinked earth stations. The universities, the government agency (the department of electronics) and the National council for Education, Research and Training and the private sector (including the private National Institute for information technologies) are working together to develop computer aided instructional material to be used for both distance and traditional learning programs. NIT works with various state governments in the area of IT education in schools.

Conclusion -

It is now widely acknowledged that ICTs have great potential for knowledge dissemination, effective learning and efficient education services e-education systems are being implemented in universities all over the world. Almost all developed countries have successfully experiment ICTs for education. But there are many challenges and dangers also. ICTs can provide the means to explore new forms of learning that break out of the traditional hierarchies of educational bureaucracy and develop genuine alternatives to rigid passive approaches to learning. But they can also reify those hierarchies if they are applied without a commitment to the principles of equality, participation, privacy, mutual respect, and responsibility that historically provided the foundation for our education system. If educational policies and strategies are not right and if the prerequisite conditions for using these technologies are not met concurrently, the potentials of ICTs will not be realized. This calls for a consensual policy framework that can inform and guide the government in introducing relevant ICT interventions in education.

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The Effect of Collaborative Learning on Multiple Intelligences of College Students



- Umendra Singh
Research Scholar -
Department of Teacher
Education,
Dharma Samaj College,
Aligarh-202001 (U.P.)
E-mail:
usds1979@gmail.com
Dr. B. R. Ambedkar University,
Agra (U.P.)



Research Supervisor
- Dr. Beena Kumari
Associate Professor -
Department of Teacher
Education,
Dharma Samaj College,
Aligarh-202001 (U.P.)
E-mail:
drbeena038@gmail.com
Dr. B. R. Ambedkar
University, Agra (U.P.)

Abstract

The present study was conducted to examine the effect of collaborative learning on multiple intelligence of college students. For this purpose, the researcher used pre-test post-test control group design. 54 male students, enrolled in 11th grade in subject of biology of a government aided inter college of Aligarh city, were chosen through simple random sampling technique for sample. These students were divided in two groups which then divided in experimental and control group randomly. First of all, pre-test was conducted to both groups. Then experimental group was taught by collaborative learning model while control group was treated with conventional learning model for five months. In order to identify the difference in multiple intelligence scores of students, post-test was administered to both groups. The data was analyzed using independent sample t-test and paired sample t-test. The results showed that there was no significant difference between experimental and control group in pre-test while there was a significant difference between the two groups in post-test. To compare the effect of collaborative learning on multiple intelligence of students, paired sample t-test's results showed that there was a significant difference between scores of experimental and control groups before and after treatment. It can be concluded after analyzing the data that collaborative learning had a positive effect on multiple intelligence of college students.

Keywords: Collaborative Learning, Multiple Intelligence, College Students.

Introduction-

Learning is the product of teaching in the classroom. Different factors like classroom environment, motivation among students, pedagogical skills, use of educational technologies, instructional strategies and competencies of teachers play an important role for the effectiveness of learning. Sultan and Hussain, 2012 quoted that the more the students are involved in activities, the more effective learning takes places. Therefore, the participation of students is directly related with



the effective learning in teaching-learning process. Student centered instructional strategies have always been selected by an effective teacher. This type of teachers designs and offers those learning activities in which learners involve actively.

Teachers use two type of teaching techniques in their classroom- individual activity and group activity. Hussain and Sultan, 2010 affirmed that effective learning to be an interactive process involving learners in different activities to accomplish their academic tasks. The students work on activities individually as well as in small groups to complete assigned tasks with mutual co-operation. This kind of learning which takes place in small groups of learners by assuming activities and helping one another is referred as collaborative learning.

Collaborative learning is a situation in which two or more learners learn or attempt to learn something together. In this learning process learners capitalize on one another's resources and skills (Dillenbourg, 1999).

Collaborative learning is a method of team-based teaching learning in which a project or assignment is given to each team. Every student of that team works individually on a smaller part of the project and at last all the parts from each student are being integrated to present the work as a finished project or assignment. This work is being assessed both individually and the team as a whole. Jain, R., Rao, V. & Sunda, H. (2016) cited Johnson and Johnson (1998) that Collaborative learning is based on the view that knowledge is a social construct.

So, the collaborative learning is generally illustrated when groups of learners work together to search for understanding meaning or solutions or to create an artifact or product of their learning. Collaborative learning activities include group projects, joint problem-solving activities, collaborative writing, fishbowl debates, case study, team based learning and major other activities.

Collaborative Learning and Multiple Intelligences:

Howard Gardner developed the theory of Multiple Intelligence in 1983 which explains nine different intelligences. He defined seven intelligences in his book *Frames of Mind* (1983). He added the last two in *Intelligence Reframed* (1999). Gardner believes each individual has nine intelligences which are following:

1. Verbal-Linguistic Intelligence- well developed verbal skills and sensitivity to the sounds, meanings and rhythms of words.

2. Mathematical-Logical Intelligence- the ability to think conceptually and abstractly and capacity to discern logical or numerical patterns.

3. Musical Intelligence- the ability to appreciate, distinguishes, compose and perform in various musical forms.

4. Visual-Spatial Intelligence- the capacity to think in images and pictures, to visualize accurately and abstractly.

5. Bodily-Kinesthetic Intelligence- the ability to control one's body movements and to handle objects skillfully.

6. Interpersonal Intelligence- the capacity to detect and respond appropriately to the moods, motivation and desires of others.

7. Intrapersonal Intelligence- the capacity to be self-aware and in tune with inner feelings, values, beliefs and thinking process.

8. Naturalist Intelligence- the ability to recognize and categorize plants, animals and other objects in nature.

9. Existential Intelligence- the sensitivity and capacity to tackle deep questions about human existence, such as the meaning of life, why do we die and how did we get here.

There are important connections between multiple intelligences and collaborative learning. On a broad philosophical level multiple intelligences and collaborative learning share the goals of helping students succeed in school and beyond. One of the multiple intelligences,



Interpersonal intelligence involves an understanding of the feelings, motives, values and points of view of others. These same skills are the by-products of successful collaborative learning. Many collaborative learning methods teach the very social skills explicitly which define the interpersonal intelligence. So, to attempt or to match the interpersonal intelligence, collaborative learning strategies are the best resources. But collaborative learning strategies can do far more than develop the interpersonal intelligence. They have proven a positive impact on higher level thinking (logical/ mathematical intelligence) and play key roles in the writing process during peer editing and positive response groups (verbal/linguistic intelligence). Collaborative learning skills come into play directly in the other intelligences as well (music groups, team sports and others). Collaborative learning and multiple intelligence have a different emphasis, yet the philosophical goals of each are closely aligned as are the practical strategies which ensure success with both of these transformative educational innovations.

Significance of the Study-

According to Ruengtam (2012), Successful learning should offer a deep understanding rather than surface knowledge and imitation. Collaborative learning may develop and improve the teaching as this leads to more effective and efficient learning by students. This collaborative learning became a critical concept to study its effect on multiple intelligence at school and college levels. To introduce collaborative learning for different subjects will help in improving the multiple intelligence of the students. This strategy will also help to make the learning more interesting and meaningful rather it was considered boring by the learners. The empirical evidences supporting collaborative learning are very less at different levels especially at college level. So, to convince instructors to use collaborative learning in their teaching in different subjects, it is very important to collect

strong empirical evidences in favor of this instructional strategy at college level.

Objective of the Study-

The present study aimed to determine the effect of collaborative learning on multiple intelligence of college students.

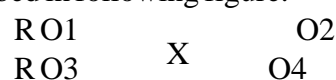
Hypothesis of the Study-

There is no significant mean score difference between the multiple intelligence scores of experimental and control groups after intervention.

De-limitation of the Study-

The present study was confined with only 54 samples of 11th grade students from a government aided inter college (U.P. Board) of Aligarh city.

Research Design- The present study was dealt significantly by using experimental research method. The pre-test post-test control group design was used in this experimental study. The systematic description of this research design is described in following figure.



This research design was selected on the basis of nature of the problem and the hypothesis of the study. This design consisted of two groups- experimental group (27 students) and control group (27 students). The experimental group was treated with collaborative learning model while the control group was taught by conventional learning model.

Sample-

The sample of this study consisted of all 11th grade students enrolled in biology section of a government aided inter college (U.P. Board) of Aligarh city. There were five sections (1 art, 1 commerce, 2 mathematics and 1 biology) in that college. First of all, one section was selected out of five by simple random sampling technique. In this section, there were 54 students. All students were male. So, there was no diversification in terms of gender. Age range of the sample was 15 to 17 years old. These 54 students were divided in



two groups on the basis of their pre-test scores. After that these two groups were randomly assigned in experimental and control group.

☛ Total Students (54)-

- Experimental Group (27).
- Control Group (27).

Instrument-

To measure the multiple intelligence of the sample, a standardized test named 'Multiple Intelligence Scale' constructed by Surbhi Agarwal and Dr. Suraksha Pal was used. This test contained 90 items, 10 items in each dimension. The same test was used for pre-test and post-test.

Procedure-

A pre-test was conducted by the researcher to deal with the pre-existing differences between the experimental and control group. After this pre-test, the treatment was given to experimental group. To control the effect of teaching quality, both the groups were treated by the same teacher who was the subject expert. The teacher taught both groups the same content from the syllabus which was prescribed in 11th grade's book of biology subject. The experimental group was taught by collaborative learning model while control group was treated with conventional learning model over a period of 20 weeks. After

this duration of implementation, post-test was applied to both the groups.

Data Analysis-

In this present study, independent sample t-test was used to examine whether there is a significant difference between pre-test and post-test scores of both groups. To determine the effect of collaborative learning on multiple intelligence of students, paired sample t-test was used.

Verification of Hypotheses-

The effect of Collaborative Learning on Multiple Intelligence of College Students-

1. To determine whether there is a statistically significant difference between pre-test mean scores of students in experimental and control groups, pre-test results were examined. (See Table-1)

As table-1 showed, there is no significant mean difference between experimental and control group. It means students in experimental and control groups were not different in terms of multiple intelligence.

1. To determine whether there is a statistically significant difference between post-test mean scores of students in experimental and control groups, post-test results were examined. (See Table-2)

Table-1

Independent Sample t-test results of experimental and Control group's Pre-test mean Scores

Group	N	Mean	SD	df	t	p
Experimental	27	272.92	21.22	52	0.478	2.000 at 0.05 level
Control	27	270.29	19.31			

Table-2

Independent Sample t-test results of experimental and Control groups Post-test mean Scores

Group	N	Mean	SD	df	t	p
Experimental	27	287.22	15.38	52	3.095	2.000 at 0.05 level
Control	27	274.56	14.65			

**Table-3****Paired Sample T-test Results of Experimental Group's Pre-test and Post-test mean Scores**

Test	N	Mean	SD	df	t	p
Pre-Test	27	272.92	21.22	26	6.087	2.056 at 0.05 level
Post-Test	27	287.22	15.38			

Table-4**Paired Sample T-test Results of Control Group's Pre-test and Post-test mean Scores**

Test	N	Mean	SD	df	t	p
Pre-Test	27	270.29	19.31	26	7.195	2.056 at 0.05 level
Post-Test	27	274.56	14.65			

As table-2 showed, there is a significant mean difference between experimental and control group. It means students in experimental and control groups were different in terms of multiple intelligence.

1. To determine whether there is a statistically significant difference between pre-test and post-test scores in experimental group, pre-test and post-test results were compared. (See **Table-3**).

As table-3 showed, there is a significant mean difference between pre-test and post-test scores in experimental group. It means there is a positive and big change in multiple intelligence of college students by collaborative learning model.

1. To determine whether there is statistically significant difference between pre-test and post-test scores in control group, pre-test and post-test results were compared. (See **Table-4**).

As table-4 showed, there is a significant mean difference between pre-test and post-test

scores in control group. It means there is a positive but small change in multiple intelligence of college students by conventional learning model.

Conclusion-

1. There is a significant difference between experimental and control groups after intervention.

2. There is a significant and big positive effect of collaborative learning on multiple intelligence of college students.

3. There is also a significant but small positive effect of conventional learning on multiple intelligence of college students.

Discussion and Recommendations-

In this study, it was aimed to determine the effect of collaborative learning on multiple intelligence of college students. To get the sound results, the students were assigned randomly in two groups; experimental and control groups. Pre-test was conducted to see whether there is significant difference between mean scores of both groups. After that treatment (Collaborative learning model) was given to experimental group and control group was treated with conventional



learning model for 20 weeks. Then a post-test was administered to see the difference of intervention between experimental and control group. The results show that collaborative learning has a positive and big effect on multiple intelligence of college students. This finding has similarity with the results of some studies conducted in this field. For example, Jain, Rao & Sunda (2016), Shu-Fen Chen (2005), Sener & Cokcaliskan (2018) and Ahanbor & Sadighi (2014). In these studies, it has been researched that there is a statistically significant relationship between male and female students' learning styles and multiple intelligences. It was also seen that most of the intelligence types and learning styles had a moderate positive correlation.

In this present study, it was determined the effect of collaborative learning on multiple intelligence of 11th grade students. This study may be useful to examine the effect of collaborative learning on multiple intelligence of different grades' students in further researches. Additionally, some researches may be conducted on large sample to increase the generalizability of the findings of the present study.

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A Role of Agroforestry in Consersation of Degraded Environment

Abstract



- Dr. Swati Saxena
Assistant Professor-
Department of Botany,
D. A-V. College, Kanpur-208001
(U.P.)

E-mail:
swatisaxena352@gmail.com

Water, soil and vegetation are the most vital natural resources for the survival of mankind. The role of agroforestry in conserving these resources can hardly be over emphasised. In view of indiscriminate widespread deforestation, excessive grazing, continued land degradation problems due to serious erosion, depletion of soil fertility, environmental deterioration and ecological disturbance resulting from heavy pressure of fast expanding population on the one hand, and acute shortage in the supply of fuel, food, fodder, fibre, wood etc. on the other, agroforestry as a conservation land use system, has tremendous scope as a practical solution to environmental stability. Role of various agroforestry systems in control of environmental pollution, improvement of soil fertility control of soil erosion has been discussed. A brief account of some of the recent information on the effectiveness of agroforestry systems in conservation of degraded Land has been given in this paper.

Key words: Soil erosion; land degradation; environmental; soil loss and run sustainability.

1. Problem of Erosion and Environmental Degradation-

In India, out of 329 m.ha: total geographical area, about 150 m.ha. is subjected TO water and wind erosion (Table- 1). About 25 m.ha area has been subjected to degradation due to the exploitative type of agriculture. It is estimated that about 16.35 tonnes of is lost annually from every ha. of Indias land amounting to 5334 m. tonnes for the whole country. Approximately 29 per cent of this soil goes to the sea, 10 per cent gets deposited in dams reducing their stories capacity by 1-2 percent every year and 61 percent gets transported from one place to another mostly getting settled on river beds.

To increase food production, we have increased the area under cultivation clearing away most of our forests at the rate of 1.5 million hectares, with the result the effective area under forest trees has been reduced to a mere 13% of our total land area, as against the desirable 33%. With this we are faced with serious ecological environmental and socio-economic crisis. It has been estimated that by the end of this decade we have to



produce about 250 million tonnes of food grains, over 2000 million tonnes of green and dry fodder, 350 million tonnes of fuel wood and about 60 million m timber for our increasing human as well as lives took population of our country which more than 1000 million and 600 million, respectively, besides amelioration of our polluted environment. Soil erosion bring about environmental deterioration ecological turbine and reduce the productivity of the soil. It is estimated that about 2.5 m. tonnes of nitrogen, 3.8 m. tonnes of phosphorus and 2.5 m. tonnes of potash are lost every year from our country. This loss is perhaps more than the production of fertilizers in India which was about 3.1, 1.0 and 0.7 m. tonnes of N.P. and K respectively in 1981-82. (See Table-1).

2. Roll to Trees in Control of Erosion-

The role of trees in erosion control is one of the most widely acclaimed reasons for including trees on farmalands that are prone to erosion hazards. The trees reduce erosion by enriching and binding the weaker surface soil, providing protection against erosion with canopy and leaf litter and impeding the velocity and

erosive ability of surface runoff by stem, surface roots and litter (Wiresum. 1984). Thus trees play an important role in soil and water conservation in all localities. Though they may not be a cure for all problems of erosion, they are, by far, the cheapest tool in the hands of soil conservationist for regulating stream flows, reducing peak of floods, preventing erosion of soil and sedimentation of reservoirs and river channels.

3. Maintenance of Soil Fertility-

It has been estimated that considerable amount of soils are lost through erosion every year from about 80m ha of the cultivated land, carrying away about 8 m t of nutrients. The inclusion of compatible and desirable species of trees in agroforestry system can result in marked improvement in soil fertility due to increased organic matter content of soil through addition of leaf litter, efficient nutrient cycling, efficient sharing of nutrients among the components, additional nutrient economy because of different nutrient absorbing zones of the root systems of the component species and nutrient release or availability (Nair, 1983).

Trees improve the long term physical

Table -1: Problems of Soil erosion and Land Degradation in India (Area in m. ha)

1. Total geographical area	329.0
2. Area subject to water and wind erosion	150.0
3. Area degraded through special problems	25.0
(a) Waterlogged	6.0
(b) Alkaline soil	2.5
(c) Saline soil including coastal sandy areas	5.5
(d) Ravines and gullies	3.9
(e) Area subject to shifting cultivation	4.4
(f) Ravine and torrents	2.7
4. Total problem area	175.0
5. Annual average loss of nutrients from l and estimated at 2 & 3	5.4 to 8.4 mt
6. Average loss of production of net developing ravines estimated at 3(d)	3 m t
7. Average annual rate of encroachment to arable land by ravines	8 m ha
8. Total flood prone area:	40 m ha
(a) Average area affected by floods	9 m ha
(b) Average cropped area affected by floods	9 m ha
9. Total drought prone area	260 mha

Source : Fertilizer Statistics, 1987-88.



condition of the soil, so that the soil is made a better medium for plant growth (Sheng, 1986). The evidence of augmentation of organic carbon, nitrogen and other nutrients inputs by NFIs is extensively available. (See Table 2 and 3).

Table 2 :

Soil fertility as influenced by tree species after 12 years at 0-15 cm depth.

Tree species	O.C. (%)	N (%)	Exch-angeable	me (%)
No tree (Control)	2.86	0.10	9.7	1.1
Eucalyptus globulus	5.41	0.60	16.4	1.2
Acacia mearnii	5.71	0.65	13.8	1.7

Table 3 :

Influence of tree species on fertility of soil after 5 years at 0-15 cm soil depth.

Tree species	pH	O.C %	Available (Kg/ha)	
			P ₂ O ₅	K ₂ O
Control	8.2	0.49	13	436
Luecaena	7.8	0.78	10	408
A. nilotica	8.0	0.80	19	848
D. sissoo	8.0	0.95	18	616
Pongamia	7.7	0.94	15	891

Source : Chandrasekhariah, A.M. (1986), Ph.D. Thesis, U.A.S. Dharwad.

4. Ameliotion of Climate by Trees-

Trees are essential to life on earth. They moderate temperature and affect pollution, noise, wind and water. As trees grow, they provide a home for wild life and products like timber, fuel, fodder, fibre and other minor forest products for our daily use. The daily transpiration from a single tree can produce an estimated cooling effect of more than a million British Thermal Units. This is equal to 10 room sized air conditioners operating 20 hours a day. Because of the "green house" effect of waste particles in polluted air, the air temperature may be 20°F higher in urban areas than it is in nearly rural areas.

Trees absorb polluted air, and emit air, richer in oxygen and somewhat freer of pollutants. As per data of the United States, agrowth of a ml ton of wood releases at least 1.1 tons of Oxygen and absorbs atleast 1.5 tons of carbon di oxide. According to various studies made, three fourths of the conversion of CO₂, back to oxygen takes place in the ocean, but trees play an important part on the land (Madan. 1971).

5. Erosion and Enevironment-

Soil erosion is the single most important cause of land degradation. When most severe form of erosion like ravines, landslides and slips occur the denuded land goes almost out of cultivation and is only fit for some permanent vegetative cover of trees. Failure of communication such as road, rail telephone, electricity etc. are very common due to landslide and riverbank erosion etc. Ground water resources are deficient due to increased rate of runoff and decreased percolation and infiltration of soils. Desertification is on increase and renewable resources are getting depleted. Wind erosion and shifting sand is going on at an alarming rate because of the reduction the vegetative cover. Erosion affects environment in two ways:

(i) Water Pollution by Water Erosion-

Water erosion pollutes water and is very dangerous. The water may contain toxicants unable to sustain any form of aquatic fauna. The flowing streams carry huge quantities of chemical fertilizers. pesticides and other toxic elements. It has been reported that forest runoff contains less nitrate contents then agriculture runoff. Runoff water in streams and rivers transport sediment load and pollute pond, river and sea water by soil particles, thus making drinking water a scarce resources (Singh and Bhardwaj, 1986). Adequate supply of safe drinking water is essential for improving public health.

(ii) Air Pollution by wind erosion-

The abrasive action of wind results in detachment of soil particles and are carried miles away from original place. The dust storms are often unbearable and people it villages, towns and



cities in arid regions have to face inconvenience due to prolonged dust inhalation. The stagnating water can pollute air by foul smelling gases. The comm. pollutants of air are injurious gases such as carbon mono-oxide, sulphur di-oxide, etc., and dust of coal particles from chimneys, soil particles etc. The plants act as air filter for its purification by absorbing and arresting injurious gases and particles.

6. Need for Ecological Balance-

The population in India, with a growth rate of about 2.3 percent, has already crossed one billion leading to the increase in demand for basic necessities viz., food, fuel, fibre, fodder and timber. India is sustaining 16 percent of global population on 2.5 percent of world's geographical area. There seems to be tendency of growing ecology imbalance due to pressure of population on forest. There has been a large scale deforestation over the past 30 years. Moreover, production from these forests is far below our expectation due to poor fertility and productivity because of erosion. Biomass production is only 0.5 cum/ha/year as against the world average of 2.1 cum/ha/year. Forest cover has declined from 22 percent in 1952 to 14.10 percent in 1982 as against 33 percent envisaged by the National Forest Policy. According to the survey conducted by the National Remote Sensing Agency the good forest with a density of more than 40 percent cover only 11 percent of total 329 m ha of land mass.

Depletion of ozone layer and increased build up of carbon dioxide in the atmosphere green house effect and global warming are some of the serious consequences of environmental degradation caused by excessive deforestation and heavy pressure of population. Due to population pressure it is impossible to allocate agricultural lands for growing forests. Therefore, advantage of forests can be harnessed by growing trees on marginal lands or with agricultural crops through agro forestry practices. This would ensure moderation of climate and ecological balance would be restored.

7. Environmental Benefits from Agro

Forestry-

Agroforestry systems aim at growing of woody perennials along with agriculture crops on the same unit of land either in some form of spatial mixture or temporal sequence. King and Chandler (1978) defined agroforestry as a sustainable land use system that maintains or increases total yields by combining food (annual) crops with tree (perennial) crops and/or animals simultaneously or sequentially on the same unit of land using management practices that suit the social and cultural characteristics of the local people and the economic and ecological conditions of the area. Bene et al (1977) expressed the main benefits of agroforestry usually in two major forms: Productivity and sustainability (conservation). Verger (1982) describes ecological benefits of agroforestry as under :

- (i) Reduction of pressure on forest.
- (ii) More trees available to protect areas from environmental deterioration. More efficient recycling of nutrients by deep rooted trees.
- (iii) Reduction of surface runoff, nutrient and soil loss,
- (iv) Improvement of micro-climate.
- (v) Improvement of soil fertility by addition of organic matter through leaf fall.

To achieve these objectives of conservation of soil and ecosystem agroforestry systems are classified (King, 1980; Huxley, 1984) as agri-silviculture, silvi-pasture, agrihorti, etc. The use, of these system & in conservation of soil and water has been stressed by several workers (Vashnava and Narwadkar, 1989).

8. Agroforestry and Soil Conservation -

Agroforestry is an age-old practice followed traditionally in different forms in different parts of India. In arid parts of Rajasthan and Gujarat *Prosopis cineraria* are grown with cereals. *Zizyphus Mauritiana* (Ber) is identified as a most promising multi-purpose tree species (MPTs) for arid areas of Rajasthan and poor degraded land of Bundelkhand region. Three species like *Acacia nilotica*, *Azadirachta indica*, *Dalbergia sissoo*, and *Tamarix articulata* are



found growing along the boundary or within the cropped area. Recently *Eucalyptus tereticornis* is being grown very extensively mostly on field bunds in many parts of India. Very recently a great amount of attention has been paid to *Leucaena leucocephala* while it is being popularized on its reportedly good qualities, very little factual information is available about its interaction with agricultural crops (Mittal and Singh, 1983) and/or soil conservation impacts. The usefulness of *Populus ciliata* as promising species for soil conservation in hilly areas was reported by Mathur et al. (1982). Das (1980) reported that *Alnus nepalensis* trees were grown on hill slopes for fuel wood purpose which subsequently acted as the terraces for paddy fields. Itan (1986) reported that in agri-silviculture study in black soils, the runoff loss of rain water was least with *Acacia auriculiformis*, *Albizia lebbek* and *Acacia nilotica*.

9. Nutrient Recycling -

One of the main benefits of perennial tree components in agroforestry system is the contribution of nutrients by nitrogen fixation, leaf fall, turnover of fine root biomass and recycling of nutrients in different soil layers. Unlike fertilizer nitrogen, the nutrients added by a tree are gradually and slowly available in situ and are less likely to be lost through volatilization and leaching.

Scope for Further Work-

Agroforestry is regarded as a sound land use system which emphasizes activity and sustainability at the same time. Agricultural research in the world has been production or crop oriented. Only since the last two decades, some attention is being given to sustainable agriculture production through agroforestry system. We can deduce that the role of agroforestry in meeting either present or future requirements of fuel Wood, food, fodder and small timber and for environmental protection has been very well recognized in our country. It is now necessary to develop location specific, need oriented systems along with necessary support

systems so that farmers can get the required seedling and other inputs easily and market the produce at competitive prices.

For an agroforestry system to be more efficient and productive, it is essential to determine most compatible combination of woody perennial and annual crops for specific site situations and socio-economic conditions with appropriate technology.

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English as an International Language in Perspective of Indian Society and Literature



- Dr. Chandra Prakash Singh
Assistant Professor -
Dept. of English,
D.B.S.(P.G.) College, Kanpur-
208005 (U.P.)

E-mail:
singhdcrcp@gmail.com

Abstract

The evolving nature of English in this context of it globalization has called for reassessment of a number of key dimensions in applied linguistic studies of english. Scholarly debates have surfaced about various political issues including the validity of the old distinction between “ native” and “nonnative” speakers, what form English should or is likely to take as a language of international / intercultural communication or lingua franca, and which groups are empowered and which ones disadvantaged by the accelerating prominence of English.

India English Literature is nevertheless a gala of the transcended modern India reflecting the various shades globalization. of late the realistic, modernistic, pessimistic mode of the first three decades of post-independence writing is giving way to a non-representational, experimental, self-conscious and optimistic literature. Many Indian English novelists like Raja Rao, Kamala markandaya, Anita Desai, Bharati Mukher ji, Salman Rushdie, Amitav Ghos, Rohinton, Mistry Vikram Seth etc. reside in the west. Even those who live in India like Sasi Tharoor and Arun Josi are products of different cultures, residing in one, educated in another partaking different cultures and presenting what will kymlicka calls a “ multicultural citizenship” in a globalized world. Globalization like good and evil is nothing in itself,” In India, there is a great deal of awareness that globalization is a mixed ,contradictory and heterogenous phenomenon. One can not simply dismiss or accept it. Like all grand narratives, One has to negotiate with it. Though this paper, we observe same key texts in Indian English literature which explicitly reflect or engage with the phenomenon of globalization. Along with them various other things have happened like easing the movement of men and goods and movements of industries and other institutions from one country to another.

Other modes of transport , telephone and wireless are



old now and surely in use. By this the able people who technological skill and resources have been greatly benefited because the global market of their products and services has opened to all the citizens of the globe but at the same time those who have ability to meet the local demands only artistically and otherwise, but do not have the ability to compete with his counterparts in technology and resource producing higher quality of goods elsewhere, have lost their fields. When everyone can see the position of the others in other countries each wants to emulate their higher life styles, consumptions and comforts, specially when models dance before thier eyes washing thier bodies with luxury soaps which attract all, the rich and poor, but while the rich has the purchasing power due to opening of thier markets, the poor can not get them for want of it. Big industries gain at the cost of tribal people as they evict them in digging thier land for mines and other purposes. So globalization is not a boon to all whereas it can open avenues to all to grow in the long run provided eveyone is given the opportunities. Globalization on the whole remains a complex process. We shall see further how the experts have found it. Globalization had begun with the adventures and travellers who covered countries on ship, boat and foot. It spread around 1500 AD with the spread of regional trade which further galloped during the Industrial Revolution around the 1800 AD The two world wars too accelerated the process of globalization. With the technological evolution, growth of trade and commerce was revolutionized helped by the tremendous development of communication, almost winning the space and time. It seems that the real globalization is a sure product of the modern technological era of the late twentieth and beginning of twenty first century.

Railways, cars, airplanes, telephones, computers with websides and e-mailing have helped the interconnectivity grow at a rapid stride. This spread across countries and nations requires a common lingua franca for exchange of

ideas, literatures, trade, commerce and education. Because the English had colonized great portions of aleardy civilized and potentially portions of the earth, English was known to this group of people across countries and when need arose to communicate, it was available handy for use with the prevailing knowledege base. The spread of English has become a contributor towards globalization and at the same time a result of globalization.

There have of course been formidable obstructions from 'many strong language groups of the world besides the objections of the nationalists against its growth, as it certainly impedes the natural growth of many native languages, at least to a good extent. Here some potential arguments in its favour are that it has not remained the language of the British is landers only who were the original and native speakers of it. It has undergone immeasurable changes with the speakers of other countries who adopted it mixing it with their culture, ethnic spirit and way of speaking. Now there are different kinds of English like American English, Indian English, African English or Canadian English and many more varieties. When its strength, adaptability and potential as an international language has been variously tested it seems rational to allow this grow to help all the people of the world in thier commons exchange of ideas and actions for various business and culture, technology, Science and literature and as common language for differenrt uses. It is product to be less egoistic to take the growth as natural, to allow the growth of other languages simultaneously with it and not to consider it as a foreign language. It does not more link with the colonial past except historically.

This English language written and spoken by Indians may be termed as Indian English. At the beginning most of such writers were brought up in UK and wrote almost their English like the second generation writers of Indian origin, now settle in England and America. They have been



writing in English regularly in their tone. Their language is akin to the nation in which their guardian settle, yet when they write an Indian or Indian theme, even write on other themes, their mind remaining Indian, their subject in most cases and ideas remain Indian, coloured by India, their language is Indian English. But another bulk of Indian English Literature is created by Indians living in India. So the combined literary product of all Indians writing in English, whether diasporic, living elsewhere or native, living in India, is Indian English literature. Raja Rao wrote in the foreword of his debut novel, *Kanthapura*, "English is not really an alien language to us. It is the language of our intellectual make-up like Sanskrit or Persian was before but not our emotional make-up. We are instinctively bilingual. We cannot write like the English. We cannot write only as Indians. We have grown to look at the larger world as the part of us. Our method of expression therefore has to be as distinctive and colourful as the Irish or the American, time alone will justify it."

The introduction of English and its teaching among the younger generation in India was talked about for some time but it became effective only when such personalities as Raja Ram Mohan Roy, T.V Macaulay, David Hare and Hyde East came forward with great interest to induce the government to take necessary steps to introduce it. And it was gradually introduced by the British government. Beyond the official introduction, for dealing with the rulers, for getting modern education and for contacts with the outside world, the elites of India learnt English. With the development of the regional languages English too developed in post-colonial India. English is not the language of any particular community in any province of India but a language popular in the whole of India. Gaining popularity among the educated people, it has now acquired a firm position in the heart of Indians to become the literary link between Indian regions

and a common link among the educated mass. It is also the most vibrant and common international link language between India and all other countries. In fact English is now the most popular international language of the world.

Raja Ram Mohan Roy was the first trilingual writer in India to use the English language in the nineteenth century. Actually he was a multilingual writer. He translated *Katha Kena*, *Isa*, *Mundaka* and other Upanishads in English. His campaign against Sati, polemics against Hindu Idolatry, writings towards social reforms, writings in Bangla, Sanskrit, Hindi and Persian, all were translated by him in English of which the readers were Indians as well as British. Some of his writings were available as early as in 1816. At the early stage of Indian English Literature Toru Dutt, writing around 1876, recorded her fine literary works, poetry, translation and prose in English. Her translation work from Bangla and French has been considered very fine, though she lived up to the age of 21 years. We must also add to this the debut novel of Bankim Chandra Chatterjee (1838-94), Rajmohan's wife- Swami Vivekanand, the great preacher won the heart of young India. His poems and discursive prose dealing with religious, patriotic and theological issues were extensively read. There was almost no political leader who did not feel the impact of Vivekanand's religious, ideological assertions in a changing society.

Then came Manmohan Ghose (1869-1924), Aurobindo Ghose (1872-1950), later known as Sri Aurobindo and Sarojini Naidu (1879-1949), of them Sri Aurobindo's works covered almost all aspects of life and literature, first and foremost he was a poet, he wrote volumes of poetry, then political essays, journalistic writings as editor of dailies and other periodicals, philosophy, essays on Indian culture, on human unity, translations from various



Sanskrit, Vedic texts, from regional language, writings on Indian epic and scriptures besides dramas. Many great stalwarts of Indian politics found it convenient to reach larger number of audience including the foreign masters of the country through the medium of English. The maturity, vigour, precision and erudition of their works enriched Indian English Literature. Even in this genre of political and discursive writing Sri Aurobindo was the pioneer through his dailies and periodicals-Bande mataram, karmayogin and others. The present emerging trend of the languages spoken and learnt in India shows that Indians speak more English than any other language except Hindi, we further know that English speaks in India outnumber those in the whole of western Europe except U.K. Indian English speakers are more than twice in number than the populations of U.K. "These facts emerge from recently released (census 2001) data on bilingualism and trilingualism in Indian," writes Subodh Mathur as forward by P. C. Mathur. According to it, the number of speakers of various major language were: Hindi-551.4 million; English-125 million; Bangla-91.1 million; Telugu-85 million; Marathi-84.2 million; Tamil 66.7 million; Urdu-59 million; Oriya-36.6 million; Malayalam-33.8 million; Punjabi-31.4 million and Assamese-18.9 million.

In 2006 English as a medium of instruction ranked fourth, behind Hindi; Bangla and Marathi but by 2007 it climbed to second place and grew even further in 2008, as reported in the latest edition of Toi- crest. Regional language medium schools have witnessed steady erosion in their share over the years.

While all the regional languages along with Sanskrit and Urdu should be encouraged to grow, English should not be treated as a foreign language. We have absorbed many foreign things and people in our national life. They have been Indianized as the English. We may say that English today is one of the Indian languages.

There is another reason for Indian writers adopting English as their medium of expression; it offers. The readership of English is really vaster than any regional language and most of the regional literary establishment are perhaps monopolistic in nature, partial in dealing with their writers, offering narrow scopes to other who are not in the preferred list. It seems that Indian English literature is broader in its application offering vaster opportunities. It is a fact that English is going far to capture the heart of Indians. Indian English literature has a remarkable history of more than 200 years now. It is high time that it should be recognized and its study should constitute an essential part of studies of English Literature in Indian schools, college and universities. It seems urgent that the teaching of English Language and literature be introduced to at all levels of education in our country.

Left as a legacy by the colonizers it has become a boon to us; English is not the language of any particular community in any province of India but a language popular in the whole of India; it has evolved replacing other languages, even pushing the claim of Hindi, as it could not capture the heart of all Indians. The only language, the real Indian culture language acceptable to all Indians, as it belonged to more in particular, was Sanskrit but it could not forge ahead due to the intervention of other languages and politics. English is the most accepted international language. It has become a literary and link language among educated Indians. I find a tremendous scope in English through which I am linked not only to fellow Indian but all writers of the language throughout the world while continuing bilingual character of writing in Bangla also. The scope of English has been widened through translations. It certainly forges all Indian mind together leading to better understanding and peace. It is the best peace link among the people of the globe. The importance of English as a global language has been comprehensively discussed and some statistical



data has also been given as evidence to prove that English is the only language that is internationally spoken and accepted language. First of all, the importance of English in the field of science and technology has been thoroughly discussed. The scenario of the international job market has been extensively discussed. The use of English in business has been highlighted.

Hence, the essence of English for business organisations to use English as medium of their communication in order to continue their business relationships and promote their business has been clearly discussed. Furthermore, the impact of English language on the internet has been discussed and it has been proved that there are many websites using English as their medium of communication. The importance of English in travel and tourism. The interesting trend in the twenty-first century is that some of the biggest economies such as China, Japan, Russia, France and Brazil are focusing on English language after

realizing the value of English global level. In the process of English language and literature teaching, each teacher emphasizes the importance of language sense, but language training requires a lot of reading practice, which means students need to read and accumulate.

Therefore, to develop the good language skills, teachers need to be able to guide students to read a lot, from quantitative to qualitative change, so as to enhance student's language skills.

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शोध-पत्र लेखकों को विशेष निर्देश

‘दि गुंजन’ और ‘अभिनव गवेषणा’ मल्टी डिस्प्लिनरी क्वार्टरली इन्टरनेशनल रेफ्रीड/पियर रिव्यूड रिसर्च जर्नल में पेपर प्रकाशित कराने के लिए पाँच प्रमुख बातों का होना बहुत ही आवश्यक है—

- (1) रिसर्च जर्नल पत्रिका के क्रमानुसार चार पेज से कम नहीं होना चाहिए।
- (2) रिसर्च जर्नल में कम से कम आठ सन्दर्भ ग्रन्थ सूची (References) का होना आवश्यक है।
- (3) रिसर्च जर्नल में लेखक का नाम, पद, कालेज का पता, ऊपर अंकित होना चाहिए।
- (4) नवीनतम एक पासपोर्ट साइज फोटोग्राफ एवं ई-मेल एड्रेस।
- (5) रिसर्च जर्नल में प्रमाण-पत्र हेतु आपके निवास का पता अंकित होना जरूरी है।

यह आप सभी के स्नेह का ही परिणाम है कि आपके प्रबुद्ध विचारों को ‘दि गुंजन’ और ‘अभिनव गवेषणा’ मल्टी डिस्प्लिनरी क्वार्टरली इन्टरनेशनल रेफ्रीड/पियर रिव्यूड रिसर्च जर्नल के माध्यम से अपने पाठकों तक पहुँचाने का सुअवसर मिल रहा है। विस्तृत जानकारी हेतु कार्यालय अथवा मोबाइल पर सम्पर्क करें।

- प्रबन्ध सम्पादक

सम्पर्क - 8896244776, 9335597658

On the basis of Relations with South Asian neighboring countries India-Pakistan Relations



- Sunil Kumar

Lecture -

Dept. of Political Science,
B. S. I. College, Sector 46,
Noida-201303 (U.P.)

E-mail:

aman.suneel@gmail.com

Abstract

India-Pakistan relations are very prominent among examples of a long chain of relations between two neighboring countries. Despite the historical similarity, cultural homogeneity, geographical proximity, economic self-reliance, the relations of distant neighbors have remained instead of friendship. From attainment of independence till today, their relations have progressed from conflict to peace, then conflict to peace, but have remained beyond friendship and cooperation.' Between them, the Cold War has become a real war four times in a row. There has been a period of tension, lassitude and cordial relations between the two for a very short time.

Introduction-

On August 15, 1947, India suffered the brunt of partition along with its independence and a part of this country was marked as Pakistan. People living in the same kind of lifestyle, eating habits, speaking, dressing up, that is, people growing up in the same kind of cultural environment were forced to live separately due to partition as victims of Hindu-Muslim communal politics. Due to this mutual communal enmity and the instigation of fundamentalists on both sides, there were fierce communal riots in the country. Thousands of innocent people had to sacrifice their lives because of the rioters. While every part of Muslims from India is migrating towards Pakistan, Hindus and Sikhs from Pakistan were fleeing towards India. Don't know how many people had lost their lives before reaching their destination and those who reached after saving their lives had to face great difficulties in getting the facilities to live a stable life. On both sides looted people who were once prosperous citizens were now beggars. This tragedy of partition had to be faced by a large section of the population.

It is true that this is what the British wanted. They wanted to make this vast country powerless by breaking it into pieces, but the power greed of the Indo-Pak leadership was also a factor in this, probably due to this mutual hatred, both the



countries could never live like good neighbors. Where both countries maintain a kind of cold war all the time, they have also fought four times. The nuclear arms race between the two continues unabated. Both countries are also engaged in nuclear weapons competition. Even in the field of sports like cricket, from the players to the spectators, being obsessed with the feeling of national prestige, they become antagonistic to each other. But this is one side of the coin. Even today efforts for peace are going on from both the countries especially India, so that both the countries can live like good neighbors in future with affection and peace. Partially some successes have also been achieved and it is expected that in the future India-Pakistan will be able to establish good relations.

India-Pakistan relations are very prominent among examples of a long chain of relations between two neighboring countries. Despite the historical similarity, cultural homogeneity, geographical proximity, economic self-reliance, the relations of distant neighbors have remained instead of friendship. From attainment of independence till today, their relations have progressed from conflict to peace, then conflict to peace, but have remained beyond friendship and cooperation. Between them, the Cold War has become a real war four times in a row. There has been a period of tension, lassitude and cordial relations between the two for a very short time.

In March 2001, the Secretary-General of the United Nations, Kofi Un, while giving his statement on the occasion of his Indo-Pak visit, had said that the United Nations resolution of half a century ago has now become out of date and irrelevant. Only Jai Shimla Agreement and Lahore Proclamation are relevant. These views of the Secretary General of the United Nations fully support India's point of view. In short, we can divide the relations between India and Pakistan into the following heads:

(1) Partition and initial separation -1947-

1954.

(2) Conflict relationship 1955-1971.

(3) The period of stress or relaxation 1972-1979.

(4) The period of ups and downs 1980-1998.

(5) New beginning but sad end 1999 to date.

Immediately some problematic or controversial issues emerged between India and Pakistan, due to which bitterness started arising among themselves. Like- (1) Division of Punjab-Bengal border, (2) Division of armies, (3) Division of civil forces, (4) Problem of government assets and liabilities. Most of these issues were resolved within a few years with the cooperation of diplomats or officials from both sides, but due to the bitterness during these issues, instead of following the path of cooperation, these countries walked on the path of confrontation.

Minorities Problem-

India was partitioned on the basis of religion. Perhaps that's why Hindus felt safe in India and Muslims in Pakistan. That's why a large number of people came from here and there. The second reason was also economic. It was found especially high in the population of East Pakistan. The reason was the end of jute trade from there. Whatever be the reason, as a result of the partition of 1947, 1405 million Hindus became a minority in Pakistan and 10 million Muslims became a minority in India. A large number of these refugees from both the sides settled as displaced persons in both the countries. According to the 1951 census, the number of these displaced people in India was 78.8 lakhs. 5 Thus about 49.05 lakh came from West Pakistan and 25.75 lakh came to India from East Pakistan, whose number later increased to 41.16 lakh in 1957.

Water Problem- One of the major problems associated with partition was the sharing of the waters of the Indus and its tributaries. Geographically, after partition, 18 million acres of irrigation land was available to



Pakistan and only 5 million acres of irrigation land was available to India. India's population of 20 million lived in this Indus river area, whereas Pakistan's population of this type was 22 million. Seven rivers were included in the Indus river region, of which the Indus itself was in the west and the Kabul and its five tributaries (Jhelum, Chenab, Ravi, Sutlej and Beas) were located in the east. Of these, Indus, Jhelum and Chenab flow mainly from Pakistan except Kabul and they drain about 80 percent of the water of the Indus region, on the other hand Ravi and Sutlej mainly flow from Vyas Purna to India.

Kashmir Dispute-

Of the many disputes between India and Pakistan, the problem of Kashmir has been the most complex and remains so to some extent. To solve the Kashmir problem, several formal meetings have taken place between the two countries since Nehru's time till today, but no concrete solution has been found till date. Kashmir is very important for both from the point of view of security. That is why both the countries want to include Kashmir in their respective states. Perhaps this is the reason why neither India nor Pakistan is ready to back down on the issue of Kashmir.

Kashmir was once ruled by Raja Hari Singh, who after Indian independence requested Nehru to merge Kashmir with India. That is why India considers Kashmir as its right. Kashmir, on the other hand, is a Muslim-majority state, due to which Pakistan considers it as its fiefdom. On the other hand, there are people among the local people of Kashmir who want to give Kashmir the status of an independent nation. Due to this triangular claim, the issue of Kashmir has not been resolved even today. Efforts are on for an agreement between the three superpowers. Under the Indian Independence Act 1947, freeing the states of local kings from English subjugation, it has been given the freedom to join India or Pakistan.

Political Relations-

After studying the political conditions of India and Pakistan and their policies after partition, it can be said that the relations between these two neighboring countries have not been good since the beginning and are not very good even today. Although most of the issues except the Kashmir dispute have been settled through dialogue, there has been a lack of mutual trust and cooperation between the two countries. Where India recognizes the policy of secularism, Pakistan is a religious fundamentalist country. This process is not only limited to the internal level of both the countries but also affects the foreign policy of both the countries. As a result of this, where India has adopted the policy of non-alignment and secularism, Pakistan has declared itself an Islamic country and has accepted to join military alliances with America.

In 1963, Pakistan handed over 5,180 square kilometers of Pakistan-occupied Kashmir to China in an agreement. In this way, due to handing over the disputed area to China and supporting China in the Sino-Indian war, the relations between India and Pakistan worsened further.

The Indo-Pak war of 1965 was the main reason for the hostile relations between the two countries. The following reasons were responsible for the start of Indo-Pak war:

- (1) Due to the defeat in the 1962 war with China, Pakistan considered India's weakness.
- (2) After the death of Nehru in 1964, Pakistan considered the new leadership very weak.
- (3) Zulfikar Ali Bhutto's assessment was that if the military victory in this war would increase his prestige, then the military defeat would bring down Ayub Khan's credibility, this would lead to the transfer of power in his favor soon.
- (4) The anti-India activities by the Muslims in Kashmir in the winter of 1963-64 would be helpful in the victory of Pakistan.'



On September 1, 1965, the Pakistan Army violated the International Border in Chhamb-Jorika area and in the same month Pakistani guerrillas infiltrated into Kashmir and engaged in border skirmishes. According to the experts, in the context of the assessment of this war, Pakistan made the following mistakes-

(1) Pakistan had an illusion that the Muslim population of Kashmir would oppose the Indian administration, this assumption turned out to be wrong.

(2) The Indian Army acted with such speed that it seemed to have realized the objectives of the Pakistani Army.

(3) India thwarted Pakistan's assessment that India would not cross the International Border.

(4) After the defeat in the China war of 1962 and the Kutch war of April 1965, the political situation was such that it could no longer favor any other agreement.

The Indo-Pak war ended on 23 September after 22 days due to the intervention of the United Nations. India's position became very strong in this war. After the end of the war, India had taken 740 square miles of Pakistan's territory including Pakistan Occupied Kashmir and about 210 square miles of Indian territory had gone under the occupation of Pakistan. To resolve this situation, finally, with the mediation of the Soviet Union, the Tashkent Agreement between the two countries was concluded on January 10, 1966.

It was believed that after the Tashkent agreement, the situation between the two countries would become friendly, but this did not happen. Sporadic incidents continued to happen on the borders of both the countries, which are still continuing till today respectively. Friendly relations between the two countries have not been established even today, although talks have been held several times at the diplomatic level. We strongly support the aspiration to improve friendly relations between the two countries.

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Production and Analysis of Soap using Locally Available Raw-Materials



- Dr. Vibha Maheshwari
Assistant Professor -
Department of Chemistry,
R. B. S. Degree College,
Agra-282001 (U.P.)

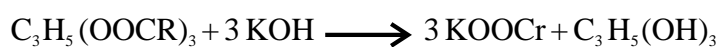
E-mail:
drvibhamaheshwari@gmail.com

Abstract

The use of locally available raw materials in soap production was carried out. The soap was prepared using sheabutter oil (SBO), palm kernel oil (PKO) and plantain peels. The physicochemical parameters of the oils were analysed. The saponification values of the oils 175.30 ± 0.81 mg KOH/g (SBO) and 249.18 ± 1.40 mg KOH/g (PKO), and the iodine values 65.99 ± 1.27 I₂/100g (SBO) and 18.58 ± 0.86 I₂/100g (PKO) agreed with those found in literature. The free fatty acid (FFA), acid value and Relative density were found to be 1.719 ± 0.009 , 3.60 ± 0.06 mg KOH/g and 0.90 ± 0.02 for PKO and for SBO the corresponding values were 5.499 ± 0.113 , 11.78 ± 0.56 mg KOH/g and 0.91 ± 0.07 respectively. The alkali was extracted from the plantain peels ash and used to saponify the oils for the production of soap. The soap produced was analysed by testing its hardness, moisture and foaming stability. The results indicated that the soap produced by SBO : PKO (50 : 50) showed a very good properties, hence regarded better compared to the soap produced by SBO and PKO separately.

Soap,
Shea butter oil,
Palm- kernel oil,
Plantain peels, Local,
Raw- materials.

It is generally known that soap is produced by the saponification of a triglyceride (fat or oil). In the process the triglyceride is reacted with a strong alkali such as; potassium or sodium hydroxide to produce glycerol and fatty acid salts. The salt of the fatty acid is called soap. The equations below represent typical saponification reactions.



Fat Potassiumhydroxide Soap Glycerol





Fat Sodiumhydroxide Soap Glycerol
Where R represents the hydrocarbon chain or alkyl group.

Fatty Acids are straight-chain monocarboxylic acids. The commonest fatty acid used in soap making contains a range of C_{10} - C_{20} and most often have an even number of carbon atoms including the carboxyl group carbon. Examples of such saturated fatty acid is palmitic acid ($CH_3-(CH_2)_{14}-CO_2H$), while unsaturated fatty acids is oleic acid, $C_{17}H_{33}COOH$.

The constituent component of fatty acids, are chiefly oleic ($C_{17}H_{33}COOH$), stearic ($C_{17}H_{35}COOH$), palmitic ($C_{15}H_{31}COOH$), lauric ($C_{11}H_{23}COOH$) and myristic ($C_{13}H_{27}COOH$) acids; Hydrocarbon oils or paraffin are not suitable for soap-making, as far as chemical combination with the caustic alkalis is concerned. The oils and fats which form soap are those which are a combination of fatty acids and alkali. While glycerin is obtain as a by-product to the soap-making industry.

Shea butter is a white or milky colored fat extracted from the nut of the African shea tree (*Vitellaria paradoxa*). Shea butter is a triglyceride (fat) that is derived from mainly stearic acid and oleic acid.

Shea butter extract is a complex fat that contains the following fatty acids: oleic acid (40-60%), stearic acid (20- 50%), linoleic acid (3-11%), palmitic acid (2-9%), linolenic acid (<1%) and arachidic acid (<1%).

Chemical analysis of Shea butter extracted from nuts sample in Nigeria shows that the extract contain 47% oleic acid [9].

Palm kernel oil is majorly lauric acid containing saturated fatty acids of C_6 - C_{18} chain. It has a sharp melting point when heated. Higher quality soap is produced using 10-15% lauric acid.

Alkalis are water soluble base, usually hydroxide or oxide of potassium or sodium. Alkali can be produced locally from ashes as "potash" by extraction with water. It is generally

believed that the highest soluble metal is potassium, though this depends on the species of the plant material and the type of soil where the plant grows.

Several studies have been carried out on the potash content of some plant materials such as: cocoa husks, fresh plantain trunk, unripe plantain peel, ripe plantain peel, groundnut shell and sorghum chaff.

The used of ashes obtained from agricultural materials as source of industrial alkali have reported [16]. Research has shown that plantain peel ash has been used to produce soap of good quality.

The aim of the present studies is to prepare and analysed soap from locally available raw materials such as; shea butter, palm kernel and plantain peels.

Materials and Methods Materials-

The materials/reagents used in this work are; shea butter oil (SBO), palm kernel oil (PKO) and plantain peel which were sources randomly from Sokoto central Market, Sokoto state, Nigeria. Ethanol, ether, KOH, NaOH, anhydrous Na_2SO_4 , iodine monochloride, glacial acetic acid, CCl_4 , HCl, KI, Sodium thiosulphate, phenolphthalene were all obtained from BDH chemicals England. Distilled water was used throughout the period of experiment.

Methods

Sample Preparation-

The samples were dried by adding anhydrous sodium sulphate for determinations in which result might be affected by moisture (e.g. iodine value). To retard rancidity the samples were kept in cool place and protected from light and air.

Determination of Relative Density-

Approximation method was used to determine the density of the oil as follows; 20ml of oil samples were measured and transferred into a cylinder of known weight.

The weight of the cylinder including its contents was measured and the density of the oil



was calculated as follows;

$$\text{Relative Density} = \frac{\text{Weight of the Sample (g)}}{\text{Volume of the Sample (ml)}}$$

Determination of Saponification Value-

The number of mg of potassium hydroxide needed to saponify 1 gram of oil/fat is term as Saponification value. A certain amount of the oil (2g) was weighed and placed into a 300 ml conical flask, 0.5 M solution of KOH was added to the above solution and heated at 55°C over water bath with continuous stirring. The temperature was raised to 100 °C to complete the saponification process. The mixture was allowed to boil for about 1 hour. The excess KOH was titrated against the mixture using phenolphthalein indicator and the Saponification value (SV) was determined using equation below:

$$\text{SV} = \frac{\text{Average Volume of KOH} \times 28.056}{\text{Weight of the oil (g)}}$$

Where the weight of sample = (weight of cylinder + weight of content) - weight of cylinder
Aiwizea and Achebob, [18].

Determination of free fatty acid (FFA) and Acid value-

To the 25 ml of 95% ethanol/ether (1:1) mixture, 2ml of 1% phenolphthalein solution was added. To the above solution, 5g of oil sample was added and the resulting solution was titrated against 0.10N NaOH solution with constant shaking until a pink color was developed and persisted for 30seconds [19]. The process was replicated thrice for each of the detergent mixtures and the percentage free fatty acid expressed as its lauric acid content and acid values were determined by the formula below:

$$\begin{aligned} \% \text{ FFA} = & \frac{\text{vol. of NaOH (ml)} \times \text{normality of NaOH} \times}{\text{X molecular weight}} \\ & \frac{\text{Sample weight (g)}}{\text{Acid Value \% FFA} \times 1.99} \end{aligned}$$

Analysis of Soap-

Foam stability and Hardness of Soap-

The soap produced was used to form lather in water and the time taken for the foam-to collapse was measured using a stopwatch. The hand feel hardness was determined relative to each other.

Moisture Content-

Moisture content was determined by drying 10g of the sample to a constant weight at 105 °C according to AOAC [17]. It was allowed to cool and then reweighed. The % moisture content was calculated from the formula below:

$$\% \text{ Moisture Content} = \frac{W_1}{W_2} \times 100$$

Where

W_1 = weight of soap after drying

W_2 = weight of soap before dryings

Results and Discussion-

The results of the physico-chemical parameters of the shea butter and palm-kernel oils are shown in table 1. The data were presented as mean \pm standard error of mean of triplicate analysis.

Discussion-

The physicochemical parameters of both SBO and PKO (Table 1) reported in this work shows relative density agrees with FAO standard value and the values obtained by other researchers (0.860 - 0.873 g/ml) elsewhere. The Relative densities of the two oils are almost the same. The saponification value for SBO oil is 175.30 ± 0.81 mg KOH/g which is also between the reported values of 178 - 198 in while that of PKO is 249.18 ± 1.40 mg KOH/g which is in agreement with 249.90 for palm kernel oils reported by Aremu. The SV of the oils are in agreement with the finding of Kyari. The FFA of SBO is 5.499 ± 0.113 mg KOH/g while that of PKO is 1.719 ± 0.009 mg KOH/g and the acid values are 11.76 ± 0.56 mg KOH/g and 3.60 ± 0.06 mg KOH/g respectively. The saponification value of the two oils indicated their suitability in soap making. (See Table-1, 2 & 3 on next page)

Tables 2 and 3 showed the properties of the soap immediately and after eight weeks of



Table 1. Physicochemical Parameters of Sheabutter oil (SBO), Palm-Kernel oil (PKO) and FAO Standard Value

Parameters	SBO	PKO	FAO [22] standard
Relative Density (g/ml)	0.90±0.02	0.91±0.07	0.89-0.910
Saponification Value (mgKOH/g)	175.30±0.81	249.18±1.40	189-199
Iodine value (I ₂ /100g)	65.99±1.27	18.74±0.86	50-55
Free Fatty Acid (mgKOH/g)	5.499±0.113	1.719±0.009s	<0.5
Acid Value (mgKOH/g)	11.78±0.56	3.59±0.06	30

Table 2. Properties of the Soap immediately after Production.

Properties of Soap	SBO	PKO	SBO:PKO (50:50)
Foam Stability (min ⁻¹)	2.00±0.01	3.70±0.06	1.90±0.03
Hardness of soap	2±0.04	1±0.00	9±0.21
Moisture Content (%)	8.20±0.43	8.20±0.54	10.60±0.87

Table 3. Properties of the Soap after 8 weeks of production.

Properties of Soap	SBO	PKO	SBO:PKO (50:50)
Form Stability (min ⁻¹)	2.45±0.02	4.15±0.09	3.20±0.07
Hardness of soap	2±0.01	1±0.03	9±0.09
Moisture content (%)	3.75±0.12	7.40±0.21	4.70±0.18

production respectively. The foam stability was determined by measuring the time it takes for the lather formed by the soap with pure water to

collapse. Sample PKO has the longest time for lather collapse hence it has highest Foam stability value of about 3.70 minutes for the fresh soap and



4.15 minutes for the eight week old soaps, this observation corroborates moisture loss, that is, as the moisture content reduces, the foaming strength increases. There is great moisture loss also as the soap ages, for example, the moisture content of the soap is 8.20% when freshly prepared and 3.70% after eight weeks. However, if foam stability is considered the most desirable soap quality and then sample SBO: PKO emerges the most suitable soap in the present study.

Conclusion-

The production of soap from shear butter and palm kernel with purified alkali made from plantain ash was successfully achieved using an improved conventional method adopted for black soap production. The qualities of soaps thus produced clearly indicated that exploitation of vegetable matter to generate alkali for soap production is worthwhile. Apart from the fact that our environment would be free of those agricultural wastes that often render them untidy, it will save the environment from the potential harmful effect on pollution that commonly associate with these synthetic chemicals. In addition, the heavy dependence on synthetic chemicals for soap production would drastically reduced if concerted effort is made on improving this locally source of raw material for soap making.

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Disparagement Despite Rights in the patriarchal and Matriarchal Society



- Asheesh Kumar Upadhyay
Research Scholar,
English Department)
Nehru Gram Bharati
(Deemed to be University)
Jamunipur, Kotwa, Dhubwal,
Prayagraj-211003 (U.P.)

E-mail:
asheeshnaginaupadhyay@gmail.com

Research Supervisor
- Dr. Chhaya Malviya
Associate Professor &
Head, Dept. of English,
Nehru Gram Bharati
(Deemed to be University)
Jamunipur, Kotwa, Dhubwal,
Prayagraj-211003 (U.P.)

E-mail:
chhayamalviya011@gmail.com

Abstract

Being deprived of rights despite having rights is a worrying and sad event not only for the human race but also for animals and others. Transgender has also been created by God, who has made all living beings and animals. Still, discrimination towards transgender and fallen attitudes towards them does not prove that we are male or female. If you have been made perfect, you must give the same rights to the third gender. They must be revered because they participate in our joy or sorrow. Constitutional rights to be granted are not enough. It is just guidance by which it can be known that they have been given the rights. Following the guidelines is an art of its own. First, ownership must be delivered, for which we must change our vision and the burying thinking towards them. Then somewhere, they can be promoted in the social, political, economic, and religious fields. It is the only medium through which the condition of transgender can be improved, for transgender people will have equal participation because Society becomes stronger with everyone's contribution. Transgender is the name of endless struggle, agony, discrimination, joke, abuse, and suicide, especially in a patriarchal Society.

Right is for the sake of right. Right does not mean slavery; on the contrary, right means to be treated equally, in which the right taker is responsible for exercising his right within his scope and limitation. It applies to all gender, whether male, female, or impotent[transgender]. This topic is direct blame on Society, which ignores the third gender. The selection of this topic is a target to give empower and equal attitude towards the third gender. They have rights from the Constitution, the power of IPC, religious blessing, and the same body structure even though they are exploited and discriminated against. It is a question in the above topic.

Keywords - Discriminated, Patriarchal, Society, Rights, Constitution.



Introduction -

"We are a sexual minority that is visible, and yet we are treated as the invisible."¹

- Laxmi Narayan Tripathi

Hizra is a species of humans that are neither male nor female, and they can't become parents because their reproductive organs are not fully developed. Their history is very ancient. They are also mentioned in religious books like Ramayan, Mahabharat, and other holy creations.

A hijra is male to female, but we don't consider ourselves female because, culturally, we belong to a completely different section of Society. I'll start with the Manu-smriti [one of the earliest Hindu texts on social order]. Then in the Vedic period [1750-500 BC], we were known as the Kinnar. We were very highly regarded people. We were at the court, cooks, the keepers, and the advisers responsible for guarding the queens. We were in all sectors of life, considered special people, nobles even divine.²

In the Mughal Sultanate, most Muslim rulers behaved brutally toward the third gender; they were exploited, raped, and sexually harassed. The bringers did the same work. They threatened transgender and buried their existence. Even after being born from the womb of a human being, they are laughing socks. Most of our Society looks at them with disrespectful eyes. Most people consider them scared and look at them from the point of view of purity. Laxmi says- I am the oldest ethnic transgender community in the world, with its own culture and religious beliefs.³

This genetic disorder is also caused due to presence of an additional copy of the x chromosome, resulting in a karyotype of 47 (x,x,y.) Such an individual has overall masculine development. It is called Klinefelter's syndrome. In the same way, Turner's syndrome is a disorder caused due to the absence of one of the x chromosomes, i.e., 45 with xo; these characteristics indicate transgender in the

biological definition.⁴

Although they have the same structure as males and females, the only reason for this corresponding with their sex-assigned birth is that they are discriminated against.

Gender dysphoria refers to the mismatching and discomfort experience of emotional identity with biological sex, which is perceived as a contradiction.⁵

We have seen with our open eyes the downfall of transgender people for almost thousands of years. We have seen these—given communities cease to exist. Society rejected this reality, which resulted in the result that after India's independence till 2014, they had to face many struggles while living a prosperous life. They did not have clothes and shelter to save their identity. Homeless people were forced to sell their bodies to satisfy their hunger.

(A) Rights were given to the third gender-

The NALSA judgment passed by the supreme court on April 15, 2015, is considered a historical decision to improve the condition and direction of transgender. With their decision, the transgender community was recognized as the third gender for the first time. In April 2015, Shiva's bill was passed in the rajya sabha. He argued that the number of transgender on pare is 40 lakhs, but in reality, their number can be around 20 lakhs. By the NALSA judgment, they got the right of the third gender in the Constitution, but still, they were discriminated there was no ceremonial law for them to protect themselves. The bill was passed in Lokasabha in December, 2018. Still, after the end of 16, the kasbah was introduced again in the kasbah in the name of the transgender rights protection bill 2019, after which it became a law after the president's signature. According to this bill, the amendment in IPC section 377 according to this bill transgender will be given all rights with the protection of IPC. In the case of NALSA vs. Union of India and others, on April 15, 2014, SC held that held-



Self-determination of gender is an integral part of personal autonomy and self-expression. Self-determination of transgender falls within individual liberty guaranteed under article 21 of India's Constitution."⁶ Therefore, "self-determined gender can be male or female or a transgender person.

After the NALSA judgment, the central government introduced "third gender" as a separate category for classification as gender in several official forms.⁷

Bill was introduced in Lokasabha by Mr. Thaawarachand Gehlot. Where there was a prohibition against discrimination in the case of education, employment, healthcare, access or enjoyment of goods, facilities, opportunity, suitable to movement, and jobs for private and government, strict rules were held against the discrimination of private or government sectors are opposing, in the education institution every facility like funding, game, education will be equally. There are strict steps in government if anybody is avoiding them for good treatment and surgery to change their gender either as male or female.

The bill states that the relevant government will take measures to ensure the full inclusion and participation of the transgender person in Society; it must also take steps for their rescue and rehabilitation, vocational training and self-employment, create schemes that are transgender sensitive, and promote their participation in cultural activities.⁸

The bill also for penalties and punishments if anyone is forcing them to labor, denies using public places, is abused, sexually harassed, removed from the house, and discriminated against. None will say them criminal as it used to say. They are for the same right. But why are the people are3 still not caring about them?

B- Right from religious and holy books.

It is believed that when lord ram left Ayodhya to spend 14 years of exile, his subject

and eunuchs also started following him, then Shri Ram asked him to return to Lanka. He saw that the rest of the people had left, but the eunuchs were waiting for them there. So after the devotion of the transgender, lord Shri Ram gave a boon to the eunuchs that their blessing would always be fruitful since then; people would be blessed in auspicious events such as childbirth and marriage. it is said that we should not insult eunuchs. If we offend, then they curse, and we take the form of eunuchs in the next life.

The female avatar of Vishnu- Mohini. Translated, Mohini means an enchantress; the Mahabharata describes the first appearance of Mohini when devas and asuras churned the ocean with the assistance of Vishnu as Kurmaa (tortoise) avatar to acquire Amrit (the elixir of immortality). Using charm, she had to separate the fight between devas and asuras.⁹

In Mahabharata, Caravan (in Tamil, the son of a snake), the son of Arjun and Ulupi (a "snake" princess), was offered to be killed for godless kali to ensure the victory of Pandavas in the Kurukshetra war. The only condition was that Aravan should spend the last night of his life as a married man. No woman was willing and came forward to marry Caravan, as he would be killed after the marriage. Lord Krishna took the wedding. Lord Krishna took the form of a beautiful woman called Mohini and married him. This is why the heart of Tamil Nadu calls itself Aravani, named after Aravan, their Progenitor.¹⁰

In some accounts, Amba is born as a daughter to King Drupad. Told by Shiva that she would eventually be transformed into a man, Drupada names her Shikhandi and raises her as a boy. In another account, Shikhandi was born a male but grew up transgender because Shiva allowed her to remember her past life.¹¹

Arjun became Brihannala due to a curse, and Uttara, on the other hand, was the princess of the Madhya kingdom. Brihannala, tall, strong, and womanly, became her Guruma. Arjun, in the form of Brihannala, was her dance and music



teacher. Later Uttara was married to Abhimanyu, the son of Arjun.¹²

The problems being faced till now-

It is a strange irony that the one which the Constitution has given full rights, the soul of the country, the right to vote, the right to manage food, the right to speak in the middle of Society, the right to stay in any room, the right to live, the right to buy land, the one who is a free citizen of an independent country, the Constitution based on which India runs. The form which has pride.; the body, which took so much discretion to write; and how many amendments were given. I am not just talking about humans because it's written as any human. I want to present to you that lord Shri Ram, who is God, has blessed the eunuch; others will feel your blessing; transgender is self a blessing fund the one who blesses us. It means that one who has been given the right by the Constitution and the one who God has shown those transgender are deprived of the request. Yet they are facing the problem of verbal abuse, physical violence, unemployment, illiteracy, discrimination, and sexual harassment.

Often, whenever a eunuch boards the bus, you are the first to see her and laugh. We despise such a particular class in which both men and women reside. We speak to them according to inappropriate language; we abuse them; we give them away and forget that they have all our rights in the form of the same s Arddanarishvar whom we do as Bhola Nath. We give benefits to our dignity; even some people physically abuse them. We catch them messing with their organs because that's how much they are unemployed. They have only a means of earning because, till now, they have no facilities even from the government. After the new constitution amendment, their condition will be improved, by even today, they are being seen with honor. It is the biggest problem for us, for our country. They cannot go to any college, school, or university. They cannot pay attention to education there because they are stared with hate, disclaim, and ominous eyes.

They are seen with a sense of humor. It is conservative thinking, our fallen and despicable thinking. Transgender will be ignored until these criminal thoughts don't change.

This problem is even more severe in compassion when our people torture us for the fact that they are transgender.

I was not hurt when my father and parents poured hot water on my legs, nor when my family threw me out of the institution; I was not hurt when my friends sexually harassed me. I was not injured when my police people took me to the police station and charged false cases against me.

I was not hurt when I was raped, and I am not hurt when Society threw stones, tomatoes, or cow dunks against me. Still, I am heart disappointed the same Indian penal code, section 377, said all sexual minorities are criminals before the country. Why I am a criminal.¹³

she says - I am a woman without a vagina; I am a woman without a uterus; I am a woman without periods. I challenge the paytriarchalmade Society norms, rules, and regulations and do claim. I do calm with pride and dignity; I am a woman with this identity.¹⁴

She is against the opinion that the majority decides minorities. The so-called man born with a penis can not dominate a woman, and women can not force and criticize transgender. They have no right for transgender people to be marginalized, oppressed, socially excluded, or socially rejected. Communalism, fundamentalism, globalization, and sexist and anti-feminist thinking are not the Constitution's symbols. Before 2015 only the one who was denied was transgender. Family, neighbors, village, city, state, country, and education are phobic.

Suppose a parent has a constitutional right to keep his child with him, even if that child is transgender. The parents should also note here that even if they belong to the transgender community, the parent should educate him about equality. If that child is discriminated against, this is the wrong behavior and rough attitude of the



trans child by the parent. It is against humanity. Why do people forget that the child also has blood, bone, and a similar body? What an injustice. It is to separate them from their brother and sisters. We live in 21 century, and we have just short thinking.

The two things I want to bring one is the question; one is requested. The question is when the state terror is against minorities, be it a transgender person, be it a caste religious race minority when you- this community because no way of your reason and patriarchally notion that poverty is dominating against you and I want to take my strong objection on it, right? The reason like how I speak. I am a criminal before section 377, which criminalizes because you are transgender lesbian, gay, or bisexual, and how do I raise my voice against this? My second is about the transgender protection rights bill, where the government is not in the conservative democratic, transparent way of discussing what the community wants and not what the government wants. If that, so how do I raise my voice? How do we fight against it?¹⁵

After all, why does a goldsmith, blacksmith, hawker, vegetable seller, milk seller, furniture seller, or cosmetic seller do? It is why they fear Society and show that they will be joked about, torched badly, and discriminated against. Of course, some transgender people dare to do such work, but they also go back because of the misbehaving and misconduct of males and females.

Language has a vital role in social thought exchange along with literature. The water also takes the sport of language in transmitting his thoughts to Society. In a social language where the personal feeling of another human is mixed, the same literature takes into account those aspects of language in the creation of literature so that understanding the vision of the literature connects its sensitivity with literature and bring it to reveal a sense of the land, using laughing as an approach.

In building Society, various language commissions are used to express the social, economic, religious, cultural, and political aspects. Our eunuch society also comes in the same language, and they have the language clapping. We should understand it.

Conclusion -

The biggest problem is that we don't know where our attitude, imaginative vision, and civilization have gone. Our wisdom, old tradition, and enlightenment are roaming around shamelessly, just like a man auctioning off his honor. Like our body is made up [of bones, blood, and cells, so are eunuchs. Just like we have hormones and body activity, they have everything in common; only the difference is gender. For one difference, they are discriminated against and exploited. This is hell for a patriarchal society because of the same womb from which we were born, the transgender also. Our community and family will have to pay more attention to these things. Humanity will have to change its attitude. An organization is formed from many families, and all are in Society. Community and family are connected, so they should live in unity and real life. Society must not criticize any child who is transgender born in the family, and that is condemned and discriminated against. Neither Society nor the family should force them out of the home where they are born. Every parent will be able to give equal rights to their children and nurture them with equal rights.

They also have equal rights from the Constitution; the glory of transgender has been described in the Vedas, Upanishads, and religious books. Applause does not have teeth, tongue, and mouth, but we should understand the language and feelings of the transgender. It can be understood and felt in the ear of the soul, which is in our heart. But first, we must realize the right to understand the language of clapping.

Disparagement despite rights in the patriarchal and matriarchal Society can be stopped only by the same members of Society and



family who are discriminating and exploiting. This community elected from the mainstream Society registers its residence through such language and behavior. At the same time, it raises the demand for its right. The community, full of contempt and disdain, uses such vocabulary and behaves for the acceptance of its identity. Transgender have their own identity as the third gender, so it is injustice and discrimination for the meaning in their life: sarcasm, obscenity, and harassment.

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दक्षिण एशियाई पड़ोसी देशों से सम्बन्ध के आधार पर भारत पाकिस्तान सम्बन्ध



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bssonker79@gmail.com

एक परिचय -

15 अगस्त, 1947 को भारत ने अपनी स्वतंत्रता प्राप्ति के साथ विभाजन का दंश भी भोगा और इस देश के एक भू-भाग को पाकिस्तान के नाम से चिन्हित किया गया। एक तरह के रहन-सहन, खान-पान, बोली-बानी, वेषभूषा अर्थात् एक ही तरह के सांस्कृतिक वातावरण में पलने वाले लोग हिन्दू-मुस्लिम साम्प्रदायिक राजनीति के शिकार होकर विभाजन द्वारा अलग-अलग रहने को विवश किये गये। इसी आपसी साम्प्रदायिक वैमनस्य व दोनों ओर के कट्टरवादियों की शह के कारण देश में भीषण साम्प्रदायिक दंगे हुए। दंगाइयों के कारण हजारों निर्दोष लोगों को अपने प्राणों की आहुति देनी पड़ी। भारत से मुसलमान का एक एक हिस्सा जहाँ पाकिस्तान की ओर पलायन कर रहा है, वहीं पाकिस्तान से हिन्दू और सिक्ख भारत की ओर भाग रहे थे। जाने कितने लोग अपनी मंजिल तक पहुँचने के पूर्व अपनी जान गंवा बैठे थे और जो अपने प्राण बचाकर पहुँच भी गये, उन्हें स्थायी जीवन जीने की सुविधायें जुटाने में भारी मुसीबतों का सामना करना पड़ा। दोनों तरफ लुटे-पिटे लोग जो कभी समृद्ध नागरिक थे, अब भिखारी हो गये थे। विभाजन की यह त्रासदी आबादी के एक बहुत बड़े हिस्से को झेलनी पड़ी।

यह सत्य है कि अंग्रेज यही चाहते थे। वे इस विशाल देश को टुकड़ों में बाँटकर इसी शक्तिहीन बना देना चाहते थे, मगर भारत-पाक नेतृत्व का सत्ता लोभ भी इसका एक कारक था सम्भवतः इसी परस्पर घृणा के कारण दोनों देश कभी अच्छे पड़ोसियों की भाँति नहीं रह पाये। दोनों देश जहाँ हर वक्त एक प्रकार का शीत युद्ध बनाये रहते हैं, वहीं चार बार युद्ध भी कर चुके हैं। दोनों के बीच आणविक अस्त्रों की होड़ अनवरत् बनी रहती है। दोनों देश अणु अस्त्रों की स्पर्धा में भी लगे हैं। यहाँ तक कि क्रिकेट जैसे खेल के मैदान में भी खिलाड़ियों को लेकर दर्शक तक राष्ट्रीय प्रतिष्ठा की भावना से ग्रस्त होकर परस्पर विरोधी बन जाते हैं किन्तु यह सिक्के का एक पहलू है। आज भी दोनों देश विशेषकर भारत की ओर से शान्ति के प्रयास जारी हैं, जिससे दोनों देश भविष्य में अच्छे पड़ोसियों की भाँति स्नेह व शान्ति से रह सकें। आंशिक रूप से कुछ सफलतायें भी प्राप्त हुई हैं और आशा है कि भविष्य में भारत-पाकिस्तान के साथ अच्छे सम्बन्ध बनाने में कामयाब भी हो जायेगा।

दो पड़ोसी देशों के मध्य सम्बन्धों की लम्बी श्रृंखला वाले उदाहरणों में भारत-पाकिस्तान सम्बन्ध अति प्रमुख हैं। दोनों के ऐतिहासिक समानता, सांस्कृतिक एकरूपता, भौगोलिक सामीप्य, आर्थिक आत्मनिर्भरता के बावजूद मित्रता की बजाय दूर के पड़ोसी वाले सम्बन्ध बने रहे हैं। स्वतंत्रता प्राप्ति से आज तक इनके सम्बन्ध संघर्ष से शान्ति, फिर संघर्ष फिर शान्ति की ओर तो अग्रसर हुए हैं, परन्तु मित्रता और सहयोग से परे रहे हैं।¹ इनके बीच लगातार शीत युद्ध व चार बार वास्तविक युद्ध हो चुके हैं। दोनों के बीच बहुत कम समय तनाव, शैथिल्य व मधुर सम्बन्धों का काल रहा है।²



मार्च 2001 में संयुक्त राष्ट्रसंघ के महासचिव कोफी अन्नान ने अपनी भारत-पाक यात्रा के अवसर पर अपना वक्तव्य देते हुए कहा था कि - 'अर्द्धशताब्दी पूर्व का संयुक्त राष्ट्रप्रस्ताव अब काल बाह्य तथा अप्रासंगिक हो गया है। अब शिमला समझौता एवं लाहौर उद्घोषणा ही प्रासंगिक है।³ संयुक्त राष्ट्रसंघ के महासचिव के ये विचार भारत के दृष्टिकोण का पूर्ण समर्थन करते हैं।⁴ संक्षेप में भारत-पाकिस्तान के मध्य सम्बन्धों को हम निम्न शीर्षकों में विभाजित कर सकते हैं-

(1) विभाजन व प्रारम्भिक अलगाव -1947-1954। (2) संघर्षपूर्ण सम्बन्ध - 1955-1971। (3) तनाव या शैथिल्य का दौर - 1972-1979। (4) उतार-चढ़ाव का युग - 1980-1998। (5) नयी शुरुवात परन्तु दुःखद परिणति - 1999 से आज तक।

भारत पाकिस्तान के तात्कालिक रूप से कुछ समस्यायें या विवादास्पद मुद्दे उभरे किसके कारण आपस में कटुता उत्पन्न होनी प्रारम्भ हुई। जैसे- (1) पंजाब-बंगाल सीमा का विभाजन, (2) सेनाओं का बंटवारा, (3) असैनिक सेनाओं का विभाजन, (4) सरकारी सम्पदा और देनदारी की समस्या। इनमें से अधिकांश विषयों का समाधान दोनों ओर के राजनयिक या अधिकारियों के सहयोग से कुछ वर्षों के अन्दर कर लिया गया किन्तु इन मुद्दों के दौरान आई कटुता के कारण ये देश सहयोग की राह पर चलने के बजाय टकराव के रास्ते पर चल दिये।

अल्पसंख्यकों की समस्या-

भारत का विभाजन धर्म के आधार पर हुआ था। शायद इसीलिए हिन्दू हिन्दुस्तान में और मुसलमान पाकिस्तान में अपने को सुरक्षित समझ रहा था। इसीलिए बड़ी संख्या में लोग उधर से इधर और इधर से उधर आये। दूसरा कारण आर्थिक भी था। यह विशेषकर पूर्वी पाकिस्तान की जनसंख्या में अधिक पाया गया। कारण वहाँ से होने वाले जूट के व्यापार का समाप्त होना था। कारण चाहे जो भी हो, 1947 के विभाजन के फलस्वरूप 1405 मिलियन हिन्दू पाकिस्तान में अल्पसंख्यक बन गये एवं 10 मिलियन मुसलमान भारत में अल्पसंख्यक हो गये। दोनों ओर से भारी संख्या में ये शरणार्थी दोनों देशों में विस्थापित के रूप में आ बसे। 1951 की जनगणना के अनुसार भारत में इस विस्थापितों की संख्या 78.8 लाख थी।⁵ इस प्रकार लगभग 49.05 लाख पश्चिमी पाकिस्तान से आये थे और 25.75 लाख पूर्वी पाकिस्तान से भारत आये जिनकी संख्या बाद में 1957 में बढ़कर कर 41.16 लाख तक पहुँची थी।⁶

पानी की समस्या-

विभाजन से जुड़ी एक प्रमुख समस्या सिन्धु और उसकी सहायक नदियों के पानी के बंटवारे की थी। भौगोलिक दृष्टि से विभाजन के उपरान्त पाकिस्तान को 18 मिलियन एकड़ सिंचाई वाली भूमि उपलब्ध थी और भारत को केवल 5 मिलियन एकड़ सिंचाई योग्य भूमि उपलब्ध हुई थी। इस सिन्धु नदी के क्षेत्र में भारत की 20 मिलियन जनसंख्या रहती थी जब कि पाकिस्तान की इस प्रकार की आबादी 22 मिलियन थी।⁷ सिन्धु नदी क्षेत्र में कुल सात नदियाँ शामिल थीं, जिनमें से स्वयं सिन्धु पश्चिम में थी तथा काबुल और उसकी पाँच सहायक नदियाँ (झेलम, चिनाव, रावी, सतलुज व व्यास) पूर्व में स्थित थीं। इनमें से काबुल को छोड़कर सिन्धु, झेलम व चिनाव मुख्य रूप से पाकिस्तान से बहती थीं तथा ये सिन्धु क्षेत्र के लगभग 80 पानी को बहा ले जाती हैं दूसरी ओर रावी तथा सतलुज मुख्य रूप से व्यास पूर्ण से भारत में बहती है।⁸

कश्मीर विवाद-

भारत और पाकिस्तान के अनेकानेक विवादों में कश्मीर की समस्या सर्वाधिक जटिल रही है और एक सीमा तक आज भी बनी हुई है। कश्मीर समस्या को हल करने के लिए नेहरू काल से लेकर आज तक दोनों देशों के मध्य अनेक बार औपचारिक बैठकें हो चुकी हैं किन्तु इस समस्या का कोई ठोस हल आज तक नहीं निकल सका है। सुरक्षा की दृष्टि से कश्मीर दोनों के लिए अति महत्वपूर्ण है। इसीलिए दोनों ही देश कश्मीर को अपने-अपने राज्यों में शामिल करना चाहते हैं। शायद यही कारण है कि कश्मीर के मुद्दे पर भारत या पाकिस्तान कोई भी पीछे हटने को तैयार नहीं है।

कश्मीर में कभी राजा हरीसिंह का राज्य था, जिन्होंने भारतीय स्वतंत्रता के बाद नेहरू से कश्मीर को भारत में विलय करने की प्रार्थना की थी। इसीलिए भारत कश्मीर पर अपना अधिकार समझता है। दूसरी ओर कश्मीर एक मुस्लिम बाहुल्य राज्य है, जिसके कारण पाकिस्तान उसे अपनी जागीर समझता है। इधर कश्मीर के स्थानीय लोगों में ऐसे लोग भी हैं जो कश्मीर को एक स्वतंत्र राष्ट्र का दर्जा देना चाहते हैं। इस त्रिकोणात्मक दावेदारी के कारण कश्मीर का मामला आज भी हल नहीं हो सका है। तीनों महाशक्तियों के बीच समझौते के प्रयास जारी हैं। भारतीय स्वतंत्रता अधिनियम 1947 के अन्तर्गत स्थानीय राजाओं के राज्यों को अंग्रेजी अधीनता से स्वतंत्र करते हुए उसे भारत या पाकिस्तान में सम्मिलित होने की छूट दी गयी है।

राजनीतिक सम्बन्ध-

विभाजन के बाद भारत एवं पाकिस्तान की



राजनीतिक स्थितियों एवं उनकी नीतियों का अध्ययन करने के बाद यह कहा जा सकता है कि इन दोनों पड़ोसी देशों के सम्बन्ध प्रारम्भ से ही अच्छे नहीं रहे और आज भी बहुत अच्छे नहीं हैं। यद्यपि कश्मीर विवाद को छोड़कर अधिकतर मामले आपसी वार्ता के द्वारा तय कर लिये गये हैं, लेकिन दोनों देशों के बीच आपसी विश्वास और सहयोग का अभाव रहा है। भारत जहाँ धर्मनिरपेक्षता की नीति को मान्यता देता है, वहीं पाकिस्तान एक धार्मिक कट्टरवादी देश है। यह प्रक्रिया केवल दोनों देशों के आन्तरिक स्तर तक सीमित नहीं है बल्कि दोनों देशों की विदेश नीति को भी प्रभावित करती है। इसके परिणाम स्वरूप ही भारत ने जहाँ गुटनिरपेक्षता और धर्मनिरपेक्षता की नीति अपनायी है, वहीं पाकिस्तान ने स्वयं को इस्लामिक देश घोषित किया है और अमेरिका के साथ सैनिक गठबन्धनों में शामिल होना स्वीकार किया है।

1963 में पाकिस्तान ने पाक अधिकृत कश्मीर की 5180 वर्ग किलोमीटर भूमि चीन के एक समझौते में सौंप दी। इस प्रकार विवादग्रस्त क्षेत्र को चीन को सौंपने तथा भारत-चीन युद्ध में चीन का साथ देने के कारण भारत एवं पाकिस्तान के आपसी सम्बन्ध और बिगड़ गये।

1965 का भारत-पाक युद्ध दोनों देशों के मध्य वैमनस्यपूर्ण सम्बन्धों का प्रमुख कारण था। भारत-पाक के बीच युद्ध शुरू होने के निम्नलिखित कारण उत्तरदायी थे-

(1) 1962 में चीन युद्ध से हुई हार से पाकिस्तान ने भारत की कमजोरी माना। (2) 1964 में नेहरू के निधन के बाद नये नेतृत्व को पाकिस्तान अत्यन्त कमजोर समझता था। (3) जुल्फिकार अली भुट्टो का आंकलन था कि यदि इस युद्ध में सैनिक विजय उसका सम्मान बढ़ायेगी तो सैनिक हार अयूब ख़ाँ की साख को गिरायेगी, इससे सत्ता का हस्तान्तरण उसके पक्ष में शीघ्र हो जायेगा। (4) 1963-64 की शीतकाल में कश्मीर में मुसलमानों द्वारा भारत विरोधी गतिविधियाँ पाकिस्तान की जीत में सहायक होंगी।⁹

1 सितम्बर, 1965 में पाकिस्तानी सेना ने छम्ब-जोरिका क्षेत्र में अन्तर्राष्ट्रीय सीमा का उल्लंघन किया था और इसी माह पाकिस्तानी छापामारों द्वारा कश्मीर में घुसपैठ तथा सीमारेखा पर मुठभेड़ की गयी। विशेषज्ञों के अनुसार इस युद्ध के आंकलन के सन्दर्भ में पाकिस्तान ने निम्नलिखित गलतियाँ कीं-

(1) पाकिस्तान को यह भ्रम हुआ कि कश्मीर की मुस्लिम जनता भारतीय प्रशासन का विरोध करेगी, यह धारणा गलत साबित हुई।

(2) भारतीय सेना ने इतनी तीव्रता से कार्रवाई की

कि जैसे उसे पाकिस्तानी सेना के उद्देश्यों का आभास हो गया हो।

(3) भारत ने पाकिस्तान के आंकलन को विफल कर दिया कि भारत अन्तर्राष्ट्रीय सीमा को पार नहीं करेगा।

(4) 1962 के चीन युद्ध एवं अप्रैल, 1965 के कच्छ युद्ध में हार के बाद अब राजनैतिक ऐसा था कि अब किसी और समझौते का पक्ष नहीं सकता था।¹⁰

संयुक्त राष्ट्रसंघ के हस्तक्षेप के कारण 22 दिनों बाद भारत-पाक युद्ध 23 सितम्बर को बन्द हो गया। इस युद्ध में भारत की स्थिति काफी मजबूत हो गयी। युद्ध समाप्ति के बाद पाक अधिकृत कश्मीर सहित भारत ने 740 वर्ग मील पाकिस्तान का क्षेत्र अपने अपने कब्जे में ले लिया था तथा पाकिस्तान के कब्जे में लगभग 210 वर्ग मील का भारतीय क्षेत्र चला गया था। इस स्थिति के समाधान हेतु अन्ततः सोवियत संघ की मध्यस्थता से दोनों देशों के बीच ताशकन्द समझौता 10 जनवरी, 1966 को सम्पन्न हुआ।¹¹

ऐसा समझा जाता था कि ताशकन्द समझौते के बाद दोनों देशों की स्थिति मैत्रीपूर्ण बनेगी, परन्तु ऐसा नहीं हुआ। दोनों देशों की सीमाओं पर छुटपुट घटनायें होती रहीं, जो क्रमशः आज तक भी जारी हैं। दोनों देशों के मैत्रीपूर्ण सम्बन्ध आज भी नहीं बन सके हैं, यद्यपि राजनयिक स्तर पर कई बार बातियाँ हो चुकी हैं। हम दोनों देशों के बीच मैत्रीपूर्ण सम्बन्धों में सुधार होने की आकांक्षा का प्रबल समर्थन करते हैं।

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I ân; h] ekuorkoknh -f"Vdsk ds i k&sd] jk"Vh; rk dh Hkkouk I s; ç&]
LokfHk&kuh] 0; f&Ro ds/kuh egkRek T; kfrjko Qqys rFkk M,- Hkhejko
vEcMdj us 19oha vlg 20oha 'krk&nh ea nfyrrk&kj ds egk; K ea
egroi wk&zo vfoLej.kh; ; k&knku fn; ka I ekt eami f&kr thou thus
okysnfyrr ox&ds m) kj dsfy, mue&pruk tkxr dhA

fo'o dsl cl scM&y&dra= Hkkjr ns&k dksv&tkn gq 63 o"K
chr p&ds gA gekjs I fo/kku ea I Hkh ukxfjdka dks I eku vf/k&dj fn; s
x; sgA vl; fi NM&oxZrFkk nfyrr ox&ds f'k& k I LFkkv&ao I j&dkjh
uk&dj; ka ea vkj {k.k fn; k x; k g& fQj Hkh I keftd vl ekurk]
vehjh&xjh] Ap&uhp dk Hkn&Hkko cuk g&v gA mnkgj.k dsrkj
ij 24 fl rEcj] 2010 nsud tkxj.k ea Nih [kj dksys I drs g&



ˆnfyr dh jksh [kkusl sdqkk vNurˆnfyr efgyk ds
gkfk l sjksh [kkusij ; fn dqqk ¼i 'kq vNur gksl drk
gS rks ekuo dh rks ckr gh D; k gksxA ; g 0; ogkj
Nq/kNur dsHko dksLo; fll) dj nrk gA tukf/kD;]
fu/kZurk] HkZVkpj] l kEçnkf; drk vkfn l eL; kvka l s
xfl r Hkkjr eanfyrka dh l keftd] vkfFkd] 'kS{k d
fLFkr ea l qkj ds fy, pruk tkxr djus dh
vko'; drk gA bl fn'kk eavkt bDdh oh l nh eaHkh
egkRek T; ksrjko Qys o M,- ch- vkj- vEcMdj ds
dk; kadh çkl fxdrk cuh gqz gA

ˆfol æfr; ka l s; çā orēku l ekt eapruk
tkxfr grqf}fnol h; jk"Vh; l ækSBh dk vk; kstu
ˆHkkjr eanfyr pruk %egkRek T; ksrjko QysrFkk M,-
ch vkj vEcMdj dsfo'kSk l UnHZeā vR; Ur l kFkd , oa
l ehphu gA l ækSBh eaefku] uohure 'kSk l ækSBh ds
ek/; e l sçLr gaksrFkk fo"K; fo'kSkK }kjk mudk
eW; kadu fd; k tk; sxAˆ

ˆHkkjr; l ekt dk , d cMk fgl l k l fn; ka l s
vekuoh; ; kruvka o.kZr o tkrxr mPprk o
fuEurk] tkrh; vgdkj vkj fu; k; rkvadsc/kuks l s
tdMk jgk] ml dh vkfFkd rFkk 'kS{k d fLFkr [kjc
Fkh] l kFk gh ç'kkl u rFkk jktuſrd {ks= eal ghkfxrk
Hkh u dscjkj FkhA nfyrkFkk , oamueapruk tkxr
djusdk iq; deZ l e; & l e; ij egkeuhf"K; ka }kjk
fd; k tkrk jgk gA çkphudky ea fo'okfe= , oa
fongjkt tud }kjk ijkgrka dh vull; rk , oa
feF; kfhkeku dsfo#) fd; sx; sl æk"K; ; fi iwkz isk
nfyr pruk dh i f f/k eaughavksrFkfi mē l æk"Kz
fuf'pr rkj ij l keftd 0; oLFkk dsçfr vl UrkSk
0; ä djrsgA tkr& çFkk vkj vLi" ; rk mUenyu dh
fn'kk eaçkphudky eaegkohj Lokeh vkj egkRek çq
usxEHkhj ç; kl fd; A

e/; dkyhu Hkkjr eaHkfä vkUnksyu ds l Urka
}kjk bl vkj fo'kSk ç; kl fd; sx; A jkekulln] dchj]
ukud] jfonkl] rpkjke] ukenu vkfn usnfyr pruk
ds mYys[kuh; ç; kl fd; } fdUrq vkfFkd : i l s
fucj] /kfeZ valfo'okl ea tdM l ekt ds l Eed[k
l Urka dks vi us mīs ; ea ; Fkkspr l Qyrk ugha fey
l dhA eqy Hkkjr eadējoknh , oal fg".kq'kkl d gq A
fdUrqmknj o l fg".kq'kkl d Hkh l keftd çjkb; ka o

valfo'okl kadksnj ughadj i k; A

vk/kfud Hkkjr dsbfrgl eaHkfeghu fd l kukj
vkfnokl ; ka ds foækska dh , d Jākyk feyrh gA
fcfV'k 'kfä; ka usf'kYi h tkr; k&fo'kSk dh/hj m | kska
ds : i ea gFkdj?kk çudjka dks dpyk rckg fd; k]
dkyēkDl ZusHkh mUuhl oha l nh dsvlr eay[k fy [kA
l kelrka vkj jkt&jtokMka us Jethoh nfyrka ij
vR; kpj fd; A tkrHkn vkj vLi" ; rk ds dkj.k
Hkkjr ds djkMka ykska dk i h<h&nj & i h<h 'kSk.k rFkk
cskj bfrgl dh vf}rh; ?kVuk gA vaxst h 'kkl u ea
Hkkjr dh tVY l keftd 0; oLFkk f?kukSs tkrHkn]
vLi" ; rk vkj vl ekurk dsv/ ; ; u vkj fo'ySk.k dk
dk; Zfo}kuka }kjk fd; k x; k] D; kfd , d vkj bz kbZ
çpkj d l f0; gksjgsFk oghanl jh vkj fcfV'k Hkkjr ea
vaxst ukSjka vkj QkSt; kadh ryk'k eaFksuotkxj.k
ds 'kq'vkrh nkj ea 1818 ea jktjke ekgu jk; us
tkr&ikr rFkk Nq/kNur dk Hkkjh fojSk fd; kA bl h
0e ea nobæukFk Bkdj dskoplæ l s] ckyxæ/kj
fryd] ykdfgroknh] U; k; efrZj kukM; i fMrk jekckb]
l kfo=h ckbZ Qy} rkjk ckbZ f'kUn} dskoplæ l s]
nknck ik.Mjæ r[kMdj] egf"Kz do} n; kuln
l jLorh] fo".kq 'kkl=h fpiywk dj] bz ojpæ
fo | kl kxj] fo".kq kkl=h i f.Mr] egkRek xk/kh vkfn
l ekt l qkj dk nk'kZudk fpurdk f'k'kkfonka vkj
l ekt l fo; ka us nc&dpyS 'kækh fi NMk efgyvk]
vj. ; okl ; ka vkfn ds fy, vkUnksyu pyk; kA
l s] kfuRd : i l s l qkj dk; Zdjus okys l qkj dka dh
Jskh eadeB] fuHkhZ] fu%LokFkh] ççq n; ky] l ān; h]
ekuorkoknh -f"Vdksk ds i kSkd] jk"Vh; rk dh Hkkouk
l s; çā] Lokfhkekuh] 0; fāRo ds/kuh egkRek T; ksrjko
Qys rFkk M,- Hkhejko vEcMdj us 19oha vkj 20oha
'krkCnh ea nfyrk}kj ds egk; K ea egRoiwkz o
vfoLej.kh; ; ksxnku fn; kA l ekt eamī f{kr thou
thus okys nfyr oxZ ds m) kj ds fy, muea pruk
tkxr dhA

l keftd l ekurk dsfy; snfyr pruk&

l keftd dghfr; k] d0; oLFkkvka , oa
valfo'okl dks nj djus ds fy, vk/kfud Hkkjr ea
vuod /keZ, oal ekt l qkj d gq Jākyk dh ml h dMk
ea egkRek T; ksrjko Qys vkj M,- vEcMdj dk



; ksnku bl fn'kk ea vR; Ur egRoiwKz jgk mlgkaus
'kæ&okfr 'kæ rFkk efgykvs dks l keftd l ekurk
vRl Eeku] vRfuhkzrk ds çfr tkxr fd; kA
egkRek Qys rFkk M,- vEcMdj us ukjh mRFku ds
vFkd ç; kl fd; sftlga ml l e; nks e ntž dk
ukxfjd l e>k tkrk Fkk T; kfrjko Qys us 1848 l s
1852 rd fofHku ikB'kkyk, [kkyh] cky gr; k
çfrckd xg 1/863½ [kksys tks bl rjg dh igyh
l lFkk Fkh] 1842 eacysxk earFkk 8 ekpž 1880 eai qks
eafokook djok; } fo/kokvka dseqMu dk fojksk
fd; k] cky fookg rFkk l rh çFkk dk fojksk fd; k A
vUrtkzh; fookg dk l eFku Hkh nksuka gh fopkj dka
}kj fd; k x; kA cEcZ dh , d l Hkk ea vEcMdj us
dgk Fkk& ^ukjh jk"V" dh fuekZ-h gš gj ukxfjd ml dh
xkn eai ydj c<rk gš ukjh dks tkxr fd; sfcuk jk"V"
dk fodkl l EHko ughagA^vr%M,- vEcMdj efgykvka
dh lFkfr ea l dkj djus ds i {k/kj FkA efgykvka ea
pruk ykuš muea tkxfr mRiUu djus , oa çj .kk
mRiUu djus ds fy; sl e; &l e; ij vud vkUnkyu
fd; s rFkk l fo/kku ea efgykvka dks Hkh Lorark o
l ekurk dk vf/kdkj fn; kA

egkRek Qys us 'kæfn&vfr'kæka ea pruk
tkxr djus dk ek/; e f'k {k dks cuk; k A mudsfy; s
1868 eavki us?kj dk i kuh dk dpyk; [kkyk D; kfd ml
l e; l kožtfud LFkyka ij mudk tkuk o i kuh Hkjuk
, d rjg l softz Fkk 1872 ea egkRek Qysus NqkNur
fuokj .k ?kksk.kk&i = çdkf'kr fd; k] ftl eadgk Fkk&
^tks'kæ ; k vl; eut; fuekZkdrlZdksekursgq ulfr
ds vuq kj vls l Q&l fjkj 0; ol k; djus dk fu'p;
dj rnuq kj vkpj .k djax mlgaeš vi us i fkokj ds
HkbbZ l e>pk vls muds l kFk vlu xg.k d: {xk] fQj
pkgsosfd l h Hkh nsk dsokl h D; ka u gkA^ ; g ?kksk.kk
i = Li"V : i l s T; kfrck ds NqkNur mlenyu ds
mnxkj 0; ä djrk gA bl h çdkj l s mlgkaus vi uh
i Ruh l sefgyk l ok e.My^ LFkfr djok; k Fkk tks
l EHkor% Hkjr dk igyk ukjhefä l æBu Fkk bl
l lFkk us 14 tuojuh] 1852 dks iqkseafrydy forj.k
l ekjkg vk; kfr fd; k ftl dh v/; {krk iqks ds
ftykf/kdkjh dh i Ruh bZ l h- tkbl us dh Fkh l ekjkg
ea vkefl=r l Hkh tkfr o /keZ dh efgykvka usfgl k

fy; k vls , d gh njh ij cBdj ij Lij l nHkkouk Hko
l sg"kk/yl l seuk; k FkA vr% l ekjkg dsek/; e l s
l ekt ds ij Eijxkx -f"Vdksk ea ifjorZ ykus dk
ç; kl fd; k x; k vls efgykvka ea tkfr&/keZ ds Hkn l s
nj jgus dk l ns k fn; k x; kA egkRek Qysus 1880 ea
'kjk [kjh dh vknrk l s l ekt dks cpkus ds fy; s
l jdkj l s'kjk dh nptkukadsykb l bl cln djus dk
vkxg fd; kA

24 fl rEcj] 1873 dks iqkse egkRek T; kfrck
us l R; 'kkskd uked l lFkk LFkfr dh ftl dk
?kkskokD; Fkk& ^l ož k {kh txRi fuk] ughapkrk fcpobž
vFkk~ bZoj dh intk&ikB ; k l Eflu/kr fdl h Hkh
çfØ; k ds fy, fdl h ek/; e 1/4 .Ms igkšgr½ dh
vko'; drk ughagSD; kfd ml l e; /keZ dh ngkbZ nus
okys; si .Ms igkšgr turk dk vkfFkd 'kksk.k djsrFs
vls /keZ xFkka dh 0; k [; k o l l dkj vkfn çfØ; k, j Hkh
vi usfgl kc l sdjokrs Fkš mudk l gh vFkZ ughacrks
FkA mē l lFkk dsek/; e l smlgkaus vkUnkyu dks rhoz
xfr çnku dhA mlgkaus rrrh; jRu 1/885½ N=i fr
jktk f'kokth Hkš yk dk i okMk 1/4 tu] 1968½ fdl ku
dk dMk 1/883½ xgykefxjh 1/4 tu] 1873½ l Rj & 1
1/4 tu & 1885½ l Rj & 2 1/4 DVicj 1885½ b'kjk
1/4 DVicj 1885½ l R; 'kkskd l ekt intk fof/k 1/4 tu]
1887½ vNrkadh dSQ; r l kožtfud l R; /keZ l rd
1/4 çš 1889½ ol h; rukek 1/4 tykbZ 1887½ rFkk vl;
dbZjpukvka o LQ/ yš kka dsek/; e l sokLrfod /keZ
l ekt vls 0; klr dghfr; k vdkfo'okl] deZk.M]
çpfyr 0; olFkk, a rFkk vf/kdkjka dk l ns k nçj
nfyrka ea pruk tkxr dhA egkRek T; kfrjko Qys
jktuhfrd xgykeh l s l keftd xgykeh dks vf/kd
Hk; kog ekurs FkA 4 Qojh] 1889 dks vi us nUkd
ckā.k iē ; 'kolr 1/4 o/kok ckā.kh dk' khckbZ dk iē½
dk fookg ekyh tkfr dsX; kuksk l l kus dh iēh jk/kk
l s djokdj vUrtkzh; fookg djok; kA nksuka gh
nk'kud vUrtkzh; fookg ds i {k ea FksD; kfd mudk
ekuuk Fk fd bl l s fuEu oxZ dk eukoKkfud Lrj
Åpk mB l dsk rFkk /khj&/khj l keftd Hkn Hkh
l eklr gkst; kA

M,- vEcMdj Hkh jktuhfrd LorU=rk l sigys
vkfFkd vls l keftd LorU=rk ykus ds i {k/kj FkA M,-



vEcMdj us26 tuojuh] 1950 dksdkg Fkk fd nfyra
 ds mRFkku ds l kettkfkd thou ea vkRel Eeku vks
 LokfHkeku ds Hkko dksfdl h : i ea Hkh oxZ l ?k"lz ; k
 oxZ ? ds : i ea Qfyr gkus dh vufr çnku dh
 tkuh pkfg, vU; Fkk bl l sjk"V^a dsfoHkktu dk [krjk
 mRiUu gks l drk gA ; g ?kj ea, d vks çvokjs dk
 dkj .k cu l drk gA nfy l ekt dh vkdkqkvka dks
 l e>dj mudh Hkkoukvka dk l Eeku djsrgg muds
 fy, mfpr vks l Eekutud LFkku çnku djus dk
 çko/kku ; Fkk'kh?zfd; k tkuk pkfg, A ----- ; g thou
 ds l Hkh {ks=kæal erk vks çu/kko dseW; çrLFkfi r
 dj l Hkh ukxfjdka o l nL; ka ds, d nLjs ds fy,
 l Eeku vks çjckjh ds Hkko mRiUu dj l kettfd &
 vkfkd l jpukeai fjoz djuk rFkk l erk o çu/kko
 dseW; kæajk"V^a dh LorU=rk dh j {kk vks turk=d
 l jpuke fufgr gA[^], d h vEcMdj dh /kkj .kk FkA M,-
 vEcMdj dsgh NqkNur dsfojkk dsç; kl Fksfd 20
 vçy] 1947 dks l ño/kku l Hkko us?kkSk.kk dh pNqkNur
 dks [kRe fd; k tkrk gSog fd l Hkh {ks= eacnkz r ugha
 gskk vks rnuq i dkbZ Hkh HknHkko i k; k x; k rksdkuu
 vij/k ekuk tk; xkA[^] ; g ckr Loræ Hkjr dh FkA
 Lorærk l simZ M,- vEcMdj us l kettfd U; k; ds
 fy, l ?k"lz fd; k rFkk nfy oxZ ea l kettfd pruk
 tkxr djus ds fy, vkfo'okl rFkk fujk'kk dh
 ekuf l d nkl rk R; kxus ds fy, Lo; a ds vkpj .k ea
 i fjoz dk l nsk fn; kA mlgkus dgk & ^; g fopkj
 NkM+nht; sfd dkbZ nork ; k vfreako vki dsfy; s
 dN djus vk; xk vi us y{; kæaHkjkd k jf[k; sD; kfd
 vki dh xykeh dh i jkuh çsm; karkM^aus dkbZ vks dgh
 l svkusokyk ughA[^] mlgkus dgk rñgaviuh ijrærk
 Lo; a l ekr djuh gskhA vkRel Eeku dh dher i j
 ftUnk jguk viekutud gA M,- vEcMdj us' k[k]
 l æBu vks l ?k"lz ds nfy pruk dsfy; sçed[k l k/ku
 ekuk nskagh egkeuhf'k; kaus LorU=rk l ekurk vks
 HkkrRo ds eny ea i j cy fn; k nfyra dk vkokgu
 'kfä of) dsfy, l æBu ds : i eafd; kA bl h mîs ;
 l scfg"—r fgrdkj .kh l Hkko 20 tykbZ 1925 ea rFkk
 1935 eabf. Mi Ms V yç; i kvizcukB^a ^vf[ky Hkjr rh;
 nfy l ?k uked l LFk, l LFkfi r dj nfy pruk
 tkxr dhA l ekt dh vU; k; i wkZ 0; oLFk ds fo#)

vkUnksyu muds i =dkfjrk vks y[ka ds ek/; e l s
 çLOqVr gqA mlgkus foHkku l ekpj i =& enyuk; d
 1/31 tuojuh] 1920½ cfg"—r Hkjr 13 vçy] 1927½
 l erk turk vks ççd Hkjr vkfn dsek/; e l nfy
 oxZ dh vkot dks Åpk fd; kA

mudh foHkku jpuke, & dkbV l bu bf. M; k
 1/1977½, fufgysku vkQ dklV 1/1937½ gwoj 'kækt
 os j n 'kækt 1/1946½ n vuVpsYI 1/1948½ n fjMYI
 v, Q fgUnT e 1/1987½ vkfn l kettfd 0; oLFk vka, oa
 fgUnw/keZ dsokLrfod fl) kurka ds çr nfy l ekt
 dks l pfr djrh gA 19&20 ekpZ 1927 dks dskck
 Vd dk ikuh [kksyus dh ?kkSk.kk o l e; i j ikuh
 [kksyuk] 25 fnl Ecj] 1927 dks l koZtfud : i l s
 'eufr tykus dh ?kkSk.kk] 2 ekpZ 1930 ea efUnj
 çosk dh ?kkSk.kk] M,- vEcMdj ds vkUnksyu dks l i "V
 djrh gA

vkfkd fodkl graqnfy pruk &

egkRek Qysdk n'kZ l i thokn vks l kE; okn
 ds çp dk Fkk rFkk vEcMdj us l ektokn uhfr dks
 çLr fd; kA nskagh l qkj dka ds n'kZ rFkk dk; Z
 'kks'kr 1/2 nfy ½ oxZ ds fy; s dY; k. kdkjh fl) gqA
 nfyra dh vkfkd fLFk ea l qkj ds vFkd ç; kl mä
 eufr'k; ka jkjk fd; s x; A T; ksrck us l jdkj l s l Hkh
 oxZ ds yskka dks ukd f; k; nusdk vkxg fd; kA —f'k
 dks çkR l kgr fd; k Lo; a ekatjh uked xkp ea tkdj
 [krh dsu; sç; kx fd; sft l eack/k dsi kuh dk mi ; kx
 Hkh Fkk fd; k rFkk yskka ds vU/kfo'okl ka dks nij djus
 dk ç; kl fd; k T; ksrjko us l jdkj l s —"kdka dks
 fonsk Hkst dj ç' k{k. k fnyokus dh Hkh ekax dh Fkh rFkk
 çn'kZ vkfn dk vk; kstu dj vPNh QI y graq
 çkR l kfg djok; k yk[kk. Ms muds l g; kxh rFkk l efkd
 Fks l s Jfed l æBu 1/2 çbz eZ LFkfi r djok; kA
 vkfkd : i l s detkj fd l kuka dsfy, ^nDdu —"kd
 jkgr dkuu 1878 ea i kl rFkk 1879 ea ykxwdjok; kA
 bl dkuu dk e[; mîs ; fd l kuka dks __.k eja
 djokuk rFkk l gmdkjka ds tyh fgl kc&fdrk l s
 cpkuk Fkk 1870&1890 rd ds nh?kdkyhu vdky
 1/egkj k"V^a eZ ds l e; yskka ds jkst xkj dsfy, l jdkj
 l sçkFkZuk dh fd bl dFBu l e; ea l jdkj turk l s
 l MelscuokusrFkk çk/k vkfn cuokusdk dke djokdj



jktxkj çnku djA 1877 ea fujkfJr cPpkadsfy, ^foDVkfj; k ckykJe [kkyus dk i q; dk; Z T; ksrck }kjk fd; k x; k mlgkaus ^vlu&l = pykdj yxska dh enn dhA ftl çdkj orëku l e; ea vkinvka ds l e; jkgr dksk yxska dh enn dsek/; e cuk, tkrA gA, d s^jkgr dksk^ dksT; ksrck usml l e; [kkyk vksj 17 eb] 1877 dks l R; 'kkskd l ekt ds l fpo T; ksrjko Qysusuezfuonu ds l kFk , d çkFkZuk i = i muk efcvzvkn 'kgjka dseggjoku 1/ku] l Ei Uu 1/2 yxska dks Hstk ftl ea mlgkaus fy [kk ----- vki l Hkh l nL; ka vksj vlu; l Hkh n; kyqI Ttukal sfuonu gSfd viuh l keF; Zdsvuq kj dN u dN enn nusdk rksbl dk eryc ; gh gksk fd vki yxska usbl l e; viuk QtZvnk djds cMk egjckuh dh gkschA ; g çkFkZuk i = l ekpj i = Kku çdk'k 24 ebZ 1877 ea Hkh çdkf' kr dj enn dh xgkj ykbZxbZFkA

M,- vEcMdj usxjhch , oacjkt xkj l si hfMf nfyx oxZdh vkfFkd fLFkr ea l qkkj dsvksj kxhdj .k , oa l kefigd [krh dk l eFkZu fd; kA xj i pthoknh vkfFkd l jpkuk tkssturk=d l kefigdrk ij vk/kfjr gks dksyus ij cy fn; kA ukxfjdka dsvfuok; Zchek dk l qko] chek dEi fu; ka ds jk^Vh; dj .k m | kska i j jkT; dk Lokfero vksj çCU/k ij cy fn; k] ftl l s nfyxkaevkfFkd l j {kk dh Hkkouk vk l dA

jktufrd l ghkxfxrk graqnfyx pruk& egkRek T; ksrjko Qys nfyx l ekt dks igys l kekfTd xykeh l sefä fnyuk pkgrs Fks vksj ml l e; fcfV'k 'kkl u ea Hkkjrh; jktuhfrd xrfrof/k; ka Hkh l fØ; ugha Fkh fdUrQ M,- vEcMdj us xkyest l Eesyuka ea yUnu ea çkUr; fo/kkul Hkkvka ea i Fkd çrfuf/kRo dh 0; oLFkk Lo; anfyxkadsfy, ykxwfd; s tkus dh ekx j [kha 1932 ds ^edMkuYM i pkV i kl gkuseanfyxkaejktufrd pruk tkxr gbl; ; g ckr vyx gSfd ^i muk i DV^ dsvuq kj nfyx oxZdsfy, fo/kkul Hkkvka ea LFku vkj f{kr fd; sx; A 1936 ea dh bf. Mi BMl ysj i kvhZ 1942 ea vuq fipr tkfr l æk cukdj jktuhfrd pruk tkxr dhA

ç'kkl fud l Ükk ea Hkkxhnhkj ds çfr nfyx pruk& egkRek Qys us l jdkj l s l jdkjh ukSdfj; ka ea l Hkh oxZdsyxska dks; kx; rk dsvk/kkj ij

j [kus dh l kuks ekx dh Fkh rFkk M,- vEcMdj us Hkkjrh; ç'kkl u ea nfyxkadsvkj {k.k dh ekx} mudh ç'kkl u ea l efp Hkkxhnhkj dsfy, rFkk l suk ea Hkh nfyxka dh HkrhZ dks rxkj l fuf'pr djus dh vko'; drk ij cy ndj nfyx oxZdks l pr fd; kA

'kS{k d {ks= ea nfyx pruk& 19oha' krkCnh ds Hkkjrh ea 'kæ&vfr'kæ dh f'k{k dh dkbZ l efp 0; oLFkk ugha Fkh vksj ; g oxZ Hkh l q qkoLFkk ea Fkka efgykva }kjk dksf'k{k nsk i ki deZ l e>k tkrk Fkka T; ksrck us bl fn'kk ea fofHku i kB'kkyk; a eku [kkydj rFkk 'kks'kr oxZ eaf'k{k ds çfr pruk tkxr djus dk dfBu dk; Z : fæknh tkrs l ekt l s l æk^Z djsr gq fd; k Fkka l u- 1855 ea jkf= i kB'kkyk [kkydj cMk dh dks f'k{k dk çCU/k fd; kA i qks i qrdky; 1852 e] Nk=kol [kky} l jdkj l s l cds FkZuk fy, f'k{k dh 0; oLFkk dh ekx 19 vDVw; ea g.Vj deh'ku ds l e{k 12 o^Z rd ds cPpkadsfy, vfuok; Zfu%kq d f'k{k dk çfronu çLrQ fd; k rFkk çk&l kgu graqNk=kadh Nk=ofÜk; k rFkk i j Ldkj nusdk l qko fn; k] ftl l s f'k{k ds çfr nfyxka ea pruk tkxr gks l dA 0; ol kf; d f'k{k o mPp f'k{k dh l Hkh oxkadsfy, 0; oLFkk l jdkj l sdjokbZ rFkk eSkysdh fQYVj uhr dk fojksk fd; k viuh l qrdks ^fd l ku dk dMk^ rFkk ^xykehB vkfn dsek/; e l snfyx oxZ eaf'k{k ds çfr pruk tkxr dhA T; ksrck dh çj .kk l s gh cMk ujs k l k; k thjko xk; dokM+us vEcMdj dks vkfFkd l gk; rk ndj fonsk i <us tkusea enn dhA M,- vEcMdj dks'kS{k d egRo crk; k gSfd fcuk f'k{k dsnfyxkads l kekfTd Lrj çkkr ughagks l drk vksj euq; fo | k ds fcuk i 'kqf; gA fo | k ea cy vksj fo | kghu cyghu gksk Fkka vr%'k{krouk} fcuk l æk^Z dsekuoh; vf/kdkj ughafeyx vr%'vf/kdkj kadsfy, l æk^Z djsA l æk^Z dsfy, l æBu cukvka

M,- vEcMdj usf'k{k ds çl kj dsfy, l jdkj ij ncko Mkyk fd og Ldkj] d,ystka ea nfyx Nk=&Nk=kvkadsfy, LFku vkj f{kr dj} Nk=ofÜk dk çCU/k djA i hi qI , twds ku l kd kbVh uked l æFkk LFkfi r dh rFkk l æFkk dh enn l snfyx oxZds Nk=kadsfy, f'k{k l æFkkvkarFkk Nk=kol kadk fuekZk fd; k rFkk nfyx oxZ ea f'k{k ds çfr pruk tkxr dhA



tqykb] 1928 ea fMçtM Dykfi l f'k{k l LFkk dh LFkki uk dh rkfd l oçkj l ekt dsyxs f'k{k çlr djus dh vkj mled[k gks l dA 8 vDVçj] 1928 dks cEcbZdsxouj usnfyr oxZdsNk=kagrç5 Nk=kokl cuk; stksvEcMdj dsl Qy ç; kl kadksçnf'kr djrs gA 1861 ea, DV&21 dsv/khu l LFkk jftLVMZ djkbZ Nk=kokl kadh nç[k&jç[k Hkh bl l LFkk dksnh xbA

l mçkkfud vf/kdkj kadscfr pruk& fo'o ds l cl s cMç ykçrl= ds l fo/kku fuekçr M,- vEcMdj us l Hkh ukxfjdka ds fy, ^ekçyd vf/kdkj çnku dj nfyrka ea vi us vf/kdkj kadscfr pruk tkxr dh rFkk vuçNn&14 dsvlrxr l eku dkuu dk l j{k.k l Hkh dks çlr gkskA vuçNn 15 ea/ke] uLy] tkfr] fyç ; k tle LFkku vkfn dsv/kkj ij dkbZHkn ughafd; k tk; sk rFkk l Hkh l koçtfud LFkku l Hkh ukxfjdka ds fy, l eku : i l s [kçys tk; çA vuçNn&16 ea l jdkjh inkA ij fu; çä ds l eku vol j gks l kFk gh vuç fpr tkfr o tutkfr ds fy, inkads vkj {k.k dh 0; oLFkk dh xbA vuçNn&17 eavLi"; rk dksn.Muh; ?kç"kr fd; k x; kA l fo/kku }kj l Hkh jkT; ka dh fo/kku l Hkhvka ea bu tkfr; ka ds fy, vkj {k.k dh 0; oLFkk dh xbA

M,- vEcMdj us u; k fl) kUr&f'kf{kr cukj l çfBr cuksvkj l 'kä cuksçfrikfr fd; k ft l dk vuçkyu orëku l e; eaHkh vfr vko'; d gA nfyr l ekt vkt Hkh vkRel Eeku i kus rFkk cfg"—r ftUnxh l seçä i kus ds fy, l çk"ç dj jgk gA l kekfçd Økflr dsc.ç.krk egkRek T; kçrjko QysrFkk nfyrkads el hgk M,- Hkhejko vEcMdj dk vkUnkyu orëku ea l 'kä l ekt LFkkfir djus o jk"Vh; rk dh Hkkouk cyorh djus dk ek/; e fl) gkskA orëku l e; ea egkRek T; kçrjko QysrFkk M,- vEcMdj fplru ds çfr mfr vo/kkj.kk dh vko'; drk gç bl uke dks oxZ fo'kç l s tkMçj nç[kç tkus ds —f"Vdksk ea i fforZ gksuk pkfg, l kekfçd] vkfçd] jktuçrd o l kç—frd l Hkh {ks=ka ea l Hkh oxZ ds ukxfjdka dh l gHkçxrk rFkk l erki wZokrkoy.k jk"Vh; , drk dks cy çnku djçkA l çkçBh ds i fj.kke nfyr pruk ds fy, egRo i wZmi ; kçh fl) gkskA

l UnHkZ xçFk l iph

- 1- xtfV; j vkQ çEcsçd HMM l h] okY; ç& 18] i kvB&2] i uk] 1885] lk'B& 133A
- 2- vkeoV ty & dYpjy fjokçVv dkykfu; u l kl kbVh] i'B&107A
- 3- oekj M,- çtyky & egkRek T; kçrjko Qys i'B& 160A
- 4- txrki] ejyh/kj ; çkç"ç egkRek Qys i'B* 97A
- 5- xçokj] eerç , oaf l ç] vt; çrki l kekfçd Økflr ds ç.krk egkRek T; kçrjko Qys i'B& 92&104
- a
- 6- i uk v,çtoç 12 tu] 1852A
- 7- 8- ujdç gfj egkRek Qys l kçR; vkj fopkj] i'B& 110&118 A
- 8- fl ç] vkj- th & l kekfçd U; k; , oanfy l çk"ç i'B& 48A
- 9- 10- l çu] M,- eatwnfy efgyk, i i'B&142&143A
- 10- M,- i çuey vLi"; rk , oanfy pruk i'B& 160A
- 11- l çu] M,- eatw& M,- çkç l kçç vEcMdj jkbçVçl , oa Li hpç] i'B& 72A
- 12- fl ç] xçfolln & çkç l kçç M,- Hkhejko vEcMdj] i'B& 51] 60] 61] 98A
- 13- M,- /keçhj M,- vEcMdj ds ç'kç l fud fopkj] i'B& 91&98A
- 14- vEcMdj] ç-vkj- & LVç l , .M ekbufj Vh] i'B& 36A
- 15- mÜkj çnçk l nçk & vEcMdj fo'kçkçd] 1 vçç] 1991] vçd&4A
- 16- vEcMdj] ç- vkj- feLVj xç/kh , .M fn , efl'kiçku v,Q n vuVpçYl] i'B&41A





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dkui g e.My ds ek/; fed Lrj ij dk; j r f'k{kdk ds
0; kol kf; d eW; ka dk rgyukRed v/; ; u



& MkW xkš o fl g
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b&ey %
varun.singh@gmail.com

I kj ka k

i Lrj 'kksk v/; ; u l jdkjh fo | ky; ka ea dk; j r i q "k o
efgyk f'k{kdk ds l j k f d] l k e f t d o / k f e d e W; ka dk v/; ; u
fd; k x; k gA bl 'kksk v/; ; u eaek/; fed f'k{k i f j "kn] m O i D) kj k
l p l f y r l j d k j h e k /; fed fo?ky; ka ea dk; j r f'k{kdk p; u
; kn f P N d i f r n ' k u f o f / k) kj k f d; k x; k gA i L r j ' k k s k e a d o y
dkui g e.My ds l j d k j h e k /; fed fo?ky; ka d k s l f e f y r f d; k
x; k gA 'kksk p j 0; kol kf; d e W; d s e k i u g r q M k O g j H k t u f l g
, o, l o i h v g y o k f y; k } k j k f u f e r T e a c h e r V a l u e s I n v e n t o r y
(TVI & SA) i j h (k. k d k i z l x f d; k x; k gA l k [; d h; fo' y k. k g r q
e/; eku] e k u d f o p y u , o a V h & i j h (k. k d k i z l x f d; k x; k gA
'kksk v/; ; u e a i k; k x; k f d l j d k j h e k /; fed fo?ky; ka ea dk; j r
i # ' k o e f g y k f'k{kdk ds l j k f d r F k k / k f e d e W; l e k u i k, x; s
t c f d m u d s l k e f t d e W; ka e v l r j i k; k x; k A
l a d r ' k C n & e k /; fed fo?ky; j 0; kol kf; d e W; A

l k k D d F k u &

f'k{k ekuo fodkl dk emy l k/ku gA f'k{k usgh ekuo dks
i 'k q l s e u t; c u k; k gA b l d s } k j k e u t; d h t l e t k r ' k f D r; ka d h
i g p k u d j d s m u d k f o d k l f d; k t k r k gA b l d s } k j k e u t; d s
K k u , o a d y k & d k s k y e a o f) , o a 0; o g k j e a i f j o r u f d; k t k r k g s
v k s m l s l H;] l d a d r , o a; k k; u k x f j d c u k; k t k r k g A e u t; d k s
l H;] l d a d r c u k u s e a e W; ka d h H k f e d k v f r e g R r o i w k z g k r h g A
e W; 0; f D r d s f o ' k s k x q k g s f t l d s e k u d l e k t L F k k f i r d j r k g A
e W; e k u o 0; o g k j d s ' k q f u / k k j d g A e W; ka d k l E c u / k v k o ' ; d r k v k j
b P N k v k j v f H k i j . k k v k a r F k k v k d k k k v k a l s g k r k g A

o f n d ; q e a x q f " k " ; d s l E c u / k f i r k & i e d s l e k u L u g i w k z
F k A x q d k s f " k " ; d s f o " k ; e a l E i w k z t k u d k j h j g r h F k A m l d s K k u]
{ k e r k } v { k e r k o d e t k s j ; k a l H k h d k s x q H k y H k k f r t k u r k F k A v k t
t u l d ; k o f) o f'k{k d s i f r t k x: d r k d s d k j . k N k = k a d h l d ; k e a
c r g k ' k k o f) g p z g A f t l d s d k j . k f'k{k d & N k = v u q k r e a v l r g y u
i s h k g k s x; k A i f j . k k e L o # i v /; k i d N k = d s c h p l E i d z e a d e h v k; h
g A v k t ; g f l F k f r g s f d l E i w k z o " k z d s m i j k U r H k h v /; k i d l H k h



Nk=kadk uke rd ugha tku ikrsga bl dk ifj.kke
; g gkrk gSfd Nk=kaea vko'; d thou dkskyka dk
fodkl ugha gks ikrka Nk=ka ea thou dkskyka dk
fodkl djus dsfy; sf'k{kdkadks thou dkskyka dk
Kku gksuk vko'; d ga , d f'k{kdk vius Kku dks
Nk=kard l okre #i earHkh igbtk tk l drk gStc
og f'k{k.k&vf/kxe ifdz k dsifr iwkl#i l sl efi r
gks; k nls "kCnka ea f'k{kdk eamPp0; kol kf; d eW;
fo |eku gka eW; fdl h Hkh 0; fDr dksl kekftd #i l s
Lohdr vkpj.k djus ds fy, ifjr djrs ga
0; kol kf; d eW; ka l s; Dr f'k{kdk f'k{k.k dk; kadsi fr
l efi r gkrsgftl l sf'k{kdk dh xqkorRk eaof) gsrh
ga

v/; ; u dh vko'; drk , oaegRo &

ek/; fed Lrj ij v/; ; ujr Nk=&Nk=k, a
fd'kkg koLFkk dh vk; qeagkrsga bl l onu'khy vk; q
eachyd dksifjokj rFkk f'k{kdk nksukadh nskj k rFkk
ekxh'ku dh vko'; drk gsrh ga f'k{kdk viusfo"K;
eafdruk Hkh i kjar D; ka u gks; fn ml ea0; kol kf; d
eW; kadk vHkko gSrksuf"pr : i l sog , d l Qy
f'k{kdk ughagks l drk ga , d l Qy f'k{kdk og gh gS
tksviusfo | kfkz kadks l eL; kvkal syMus; kx; cukrk
gSo mueal kekftd] l kadfrd xqkka dk fodkl Hkh
djrk ga

21oha 'krkCnh ea tgk; Nk=ka ea <jka voxqk
mRi lu gksjgsg eW; kadk gkl gksjgk gS Lokfkz i DrR
pje ij gS ogk; , d sf'k{kdkadh vR; f/kd vko'; drk
gStks Nk=kads voxqk kadksnj dj eW; kadks fodfl r
dj mUga, d ; kx; o dky ukxfjd cuk l da

vr% orEku Hkjr; l ekt o f'k{kdk dh
cnryh gbl ij fLFkr; ka dks nskrs gq 'kkskdrkz dks
ek/; fed Lrj ij dk; jr f'k{kdk ds 0; kol kf; d
eW; kadk v/; ; u djusdh vko'; drk egl w gq h ga
i Lrj 'kksk v/; ; u ds fu"d"Kz Nk=k vfhHkdhodk
f'k{kdk eukokkfudk f'k{kdk kfl=; k; l ekt 'kfl=; ka
o l ekt dsfy, yHki n fl } gka
l kfgR; koyksdu &

[kluk , oa fi Yybz 1/20081/2 us batfhu; fjx
d,yst ds f'k{kdk dh 'kksk.kd ; kx; rk rFkk

0; kol kf; d eW; ka dk v/; ; u fd; ka v/; ; u grq
'kkskdrkz usbatfhu; fjx d,yst ds 100 f'k{kdkap; u
fd; ka 0; kol kf; d eW; ka dk dk eki u djus grq
LofufeR eW; eki uh c; kx fd; k x; ka 'kksk ds
ifj.kke l s; g fl) gqk fd mPp 'kksk.kd ; kx; rk ds
f'k{kdkads0; kol kf; d eW; Hkh mPp i k; sx; srFkk bu
f'k{kdkausl ekt eamPp in fLFkr Hkh cklr dhA

jktu 1/20091/2 us gfj; k.kk jkT; ds
f'k{kdk&f'k{kdk ds 0; kol kf; d eW; ka dk v/; ; u
fd; ka v/; ; u grq 'kkskdrkz us gfj; k.kk jkT; ds
l jdkjh rFkk Lofokki ksr f'k{kdk&f'k{kdk l LFkkads
400 f'k{kdk&f'k{kdk dk p; u ; knfPNd ifrn'ku
fof/k ds}kj fd; ka v/; ; u ea; g i k; k x; k fd &

1- l jdkjh rFkk Lofokki ksr f'k{kdk c'f'k{k.k
l LFkkuka ea dk; jr f'k{kdk ds 0; kol kf; d eW; ka ea
xqkRed vlRj ga

2- Lofokki ksr f'k{kdk&f'k{kdk l LFkkuka ds
f'k{kdk&f'k{kdk ds 0; kol kf; d eW; ka dk Lrj
l jdkjh f'k{kdk&f'k{kdk l LFkkuka ea dk; jr
f'k{kdk&f'k{kdkal smPp i k; k x; ka

3- i #k rFkk efgyk f'k{kdk&f'k{kdk ea i #k
f'k{kdk&f'k{kdkads0; kol kf; d eW; kadk Lrj efgyk
f'k{kdk&f'k{kdkal svf/kd i k; k x; ka

cjh rFkk cjh 1/20161/2 us f'k{kdk&f'k{kdkads
0; kol kf; d eW; kadk l Ecu/k mudsvfhkcg .kk Lrj l s
nslka v/; ; u dk eL; mls; f'k{kdkadh 0; kol kf; d
eW; kadk fodkl djuk Fkka v/; ; u ea i k; k x; k fd
mPp cjh.kk l s; ja f'k{kdk&f'k{kdk ds 0; kol kf; d
eW; ka dk Lrj Hkh mPp jgrk ga efgyk f'k{kdk
i f'k{kdkads0; ol kf; d eW; kadk Lrj i #k f'k{kdkal s
mPp i k; k x; ka

, drk 1/20191/2 Lukrd Lrjh; f'k{kdk
0; ol kf; d eW; ka muds vkRei R; ;] f'k{k.k
cHkkodkfjrk rFkk l rr 0; ol kf; d fodkl l sl ad/kr
v/; ; u fd; ka 'kkskdrkz us iatkc jkT; ds 200
l jdkjh fMxh d,yst ds f'k{kdk rFkk 200 Lofor
i ksr fMxh d,yst ds f'k{kdkads; knfPNd ifrn'ku
fof/k ds}kj p; fur fd; k x; ka 'kksk dsfuEufyf[kr
ifj.kke cklr gq &



1- i#k rFkk efgyk f'k{kdkad dh 0; ol kf; d eW; kaeal kFkd vj ik; k x; kA

2- Loforikf'kr d,yst ds f'k{kdkad ds 0; ol kf; d eW; kadk Lrj l jdkjh d,yst ds f'k{kdkad l smPp ik; k x; kA

3- f'k{kdkad dh 0; ol kf; d eW; kadk muds vkRei R; ; j f'k{k.k çHkkodkfjrk rFkk l rr 0; ol kf; d fodkl l sl dkjRed l gl ec/k ik; k x; kA

'kks/k 'kh"kd ds vUrxr vk; sinkadh l fØ; kRed i f jHkk"kk, a&

ek/; fed fo|ky; & ek/; fed fo|ky; l s vFkz jkt dh; rFkk l gk; rk iklr ek/; fed fo|ky; ka l sgA

ek/; fed f'k{kdkad & ek/; fed f'k{kdkad l svFkz d{kk&9 l s d{kk&12 rd ds Nk=ka dks i <kus okys f'k{kdkad l sgA

pj & 0; kol kf; d eW; A

0; kol kf; d eW; & 0; kol kf; d eW; kadk ds vUrxr l j kFurd l kelftd o /kkfed eW; kadk ds l fEefyr fd; k x; k gA

U; kn'kz & U; kn'kz ds#i eal jdkjh ek/; fed fo?kky; ka eadk; jr 200 f'k{kdkadk p; u ; knfPNd i frn'kz fof/k) kjk fd; k x; k gA

'kks/k fof/k & i Lr'kksk v/; ; u grqI o{k.k fof/k dk iz kx fd; k x; k gA

mi dj .k & 0; kol kf; d eW; dseki u grqI/MW gjHktu fl g , oa, l - ih vgyokfy; k jkj fufel Teacher Values Inventory (TVI & SA) i jh{k.k dk iz kx fd; k x; k gA

v/; ; u dsmnns ; &

1- l jdkjh fo|ky; kadk f'k{kdkad l j kFurd eW; karyukRed dk v/; ; u djukA

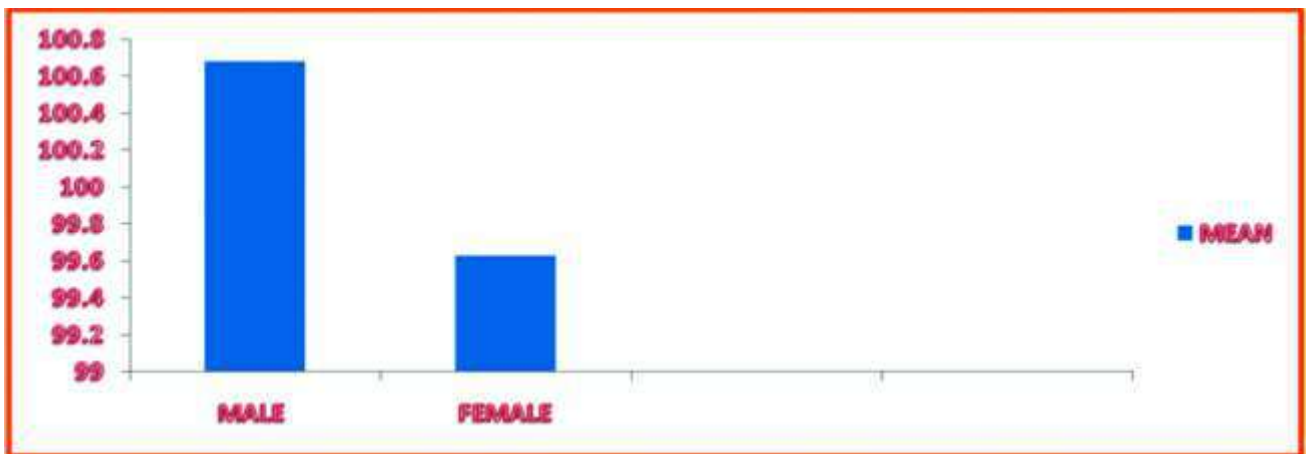
2- l jdkjh fo|ky; kadk f'k{kdkad l kelftd eW; kadk rgyukRed v/; ; u djukA

f'k{kdkad eW; eki uh i j f'k{kdkad & f'k{kdkadka ds e/; eku] ekud foppyu rFkk dkfurd vuq kr 1/2 CR 1/2 dk eku

शिक्षक / शिक्षिकाएं	संख्या (N)	मध्यमान	मानक विचलन	'CR' मान	सार्थकता	परिकल्पना
शिक्षक	100	100.68	13.768	.514	असार्थक	स्वीकृत
शिक्षिकाएं	100	99.63	12.316			

* 0.05 सार्थकता स्तर पर CR का सारणी मान = 1.97

f'k{kdkad & f'k{kdkadka ds l j kFurd eW; kadk ds e/; eku dk n.M vkjs[k





3- I jdkjh fo |ky; ka ds f'k{kdkads /kkfeZd eW; kadk rgyukRed v/; ; u djuka v/; ; u dh i fj dYi uk, a&

1 + I jdkjh fo |ky; ka eadk; j r i # 'k o efgyk f'k{kdkads I § k fUrd eW; ka eadkbZ I kFkZd vUvj ugha gSA

2- I jdkjh fo |ky; ka eadk; j r i # 'k o efgyk f'k{kdkads I kekftd eW; ka eadkbZ I kFkZd vUvj ugha gSA

3 + jdkjh fo |ky; ka eadk; j r i # 'k o efgyk f'k{kdkads/kkfeZd eW; ka eadkbZ I kFkZd vUvj ugha gSA ¼rkfydk I a; k&1 fi Nysi "B ij ns[k& çnRrkadk fo' y'sk.k &

mijkDr rkfydk ea f'k{kdk eW; eki uh ij iklr 100 iq "k o 100 efgyk f'k{kdkads i nRrkadk e/; eku dæ" k%100-68 o 99-63 ekud fopyu 13-768 rFk 12-316 rFk dk fUrd vuq kr ¼CR½ dk eku 198 LorU=rk Lrj ij -514 gA ; g eku -05 I kFkZdrk ij rkfydk eku 1-97 I sde gA i fj .kke dh 0; k[; k &

vr%ek/; ka dschp vUvj I kFkZd ugha gA bl izdkj "k; i fj dYi uk bl jdkjh fo |ky; ka ds i # 'k o efgyk f'k{kdkads I § k fUrd eW; ka eadkbZ I kFkZd vUvj ugha gA Lohdr dh tkrh gA vr%i # 'k o efgyk f'k{kdkads I § k fUrd eW; ka eadkbZ I kFkZd vUvj ugha gA tksHkh vUvj n"Vxr gksjgk gSog fujFkZd gA i fj .kke dh foopuk&

mijkDr i fj .kke baxr djrs gA I jdkjh fo |ky; ka ds i # 'k o efgyk f'k{kdkads I § k fUrd eW; ka eadkbZ I kFkZd vUvj ugha i; k x; ka bl dk dkj.k ; g gks I drk gSfd muds0; ol k; ea i d'sk grqfu/kkfj r i k=rk I Hkh vH; fFkZ ka ds fy, , d I eku gh gksrh gA , d gh 0; ol k; ea dk; Z djus ckys 0; fDr; ka dh 0; kol kf; d i fj fLFkfr; kWyxHkx I eku gh gksrh gA vkj I eku i fj fLFkfr; ka ea dk; Z djus ds dkj.k mudk I kpus dk rjhdk o I kekftd 0; ogkj Hkh yxHkx I eku gh gksrk gA vr%i # 'k o efgyk f'k{kdkads I § k fUrd eW; ka dk I eku gksrk LokHkkfod gh gA ¼rkfydk I a; k&2 nf[k, ½

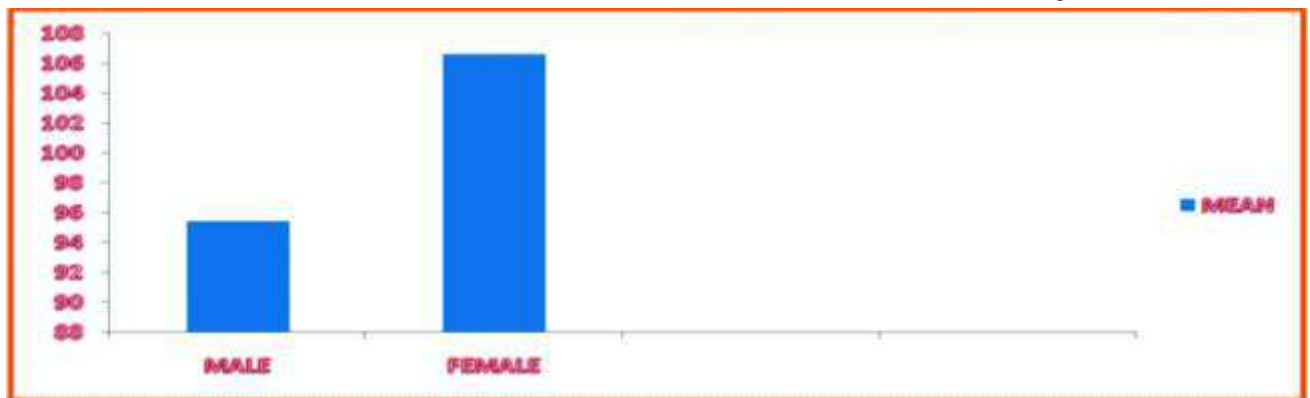
I jdkjh fo |ky; ka eadk; j r i # 'k o efgyk

f'k{kdk eW; eki uh ij f'k{kdk & f'k{kdkvka ds e/; eku] ekud fopyu rFk Øk fUrd vuq kr ¼CR½ dk eku

शिक्षक / शिक्षिकाएं	संख्या (N)	मध्यमान	मानक विचलन	'CR' मान	सार्थकता	परिकल्पना
शिक्षक	100	95.38	15.461	5.498	सार्थक	अस्वीकृत
शिक्षिकाएं	100	106.58	13.264			

* 0.05 सार्थकता स्तर पर CR का सारणी मान =1.97

f'k{kdk & f'k{kdkvka ds I kekftd eW; ka ds e/; ekudk n.M vkj[s[k





f'k{kdkads l keftd eW; kaeadkbZl kFkZd vLrj ugha gA

çnrRkadk fo' y'sk. k &

mijkDr rkfydk eaf'k{k d eW; eki uh eki uh ij i klr 100 iq "k o 100 efgyk f'k{kdkads i nrRkadk e/; eku Øe"K%95-38 o 106-58 ekud fopyu 15-461 rFk 13-264 rFk ØkflUrd vuq kr ½CR½ dk eku 198 LorU=rk Lrj ij 5-498 gA ; g eku -05 l kFkZdrk ij rkfydk eku 1-97 l svf/kd gA

ij .kke dh 0; k[; k &

mijkDr ifj .kke bñxr djrs gñfd ek/; kads chp vLrj l kFkZd gA bl idkj "k[; ifjdYiuk pl jdkjh fo/kky; ka ds i# "k o efgyk f'k{kdkads l keftd eW; kaeadkbZl kFkZd vLrj ughagB vLohdr dh tkrh gA i# "k o efgyk f'k{kdkads ek/; ka ds voykdu l s ; g Li"V gS fd efgyk f'k{kdkads l keftd eW; ka dk Lrj i# "k f'k{kdkad dh rgyuk ea mPp gA vr%ge fu"d"K : i ea dg l drs gñfd l jdkjh fo/kky; ka dh efgyk f'k{kdkads l keftd

f'k{k d eW; eki uh ij f'k{k d & f'k{kdkvka ds e/; eku] ekud fopyu rFk ØkflUrd vuq kr ½CR½ dk eku

eW; kadk Lrj i# "k f'k{kdkal smPp gA ij .kke dh foopuk&

mijkDr ifj .kke bñxr djrs gñfd efgyk f'k{kdkads l keftd eW; ka dk Lrj i# "k f'k{kdkad dh rgyuk ea mPp gS vFkkZr~efgyk, a i# "kka dh rgyuk ea vf/kd l keftd gA l keftdrk dk xqk mlgavius ifjokj vkj ifjLFkfr; ka l s i klr gk'r k gA Hkkjrh; ifjokj ka ea i k jEHk l s gh ckfydkvka ds vPNk o l k[; 0; ogkj djusdh f'k{k nh tkrh gA l ekt mul sl n[vPNs 0; ogkj dh vk'kk djrk gS ft l l sefgykvka ij , d viR; {k nckc cuk jgrk gA efgyk, a vius ewy LoHkko l sHkh i# "kka l svf?kd l keftd gk'r h gA bl ds dkj .k efgyk f'k{kdkads l keftd eW; kadk Lrj i# "k f'k{kdkal s mPp i k; k x; kA ½rkfydk l a[; k&3 nf[k, ½

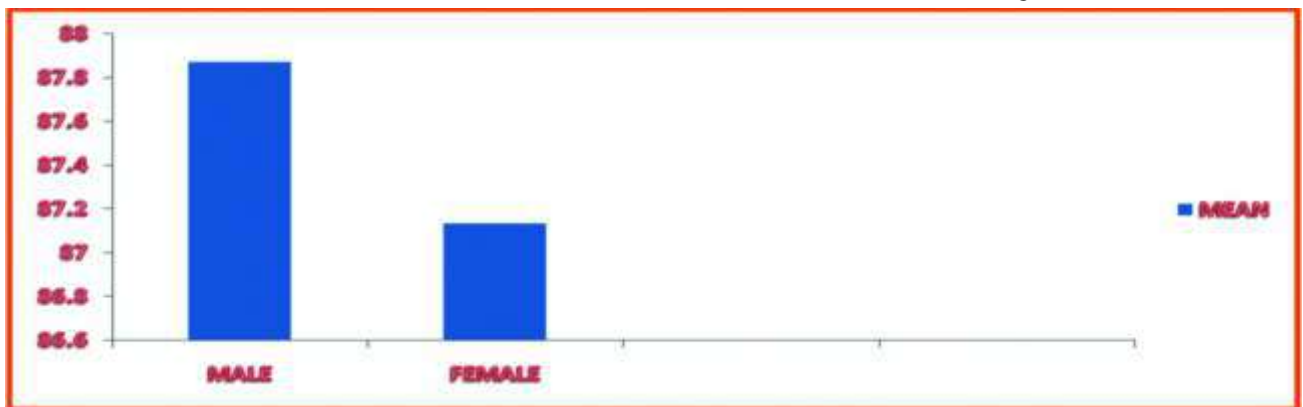
l jdkjh fo | ky; ka ea dk; j r i# "k o efgyk f'k{kdkads/kkfeZd eW; kaeadkbZl kFkZd vLrj ughagA çnrRkadk fo' y'sk. k &

mijkDr rkfydk eaf'k{k d eW; eki uh ij

शिक्षक / शिक्षिकाएं	संख्या (N)	मध्यमान	मानक विचलन	'CR' मान	सार्थकता	परिकल्पना
शिक्षक	100	87.87	16.023	.339	असार्थक	स्वीकृत
शिक्षिकाएं	100	87.13	14.792			

* 0.05 सार्थकता स्तर पर CR का सारणी मान =1.97

f'k{k d & f'k{kdkvka ds /kkfeZd eW; ka ds e/; eku dk n. M vkjs[k





iklr 100 iq "k o 100 efgyk f'k{kdkads inRrka dk e/; eku Øe"lk%87-87 o 88-13 ekud fopyu 16-023 rFkk 16-792 rFkk Økflurd vuq kr ½CR½ dk eku 198 LorU=rk Lrj ij -339 gA ; g eku -05 l kFkdZrk ij rkfydk eku 1-97 l sde gA

ij .kke dh 0; k[; k &

vr% ek/; ka ds chp vlurj vl kFkdZ gA bl idkj "kk; ij dYi uk bl jdkjh fo | ky; kads i# "k o efgyk f'k{kdkads/kkfeZ eW; ka eadkbZ l kFkdZ vlurj ugha gB Lohdr dh tkrh gA vr% i# "k o efgyk f'k{kdkads/kkfeZ eW; ka eadkbZ l kFkdZ vlurj ugha gA tksHkh vlurj nF"Vxr gksjgk gSog fujFkdZ gA ij .kke dh foopuk&

mijkDr ij .kke bñxr djrs gSfd l jdkjh fo | ky; kads i# "k o efgyk f'k{kdkads/kkfeZ eW; ka eadkbZ l kFkdZ vlurj ugha gA bl dk dkj .k ; g gksl drk gSfd , d gh /keZdksekuusckys0; fDr; kadk bz'oj ds i fr J) k Hkkoj uSrdrk] eW; o fo"okl yxHkx l eku gksr gA , d gh {ks= dsfuokl djusckysukxfjdkadh #fp] vkLFkk rFkk fo'okl ea l ekurk ik; h tkrh gS fyx dk i Hkko /kkfeZ fo"okl kaij cgr de i Mrk gA ; gh dkj .k gSfd l jdkjh fo/ky; kads i# "k o efgyk f'k{kdkads/kkfeZ eW; ka eadkbZ vlurj ugha i k; k x; kA Hkkoh vuq ækku gsrqfofHkUu i fji æ; &

1- çLrñ 'kkèk dk; Z dñy dkuig e.My ds f'k{kdkaij fd; k x; k gS Hkkoh 'kkèk vè; ; u vU; e.Myka , oajkT; kads f'k{kdkaij Hkh fd; k tk l drk gA

2- çLrñ 'kkèk dk; Zekè; fed Lrj ds f'k{kdkaij dksydj fd; k x; k gA Hkkoh 'kkèk dk; Zf'k{kk ds vU; Lrjka¼ kFkfed] mPp i kFkfed rFkk Lukrd bR; kfn½ ds f'k{kdkadksydj Hkh fd; k tk l drk gA

3- çLrñ 'kkèk vè; ; u eadñy ; ñ h ckM/Z }kj k l pkfyr fo | ky; ka eadk; j r f'k{kdkadksfy; k x; k gS Hkkoh 'kkèk ea l h- ch- , l - Å-] vkÅ- l h- , l - Å- ; k vU; ckM/Z }kj k l pkfyr fo | ky; kads vè; ki dka dks Hkh fy; k tk l drk gA

l nHkZ xDfK l uph

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vkØe.kdkfj; kadh ?kq i B ds l kFk viuspje ij igphA bu fonskh
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efgykvka dk vigj.k djds HkZV fd;k vñ bl hfry, i jnk i Fkk]
l rh&i Fkk] tkñj&i Fkk] ckfydk f'k'kqGR; k tñ h dñhfr; kñ tñe yhA
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Hkkjr eaefgykvka dh fLFkr ds ckjs ea dñ dgus ds fy,
ml ds vrñ dks Hkh l e>uk gkxkñ vuñ dkykaeaeefgyk, j l ekt dh
eq; /kkjk ea jgh ; k gk'k, ij bu l c igyvka dk fo'yñk.k djuk
gkxkA l oñ Fke ge efgykvka ds , frgkfl d igyw ij nñ'Vikr dj&
oñd dky eaefgykvka dh fLFkr vR; Ur mlur'khy ekuh tkrh gñ
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vigj.k djds HkZV fd;k vñ bl hfry, i jnk i Fkk] l rh&i Fkk]
tkñj&i Fkk] ckfydk f'k'kqGR; k tñ h dñhfr; kñ tñe yhA e/; ; qhu
efgykvka dh fLFkr ds ckjs ea l rñ mnkgj.k i frfuf/kd gh tku
i Mñk g&

ñl oha vñ X; kjgoha l fn; kñ gekjs nñk ea eq yekuka ds
vkxeu dh l kñh jgh gñ ftugauscñ ea; gñ viusiñ etñrh l stek
fy, A tc fgññ l ññr dk , d , ñ h l ññr l s Vdjko gñk tks
, dne fhkñ Fkh rñs l ekt ds vxokvka us viuspje fo'kñkdj
efgykvka dh fLFkr dh l jñ{k dsfy, fu; e dkuñh cukuk 'kq dj



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ge cky fookg dh tMajijh rjg tersgq n[ksrsgāfd
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fo/kok dk ej tkuk gh cgrj Fkka bl fy, fo/kok }kjk
vkReng dksdkumh ekU; rk nsnh xbzftl eavk'kk dh
tkrh Fkh fd bl izdkj ml n[kkk; 'kkyh i hfMf efgyk
dks Lofxzd oBko dh i kflr gksxA ; g vksj , d s dbz
iko/kku ykxw dj fn, x, ftul s efgykvka dh
Lora-rk ij dkQh cān'kayx xba , d k l EHkor%mlga
fons'k; ka l scpkusvksj uLy dh 'kq rk cuk; sj [kusds
fy, fd; k x; k Fkka

ijUrqeulqfr bR; kfn xFkka dk v/; ; u djus
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efgyk l 'kfDr dj .k dh vo/kkj .kk dks l jdkjh
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fL=; ka dh fu; k; rk vka dks nj djds mlga Åpk mBkus
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i klr gā

vuPNn&15 & jkT; efgyk o cPpkadsfgr
eaf o'kSk iko/kku dj l drk gā

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efgykvka, oai # "kka dks l eku oru fn; stk; xA

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vf/kfu; e 1929] fglunwfookg 1955] ngst vujsk
vfuf/kfu; e 1961] fglunw ukckfyx , oa l jf{kr
vf/kfu; e 1956] fglunw nUkd&xg.k , oa Hkj .k&i kSk.k
vf/kfu; e 1956] eQLye fookg foPNn vf/kfu; e 1939
vksj eQLye 'kjh; r vf/kfu; e 1937 rFkk ?kjywfgd k
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xBu fd; k x; kA

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l eflor l gk; rk inku djukA

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8- l cyk ; kstuk ½2010½ & 11&18 o"kd dh fd'kksj; kadk l okxh.k fodkl djuka

9- tMj ctfvax igy & ½2004&05½ ds nksku nsk eatMj ctv dh 'kq vkr dh xba

10- L=h&'kDr i gLdkj & 'k#vkr 1999 Hkjr dh 5 L=h 'kDr dsuke l s; si gLdkj fn; stkrsg & ¼½noh vfgY; k ckbz gkydj] ¼½ dLuxh] ¼½ ekrk thtkckb] ¼½ jkuh xSMfy; wtfy; kax vks ¼½ jkuh y{ehckbz i gLdkjA ; sl Hkh i gLdkj ifro"kd8 expz dks vUrjkdVh; efgyk fnol ds vol j ij fn; stkrsg & bl i gLdkj ea, d yk[k udn rFkk, d izkflr i = fn; k tkrk gA

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¼½ ckfydkva ds vLrRo dks cpuk vks mudh l g{kk l fuf'pr djuka

¼½ ckfydkva dh f'k{kk vks Hkxhnhkh l fuf'pr djuka

efgykvadks l 'kDr cukusdsfy, fodkl ds iR; cl {ks= ea l eku Hkxhnhkh, oa urRo Hkh vR; r vko'; d gS tks igys dh vi{kk rks Bh d gS fdUrq vuq kr dkQh fujk'ktud gS tks ykd l Hk ds 2014 ds i fj.kke l sLi"V gkrk gS; Fkk& efgyk i fruf/k; ka dh fLFkr fuEufyf[kr g& orëku eehfM; k] izkkl u] jktuhr vkfn {ks=ea efgykva dh l ; k rksc<+gh gS i jUrqvHkh i fruf/kRo vR; r de gA mlgal 'kDr cukusgrq iR; cl {ks= ea l eku Hkxhnhkh, oa vkfFkd {ks= eamudh i jk; rk dks l rfy djus dh t: jr gA

yfdu D; k orëku eakjh&mRi hMaj i rkMaj vR; kpkj, oafokn dh f'kdj ughagA okLro eakjh dh fLFkr dks l p<+cukusgrq l dskfud l g{kk ds l kF&l kF l ekt dks viuh l kp cnyus dh t: jr gA i #koknh l kp tks vk/kh vkcknh dk d j gS ml s

R; kxdj efgykva dks 0; kogkfjd /kjry ij l ekrk dk ntLznuk gksk D; kad dksZHkh l ekt vk/kh vkcknh dks utjvnt djds mudks 'kks'kr djd dBi ryyh cukdj mUur'khy ughacu l drk gA l ekt dksngst] efgyk f'k{kk eafokn, oafokn gR; k bR; kfn fo"k; ka i j eku djus dh t: jr gS tgl, d rjQ Hk[kejh] xjhch] cjkstxkh vkfn l eL; kvka dks nj djuk vko'; d gS ogha efgykva l s tMh; kstukva pks f'k{kk] jktxkj l g{kk, oa LokLF; vkfn gks ml s, d vkUnkyu ds : i ea 0; kogkfjd /kjry ij ykus dh t: jr gA

vr%, d LoPN, oa l 'kDr jk"V" ds fuekZk ds fy, efgykva dks l eku Hkxhnhkh vfrvko'; d gS rFkk efgykva dks l eku i wL : i l s fodkl ea Hkxhnhkh l fuf'pr djuk Hkh l ekt dk i je nkf; Ro gA

l UnHkZ xLFk l ph

- 1- la & vk; j l k/kuk(esu] fuofnrk(ykdurk] ftuh(ukjhoknh jktuhr & l "kz, oa eph] fglh ek; e dk; kLo; funskky; j fnYyh fo' ofo | ky; j fnYyh 2015A
- 2- la & fl g] mešk irki(xx] jktšk dëkj(efgyk l 'kDrdrj.k fofHku vk; ke] v/; ; u ify'kl l, .M fMLVNC; w l j ubzfnYyh] 2012A
- 3- l fr; k] l Hk"K(xk/kh th dk L=h foe'k; ; kstuk eksp&2013] ubzfnYyhA
- 4- Hk l hu] deyk(Hkjr; l mHkZ eakjh l 'kDrdrj.k] ; kstuk & fl rEcj&2016] ubzfnYyhA
- 5- la & id kn] i ks deyk('kek jktbæ(L=h % eDr dk l i uk] ok.kh izdk'ku] ubzfnYyh&2009A+
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Þcky vijk/k % dkj .k , oa fuokj .kß



& Mkw vYdk f}onh
vfi LVUV ÁkQd j & f'k{kk'kkL=]
dkyhpj.k ih- th- dkyst]
y[kuÅ&226001 ¼m-i z½

b&esy%
dralka2005@gmail.com

I kjka k

orðku I e; ea cky vijk/k dh I eL; k fodfl r vlg
fodkl 'khy nkska Ádkj ds I ektka ea, d paks-h cudj mHkj gh
vkt nsk i <sfy[kschy vijk/k I sijs'ku gA ; gh ot; gsfed vDI j
ekrk&fi rk] f'k{kd] I epk;] i fyi & Á'kkL u] eukspfdRI d]
I lekftd dk; Þrkj I ekt'kkL=] f'k{kk'kkL=h] I jdkj ehfM; k vkfn
fofHku i fjppkz/kadsnlgku cky vijk/k i j fplru euu djrs gA

kydka ea vl lekftd , oa fopyudkj h 0; ogkj dk c<ek
fdl h Hkh LoLF; I ekt dk y{; ughagA ; g I ekt eal q'k 'kkflr vlg
I ef}ds fy, [krjukd gA vr%cky vijk/k ds fy, mRrjnk; h
dkjdka dh ryk'k djds bl ds jkdFike dk mik; djuk gekjk
mRrjnkR; o gA bl ÁLr r 'kks Ácl/k eacky vijk/k dsfuokj .k ds
fy, Á; kl fd; k x; k gA

dh oMZ & ÁofRr] fopyudkj h] mRrjnk; h] mYyaku] vijk/k]
I h; rka

ÁLrkouk &

orðku I e; eage ns[krs gsfed kydka ea Hkh dkumu dk
mYyaku djusdh ÁofRr dk fodkl gkrk tk jgk gA vkf[kj kyd
vijk/k D; kadjrs gA bl dsfy, D; k kyd gh nskth gA cky vijk/k
eaD; k I ekt dk nsk ughagA vkt geabu Á'ukadsmRrj [kst usdh
vko'; drk gA fdurq dkj .kka dks tkuus I s igys cky vijk/k ds
I e>uk vr; lrvko'; d gA

cky vijk/k D; k gA

bl 'kks eacky vijk/k dk rkRi ; Zmu kydkal sg ftudh
vk; q15 o'kzrd dh gka I h; rk ds i Fk ij c<rs gq I ekt usvius
vlnj vudkai fjorZu fd; sgA I ekt dk mfr I pkyu djusdsfy,
I ekt usLo; agh dN fu; eka dk fuekZk fd; k gA bl fu; eka dk
i ky u djuk I ekt ds ÁR; d I nL; dk dRrD; gA bu fu; eka dk
i ky u djuk gh vijk/k gA nls'kcnkae adkumu dk mYyaku djuk
gh vijk/k dgk tkrk gA

tc dks0; fDr dkumu dk mYyaku Áfke ckj djrk gsvFkkz-
ml eavi jk/k dk ÁkjEHk gh gvk gSrk smI sdkumu dh Hkk'kk ea'vkdS Mj*
dgk tkrk gsvkdS Mj dsge vi usHkk'kk eank'kh dg I drsgA ft I
0; fDr eavi jk/k dh ÁofRr vk tkrh gS ml sge *MsyHJDos V* dgrsgA
MsyHJDos V 'kcn dksge fgluh eadnkpjkh dg I drsgA bl eavi jk/k



ds l kFk&l kFk vij/k dh fØ; k Hkh gkrh g\$ vFkkz~
dnkpkjh vij/k dh jr k Hkh g\$ vij/k dh rhl jh Jskh
vkrh g\$ ftl s*fØfeuy* dgrsg\$ fØfeuy iwkz isk
vij/k kh gkrk g\$ bl Ádkj ge n\$ k l drs g\$ fd
vij/kf/k; ka dh rhu J\$.k; k; g\$ nkskh] dnkpkjh , oa
vij/k khA gekjk l Ecl/k ; gk; ij n\$ jh Jskh ds vFkkz~
dnkpkjh vij/kf/k; ka l sfo'ksk : i l sg\$

Hkkjrh; n.M l fgrk dh /kkj 82 ds vUrk
tks ckyd l kr o'kz dh vk; q ds uhps g\$ vk\$ vij/k
djrs g\$ mlgnskh ughaekuk tk l drk g\$ bl h l fgrk
ds/kkj 83 eabl vk; qdks 12 o'kzrd dj fn; k g\$

dqg x; k g\$; fn os 12 o'kzrd dh vk; q ds Hkh
gkrks vij/k ds n.M ds fy, Lo; a Hkkxh ugha gkaA
dkuu dh Hk'kk eabl vk; qdks l j {kkRed vk; q dgk
tkrk g\$

l j {kkRed vk; q ds Áij 15 o'kz dh vk; qrd
ds ckyd ; fn vij/k dh jrsg\$ mlg\$ cky nkskh dh
l Kk nh tkrh g\$ bl dsi 'pkr-uo; qd nkskh gkrsg\$
uo; qd nkskh dh vk; q ds Áij gkrk g\$ uo; qd nkskh
dh vk; q dh mPpre l hek jkT; ka ea fHkUu & fHkUu g\$
t\$ & mRrj Áns& 16] vl e] cEcbz rFkk fnYyh ea
& 16] fcgkj e& 20 bl Ádkj vk; q dh nf'V l s
vij/kf/k; ka dks ge fuEufyf[kr pkj J\$.k; ka ea j [k
l drsg\$

¼½ l j {kkRed vk; q ds uhps ds vij/k kh
¼&12¼A

¼½ l j {kkRed vk; q ¼4] 15] 10½ o'kz ds chp ds
cky nkskhA

¼¾ cky nkskh vk; q ds Áij fdUrqvk; qdh , d
fuf'pr mPpre l hek ds uhps ds uo; qd nkskhA

¼½ jkT; }kjk Loh—r vk; q ds mPpre l hek
ds Áij dso; Ld vij/k khA

bl Ádkj vij/k kh dh Jskh Kkr gkaus ds
i'pkr~ ÁLr' 'kks'kys [k ea ge cky vij/k kh l s
l EclU/kr cky nkskh vFkok uo; qd nkskh gkaus dk
v/; ; u dkjA

xM ds vuq kj & pdkbz Hkh ckyd] ftl dk
0; ogkj l kekl; l kekltd 0; ogkj l sbruk fHkUu gks
tk; fd ml sl ekt fojkrh dgk tk l d\$ cky vij/k kh
dgykrk g\$

v/; ; u dk egRo&

cky vij/k dh l eL; k dk v/; ; u vkt
ÁR; d v/; ki d] l ekt l qkkj d] Á'kk l u vkfn ds fy,
egRo iwkz cu x; k g\$ bl ds v/; ; u dk egRo fuEu
Ádkj l sl e> l drsg\$

¼½ ckyd ka dh Á—fr dk KkuA

¼½ jk dFkkeA

¼½ l qkkjA

cky&vij/k dk Lo: i &

cky vij/k ds Lo: i dksge mu vij/k ka l s
l Qyrki d l e> l drs g\$ ftl g\$ cky; ; k fd'kjs
djrs g\$

bl Ádkj ds dN vij/k g\$ pkjh djuk] >B
ck\$yuk] u'kk djuk] t\$ dkVuk] >xMk djuk] p\$ks'h
nuk] fl xjV i huk] 0; fHkpkj djuk] rkMqkM+ djuk]
n\$ jka ij vkØe.k djuk] fo|ky; l s Hkkx tkuk]
vij/kf/k; ka ds l kFk jguk] d{kk ea nj l s vkuk] Nks/s
ckyd ka dks r\$ djuk] cMka ds fo#} fontg djuk] fnu
vk\$ jkr ea fu#nns; ?k\$uk] cl vk\$ jy ea fcuk
fVdV ; k=k djuk] nhokj ka ij mfpr ; k vufpr kra
fy[kuk] tq adsvMMka vk\$ 'kjk [kkuka ea vkuk & tkuk]
pkj k\$ Mkd\$ vk\$ vkokjk cnpyu vk\$ nqV 0; fDr; ka l s
feyuk & t\$yuk] ekrk & fi rk dh vkKk ds fcuk ?kj l s
xk; c gks tkuk] l Md ds fu; eka dk ikyu u djuk]
fdl h dh [kMk g\$z ekVj l kbfdy ; k ekVj dkj ea
cBdj l j ds fy, py nuk vkfnA

cky vij/k ds dkj .k&

e\$Mul o tkM u dk er g\$ bl kekltd
LokLF; ds: i ea cky vij/k ea of} gkrh g\$z tku
i Mfh g\$; g cf) dN rks tul \$; k dh l kekl; cf)
ds ifj .kkeLo: i vk\$ dN tul \$; k ds vf/kd Hkkx ds
xkeh.k okrkj .k ds ctk; 'kgjh okrkj .k ea jgus ds
ifj .kkeLo: i gksjgh g\$

bl Ádkj bl of} dh 0; k [; k] cky vij/k ds
dkj .kka ds vk/kkj ij gh dj l drs g\$; s dkj .k
fuEufyf[kr g\$

¼½ vuqka'kd dkj .k

¼½ k\$ 'kkj hfj d dkj .k

¼½ euk\$Kkfud dkj .k

¼½ l kekltd dkj .k



$\frac{1}{4}\frac{3}{2}$ i kfjokfjd dkj .k
 $\frac{1}{4}\frac{1}{2}$ fo | ky; | EclU/kh dkj .k
 $\frac{1}{4}\frac{1}{2}$ I okn&okgu dsl k/ku
 $\frac{1}{4}\frac{1}{2}$ I kl—frd dkj .kA
 1- vupkf' kddkj .k &
 bu dkj .kka dk o.ku blgha 'kh'kdka vkj
 mi 'kh'kdksvUrZr ÁLr dj I drsg&
 $\frac{1}{4}\frac{1}{2}$ vijk/kh ÁofRr
 $\frac{1}{4}$ [k $\frac{1}{2}$ mRi knu xqk&I #
 $\frac{1}{4}\frac{1}{2}$ 'kkjhfd j pukA
 2- 'kkjhfd dkj .k &
 $\frac{1}{4}\frac{1}{2}$ 'kkjhfd nsk
 $\frac{1}{4}$ [k $\frac{1}{2}$; k&kaadk rhozfodkl A
 3- euk&Kkfud dkj .k &
 $\frac{1}{4}\frac{1}{2}$ fuEu I kekl; cfj
 $\frac{1}{4}$ [k $\frac{1}{2}$ ekufI d jks
 $\frac{1}{4}\frac{1}{2}$ vo#) bPNk
 $\frac{1}{4}\frac{1}{2}$ fujk'kk
 $\frac{1}{4}\frac{3}{2}$ xUFk; k
 $\frac{1}{4}\frac{1}{2}$ I okRed vl UryuA
 4- I kekftd dkj .k &
 $\frac{1}{4}\frac{1}{2}$ I kFkh
 $\frac{1}{4}$ [k $\frac{1}{2}$ vodk'k
 $\frac{1}{4}\frac{1}{2}$ ukxfjd okrkoj .k
 $\frac{1}{4}\frac{1}{2}$ xUnh cfLr; k
 $\frac{1}{4}\frac{3}{2}$; q
 $\frac{1}{4}\frac{1}{2}$ ns k foHkktuA
 5- i kfjokfjd dkj .k &
 $\frac{1}{4}\frac{1}{2}$ HkXu i fjokj
 $\frac{1}{4}$ [k $\frac{1}{2}$ vufrd i fjokj
 $\frac{1}{4}\frac{1}{2}$ i fjokj dh fu/kZrk
 $\frac{1}{4}\frac{1}{2}$ i fjokj dk okrkoj .k
 $\frac{1}{4}\frac{3}{2}$ frjL—r cPps
 $\frac{1}{4}\frac{1}{2}$ cPpkadsÁfr nq; bgkj
 $\frac{1}{4}\frac{1}{2}$ fi rk dh vuq fLFkfr ; k eR; A
 6- fo | ky; | EclU/kh dkj .k &
 $\frac{1}{4}\frac{1}{2}$ fLFkfr
 $\frac{1}{4}$ [k $\frac{1}{2}$ fu; #.k dk vHkko
 $\frac{1}{4}\frac{1}{2}$ [ky o eukjat u dk vHkko
 $\frac{1}{4}\frac{1}{2}$ i jh{k&Á. kkyh

$\frac{1}{4}\frac{3}{2}$ 0; fDrxr LdwyA
 7- I okn&okgu dsl k/ku &
 $\frac{1}{4}\frac{1}{2}$ Ágl u dh i qrd
 $\frac{1}{4}$ [k $\frac{1}{2}$ I LrsmiU; kl o if=dk; a
 $\frac{1}{4}\frac{1}{2}$ pyfp=
 $\frac{1}{4}\frac{1}{2}$ VsyhfotuA
 8- I kl—frd dkj d &
 vk/kfud ; q eagekjs thou dsl eku gekjh
 I kl—fr Hkh —f=e gksxbZgA ml dsvFkZvkj egRo dk
 yki gksx; k gA og o; Ldkaf'd'kkjka vkj ckydka dh
 vko'; drkvkads i wkdjuseavl Qy gksjgh gA vr%
 ckyd vkj fd'kkj ml I svi uk I EclU/k&foPNn djds
 I ekt&fojkskh dk; k&eal yXu gksrgq fn[kkbZ nsjgs
 gA efMul o tkul u ds'kCnkae&pchVfud vkj fgli h
 vUknyu I EclU/k&foPNn dk vf/kd i wkd : i 0; Dr
 djrk gA
 cky&vi jk/k dk fuokj .k &
 cky&vi jk/k dsfuokj .k] fujksk ; k jkdus ds
 fy, i fjokj] fo | ky;] I ekt vkj jkT; vud
 egROI wkd; Zdj I drsgA ; Fkk&
 1- i fjokj dsdk; &
 $\frac{1}{4}\frac{1}{2}$ mRre okrkoj .k
 $\frac{1}{4}$ [k $\frac{1}{2}$ of) i j fu; #.k
 $\frac{1}{4}\frac{1}{2}$ ckydkaadk funZ ku
 $\frac{1}{4}\frac{1}{2}$ ckydkaadk fujh{k .k
 $\frac{1}{4}\frac{3}{2}$ ckydkaadsÁfr mfpr 0; ogkj
 $\frac{1}{4}\frac{1}{2}$ ckydkaads v/; ; u dh 0; oLFkk
 $\frac{1}{4}\frac{1}{2}$ ckydkaadh vko'; drkvkaadh i firZ
 $\frac{1}{4}\frac{1}{2}$ ckydkaadsnfud 0; ; dh i firZ
 $\frac{1}{4}\frac{1}{2}$ ckydkaeavPNh vknrkadk fuekZk
 $\frac{1}{4}\frac{1}{2}$ ckydkaeavkRe&fuHkZrk dk fodkl A
 2- fo | ky; dsdk; &
 $\frac{1}{4}\frac{1}{2}$ mRre okrkoj .k
 $\frac{1}{4}$ [k $\frac{1}{2}$ ckydkaadh Lor=ark
 $\frac{1}{4}\frac{1}{2}$ r#.k xks'B; kaadh LFkki uk
 $\frac{1}{4}\frac{1}{2}$ 0; fDrxr foHkUurkvadk fodkl
 $\frac{1}{4}\frac{3}{2}$ vPNsi qrdky; dh 0; oLFkk
 $\frac{1}{4}\frac{1}{2}$ mi pkj kRed o 0; kol kf; d d{kk; a
 $\frac{1}{4}\frac{1}{2}$ i kB; Øe&I gxkeh fØ; kvkaadh 0; oLFkk
 $\frac{1}{4}\frac{1}{2}$ vuq. kZgkusdh I eL; k dk I ek/kku



¼>½okNuh; I kelfttd nf'Vdkskkadk fodkl

¼¼½; kX; f'k{kdkadh fu; qDrA

1- I ekt o jkT; dsdk; &

¼d½ckydka dh jktuhfr I si Fkdrk

¼[k½eukj at u dh 0; oLFkk

¼x½fu/kZu ckydka dh vkfFkd I gk; rk

¼q½fu/kZu i fjokjka dh vkfFkd fLFkfr eal qkkj

¼¾½pyfp=kai j fu; æ.k

¼p½I kelfgd I qkkadk fuekZk

¼N½xUnh cFL=; kadh I ekflr

¼t½vušrd dk; kZij ÁfrclU/k

cky&vi jk/k dk mi pkj &

cky&vi jk/k dk mi pkj djus ds fy, nks

Ádkj dh fof/k; ka dk Á; kx fd; k tk I drk g& ¼¼½

euk&Kkfud vkj ¼½o&KkfudA

1- euk&Kkfud fof/k; k&

¼d½eukfo'ysk.k

¼[k½euk&vfHku;

¼x½[ksy }kj k fpdRI kA

2- o&Kkfud fof/k; k&

¼d½dkjkokl

¼[k½fd'kkj &U; k; ky;

¼x½Áoh{k.k

¼q½fd'kkj &clUnhxg

¼¾½fd'kkj &I qkkj xg

¼p½ckkVŷy I LFkk; A

vkt nsk ea cPpka ds f[kyQ gj fnu 350

vi jk/k ntZgkrsqftl eamRrj Áns'k, oae/; Áins'k

I cl sÁij gA fi Nys o'kZ I svkUykb u nq; bgkj ds

ekeys 400 Áfr'kr c<sgA cPpka ds f[kyQ vi jk/k ds

clgy 1[28]531 ekeys fi Nys o'kZ ntZ gqA jk'Vh;

vi jk/k C; jks¼ u-I h- vkj- ch½pkbYM jkbVt, .M; w

¼Økb½usvi us, d fo'ysk.k eadgk fd 2019 eajk'Vh;

vi jk/k fjdkMZC; jksdsvkdkMkadh ryuk ea, d sekeyka

dh clgy I q; k ea 13-3 Áfr'kr dh fxjkoV vk; h gA

I qko&

gea cPpka dks mfpr I ldkj nus o muea

ekuoh; eW; ka dh LFkki uk djus ds fy, I tx]I psV

vkj I fØ; gksuk gksk] rHkh bl fcxMfscpi u vkj

HkVdrs jk'Vª ds uo i h<h ds d.kZkkj ka dk HkkX; vkj

Hkfo'; mTtoy gks I drk gA bl ds fy; s gea
fuEufyf[kr mik; djus gk&

1- ifjokj ea cPpka dk mfpr <æ I si ky u&

i ksk.k] , d I eku Áæ , oa0; ogkjA

2- mfpr f'k{k dh 0; oLFkkA

3- LoLFk eukj at u dsl k/kuka eo f}A

4- I qkkj kRed xgkadh I efpr 0; oLFkkA

fu"d"kk&

cky vi jk/k; ka dks I qkkjus ea vkt Hkkjr Hkh

Áxfr'khy ns kka I si hNsugh gA ij Hkkjrh; I ekt ea

dN vl; I eL; k, a tS s vfr tul q; k] cjkst xkj h]

Hkq[kehj vkfn bruh vf/kd xEHkj gS fd ml I s gh

fui Vuk I jdkj ds fy, vR; Ur dfBu gks jgk gA

; | fi ; sl p gS fd 16 I s 18 I ky dh vk; qI eW okys

cPpka dh I q; k t?kU; vi jk/kka ea c<+jgh gS bl fy,

I d n eal d kksku dh cgl dsl e; bl ij ppkZ'vo';

gksuh pkfg; s fd ge I ekt ds : lk ea , d U; k; ij

vk/kkfjr 0; oLFkk pkgrsgA; k Áfrdkj vkj I tk; k , d

, d h 0; oLFkk tks fd'kkj vi jk/k; ka ds I qkkj vkj

I eko'sk ds; kX; gkA jkT; ds I kFk gh I ekt vi us

cPpka ds fy; sdN ftEenkfj; k j [krk gS fd oks jgk I s

u HkVds vkj I ekt dk eq; i {k cus jgA bl rjg

fd'kkj U; k; eal d kksku d jrs I e; ns[kHkky vkj I j {kk

eq; mnas; gksuk pkfg; A

I UnHkZ xLFk I qph

1- eplthz ukFk johUnz vxoky Hkxr] I kelftd I eL; k, }

food Ádk'ku] fnYyh] 2003A

2- egktu I at ho] I kelftd I eL; k, } vtq i fcyf'kak

gkA I] ubZfnYyh 2010A

3- oekZ fl g ppy] ckydka dh Hkkoukvka o 0; fDrRo dk

v/; ; u] dYi t i fcyds kUI] fnYyh 2011A

4- vkgnk jke] I kelftd I eL; k, } jkor i fcyds kUI] fnYyh

2012A

5- HkVukxj ch- ,] vf/kxedrkZ dk fodkl , oa f'k{k.k &

vf/kxe ÁfØ; k] jkf/kdk dEI; wI I ejB] 2013A

6- , u- I h- vkj- Vh- dh fj i kVZ 2016A

7- I ekpkj lk=&

nsud tkxj.k] 30 uoEcj] 2017A





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mPprj ek/; fed Lrj v/; ; ujr~mPp , oa fuEu 'k{kd
mi yfC/k okys Nk=&Nk=kvka dh I ek; kstu {kerk dk
rnyukRed v/; ; u



I kjak

& vk'kk I pku
ih&, p-Mh- 'kks'k ¼Nk=k½
f'k{kk foHkkx]
ts , I - fo'ofO | ky;]
f'kdkgkckn] ¼Qj kstkckn½
&283135] mRrj in'sk

b&ey%
ashasacha2541979@gmail.com

f'k{kk ufrd i f'k{k.k dh i fØ; k gš f'k{kk dk dk; Zjk'V^a ds
fy, vPNsukxfjd rš kj djuk gā I keftd U; k; dh LFkki uk ft I
i fØ; k }kjk dh tkrh gš og f'k{kk gh gā f'k{kk I epsnf'Vdksk dks
cnydj cjk; kadh tM+dksnj djusdh psVk gā f'k{kk vkRek dks
ml i fjošk eaystkrh gštksml dsfodkl dh gj voLFkk eamll; u
vš I cl svuphy gšRfkk 0; fDr eal keftd pruk ykrh gā ; fn
0; fDr I epr f'k{kk o i frHkk I sl Ei Uu gsrksog i k.kh txr eal cl s
I H; o fn0; cu tkrh gšvš ; fn ml dh f'k{kk mfpr jhfr dh ughagš
rks og I kjs i kf.k; kaea vf/kd fuEu&Lrj dk gš tkrh gā f'k{kk ds
ek/; e I svPNs0; fDrRo dk fuekZk gšrk gā vPNk 0; fDrRo I ur'yr
gšrk gā I keatL; dh ; kk; rk Hkh f'k{kk ds }kjk gh I Ehko gā f'k{kk
thou dscI ur I si kjEhk gskh pkfg,] D; khd cl ur eagh dks y gšrk
gā f'k{kk dk dk; Zfodkl dsvol j inku djuk gSD; khd tc rd
vuphy okrkoy.k ughafeyxk] rc rd fodkl dh "kDr fNi h jgrh
gā thou , oal kdr dh i wZ-%dk cge[kh fodkl rFkk thou dh
izdr] vaka dk csk] f'k{kk ds }kjk gh gšrk gā f'k{kk ds }kjk gh
fo | kFkZvi usvutko }kjk foHkUu oLr/kadh , drk dh i gpku djrk
gā f'k{kk mu I c "kDr; kadsfodkl dk uke gšftuds }kjk euq;
vi us okrkoy.k i j fu; æ.k j [kus rFkk vi uh "kDr; kadh I keF; Z
mRi Uu djrk gā I gh fu'd'kZ i j i gpusdh {kerk i shk djuk f'k{kk dk
, d egroi wZ/; s gšRfkk f'k{kk I R; dk vuqeu djrh gšvš I R;
rFkk vl R; eahkn djusdh {kerk dks i shk djrh gā f'k{kk i xfr dk
I k/ku gā f'k{kk I s0; fDr ds vlnj I gh nf'Vdksk mRi Uu gšrk gš
ft I I s0; fDr vš I ekt nksukadk mRFkku gšrk gšvš , drk dh tMa
geaf'k{kk eans[kusdksfeyrh gā f'k{kk dsek/; e I sgh ge , drk ds
I = eaczk I drsgvš i xfr dh vš c<+l drsgā f'k{kk dksge [kkbZ
gbZ "kDr vš I Eeku dks i q% i tlr djusdk I k/ku ekursgā f'k{kk
}kjk 0; fDr; kaea "kk"or&eW; kadk Kku gšrk gš I qk&nd'k 0; fDr dh
vkRek i j vi uh Nki NkM+tkrsgā vPNsfopkjka I sgh euq; &euq;
curk gš tc ge fopkj djrsgā rks i R; d fopkj gekjs "kjij i j dN
vl j Mky nrk gšft I izdkj gFkMsdh gYdh pk/ Hkh ykgs i j i Hko
Mkyrh gš ml h izdkj fopkjkaeal thork mRi Uu gšrk gā vr%f'k{kk ds



ǝkj k vPNsfopkj k d k fuekz k gkrk gsvkǝ f'k{k k vPNs
euq; dk fuekz k djrh gā

i Lrkouk&

f'k{k k l h[kus dh i fØ; k gā f'k{k k dk vi uk , d
vyx gh mnæs; gkrk gā l ekt eǝ jk'V'eǝ gj txg
f'k{k k usvi uh , d vyx igpku cuk j [kh gā f'k{k k
dh uhø dksfgykuk bruk vkl ku ughagǝ D; kǝd f'k{k k
dkbz i jkuh bekjr ughagǝft l svkl kuh l sfgyk fn; k
tk; ǝ f'k{k k dh bǝkjr cgr dh etar gkrh gā f'k{k k
gekjs nǝk ds Hkfo'; dks fu[kkjrh gsrFkk vkus okys
Hkfo'; dsfy; sgearǝ kj djrh gā euq; ds thou ea
cgr l h iǝskfu; k vkrh gā f'k{k k euq; dh
iǝskfu; ka dks niǝ djrh gsvkǝ ml svks c<us dh
i j .kk nǝrh gā f'k{k k gh euq; ka dks muds drǝ; ka ds
fo'k; eacrk h gsf d euq; dk l ekt dsifr] jk'V ds
ifr rFkk ekrk&fir k] Hkbb&cgu ds ifr D; k dÜkǝ;
gā dÜkǝ; kadh tkudkj h Hkh geaf'k{k k l sgh feyrh gā
euq; ds vlnj usrd xqk rFkk vPN&vkpj .k f'k{k k
dsek/; e l sgh vkrsgā l d kj ds d.k&d.k eaf'k{k k
cl h gǝz gǝ tǝ so{k geaf'k{k k nǝrk gsf d 'nǝ jka dh
ges'kk enn djs' o{k Lo; a/kñ eajgdj euq; dks Nk; k
i nku djrk gā l emz l sgeaf'k{k k feyrh gsf d 'dHkh
ykhk er djs' dgus dk vk'k; gsf d l emz ds i kl
vki kj i kuh gksus ds dkj .k oks ml dk ykhk ugha djrk gǝ
cfYd [kq l; kl k jgdj og nǝ jka dks i kuh fi ykrk g&
tǝ sfd o{k vi us Qy Lo; augh [krs nǝ jka dks nǝrh
gā Bh d bl h i d kj dk pfj = euq; dks Hkh /kkj .k djuk
pkfg, A dgus dk rRi ; Z; g gsf d l d kj eajgusokyh
gj pht gea dñ uk dñ f'k{k k nǝrh gā cl ml ds Kku
dks l e>us dk utfj; k gksuk pkfg; ǝ yfdu ; s Kku
rHkh vk; ǝk tc ge f'k{k k r gk&ā

f'k{k k , d xfr'khy i fØ; k gā ; g thoui ; Dr
pyrh jgrh gǝ fQj Hkh ckyd ds fodkl dks
l ñu; kǝtr fn'kk nǝus ds fy, ml dh l eLr 'kDr; ka
ds l eǝpr fodkl ds fy, l ekt fo|ky; dk fuekz k
djrk gā fodkl ds i R; d {k= dk thou ea cgr
; ǝx nku gǝ fdUr qeuf l d vkǝ ckǝ) d fodkl dk
egRo fuf'pr gh vf/kd gā fo|ky; ea tc Nk=
v/; ; u djrk gsrHkh ml ds vlnj v/; ; u dh vknrkā
ea ifjorǝ gksuk 'kq gkrk gā 0; fDr tc nǝ jka ds

vuǝkoka dks 'kCnkǝ fujh{k.k] fpÜru] euu ǝkj k xg.k
djrk gǝ rFkk ml dk ykhk mBkrk gā 0; fDr l nk
v/; ; ujr-jgrk gǝ ; g vko'; d ugha fd og dǝy
'kCnkā dk v/; ; u djrk gā Kku dks xg.k djus dh
i fØ; k dk uke v/; ; u gā ek/; fed Lrj dh f'k{k k dh
l Ei wkz f'k{k k dh jh<+dh gMMh dgk tkrk gā D; kǝd
bl Lrj dh f'k{k k gh fo|kFkhz ds i Fk&i n'kd dk dke
djrh gā bl Lrj i j f'k{k k i ltr djsokys Nk= vi uh
fd'kǝ kolFkk ea gkrk gā vxj bl Lrj i j ml gā l gh
ekxh'kz fn; k tk; s rks os cMā l scMā l Qyrk i ltr
dj l drsgā

Nk= fo|ky; ka ea l = i; Dr v/; ; u djs
Kkuktǝ vftǝ djrs gǝ i j Urq l Hkh Nk=kadh Kkuktǝ
dh {kerk l eku ugha gkrh gā Nk=ka ea oǝ fDr d
fHkUurk, a i k; h tkrh gā ifj .kkeLo: i Nk=ka ǝkj k
vftǝ Kku ea Hkh fHkUurk i kbz tkrh gā Nk=kaead {kk ea
i fBr fo'k; oLrql stks Kku vftǝ fd; k gSbl vftǝ
Kku ; kǝ; rk , oadk; Zdqyrk ds i hNsfuEu dkj d gkrk
gā bu dkj dka ea cf)] #fp] vfHk#fp] euf l d Lrj]
vfHki j .kk] v/; ; u vknrkā 0; fDrRo bR; kfn Nk=ka dh
'kǝ{k d mi yfC/k ea l gk; rk i nku djrs gā bu dkj dka
ea v/; ; u vknrkā dk 'kǝ{k d mi yfC/k i j i Mǝs okys
i Hkko dk cgr cMā ; ǝx nku gkrk gā orǝku f'k{k k ea
'kǝ{k d mi yfC/k dh i fØ; k dks l pkyr djus ea
v/; ; u vknrkā l fØ; Hkfedk dk fuokǝ djrh gā
bul si ltr ifj .kkeka l sNk= i R; {k : i l si Hkfor gkrk
gā f'k{k k ea Nk=ka ds 0; fDrRo fodkl dh nǝ'V l s
vknrkā dk cgr egRo gā Nk=ka ea foHkUu vknrkā
fo|eku gkrh gā buea dñ vPNh gkrh gā vkǝ dñ cǝh
vknrkā gkrh gā cǝh vokāNuh; vknrkā ea >B cksyuk]
pkǝh djuk] vkKk u ekuuk] xg dk; Zu djuk] l e; l s
fo|ky; u tkuk] mn-Mrk djuk] vkyL; vkfn gā
tk 'kǝ{k d mi yfC/k i j udkjRed i Hkko Mkryh gǝ
vkǝ tks Nk= vius thou ea vPNh] okāNuh; vknrkā
tǝ & bǝkunkjh] drǝ; fu"B] l eHkko l Ekn'kh] l e;
dk ikyu] vkKk ikyu fou; tǝ h vu d vknrkā dks
vius 0; ogkj eamrkjrk gā ml dh 'kǝ{k d mi yfC/k i j
l dkjRed i Hkko i Mǝk gā gekjk l Ei wkz thou
l kekU; r%vknrkā dk , d rkuk ckuk gā 'kk; n gh ge
, d k kbz dk; Zdjrs gǝft l dk l Ecu/k gekjh vknrkā l s
u gā vknrkā dh bl h 0; ki drk dks /; ku ea j [kdj



euŋ; dksvknrkadk i q̄t ekuk x; k gā
v/; ; u dh vko'; drk, oægRo&

'kks'k l eL; k ds vlr x' v/; ; u vknrkā dks
bl fy, p̄pus dh vko'; drk gpz D; kīd v/; ; u
vknrafdl h Hkh fo | kFkz, kads' k{kd mi yfc/k ij i Hkko
Mkyrh gā bl l s Li "V gkrk gS fd ftu Nk=ka dh
v/; ; u vknra vPNh gkrh gāmudh 'k{kd mi yfc/k
mPp gkrh gā yfdu nū jh rjQ ftu Nk=kadh 'k{kd
mi yfc/k fuEu gkrh gS vFkz' nū js' kCnka ea dgk tk
l drk gSfd v/; ; u vknra 'k{kd mi yfc/k l s l h/ks
l EcflU/kr gkrh gā v/; ; u vknrkā ea iēq̄k mi Hkx
gkrs gā t̄g & , dxxrk] l e>us dh ; kx; rk] dk; Z
vfhkfol; kl] vlr%Ø; k] vH; kl] l gkjk nūkl vfhkyq̄k
djuk rFkk Hk"kk bR; kfn dk v/; ; u ij i Hkko i Mf̄k
gā ; fn ; g Hkx fdl h Hkh iēdkj l si Hkfor gkrs gārks
v/; ; u vknra Hkh i Hkfor gkrh gā fo | kFkz, ka ds
0; fDrRo , oapkfj=f d fodkl ij v/; ; u vknrkā dk
egROI wZ i Hkko i Mf̄k gā Nk=ka dks v/; ; u vknrkā dks
l nō vi ukuk pkfg,] yfdu budk nkl ugha gkuk
pkfg,] cfYd Lokeh gkusk iz kl l nō djuk pkfg, A

fo | kFkz, ka dh 'k{kd mi yfc/k i klr djusea
mudh v/; ; u vknra egROI wZ Hkiedk fuHkkrh gā
LokLF; fuekz k fnup; kZ ea v/; ; u dk fo'kSk LFkku
j [krk gā mfr l e; ij l kuk i k%dky fd; s x; s
dk; Z dks l U/; kdky dk fujh(k.k) n<+ l adYi]
bēkunkjh] fu; fer vuq̄kl u fo"k; ka dk v/; ; u ea
mfr Øe dk fu/kkz .k xgdk; Zdjuk] l e; dk l nk
mi ; kx djuk vkfn v/; ; u vknraḡtksfo | kFkz, kadh
'k{kd mi yfc/k ds l kFk&l kFk 0; fDrRo dks Hkh
l gstrh] l okjrh , oa fodfl r djrh gā Nk= dh
'k{kd mi yfc/k ea v/; ; u vknrkā dk fo'kSk ; kx nku
gkrk gā vPNh v/; ; u vknrkā ds dkj .k gh Nk=ka dks
Kku i klr djusea' kh?kark , oal jyrk gkrh gā

"k{kd mi yfc/k fo | kFkz, ka }kjk vf/kxe fd; s x; s
, oa iz kx ea yk; s x; s Kku dks eki us dk l okRe
l k/ku gā ckydka ds uSdrk] l keftd eV; ka ea
fxjkoV dk i Hkko f"kk eans[kus dks feyrk gS ftl ea
i R; {k ; k vi R; {k : i l s fo | kFkz, ka dh "k{kd
mi yfc/k i Hkfor gkrh gā ckydka dks i R; d {ks= ea
i frLi /kkzo rukoi wZ i fjLFkr dk l keuk djuk i Mf̄k
gā bl ea l Qyrk gr̄q vko"; d gS fd og vi us

0; ogkj dks "k{kd y{; kadh si klr gr̄q fufe'z dja vr%
fo | kFkz, kaea "k{kd mi yfc/k o ml eal EcflU/kr pj kdk
egROI wZ LFkku gā "k{kd mi yfc/k ds l UnHkZ ea j q̄kk
1996 }kjk fd, x, "kkskdk; Z ea fu'd'kZ : i ea i k; k
x; k dh ifjokj ds l nL; ka }kjk inku fd; k x; k
funz'ku o i Fk in "kZ fo | kFkz, kads v/ k d vPNs "k{kd
n'Vdks k , oa "k{kd mi yfc/k ea ; kx nku djrk gā
dēp us vfhki j .kk dsmPp Lrj dks "k{kd mi yfc/k ds
fy, egROI wZ ekuk gS tcf d fyx o ifjos'k dk
fo | kFkz, ka dh "k{kd mi yfc/k ij dkbZ i Hkko ugha
i Mf̄k gā fo | kFkz, ka ds l UnHkZ ea "k{kd mi yfc/k , d
egROI wZ dkj d ḡtksf "k{kk] l ekt] ifjokj vkfn , d s
vucl {ks=kal st̄p/lt gpz tks fHkku fHkku : lk ea i fjyf'kr
gkrh gā

mi yfc/k l srkRi ; Zfdl h Hkh {ks= eavft'z Kku
l sugha gā l kekl; r%ge mi yfc/k dks "k{kd {ks= eagh
n[ksr gS yfdu ; g thou ds l Hkh {ks=ka l s l EcflU/kr
gkrh gā vr%mi yfc/k dk rkRi ; Zfo | kFkz, ka }kjk d {kk
eafofHkku fo'k; kaea i klr vdkal sugha vFkz-mi yfc/k
fo | ky; eackyd ds v/; ; u fo'k; ds vft'z Kku l s
gā f"kk "kCndks k ds vucl kj d̄kyrki {kh {ks= ; k Kku
ds fdl h {ks= ea i klr n[krk dk Lrj ftl s l k/kj .kr%
fo | ky; h ij h {kk }kjk i klr fd; k tkrk gā vU; vFkZ ea
"k{kd mi yfc/k dk iēq̄k vk"k; f"kk ds {ks= ea i klr
ifj .kke l s gā "k{kd mi yfc/k fo | kFkz, ka }kjk fd; s
tkusokys d {kk&d {kkadh fØ; k gkrh gS tksfo | kFkz, ka
}kjk l Ei wZ l = eavf/kxe dh tkrh gS tksfd fofHkku
ij h {kkvka }kjk Kkr dh tkrh gā "k{kd mi yfc/k]
d {kkd {k dk okrkoy .k] i kfjokjd okrkoy .k]
l 'tukRedrk] c[̄] yfc/k] ekrk&fi rk dk vi uscPp kads
i fr 0; ogkj] fd "kkj koLFk , oackY; koLFk vkfn ?kVdka
l s i Hkfor gkrh gā Li 'V : i ea "k{kd mi yfc/k
fo | kFkz, ka dh l Hkh mi yfc/k; ka dks i Hkfor djrh gS
rFk Lo; aHkh vU; xfrfof/k; kao mi yfc/k; ka l si Hkfor
gkrh gā

l eL; k dFku&

"mPprj ek/; fed Lrj v/; ; ujr-mPp , oa
fuEu 'k{kd mi yfc/k okys Nk=&Nk=k vka dh
l ek; kstu {kerk dk r̄yukRed v/; ; uA**
l eL; k dFku eai z , p̄r 'kCnka dk i fj Hk"kh d j .k&

ek/; fed Lrj&ek/; fed Lrj dh f'kk



ikFkfed f'k{k{k vkj mPp f'k{k{k ds chp dh f'k{k{k
0; oLFkk gA ek/; fed f'k{k{k dks I Ei wKz f'k{k{k 0; oLFkk
dh jh<+dh gMMh dgk tkrk gA ek/; fed f'k{k{k dk
mnns; Nk=ka dk I okZh.k fodkl djds jk"Vh;
fodkl o , dh dj.k dks I fuf'pr djuk gA ns k ea
ek/; fed f'k{k{k dk I pkyu dlnh; I jdkj] jkT;
I jdkj] LFkkh; I LFkkvkj futh I LFkkukarFkk dlnh;
ek/; fed f'k{k{k ds {ks= eægRoI wKz Hkfiedk vnk djrh
gA

I ks gæk; q dchj ds 'kCnka e& ^ek/; fed
f'k{k{k} f'k{k{k dh , d , d h dMh gStski kFkfed , oamPp
f'k{k{k dks n<rk ds I kFk , d dMh ea ck/krh gA
ek/; fed f'k{k{k f'k{k{k iz kkyh dk , d , d k }kj gS tks
, d vkj rksmPp f'k{k{k eai os k dsfy; sjkLrk [kkyrk
gStkskydka ds 0; fDrRo dk I okZh.k o I Ei wKz fodkl
Hkh ek/; fed f'k{k{k }kj gh i wKz dks i klr djrk gA**

'kF{k d mi yfC/k & 'kF{k d mi yfC/k I s rkRi; Z
f'k{k{k ds {ks= eafdl h Hkh Nk= }kj fn, x, funZ kka I s
ykHk mBkus I s gS vFkkZ~fdl h Hkh 'kF{k d i j d dh
mi fLFkr eatc dkbZ Nk= Kku i klr djds vf/kdre
dk; Zdjuseal eFkZ gS tkrk gS rc ml sml Nk= dh
mi yfC/k dgrsgA 'kF{k d mi yfC/k 'kF{k d dk; Zealklr
i dh.krk rFkk ml ea dke; kch i klr djus I s gA
I kekU; r%fdl h Hkh Nk= dh 'kF{k d mi yfC/k dk I h/kk
I Ecu/k ml ds }kj okf"kd I jh{k eai klr fd; sx; svad
ml Nk= dh fo | ky; eamUufr rFkk vU; fo'kSkrvka
dks inf'kr djrs gA , d KkuktZ i jh{k.k ; g tkuus
dsfy, iz q r fd; k tkrk gS fd 0; fDr usD; k vkj
fdruk I h[kk rFkk og dkbZ dk; Zfdruh vPNh rjg I s
dj I drk gA 'kF{k d mi yfC/k I s rkRi; Z bu f'k{k.k
mnns; kadh i klr I sgA fo | kFkZ kaus' kF{k d mnns; ka
dks fdl I hek rd i klr fd; k gS; gh mudh 'kF{k d
mi yfC/k dks crkrk gA 'kF{k d mi yfC/k I s rkRi; Z f'k{k{k
ds {ks= eafdl h Hkh Nk= }kj fn, x, funZ kka I s ykHk
mBkus I s gS vFkkZ~fdl h Hkh 'kF{k d i j d dh mi fLFkr
eatc dkbZ Nk= Kku i klr djds vf/kdre dk; Zdjus
ea I eFkZ gS tkrk gS rc ml sml Nk= dh mi yfC/k
dgrsgA

I ks/kh ds vud kj & blgkaus mi yfC/k dh , d
cgr foLrr i jh{k"kk nh g& ^mi yfC/k fdl h dfBu
dk; Z dks i wKz djuk] mPp Kku i klr djuk] viusdk; ka

dks 'kh?krk , oa vkRefuHkj rk I s i wKz djuk] mPp Lrj
i klr djuk] nh jka I svkxsc<uk rFkk viuh I Qyrk]
i frHk }kj vkRel Eeku dks c<kuka**

bosy ds vud kj & ^mi yfC/k i jh{k.k dk og
vfhkdYi gS tks fo | kFkZ }kj xg.k fd; s x; s Kku]
dqkyrk o n{krk dk eki u djrk gA**

I ek; kstu {kerk & 0; fDr dks I Qy , oa
0; ofLFkr thou thusdsfy, ; k 0; rhr djusdsfy,
okrkoy.k vkj i fjLFkr; kads I kFk I ek; kstu LFkfi r
djuk vko'; d gS tkrk gA I d kj ds I elr i kF.k; ka
ds I eku ; g ckS) d i k.kh euq; Hkh fnu&jkr
f0; k'khy jgrk gA I kkk] tkxuk] fpuru djuk]
[kyuk] dk; Zdjuk vkfn I Hkh ml dh f0; k; a gsrh
jgrh gA I Hkh dks vius i fjo s k dh dfBukb; ka dk
I keuk djuk I Mfk gS vkj y{; dh i klr dsfy,
vud ck/kvkadk I keuk djuk I Mfk gA

tc 0; fDr dks y{; dh i klr I jyrk I sugha
gsrk gS rksml svl rksk dk vudko gsrk gA vl rksk ds
dkj.k 0; fDr dseu ea , d I oskrRed ruko jgrk gS
ml snj djusdsfy, 0; fDr ck/kvkadks nj djusdk
iz kl djrk gA rc og i fjLFkr; ka; k okrkoy.k I s
I keatL; LFkfi r dj yrk gS, oacq) o vU; I keF; ka
I sdke yrsqg bu I eL; kvkadks I gy>kuseaviusdks
I ek; kstr dj yrk gA I ek; kstu dks I keatL;]
0; oLFkki u ; k vudhyu Hkh dgrsgA I ek; kstu dh
; g i f0; k 0; fDr ds thou dky eafujlrj pyrh
jgrh gA ; g , d I Urqyr n'kk gS ftl ij i gpus ij
ge 0; fDr dks I q ek; kstr dgrsgA fofHku f'k{kfonka
dh I ek; kstu I Ecu/kh i edk i jh{k"kk; a fuEufyf[kr
gA

ckfjæ] y&QhYM , oa c&YM & ^I ek; kstu
og i f0; k gS ftl ds }kj i k.kh viuh vko'; drkvka
vkj bu vko'; drkvkadh i frZ dks i Hkfor djusokyh
i fjLFkr; kaeal Urqy j [krk gA**

x&4 o vU; & ^I ek; kstu 'kCn ds nks vFkZ
gA , d vFkZ eafujlrj pyusokyh i f0; k gS ftl ds
}kj 0; fDr Lo; avkS i ; kbj.k dschp vf/kd I keatL;
i wKz I Ecu/k j [kusdsfy, vius0; ogkj eafjorZ dj
yrk gA nh js vFkZ eal ek; kstu , d I Urqyr n'kk gS
ftl ij i gpus ij ge ml 0; fDr dks I q ek; kstr
dgrsgA**



bl idkj iwkz lek; kstr 0; fDr ml h dks
dgrsgstksviuh eny vko'; drkvka dksokrkoj.k l s
bl idkj l rjV dja fd nlt jsdh vko'; drkvka dh
i firzeagLr{k i u gka

v/; ; u dsmnns; &

1/4 1/2 mPp ek/; fed Lrj ij v/; ; ujr-mPp
, oafuEu mi yfc/k okys Nk=kadh lek; kst u {kerk dk
v/; ; u djuka

1/2 1/2 mPp ek/; fed Lrj ij v/; ; ujr-mPp
, oafuEu mi yfc/k okyh Nk=kvka dh lek; kst u {kerk
dk v/; ; u djuka

1/3 1/2 mPp ek/; fed Lrj ij v/; ; ujr-mPp
, oafuEu mi yfc/k okys Nk=&Nk=kvka dh lek; kst u
{kerk dk rnyukRed v/; ; u djuka

v/; ; u dh i fjdYi uk, &

1/4 1/2 mPp ek/; fed Lrj ij v/; ; ujr-mPp
, oafuEu mi yfc/k okys Nk=kadh lek; kst u {kerk ea
l kfkZdl vlrrj ughagkska

1/2 1/2 mPp ek/; fed Lrj ij v/; ; ujr-mPp
, oafuEu mi yfc/k okyh Nk=kvka dh lek; kst u {kerk
eal kfkZdl vlrrj ughagkska

1/3 1/2 mPp ek/; fed Lrj ij v/; ; ujr-mPp
, oafuEu mi yfc/k okys Nk=&Nk=kvka dh lek; kst u
{kerk eadkbZl kfkZdl vlrrj ughagkska

v/; ; u dk l hekadu&

1/4 1/2 i Lrr v/; ; u dkuig ngkr tuin ds
mPp ek/; fed fo|ky; ka ds Nk= , oa Nk=kvka dks
l ffeefyr fd; k x; k gA

1/2 1/2 i Lrr v/; ; u mPp ek/; fed Lrj ds
fo|ky; kard gh l hfer gA

1/3 1/2 i Lrr v/; ; u mPp ek/; fed fo|ky; ds
doy d{k 11&12 dsfo | kfkZ, kadksfy; k x; k gA
l Ecfu/kr l kfgR; dk l o{k.k&

1/4 1/2 'k{k{kd mi yfc/k l sl Ecfu/kr l kfgR; &

pkjku 1/2003 1/2 us 'k{k{kd mi yfc/k vkj
v/; ; u vknrka ij v/; ; u fd; k rFkk ik; k fd
ek/; fed fo|ky; dsfo | kfkZ, ka dh 'k{k{kd mi yfc/k
mudsv/; ; u vknr l sl Ecfu/kr gkrh gSrFkk mlgkaus
; g Hkh crk; k fd 'k{k{kd mi yfc/k , oav/; ; u vknr
/kukRed : i l s, d nlt jsl sl Ecfu/kr gA

vkyyqt k 1/2004 1/2 us l keft d 0; fDrRo 'k{k{kd

vfhk; kx; rk v/; ; u vknr , oa 'k{k{kd mi yfc/k dse/;
l Ecfu/ka dk v/; ; u fd; k rFkk mlgkaus ; g fu"d"kZ
fudkyk fd ; g v/; ; u fo'yf"kr djrk gS fd
0; fDrRo dsdkjd v/; ; u vknr , oa 'k{k{kd mi yfc/k
dse/; mRi j dh; l gl Ecfu/k gkrh gA mPp l keft d
0; fDrRo 'kSyh okys Nk=kadh v/; ; u vknr fuEu
l keft d 0; fDrRo 'kSyh okys Nk=kadh v/; ; u vknr
l svPNh gkrh gA 0; fDrRo , oa 'k{k{kd mi yfc/k dse/;
l Ecfu/kaeav/; ; u vknr e/; LFkrk j [krk gA Nk=kvka
dh 'k{k{kd mi yfc/k Nk=kadh vi {kk vf/kd ik; h x; hA
; g vlrrj bl rF; dks i ekf.kr djrk gSfd Nk=k, a
vf/kd l keft d 0; fDrRo , oa mPp v/; ; u vknr
inf'kZ djrh gA

'kSyh 1/2008 1/2 usek/; fed Lrj dsfo | kfkZ, ka
dh v/; ; u vknrka vkj i kfjokjd okrkoj.k dk mudh
'k{k{kd mi yfc/k ij i Hkko dk v/; ; u fd; kA bl
v/; ; u l s; g fu"d"kZ i klr fd; k fd ek/; fed Lrj ds
fo | kfkZ, ka dh v/; ; u vknrka dk mudh 'k{k{kd
mi yfc/k ij vf/kd /kukRed i Hkko ik; k x; kA
fo | kfkZ, ka ds i kfjokjd okrkoj.k dk mudh 'k{k{kd
mi yfc/k ij /kukRed i Hkko u dscjckj ik; k x; kA

t knw , oa j Suk 1/2008 1/2 us v/; ; u fd; k fd
mPprj ek/; fed fo | ky; ka ds fo | kfkZ, ka dh 'k{k{kd
mi yfc/k vfhkofuk , oav/; ; u vknr dse/; l gl Ecfu/k
gkrh gSrFkk ; g crk; k fd Nk=kadh 'k{k{kd mi yfc/k ds
l kfk v/; ; u vknr , oa vfhkofuk ea /kukRed l Ecfu/k
gkrh gA

xkfolln jk; 1/2013 1/2 blgkaus cfj) o 'k{k{kd
mi yfc/k ij v/; ; u fd; k U; kn'kZ ea pkj Ldnyka ds
vkBohad {kk dsrhu xg ij h {kkvka ds vadka ds vkj r dks
fy; k cfj) dseki u dsfy, Lo&fufez cfj) ij h {k.k dk
mi; kx fd; k vkj fu"d"kZ fudkyk fd cfj) o
, dknfed mi yfc/k dse/; l dkjRed l g l Ecfu/k gS
rFkk l oskrRed l Urryuj LokLF;] m | kx] l j {kk
fu; ferrk] l LFkr o xg ij fLFkr; ka dk , dknfed
mi yfc/k ij egRoiwki Hkko i M-rk gA

ef; wMh- i h- 1/2014 1/2 usek/; fed fo | ky;
dsfo | ky; h okrkoj.k o mi yfc/k ij v/; ; u fd; kA
fu"d"kZ fudkyk fd 'k{k{kd mi yfc/k ij j .kkRed dk; ka o
fo | ky; h okrkoj.k l s /kukRed l Ecfu/k fn [kk; h gA

vgywkyf; k o HkVukxj 1/2014 1/2 us 'k{k{kd



mi yfC/k oj.k dsi Hkko dk v/; ; u fd; k rFk ik; k fd
; scPpsvf/kd vl Qy gkrsgt kscMsi fjokjka dsgkrs
gārFkk ftudsikl v/; ; u grqmfpr LFku dk vHkko
gkrk gA xjhch] ekrk&firk dk vufpr 0; ogkj ,oa
: f<ekfnrk iwkzfØ; kdyki vl Qyrk dse[; dkj.k
gA

f=efrZ ½2015½ usek/; fed Lrj ds Nk=ka
dh I 'tukRed fpru {kerk dk eukSkfud dk; k l s
l gl Ecu/k gkrk gSij v/; ; u fd; k ifj.kke Lo: i
ik; k fd I 'tukRedrk fo| kFkz; ka dh I kelftd
vkFkd Lrj I si Hkfor ughagkrh oju-fplru ml dh
mi yfC/k dsi Hkfor djr h gA

¼[k½ I ek; kstu {kerk I sl Ecfu/kr I kfgR; &

nps ½2011½ usfo | kFkz; kadh "kS{kd mi yfC/k
ij "kS{kd vfhkzj .kk rFkk I ek; kstu ds cHkko dk
v/; ; u fd; k vkj ik; k fd fo| kFkz; ka ds "kS{kd
mi yfC/k ij I ek; kstu ds cHkko dk i Mrk gA "kS{kd
vfhkzj .kk ,oal ek; kstu dse/; mPp I g I Ecu/k gA
"kS{kd vfhkzj .kk ,oa "kS{kd mi yfC/k dse/; mPp I g
I Ecu/k gA

dpekjh] v#.kk ½2012½ us**fgekpy insk ds
fo|ky; ka ea v/; ; ujr f[kykMh rFkk xj f[kykMh
Nk=kvka ds I 'tukRed fplru I ek; kstu rFkk
vkrEl Ei R; ; dk rgyukRed v/; ; u fd; kA vius
ih-, p-Mh Lrjh; v/; ; u eablgkaus ik; k fd xkeh.k o
'kgjh {ks=ka dh f[kykMh Nk=k, j 'kkjhfd] I kelftd
0; ogkjfd] vkrEl Ei R; ; ea xj f[kykMh Nk=kvka dh
vi\$kkNr vf/kd vPNh ikbzxbA xj f[kykMh Nk=k, j
f'k{kk ea uSdrk rFkk ckS) d vkrEl Ei R; ; ea
f[kykMh Nk=kvka l vPNh ikbzxbA f[kykMh Nk=k, j
tks'kgjh rFkk xkeh.k {ks=ka l sl Ecfu/kr Fkh HkkoukRed
: i l } I kelftd rFkk 'kS{kd I ek; kstu ea xj
f[kykMh Nk=kvka l svf/kd I ek; kstr ikbzxbA xj
f[kykMh Nk=k, j f[kykMh Nk=kvka dh vi\$kk I Hkh
idkj dh I 'tukRed fplru ds pjka ea vf/kd vPNs
vad i klr fd, A

ujfl Egu rFkk fi Yybz ½2012½ us fofHkuk
ek/; eka ds fo| kFkz; ka dse/; I ek; kstu ,oami yfC/k
Lrj tkuus dk iz kl fd; k] ftl l smlgkaus ik; k fd
vaxst ek/; e ds fo| kFkz; ka dk I ek; kstu Lrj o
mi yfC/k Lrj rgyuk/; e dh vi\$kk vf/kd Fkka

vehukHkkoh] fot; y{eh] ½2014½ us
B'kkjhfd : lk l sv; kx; ,oa; kx; Nk=ka dh I ek; kstu
{kerk dk v/; ; u^ djrsgq ik; k fd 'kkjhfd : lk l s
v; kx; Nk= ; kx; Nk=ka dh rgyuk ea ikfjokjfd]
HkkokRed] urRo rFkk eu%LFkr ds {ks=ka ea
dq ek; kstr ik, x, A 'kkjhfd : lk l sv; kx; Nk=]
I dx eu%LFkr] vijkf/kd idfuk ,oaurRo ds {ks=ka ea
I keku; Nk=ka dh rgyuk ea de I ek; kstu'khy FkA
fu"d"kr% ; g ik; k x; k fd fodykx Nk= I keku;
Nk=ka dh rgyuk ea dq ek; kstr ik, x, gA yfdu
'kkjhfd fodykx Nk= I dx] eu%LFkr] vijkf/kd
idfuk o urRo {ks= ea I keku; Nk=ka dh rgyuk ea de
I ek; kstr ik, x, A

ckcw ½2014½& BgkW j I ds Mjh LVMh/4
, VhV; M VmMLk n LVMh vkND dkl l , .M nsj
, MtLVeB i Lrj v/; ; u eagkW j I ds Mjh LVMh/4
dh dkl l v/; ; u dsifr vfhkofrr rFkk ml ds grq
fd; s tkusokys I ek; kstu dse/; I Ecu/k tkuus dk
iz kl fd; k x; kA v/; ; u ds idfuk pj Nk= fyax]
vkoi ¼'kgjh@xkeh.k½ Ldwy dk idkj ¼ jdkjh@
futh½ rFkk v/; ; u dk ek/; e ¼vaxst@rfey½ FkA
v/; ; u grq rfeyukMq jkT; ds dMkyk ,oa
fo:) kpye tuin ds x; kjgoha d{kk ea v/; ; ujr
240 Nk=ka dks l; kn"kr ds : i ea p; fur fd; k x; kA
v/; ; u grqckj vkj 0 ¼1988½ } kjk fufeh , VhV; M
Ldwy VmMLk n LVMh vkND dkl l f l g o f l g vkj-i h-
¼1984½ } kjk fufeh Ldwy LVMh/1 , MTKLVeB blol/jh
dk iz kx fd; k x; kA fo"ysk. k l sKkr gq/k fd gkW j
I ds Mjh LVMh/4 dh dkl l v/; ; u dsifr vfhkofrr
rFkk I ek; kstu dse/; I kFkd I Ecu/k ik; k x; kA
Nk=ka dh eukofrr Nk=kvka l scgrj ik; h xba 'kgjh
Nk=ka dh rgyuk ea xkeh.k Nk=ka dk dkl l v/; ; u ds
ifr : [k cgrj jgkA futh fo|ky; ka ds Nk=ka dh
eukofrr I gdljh fo|ky; ka ds Nk=ka dh rgyuk ea
vf/kd jghA rfey ek/; e dh rgyuk ea vaxst ek/; e
ds Nk=ka ea #fp vf/kd FkA I e; kstu ds I UnHkz ea
yMds@yMfd; k] I jdkjh fo|ky; @ futh fo|ky;
Nk=] rfey@vaxst ek/; e eadkbz I kFkd vl rj ugha
ik; k x; kA Nk=ka dk HkkokRed] I kelftd rFkk 'kS{kd
I ek; kstu vR; r fuEu Lrj dk ik; k x; kA

nsh ½2015½& BbQSDVoud vkND xj



dkmUl fyx % ,MtLVeW vekæ oneu dkwyst
LVWV/I B iLrqr 'kksk v/; ; u dk eq; mnnš;
dkwyst eal em ijke"kd; Døe l sNk=kvkadsifjp;
djuk rFkk ml dk Nk=kvka ij iHkko] muds
l ek; kstu] vkRefo"okl o HkkokRed LFkkf; Ro dk
v/; ; u djuk FkA v/; ; u grq l W tkl Q dkyst]
fo"kk[kki VVue dh 304 Nk=kvkadsU; kn"kd; : i ea
p; fur fd; k x; k] ftudh vk; q16 l s22 o"kdse/;
FkA inRrkads l æg.k grqcy ¼1952½ }kjk fufeR cy
, MtLVeW buobVjh dk iz kx dj HkkokRed i{k ea
ikl de ekukads vk/kj ij nks l emkafu; fu=r rFkk
iz kx"khy] eafokDr dj] l Hkh dk jkWj ¼1972½ }kjk
fufeR buVjuy& , DI VUy ykd l vKd dWky
Ldsy vkj djsu o dSv ¼1973½ }kjk fufeR , V LVV/
Dod psu; j ij ijh{k.k fd; k x; kA ijh{k.k mijkar
iz kx"khy l em dks ijke"kd inku fd; k x; kA v/; ; u
l s; g Kkr gvk fd ijke"kd; Døe dk Nk=kvkads
l ek; kstu] vkRefo"okl] HkkokRed LFkkf; Ro ij
l dkjRed i Hkko gkrk gA

f]onh] vfHk"kd ¼2019½ us ek/; fed Lrj
dsf[kykMh vkj xj f[kykMh fo|kfFkz kadh euknfgd
l el; kvk fu.kz] {kerk} vuqkl u , oal ek; kstu dk
rgukRed v/; ; u** 'kh"kd ij ih&, p- Mh- Lrjh;
'kksdk; Zfd; kA blgkaviusv/; ; u eai k; k fd xj
f[kykMh fo|kfFkz kadh rguk eaf[kykMh fo|kfFkz
l kFkd : i l s mRre l kelftd rFkk l æskRed
l ek; kstu jgrsgA

Xkxfj; k ¼2019½ PbQDV vKd ijs Vt
fcgfo; j vku n , MtLVeW LVV/I vKd LVWV Vt B
mijkdR 'kksk dk; Z ea Nk=ka ds l ek; kstu Lrj ij
muds ekrk fir k ds 0; ogkj ds i Hkko dks tkuus dk
iz kl fd; kA 'kksk dk eq; mnnš; ekrk&fir k rFkk
ckydk ds e/; l Ecu/k] ekrk&fir k }kjk Nk=ka dks
inku dh tkusokyh l ek; kstu l Ecu/kh tkudkjh dks
tkuuk rFkk ml dk i Hkko Nk=kads l ek; kstu Lrj ij
Kkr djuk FkA 'kksdk; Z grq U; kn"kd; : i ea
jkt dh; fo|ky; j fVgjh U; kn"kd; : i eadkMh ds
pkj jkt dh; fo|ky; kads i Fke Lrj ij p; fur 300

U; kn'kd dk p; u ¼Vfcy&1

यूपी0 बोर्ड	छात्र	छात्राँ	योग
माध्यमिक स्तर	50	50	100

Nk=ka ea l s; knfPNdh fof/k }kjk p; fur 100 Nk=ka
rFkk 100 Nk=kvka dk p; u fd; k x; kA l Hkh p; fur
Nk= o Nk=k; a d{kk ukS o nl ds FkA v/; ; u grq
l DI suk }kjk fufeR , MtLVeW iksye buobVjh dk
iz kx fd; k x; kA ftl ea Nk=ka ds xg] l kelftd]
LokLF; j l æs rFkk fo|ky; h l ek; kstu l s l Ecu/k
iz u FkA v/; ; u dsfu"dkkdl s; g Kkr gvk fd Nk=ka
o Nk=kvkads l ek; kstu eadkMh l kFkd varj ughai k; k
x; kA xteh.k rFkk 'kgjh Nk=&Nk=kvka ds fofHkU
l ek; kstu xg] l kelftd] LokLF; j l æs rFkk
fo|ky; h l ek; kstu ealrjkvuq kj varj i k; k x; kA

'kksk fof/k&bl l Ecu/k ea"kkfFkZuh us iz dj .k
dsvuq i i fof/k dk p; u djs l e; i k; k fd p; fur
v/; ; u grqo.kLkRed vuq ækku fof/k ds vUrxR
l oæ.k k fof/k l okZ/kd mi; Ør gA
v/; ; u dspj&

1- Loræ pj & mPp ek/; fed Lrj ds
fo|kfHkA

2- vkfJr pj & 'kS{k d mi yfc/k , oal
l ek; kstu {kerkA

3- fu; æ=r pj & 'kS{k d Lrj] vk; A
'kksk tul æ; k&

iLrqr 'kksk v/; ; u ea tul æ; k l s rkRi; Z
>kl h tuin eafLFkr ; w ih- ckMZ l sekU; rk ikl
ek/; fed fo|ky; kadh dgy l æ; k l s gA ¼Vfcy&1
ns[kæZ
v/; ; u dsmi dj .k&

l ek; kstu {kerk (AISS)- Kkr djus ds
fy, MkW , - ds i h- fl Ugg ¼ubZfnYyh½ , oavkj- i h-
fl æ ¼i Vuk½ }kjk i æk.khdR mi dj .k dk iz kx fd; k
x; k gA

'kS{k d mi yfc/k & 'kS{k d mi yfc/k ds : i ea
ek/; fed fo|ky; kads d{kk 10 ds fo|kfFkz kadsokf"kd
ijh{k dsi klrkadksi fr'kr ds : i eafy; k x; k gA
iz Ør l kA] dh; fof/k; k&

'kksk fFkZuh ds }kjk l ek; kstu {kerk ijh{k.k
djus ds fy, vkadMh dk l æg fd; k x; k gS rFkk
rRi 'pkr ml dk e/; eku] ekud fopyu] ekud =fV]



I kfj . kh&2

समूह	न्यादर्श	सहसम्बन्ध	मुक्तांश	सार्थकता स्तर
छात्र	50	0.08	98	सार्थक
छात्रा	50			

Økflurd vuq kr ; k Vh&vuq kr] I gl ECU/k ij h{k.k
rFkk e/; eku ds vlurj dh I kFkZdrk }kjk fd; k x; k
g&

vkpdlMkdk I xg] fo'yšk.k, oa; k[; k&

I eadka dk I kj.kh; u&I eadka dks I kj.khc)
djd's'kks'k fu"d'kka dks tkuusdsfy, fo'yšk.k i fØ; k
'kks'k dk; Zdk , d vko'; d vx g& bl fy, I kj.khc)
i nRrka ds vk/kkj ij fo'yšk.k dk; Z fuEu izdkj I s
fd; k x; k g&

i fjdYi uk&1& ek/; fed Lrj
Nk=&Nk=kvka dh 'kS{k d mi yfC/k , oa I ek; kstu
{kerk ij i Mūsokys i Hkko dk I gl ECU/k grqI adfy
vkpdlMkdk I kfi[; dh; fo'yšk.k& %I kj . kh&2 ns[k&

mijkdR I kj.kh Øehd&1 I sKkr gkrk gSfd
ek/; fed Lrj ds Nk=&Nk=kvka dse/; I gl ECU/k 0-
08 gS tksfd i klr eku nkuaka pjka ea vYi dksV dk
I gl ECU/k n'kkrk gS ftI dk eprkak af 98 ds -01
I kFkZdrk Lrj ij eku -15 o -31 g& tksvko'; d eku
-254 ¼15&-31½dse/; vkrk gStksI kFkZd g&

vr% gekjh i fjdYi uk&1 vLohdr gkrh gS
vFkZr~mPp ek/; fed Lrj ds Nk= , oa Nk=kvka dh
'kS{k d mi yfC/k , oa I ek; kstu {kerk ij I kFkZd i Hkko
i Mfrk g&

i fjdYi uk&2 &

ek/; fed Lrj Nk=&Nk=kvka dh v/; ; u
'kS{k d mi yfC/k , oa I ek; kstu {kerk ij i Mūsokys
i Hkko dk rgyukRed v/; ; u grqI adfy vkpdlMkdk
I kfi[; dh; fo'yšk.k&

mijkdR I kj.kh Øehd&2 ds voykdu I sKkr gkrk gS
fd mPp ek/; fed Lrj ds Nk=kadk e/; eku 128-42 o
ekud fopyu 13-24 gS, oaek/; fed Lrj ds Nk=kvks
dk e/; eku 124-32 o ekud fopyu 13-30 gS nkuaka

I kfj . kh

oxkadse/; ekuka dh rgyuk }kjk i klr Vh&eku 1-54 gS
tks 0-05 I kFkZdrk Lrj ij I kFkZdrk dsfy, vko'; d
I kj.kh eku 1-98 I sde g& vr%'kks'k fFkZuh }kjk fufe'r
'kS{k d mi yfC/k , oa I ek; kstu {kerk ij i Mūsokys
i Hkko ea dksZ I kFkZd vlurj ugha g& 0-05 I kFkZdrk
Lrj ij Lohdr gkrh g&
fu"d'kZ

I kfi[; dh; fo'yšk.k ds mijklr y?kq 'kks'k
^ek/; fed Lrj ij Nk=kadh v/; ; u I ECU/kh vknrka
dk mudh 'kS{k d mi yfC/k ij i Mūsokys i Hkko dk
rgyukRed v/; ; u** ds fuEu fu"d'kZ i klr gq &

1- mPp ek/; fed Lrj ds Nk=&Nk=kvka dh
mPp , oafuEu mi yfC/k , oa I ek; kstu {kerk ij I kFkZd
i Hkko i Mfrk g&

2- mPp ek/; fed Lrj ds Nk=&Nk=kvka dh mPp
, oafuEu mi yfC/k ij I ek; kstu {kerk ea dksZ I kFkZd
vlurj ugha g& 0-05 I kFkZdrk Lrj ij Lohdr gkrh g&

I ek; kstu {kerk , d egroi wZ pj gS tks 'kS{k d
mi yfC/k ij i Hkko Mkyrk g& vr, o fo| kFkZ ka ea
vPNh v/; ; u dh vknrka fodfl r djd's'kS{k d
mi yfC/k dks mPp Lrj rd igpk; k tk I drk g&
v/; ; u dh vknrka ea f'k{k dka dk fopkj&0; ogkj
egroi wZ LFkku j[krk g& f'k{k d vius 0; ogkj I s
fo| kFkZ ka dsfy, mnñhi d dk fodkl dj I drs g&
ftI I sfo| kFkZ I h[k I ds vLg mi yfC/k dks i klr dj
I d& fo| kFkZ vi uk vf/kdk k I e; i fjoj eafcrkrk
gS vr% vfHkHk kod dk Hkh ; g drD; gSfd osvi uscPps
dks vPNk i kfjokjd okrkoy.k na rkfd fo| ky; ea
vPNs'kS{k d okrkoy.k dk fuekZk gksI dsftI I svPNh
v/; ; u dh vknrka dk fuekZk gksI d& bl ds vykok
vfHkHk kodka dks pkfg, I e; & I e; ij f'k{k d ds I kFk
[a k&3

समूह	न्यादर्श	मध्यमान	मानक विचलन	मानक त्रुटि	t-test	सार्थकता स्तर
छात्र	50	128.42	13.24	2.65	1.54	असार्थक
छात्रा	50	124.32	13.30			



vi uscPpkadsckjseafopkj&foe'kZdjrsgavkš cPpka
dksi fjr djrsjgA

fo|ky; izkkl u dk ;g drD; gS fd
l e; &l e; ij , d sdk; Øekadk vk; kstu gksftl l s
Nk= ij .kk xg.k dj l dA izkkukpk; Z }kjk l e; &
l e; ij vfhkHkkodkadh ehVax djuh pkfg, ftl l s
fo|kFkZ ka dh i xfr dsckjseafopkj&foe'kZgks l dA
izkkl u }kjk vuqkkl u dk dMkbZ l s ikyu djuk
pkfg, ftl l s Nk= vuqkkl r gkdj v/; ; u dja
gekjsjk"V^a dh f'k{kk ds Lrj dks Åpk cukusdsfy,
i R; d fo|ky;] v/; ki d rFkk vfhkHkkodkads l g; kx
l sgh gksl drk gA

fo|kFkZ; kadsfy, &

➤ vPNh v/; ; u vknrka dk fodkl Lo; a
fo|kFkZdsghFk eagksrk gA

➤ mfpr v/; ; u fof/k vi ukdj vk'kkrhr
l Qyrk i ktr djusdsfy, i R; d {k= ea/; ; u o /; s
dk fu/kkZ .k djrsjguk pkfg, A

➤ vPNh i qrd; nšud v[kckj , oa
'kCndks'k dk iz kx vPNh v/; ; u vknrkadksfodfl r
djusea; FkšV i Hkko'kkyh dne gA
f'k{kdkadsfy, &

➤ f'k{kdkadksvi usNk=kaea vPNh v/; ; u
vknrkadksfodfl r djusdsfy, ml dk l e; &l e;
ij eW; kadu , oaekxh'kZu djuk pkfg, A

➤ f'k{kdkadk }kjk i fjr Nk=&Nk=k gh Hkfo";
eamPp vknrkadsLokh cu tkrsgftl l sosl ekt ea
mPp inkaij , oafTEenkj ukxfj d cudj jk"V^a i xfr
es; kxнку nsl drsgA

➤ fo|kFkZ ka dh v/; ; u vknrka dh
fofHkUurk; a f'k{kdk dks f'k{k.k fof/k ea #fp; k; mRi Uu
djusdh ij .kk nšsg o f'k{kdk dh mi yfC/k ij Hkh
v/; ; u vknrkadk i jkšk i Hkko i Mf k gA
vfhkHkkodkadsfy, &

➤ vfhkHkkodk dks ; fn muds cPpka dh
v/; ; u vknrkadk i rk gkšk rHkh osml sde ; kš; rk
okys{k= eavf/kd i kRl kgu nsl drsgA

➤ v/; ; u vknr dsfo'yšk.k l scPps dh
: fp dk i rk pyrk gšftl l svfhkHkkod ml ij vi us
fopkj u Fkš dj cfYd Lo; adsfopkj kadksegRo nšdj
ml sml ds#fpdj {k= eac<usdsfy, i fjr dj kA

➤ cPpka dh 'kš{kdk mi yfC/k c<kus ea
vfhkHkkod Nk=ka dks JšB v/; ; u vknra fodfl r
djdsgh ; kxнку nsl drsgA

l UnHkZxUfK l qph

- 1- vxoky l jLorh] feJk #fp] ½2002½ "fo|kFkZ ka dh d{k
ea mi fLFkfr rFkk 'kš{kdk mi yfC/k ea l gl Ecu/k dk
v/; ; u** f'k{k fplru Vol. 21 i "B l q; k 29 l smnÅrA
- 2- vkhk xqrk ½2005½ "l jdkjh&xš l jdkjh mPprj
ek/; fed fo|ky; kads 'kš{kdk okroj .k dk fo|kFkZ ka dh
l kekftd i fji Dork l ek; kstu vš 'kš{kdk mi yfC/k ij
i Hkko dk rgyukRed v/; ; u**A f'k{k fplru Vol. 21 i "B
l q; k 4&6A
- 3- vkfcn edcny ½2006½ "tkšij tuin ds ek/; fed
fo|ky; kads mPp , oafuEu opu Lrj ds fo|kFkZ ka dh
v/; ; u dh vknr] vFkZ kkl= dsfo" ; dsifr vfhk: fp dk
mudh 'kš{kdk mi yfC/k ij i MšokysvUrfØZ kRed i Hkko
dk v/; ; u**A eq; l Eiknd MKW l ej cgkng fl g
i "B&60A
- 4- xqrk] , l - i h- ¼1998½ "vk/kqud f'k{k euksokku**
bykgkckn] 'kkjnk i qrd HkouA
- 5- yky] jeu fcgkj h %f'k{k dsnk'kZud , oal ekt'kkl=h;
fl) klr] vBkjgok; l d j .k] 2016&17] ejB] jLrksxh
i fcydšku] i "B l q; k & 2] 3A
- 6- l q[k; k , l - i h- ½2000½ "fo|ky; izkkl u , oal æBu**
foukn i qrd eflnj] vxj kA
- 7- l r fot; ½2007½ "Lukrd Lrj ij Nk= vš Nk=kvkads
v/; ; u dh vknrka , oal ek; kstu dk rgyukRed
v/; ; u**A Hkkrh; f'k{k 'kšk if=dk okY; e 26 uEcj 2
tgykb&fnl Ecj ist ua 60A
- 8- "kekZ l at; ½2005½ us "ek/; fed Lrj ds fo|kFkZ ka dh
v/; ; u vknrka , oaxf.krh; fu"i fRr eadkšpæ d{kvkads
i Hkko ds v/; ; u**] , e- , M- y?kq 'kšk] MKW jke eukšj
yšk; k vo/k fo'of o fo|ky;] QšckcknA
- 9- fl g] MKW jkeiky 'kekZ MKW vks i h- % 'kš{kdk vuq dkku , oa
l kš [dh] prqkZ l d j .k] 2012] vxj k] Jh foukn i qrd
efl njA
- 10- 'kqyk] MKW J) k] i me HkVukxj ½2006½ jhmj MCY; w
Vh- l h- egkfo|ky; Vdkuij ½ "l Fkšx o Loforri kš"kr
ch , M- Nk=kvkadh v/; ; u dh vknrka dk rgyukRed
v/; ; u**A f'k{k fplru f=efrZ l Fkku dkuig vad
16&17 'kš{kdk =škl d l a qrkad vDVm j 2005 ekpZ
2006 ist ua 4&5A
- 11- oekZ i e dškj ½2006½ us "jkt dh; vuqkfur , oafuth
fo|ky; kads ek/; fed Lrj ds fo|kFkZ ka dh v/; ; u
vknrka , oamudk 'kš{kdk fu"i fRr ij i Hkko dk rgyukRed
v/; ; u**] , e- , M- y?kq 'kšk] MKW ch vkj- vEcMdj
fo'of o fo|ky;] vxj kA





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21oha l nh ea n{k d dh Hk fiedk % , d jktuhfrd fo'y'sk.k



I kj k d

& MkW l q khy d'ekj l p'u
i k/; ki d & jktuhfr foKku foHkx]
l h- ,e- ts dKlyst] nkuokjhgv]
[kq/kuk] e/kp'uh&847109 %fcgkj %

b&ey %

sunilsdrh08@gmail.com

90 dsn'kd eanf{k.k , f'k; k ea^{ks=h; , dh d j .k** d lsc<kok
nusgrq, d l g; l xkRed l xBu dh LFkki uk dh x b] ft l sn{k d ; k
l kdZdsuke l stku tkrk gA nf{k.k , f'k; kbZ{ks=h; l g; l x l xBu
eyr%nf{k.k , f'k; k ds v k B n'sk adk vkfFkd v's jktuhfrd l xBu
gA ft l ea vQxkfuLrku] ikfdLrku] usky] Hk/kku] cl'kykn'sk]
ekynho] Jhydk , oahkjr t's sjk'V' l f'efyr gA l xBu ds l nL;
n'sk adh tul d; k d l sn'k tk, rks; g f d l h Hk {ks=h; l xBu dh
ryuk eaT; knk cHko'kkyh gA l kdZ l nL; n'sk adk {ks=Qy fo'o ds
{ks=Qy dk 3 i fr'kr gS, oaf'o' dh d'g v'cknh ds 21 i fr'kr y'x
l kdZ n'sk ea jgrs gA rFk os'od v'f'd; oLFk ea l kdZ n'sk dh
fgL nkjh 3-8 i fr'kr v'f'd-2-9 f'vfy; u v'f'dh M,yj gA o'k'eku
os'od ; q' eav'k'efuLk] fodkl , oav'f'r'o dh d'Yi uk v'dysl Etko
ughagA vki l h l g; l x gh 'k'f'ur] vkfFkd fodkl] i frj{k] y'kdr-
, oae'kuokf/kdkj'ad l j {k.k dh fn'k ea l 'kDr ek/; e g's l drk gA
nf{k.k , f'k; k ; k Hkjr h; mi egk}hi ds n'sk ds chp l kek't d]
vkfFkd , o l k'dfrd l g; l x LFkfi r djus ds m's ; l s {ks=h;
l xBu nf{k.k {ks=h; l g; l x l xBu LFkfi r fd; k x; kA

d'w i'ath& l k'dfrd l g; l x os'od ; q] tul d; k]
vkfFkd fodkl] i frj{kA

i Lrkouk&

nf{k.k , f'k; k og {ks= g's t's m'Uk] eafglnd'k o fgeky; l s
y'xj nf{k.k eafgl' egkl kxj , oac'ky dh [kMh ds e/; fLFkr
l {oLrh.kz i k; }hi : i h , d Hk'skfyd bdkbZ gA bl {ks= ea Hkjr]
ikfdLrku] usky] Hk/kku] cl'kykn'sk] Jhydk] ekynho }hi l e'g
l f'efyr gA ft l ea , frgk'f d] Hk'skfyd l k'dfrd] vkfFkd , o
jktuhfrd {ks= ds l n'kZ eacgyrk 0; klr gA nf{k.k , f'k; k {ks= og
{ks= g's t's 50 dsn'kd l si'wZ f'cfV'k l kekT; okn l s=Lr jgk rFk
f}rh; fo'o ; q] dsmij'k'ur uok'sr jk'V'kads: lk eafodkl 'khy n'sk
dh J'sk ea t'kusx; A ftuds l e{k dbZ i'zdk dh p'uk'sr; k; fo | eku
FkA oLr'q%1980 eac'kykn'sk ds jk'V' fr ft; kmj jgeku usnf{k.k
, f'k; k ea {ks=h; l g; l x ds fy, , d <kpsdh LFkki uk grq i'zko j [kA



ftl ds lk'pkr~1985 dks <kdk ea , d l Eesy j [kk
x; k ftl snf{k.k {ks=h; l æBu dsuke l stkuk tkrk
gā

nfu; k ds vfrfodfl r] vYifodfl r vj
fodkl 'khy nś kkaeaHkh vki l eafeydj dke djusdh
ijEijk cuh gpbZgā 0; fā gks; k nśkj vdsysdkbzHkh
vkxsugbac<+l drk] fdl h u fdl h dh enn yuh gh
gkrh gā l kdZdsxBu ds i hNsHkh; gh vo/kkj.kk dk; Z
dj jgh Fkh] ftl eai Mkl h /keZdksfoLrkj fn; k x; kA
l kdZ ds ceq[k mīś; gā nf{k.k , f'k; k ds ykxka ds
dY; k.k dks c<kok nśkj] thou dh mudh xqkoUkk ea
l qkkj ykusdsfy, {ks= eavkfKd fodkl l kekfTd
çxfr vj l k—frd fodkl ea rsth ykuk] nf{k.k
, f'k; k ds nśkka ds chp l kefgd vkRe fuHkjrk dks
c<kok nśkj] vki l h fo'okl] , d nī js l eL; kvka ds
çfr l e> c<kuk] vkfFkd] l k—frd] rdudh
l kekfTd vj oSkfud {ks=kaea l fØ; l g; kx] vl;
fodkl 'khy nśkka ds l kFk l g; kx dksetcār djuk;
vki l eal k>k fgr dsekeyka ij varjjk"Vh; epkaea
l g; kx dksetcār djuk vj l eku y; vj mīś;
ds l kFk varjjk"Vh; vj {ks=h; l æBuka ds l kFk
l g; kx djuka vxj bu reke mīś; ka dks bēkunkjh
l sl Hkh l nL; nśk çklr djusdh dks'k'k djsrks
vkt nfu; k dsbl fgLI sdh rLohj dñ vj gkrhA
vkt l Ppkbz; g gS fd l kdZ l Eesy viuh
çkl ixdrk cjdjk j[kus ds fy, l æk"kr gā
vj pkfjdrk dsfy, bl ds l Eesy gkrsgā l nL;
nśkka ds jk"Vh; {k , d ep ij mīflFkr gkdj dñ
vj pkfjd , yku djsrgā vj fQj l c viuh vius
nśk ykS/ tkrsgā tS k fd mīś; kaeaof.kr gSbu nśkka
ds chp u vkfFkd l g; kx ed[kkl of) gpb] u
, d&nī jsdh l eL; kvkadsçfr l ænu'khyr c<h] u
gh vki l h fo'okl dk; e gā nfu; k ds fofHku
fgLI kaea vl; i Mkl h nśkka us bl h çdkj ds l æBu
cuk, vj mudk vkfFkd] 0; ki kfjd] jktuhfrd; gka
rd fd l kefjd 0; ogkj Hkh l kdZ l s dgha/fkd
fodkl ijd jgkA; jkSi; u; fu; u] ukV vj
vkf l; ku ds l nL; nśkka dk vki l h 0; ki kj l kdZ ds
nśkka ds 0; ki kj l sdghT; knk gā l kdZ ds l nL; nśkka
dh tul ē; k yxHkx 1-5 vjc gS vFkz l kdZ dh

etcār fo'o dh bruh cMh vkcnh dk thou Lrj
l qkkj l drh gā dkBek.Mw ea vk; kstr 18oa l kdZ
l Eesy dk fo'ySk.k bl i"BHke ea gkuk pkfg, A
Hkjr ds ç/kkuea=h ujāe eknh us vius 'ki Fkxg.k ea
l kdZ nśkka ds jk"Vh; {kka dks vkef=r fd; k Fk vj rHkh
viuh vkxkeh fonsk uhfr ds l ær ns fn, FkA os
i Mkl h nśkka ds l kFk fofHku erHkna o fookna ds
ckotm cgrj l Ecu/k cukusds i {k eafn[kA rc Hkjr
vk, l Hkh eggekuka us Hkh viuh vj l s xeZtkskh dk
ifjp; fn; kA fdUrq; g xeZtkskh ckn ea cjdjk u
jgh] fo'kSk dj i kfdLrku dh vj l A cfYd; g dguk
mfpr gksk fd bl chp fj'rkaeabruh rY[kh i snk gks
xbZ gS fd l kdZ ds l Eesy ea , d&nī js l s utja
feykus l s ujāe eknh vj uokt 'kjhQ cpS gkFk
feykuk rks nī dh ckr gā tkfgj gS bl dk dkj.k
i kfdLrku dh vj l srkMk x; k; q fojke vj fQj
l jk dsep l sd'ehj dk eqk mBuk gā uokt 'kjhQ
usvc Hkh viuh vj l s; g dgdj i Yy >kmfy; k fd
og ckrphr dsfy, rS kj gS Qs yk Hkjr dks djuk
gā Hkjr&i kfdLrku ds chp rY[kh cuh jgS, d k ogka
dh l suk vj vkbZ, l -vkbZ pkgrsgā ml h epkfed os
pūh gpbZ jdkj dksfun'kr Hkh djsrgā; g l a kx gh
gS fd epbz ij geysdh 8ohaj l h ds finu gh l kdZ
l Eesy vk; kstr gā ç/kkuea=h ujāe eknh us
mfpr gh dgk gS fd Hkjr ml geysdh i hMk Hknyk ugha
gā bl c; ku l sl Eesy eavkradokn dk eqk mBuk
LokHkfod gā vkradokn vdsys Hkjr dh l eL; k
ughā cfYd i kfdLrku] vQxkfLrku] çkkyknskj
us ky l Hkh bl l s de; k T; knk i hfMf gā vxj
l pep; s reke nśk , dtq/ gkdj] [kfQ; k l puk, a
l k>k dj] ekuork dh j {kk dsmīś; l svkradokn ds
f[kykQ yMāS] rks bl ds iS m[kM+gh tk, æA uokt
'kjhQ dks bl utfj, l sHkh l kpuk pkfg, A ujāe eknh
us l kdZ ea l Ecksu Hkh fpjifjpr pūkoh jSyh ds
vnt eafn; kA dbZ l i usfn[kk,] dbZ Qyl Qsc; ka
fd, vj dbZ?kkSk.kk, adha mudk; g vnt Jkrkvka
dks yHkkrk gā bl fy, l kdZ eamudk vkd"z k dk dāe
cuuk LokHkfod gā l kdZ l Eesy dscgkusnī jh ckj
mūgaus ky; k=k djusdk vol j feyk vj mūgaus dbZ
l kSkra us ky dks nhā bl l s Hkjr&us ky l Ecu/kka ds



—<+gkūs dh mēēhn cākh gā mūga; gh još k Jhyādk] cākyknśk dsl kFk Hkh j [kuk pkfg, A bu nśkkadk gekjh {ks=h; vkš tkrh; jktuhfr ij çHkko gā vQxkfuLrku fujUrj l āk'kīr gš ogk; vkfFkz] l kefjd l g; kx ds l kFk jktuśrd fLFkjrk dk; e djusdk l ēy pkfg, A phu vjl sl sl kdZea'kkfey gkūsdsfy, ykykf; r gā bl ep l shkh og nū; k dks viuh rkdr dk , gl kl djuk pkgrk gā l kdZ ds orēku l nL; ; g l fuf'pr dja fd bl ea vehj&xjhcl fi NM&vxz.kh l Hkh l nL; nśkka dks cjkj dh dk ntīz feys vkš , d&nū js dh dfe; ka dks , d&nū js dh rkdr ka l s Hkjus dh dks'k'k djā rHkh bl dh çkl āxdrk dk; e jgśhA

jk"Vh; fgrka vkš {ks= ea bl ds LFkku l s çHkfor Fkka bl çdkj] nśkkaus {ks=h; rā= dsek/; e l s bu jk"Vh; , tām dks ijk djus dh ekax dhA nū jš bl fy, bu çj.kkva l s irk pyrk gšfd –f"Vdksk dñ gn rd udkj kRed Fk vkš l āk ea'kkfey gkūsds fy, {ks=h; l g; kx çkFkfed edl n ugha Fkka gj nśk ds ikl {ks=h; l g; kx dks l āFkxr : i ndj ijk djusdsfy, , d Li"V jktuhfrd , tām vkš gkl y djusdsfy, , d jktuhfrd Hkfedk Fkha bl çdkj mu ifjLFkfr; ka dk l āki eafo'yšk.k djuk vfuok; Z gšftl dsrgr osl āk ea'kkfey gq vkš bl fy, {ks=h; l āk l s mudh višk, ā ; g , tām mudh Lo; a dh /kkj.kk] muds nśkka dsk"Vh; fgrka vkš {ks= ea bl ds LFkku l s çHkfor Fkka bl çdkj] nśkkaus {ks=h; rā= dsek/; e l s bu jk"Vh; , tām dks ijk djus dh ekax dhA nū jš bl fy, bu çj.kkva l s irk pyrk gšfd –f"Vdksk dñ gn rd udkj kRed Fk vkš l āk ea'kkfey gkūsdsfy, {ks=h; l g; kx çkFkfed edl n ugha Fkka gj nśk ds ikl {ks=h; l g; kx dks l āFkxr : i ndj ijk djusdsfy, , d Li"V jktuhfrd , tām vkš gkl y djusdsfy, , d jktuhfrd Hkfedk Fkha bl çdkj mu ifjLFkfr; ka dk l āki eafo'yšk.k djuk vfuok; Z gšftl dsrgr osl āk ea'kkfey gq vkš bl fy, {ks=h; l āk l s mudh višk, ā nśkkaus {ks=h; rā= dsek/; e l s bu jk"Vh; , tām dks ijk djus dh ekax dhA nū jš bl fy, bu çj.kkva l s irk pyrk gšfd –f"Vdksk dñ gn rd udkj kRed

Fk vkš l āk ea'kkfey gkūsdsfy, {ks=h; l g; kx çkFkfed edl n ugha Fkka gj nśk ds ikl {ks=h; l g; kx dks l āFkxr : i ndj ijk djusdsfy, , d Li"V jktuhfrd , tām vkš gkl y djusdsfy, , d jktuhfrd Hkfedk Fkha bl çdkj mu ifjLFkfr; ka dk l āki eafo'yšk.k djuk vfuok; Z gšftl dsrgr osl āk ea'kkfey gq vkš bl fy, {ks=h; l āk l s mudh višk, ā nśkkaus {ks=h; rā= dsek/; e l s bu jk"Vh; , tām dks ijk djus dh ekax dhA nū jš bl fy, bu çj.kkva l s irk pyrk gšfd –f"Vdksk dñ gn rd udkj kRed Fk vkš l āk ea'kkfey gkūsdsfy, {ks=h; l g; kx çkFkfed edl n ugha Fkka gj nśk ds ikl {ks=h; l g; kx dks l āFkxr : i ndj ijk djusdsfy, , d Li"V jktuhfrd , tām vkš gkl y djusdsfy, , d jktuhfrd Hkfedk Fkha bl çdkj mu ifjLFkfr; ka dk l āki eafo'yšk.k djuk vfuok; Z gšftl dsrgr osl āk ea'kkfey gq vkš bl fy, {ks=h; l āk l s mudh višk, ā gj nśk ds ikl {ks=h; l g; kx dks l āFkxr : i ndj ijk djusdsfy, , d Li"V jktuhfrd , tām vkš gkl y djusdsfy, , d jktuhfrd Hkfedk Fkha bl çdkj mu ifjLFkfr; ka dk l āki eafo'yšk.k djuk vfuok; Z gšftl dsrgr osl āk ea'kkfey gq vkš bl fy, {ks=h; l āk l s mudh višk, ā gj nśk ds ikl {ks=h; l g; kx dks l āFkxr : i ndj ijk djusdsfy, , d Li"V jktuhfrd , tām vkš gkl y djusdsfy, , d jktuhfrd Hkfedk Fkha bl çdkj mu ifjLFkfr; ka dk l āki eafo'yšk.k djuk vfuok; Z gšftl dsrgr osl āk ea'kkfey gq vkš bl fy, {ks=h; l āk l s mudh višk, ā n{kd , f'k; kbZ {ks=h; l g; kx l āBu 'n{kd * d ckjseafi Nysdñ o"kkseā; g /kkj.kk 0; Dr dh tkus yxh gšfd ; g l āBu f'kFky gks x; k gšrFk , d {ks=h; l āBu ds : i ea bruk i Hkko'kkyh ugha gks l drk gā ftl iādkj l s n{kd nśkka }kjk f'k[kj l Eesy ds LFkxu dh ?kkšk.kk dh tkrh gšml l s rks n{kd dh jkg vkš dfBu gkrh tk jgh gā

bl jktuhfrdj.k dk l cl s T; knk l āV n{kd ds f'k[kj l Eesyka ean[kus dks feyk gā vxj bl ds ?kkšk.kk&i = ean[kk tk, rks; g fy[kk x; kFk fd n{kd ds 'kkl uk/; {k o"kZ ea , d ckj ; k vf/kd ckj



f'k[kj I Eesyu ea Hkx yxs yfdu n{kd bl dh U; nure i firZ Hkx ughadj i k; k gA vkradokn dk el yk I cl sigysn{kd ep ij Jhyadk usmBk; k FkA I Hkh ns kkausbl ckr dk I eFkZ fd; k Fk fd vkradokn dk epkcyk djus ds fy, I kefgd iz kl fd; s tkus pkfg, A i kfdLrku Hkh bl ?kksk. kk eal fEefyr FkA , d vkj rks i kfdLrku vkradokn ds f[kykQ [kMk gpyk utj vkrk gSoghanijh vkj ml dh I jteha ij gh vkradokn iui jgk gA

bu I c ckrkadsckotm Hkh n{kd dsegRo dks de djds ugha vkadk tk I drkA n{kd ds I Hkh ns k Hkjr ds i Mkl h t: j gA yfdu muea I s Hkjr ds fl ok; fdl h dh I hek nI jsl sughafeyrA n{kd ds I keus, d paksr; g Hkh gSfd I kekftd&vkfkd efs tksfd ml dsx Bu dsey vk/kkj Fksdgh&u&dghaoks nj tk jgsgA

n{kd dks I e; jgrs I kekftd] vkfkd] dk; De dks vxks c<kus dk iz kl djuk pkfg, A D; kfd i Mkl h ns kka dh; g I kp curh tk jgh gSfd Hkjr vkj i kfdLrku vius I hek I Ecl/kh fooknka ea bruk f?j x; sgdf n{kd dks ml gkaus njfdukj dj fn; k gA

n{kd dk I cl scMk jk"V^a gkusdsdkj .k Hkjr dh Hkiedk curh gSfd og n{kd dks I Qy cukusea viuh I dkjRed Hkiedk fuHk, A Hkjr dh uhr vkj Hk I s gh I Hkydj pyus okyh jgh gA D; kfd ml dks yxrk Fk fd oks vxj T; knk I fØ; gks tk, xk rks i Mkl h ns k ml dks I ang dh n"V I sn[kaxA bl fy, Hkjr igys i rh{k dkj] n[kk vkj rc gkFk dke eayks dh uhr ij pyrk jgkA vc t: jh gSfd Hkjr dks viuh 0; ki d Hkiedk fuHkkuh i Mxh vkj cgqkh; I e>ks ka dks egRo nsuk gksx n{kd ds vU; jk"V^a Hkh Hkjr I svi[kk dj jgsgdf og ml gaurRo inku djs vkj I Hkh I nL; jk"V^a I kefgd : i I s feydj paksr; kadk I keuk djA fu"d"ka

fu"d"ka%dgk tk I drk gSfd of'od {ks= ea I kd&ryukRed : Ik I s, d ubZ I xBu gSfQj Hkh cgr I kjs {ks=ka ea I kdZ us viuh Hkiedk c<p<+dj fuHkbbZ gA gkykd n{kd ds I keus vkus okyh I eL; k

vkj paksr; ka dks de djds ugha vkadk tk I drk] yfdu ge nf{k.k , f'k; k vkj I kdZ dks vk/kk Hkjk fxyk ds : Ik eans[k I drs gA tcfu fujk'kkoknh bl dks vk/kk [kkyh fxykl ds: Ik eans[krsgA n{kd dk I cl s cMk jk"V^a gkusdsdkj .k n{kd dks I Qy cukusea Hkjr dh Hkiedk c<+ tkrh gA gea vf/kd tul[; k] vR; f/kd xjhch vkj varghu NkV&ekV/s >xMka ij fujk'k gkusdh t: jr ugha gA bl dh ctk; gea {ks= ij vR; f/kd ; pk vkj cnyko okyk rFk I dkjRed n"Vdks k] pkyw I [kkj] fo'kky cktkj rFk ykHk ds utfj, I s/; ku nsuk pkfg, rkfd n{kd dks vik okftc LFkku fey I dA I kdZ ds ns kka dks bE kunjh I s iz kl djuk pkfg, rkfd cjh jktuhr vPNh vFk; oLFk vka ij gkoh u gks I davk gea; g ekudj pyuk pkfg, fd n{kd ds I keus vkus okyh paksr; kadk I kekuk ge I cdksfeydj djuk gkskA ge i kl & i kl ugha gA I kFk&I kFk gA

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- 2- ubZ vUj jkZVh; vFk; oLFk o nf{k.k , f'k; kbZ ns k] Hkkouk 'kek] jkor i fcyds ku] 2017A
- 3- vk/kqud , f'k; k dk bfrgk I MKW I j s k d ekj] 2016A
- 4- nf{k.k , f'k; k ekuokf/kdkj o vU; efs jktLFkkuh xFk uxj] tskij] ehuk cfnz k] 2016A
- 5- Regional Coporation in South Asia, "Nidhi Sharma, Kalpaz Publication, March. 2019.
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vki bl dsfy, mfr dkun dk fuekZk dj l drsgA f'k{k.k , oal
ipkj dsfofo/k l k/kuk dk i Hko'kkyh <x l smi; kx dj l drsgA
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; kst uk dksf0; kflor dj l drsgA vj l dYi dh i kfr dsfy, dk; l
dj l drsgA vki jkT; l Ukk dh i kfr dsckn Hk vius l dYi ds
i frjksk dksdpy l drsgA bl dsfy, l 0; cy vFkok i fyi cy dk
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eagrk gS bl dk eq; dkj .k ; g gS fd ml dsgkFkkaeal Ukk , oal kfr
gkxh gA og ykxkadks l e>k&c&kdj vFkok cy iz kx dj ykxkadks



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vf/kdkj Lfkkf r fd, fcuk l ektokn dh Lfkk uk ugha
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Økār vFkok l Ø; cy ds }kj k fd; k tkrk gā¹

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tul eFkZj Hkh vko'; d gā bl izdkj jkt; l Økk ij
; fn fu; æ .k dk; e gS rFkk tu l eFkZj iklr gS rks
l ektokn dh Lfkk uk l øe : i eal EHko gā D; kād
jkt & l Økk l sfojks/k; ka l sfui V k tk l drk gS vksj
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bruk gh ugha os ; g Hkh ekurs gā fd ; fn , d
l ektokn jkT; dksy iz kx dh 'kDr iklr gS rks
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fLFkr ugha gS rks tu l eFkZj iklr djus eadfbukbz
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l Ei l u ykxkād l eFkZj l ektokn dsfojks/k; ka vFkok
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i frfØ; kokn 'kDr; ka dks iklr gkskA bl izdkj ; fn
mudh bl eku; rk dk fo'ysk .k fd; k tk; rks; g dgk
tk l drk gS fd mu ij ekDI bknh fplru , oa
xk/khokn fopkj/kkj k dk l fefyr i Hko dk; e FkA
jk'Vh; vkUnkyu dsdky eaf t l izdkj dh jktuhfr
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0; xzFkA vksj bl h dk ifj .kke Hkjr dsfoHkktu ds: i
ea l keus vk; k FkA xk/kh Hkh l jdkj ds l kfk
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Fkk D; kād xk/kh th vko'; drkuq kj , oa vkspr; ds
vk/kkj ij l nk l Øk'kZ djsrjgā tc fd dkad h usk
bl dsfy, i wZ-%r\$ kj ugha FkA

vr% t; izdk'k ukjk; .k dks bl ckr dh
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voyEcu dkad ds usk dj jgs gā ml eadkad ds
fy, l ektokn dsy{; dh vksj vxsc<uk vR; kf/kd
dfBu gkskA² vr% os ekurs Fks fd ; fn Hkjr dks
vkfFkZd nf'V l s l Ei l u cuuk gS rks ml s l Økk dh
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jk'Vh; dkad l sviuk l Ecu/k fopNn dj fy; k vksj
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ykg; k nsk ea l ektokn dh fn'kk ea vc rd gpbZ
ixfr l sfujk'k FkA os, d l Ppsv FkA eal ektokn ny
dk xBu djuk pkgrs Fks tks l j pukRed , oal Ø kfUr
nf'V l s i wZ-% l ektokn gkA bl l e; rd os bl
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fd l Ppsv FkA ea l ektokn dh Lfkk uk ykdrkA=d
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eku; rk dk vc rd i wZ-% ifjR; kx dj pps FkA os
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tk; A bl h izdkj mlgk us bl ckr ij Hkh cy fn; k fd
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fuokZj djuk pkfg, A³ bl i'V HkA ea tsy l s 1946 bz
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y {k 'l ektokn dk ejk fp=* izkf'kr fd; kA bl y {k
eamlgk us Li 'V fd; k fd Hkjr ea l ektokn vkUnkyu
fd l h nū jsn s k dh udy ds vk/kkj ij l pkyr ugha
gks l drkA bl dsfy, ykdrkA=d i) fr dk puko
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l kekftd ifjorZ l Hko gks l ds kA mudk ; g fopkj
Fk fd Hkjr tS sdf'k i zkku nsk ea ekDI Zdk oxZ l Øk'kZ
dk fl) klr l ektokn l vkUnkyu ds fy, mi ; Ør
ughā gā ekDI Z }kj k ft l oxZ l Øk'kZ ds fl) klr dk
i friknu fd; k x; kj og fl QZ vksj kfxd l ekt eagh



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0; ki d fgd k QSyxhA nfyka, oa' kks'krka dksvR; kf/kd
d'V I guk i Mæka mudh nf'V ea'oxZ I æk'kZ I Ei wkZ
Økflur dk , d vax gA ospkgrs Fksfd I Ei wkZ Økflur ds
fy, fdl kuka, oadetkj oxka dks I æfBr fd; k tk;
o Økflur dsfy, mudk urRo fd; k tkuk pkfg, A⁵

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x; kA mudh nf'V ea , d I Ppk I ektokn I ekt
ykdræ ds vk/kkj ij gh dk; e fd; k tk I drk gA
mudh nf'V ea , d ykdrk=d 0; oLFkk ea i R; sd
0; fDr dks fopkj vfHk0; fDr dh , oal æk rFkk I æBu
cukusdh NW gkuh pkfg, A ; fn , d h fLFkr LFkfi r
dh tkrh gsrks ykdræ eayks u rksi i thokn ds xyke
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1948 bZ eal ektokn ny dsegkaæh ds: i
eany ds ukfl d vf/košku ea tks ifronu mi fLFkr
fd; k ml eal Økk dh i kflr ij ftruk cy ughafn; k
x; k Fkkj ml I svf/kd turk dsfy, fu'dke I ok ea
I efiæ gkus ij cy fn; k x; k FkA⁶ bruk gh ugha
mlgkæ bl ckr ij cy fn; k fd jktuærd thou
uærd eW; ka I svuq kf.kr gkus pkfg,] rHkh I Økk dh
i kflr dh i frLi) kZ I scpk tk I drk gA mudh; g
ekU; rk fu'p; gh ny ds vU; I nL; ka , oafe=ka dks
vk'p; Zpdr djuokyk FkA bl h izdkj I ektokn
i kvhZ ds 1950 bZ dsentl vf/košku eavi uk ifronu
mi fLFkr djrs gq mlgkæ Li 'V fd; k fd 'Hkkjrh;
I ektokn vkUnksy dsftu mîs; kaij geacy nuk
g\$ osfI QZ i thokn 0; oLFkk dks I ekr djuvks
d i kvhZ dk vf/kuk; dokn 'kkl u LFkfi r djuærd
I hfer ughag\$ cfYd geaLoraæ , oal eku 0; fDr; kads
d I ekt dk fuekZk djuk g\$ tks ekuoh; , oa
I kekftd thou dseW; kaij vk/kkfjr gkA⁷

bl izdkj ; g dgk tk I drk gSfd mudh
I ektokn ekU; rk, a ekDI Z , oa yfuu ds fopkj ka I s
i Hkkfor FkA yfdu I kso; r I æk , oa Hkkjrh;
I kE; okfn; kadh 'kks'kd , oafgd d i pfUk; kads dkj .k
os ekDI Bkn I s nij gVrs x, vkj vlur-% xk/khokn
ekU; rk vkads i Hko I si Hkkfor gkdj os ykdrk=d , oa

vfgd d I ektokn dh vkj vxZ j gks x, A xk/khokn
fopkj/kkj I s i Hkkfor gkus ds dkj .k gh mlgkæ , d
rjQ tgl; I R; kxg dks I æk'kZ ds I k/ku ds : i ea
vi ukusij cy fn; k oghavk; I ektokn dsuærd i {k
dks Hkh mtkxj fd; kA

t; izdk'k ukjk; .k ykdræ , oal ektokn dks
I gxkeh ekurs gævk; I ektokn ds Øfed fodkl ds
I efkd gA osekurs gæfd ykdræ , oal ektokn , d
ni jsl sij d gA⁸ osbu nksukadse/; ?kfu'V I Ecu/k dks
Li 'V dj ; g fn[kykus dk iz kl djrs gæ fd
I ektokn ykdræ I svyx jgdj i wkZ k i klr ugha
dj I drk gA mlgkæ Li 'V fd; k fd I kso; r I æk , d
I ektokn jkT; gA og vi us dks ykdræ okn ekurk
gA yfdu og ; g dgusdk I gl ughadj i krk gSfd
og I okZ/kdkjokn gsvk; ykdræ ds neu eaf'o'okl
j [krk gSD; kfd] ekDI Bkn mlgabl dh vuæfr i nku
ugh djrk gA 1872 bZ ea dE; fuLV b. Vju skuy ea
dkyZekDI Z ds }kj k fn, x, 0; k[; ku I s; g Li 'V gS
fd I ektokn dh LFkki uk dsfy, I 'kL= Økflur gj
LFkku ij vfuok; Z ugha ekuk tk I drk gA tgl;
ykdrk=d <æ I sl ektokn dh LFkki uk dk ekxZ
[kyk gvk g\$ ogk ml h dsek/; e I sl ektokn dh
LFkki uk dh tk I drh gA bl h vk/kkj ij I kso; r
I kE; okn; g ?kksk.kk djrs gæfd I kso; r I æk , d
ykdrk=d nsk gS vkj mudk ykdræ i thokn
ykdrk=d 0; oLFkk I s JsB gA⁹ t; izdk'k mu
I ektokfn; kads Hkh vkykd Fks tks egkRek xk/kh dks
i frfØ; kokn ekurs FkA muds vuq kj egkRek xk/kh
d egku Økflurdkjh ekurs FkA¹⁰ t; izdk'k ukjk; .k ds
vuq kj I ektokfn; kads , oal ektokn vkUnksy dks
xk/khokn fopkj/kkj I s rhu ckrka dks vi ukuk gkæ¹¹
i Fke& uærd eW;] f}rh; & I R; kxg] rrrh; &
jktuærd , oavkfkd fodUnhdj .k A

bl izdkj t; izdk'k ukjk; .k Økflurdkjh
I ektokn ds LFkku ij ykdrk=d I ektokn dh
LFkki uk ij cy nrs gA mlgkæ Li 'V fd; k fd
dkyZekDI Z us ftl I e; Økflurdkjh I ektokn dh
ekU; rk dk i friknu fd; k ml ds i 'pkr-ykdræ us
vi uk fodkl uohu : i eadj vR; kf/kd 'kfdR i klr
dj yh gA vr% I ektokn dh LFkki uk vc ykdrk=d
<æ I sgh gkuh pkfg, A osekurs gSfd , d I ektokn
jkT; dks enyHkur ekU; rk vkadh LFkki uk djuh pkfg, A



mlga uſrd eW; ka dks viukuk pkfg, rFkk uſrdk foghu thou dksvLohdkj djuk pkfg, A bl h izdkj os egkRek xk/kh dh gh rjg ; g Lohdkj djsrgſd l k/ku vkj l k/; dk ikjLifjd l ECU/k vR; kf/kd egſoiwkZ gA mPp vkn'kkſdsvuq i fd, x, dk; ZmPp y{; ka dh ikflr eal gk; d gksrgA bl dsfoijhr vkpj.k dj mPp vkn'kZ; k y{; dh ikflr ughadh tk l drh gA uohu l ekt dh LFkkiuk ds fy, Lohdkj dh x; h vkn'kZ eW; ka dks }U}kRed i) fr ifjofrſr ugha dj l drh gA bl izdkj l ektokn dh l Qyrk dsfy, t; izdk'k ukjk; .k ykdrkſ=d jkT; dks vfuok; Z ekurs gA mlgkaus ; g Hkh Li'V fd; k gS fd , d okLrfod l ektokn l ekt dh LFkkiuk rHkh l EHko gksk tc ml sykd'kkl u ds: i eal fjoſrſr dj fn; k tk; A fl QZjk'Vh; Lrj ij l ektokn dh LFkkiuk ; k ppkZfujFkd gA¹²

bl Ōe ea ; g mYy[kuh; gSfd xk/khokn fopkj/kkj l s vR; kf/kd i Hkkfor gksus ds cktm t; izdk'k ukjk; .k xk/khokn dks l ektokn dk i; kZ ughaekurs gA yſdu] bl ds l kFk gh l kFk os ; g Hkh Lohdkj djsrgſd xk/khokn dks Hkkykdj Hkkjr ea l ektokn dh LFkkiuk l EHko ugha gA oKkfud l ektokn; ka ea xk/khokn dks ijkr u i fkh dgdj vLohdkj dj fn; k FkA t; izdk'k th bl dsfojksk ea FkA muds vuq kj egkRek xk/kh , d egku l ekt d ŌkſrdkjH Fkſ ftudh futh ekU; rk, aFkha vkj ftudk viuk i Fkd eksyd fplru FkA xk/khokn l ekt 0; fDrxr , oal kekftd thou ds mu eW; kadksuohu l H; rk dk vk/kkj cukuk pkgrk gS ftl dh ikflr gh l ektokn dk y{; gS vkj ftl dh ikflr ds fy, l ektokn mRl pl gA¹³ t; izdk'k ukjk; .k ds vuq kj & ^; | fi nk'kZud nf'V l s xk/khokn /kfeZ vk/kkj ij vk/kkfjr gStc fd l ektokn n'kZ i wkZ; k Hkſrd , oal fku fujiſk gA yſdu 0; ogkfjd thou ea Hkh xk/khokn l ektokn l ſfhku ugha gA l kekftd , oa vkfFkd l ekurk 'kks'k.k l ſe[Dr] ikjLifjd ekuoh; l g; kx] i R; ſd dsdY; k.k dk l kekftd mŪkjnkf; Ro , oa i R; ſd dk l ekt ds ifr mŪkjnkf; Ro l ektokn dh rjg gh xk/khokn eorſku gA fu"d"kk&

fu"d"kk& t; izdk'k ukjk; .k ds vuq kj xk/khth dk nſ jk i e[dk ; ksnku vfgd d Ōkſr dk gA

mul sigys'kksk.k dsfo#) l ſk'kZ dk , d ek= l k/ku fgd d Ōkſr FkA yſdu fgd d Ōkſr dk mi ; kx u rksvkſpR; i wkZ FkA vkj ugha l ſe ; k l yk ; kx; FkA vr% l kekftd vl; k; dsfo#) gksusokyk dkbZ l ſk'kZ i wkZr i klr ugha dj l drkA tc fd 'egkRek xk/kh dk vl g; kx] l fou; voKk , oal R; kxg dh i) fr dus nfyR , oa 'kks'kr l ekt dks l kekftd ifjorZu dk uohu vL= inku fd; ka egkRek xk/kh dk ; g vL= l kekftd l ſk'kZ dks 'kks'k i wkZ < x l s vkxsys tkrsgq l kekftd U; k; rFkk l kekftd ifjorZu dh ek x dks l epr vfhk0; fDr inku dhrh gA bl h izdkj t; izdk'k ukjk; .k Hkkjr; l ekt eorſku fo'kerk] 'kksk.k] HkZvkpkj] iz kkl u eal okZ/kdkjokn i ſr ds fojksk ea FkA vr% mlgkaus 1975 bZ eal dVdky dh mn'kksk.kk l s Bh d i mZ' l Ei wkZ Ōkſr* dk ukjk fn; kA bl dk e[; mſ; l ekt , oajkT; eorſku 'kksk.k] mRi hMſ] vl; k;] l okZ/kdkjokn i ſr; kadk vlR , oa , d uohu l ekt , oajktuhfrd 0; oLFk dk fuekZk djuk FkA bl izdkj xk/khokn l k/ku ; k rduhd dk mi ; kx djus ds l kFk&gh&l kFk t; izdk'k ukjk; .k }kj k tgk; l Ei wkZ Ōkſr* dk vkgeku fd; k x; k ogha Mkw ykſg; k us' l IrŌkſr* dh viuh ; kstuk mi l Fkr dhA vr% bu nksuka fopkj dkdh rduhdh ; k l k/kukadh rgyuk okNuh; i rhr gkrh gA

l nHkZ xŪFk l ſh

- 1- t; izdk'k ukjk; .k] VmkMſ -vkj/y fjhMſ u] i' B&124A
- 2- frey id kn] l a t; izdk'k ukjk; .k] l kſkyTe l okh; , .M fMekſ kh ¼ f'k; k i fcydſ'ku- cEcbZ1964½ i' B&108
- 3- t; izdk'k ukjk; .k] 'VmkMſ , U; w l k kZ/h' dkd Ōkſ dYpjy ŸhMe] 1955] i' B&14] 19 , oa20A
- 4- Mkw j?wſd] t; izdk'k ukjk; .k ds fopkj ¼ ykſdHkkjr] bykgckn] 1977½ i' B&20A
- 5- mijkDrA
- 6- jke eukg] ykſg; k] ekDI] xk/kh , .M l kſkyTe ¼ gñjkckn] 1969½ i' B&121A
- 7- jke eukg] ykſg; k] n fcy Vwikou , .M vnj jkbfVſl ¼ gñjkckn] 1956½ i' B&58A
- 8- mijkDrA
- 9- mijkDrA
- 10- jke eukg] ykſg; k] ekDI] xk/kh , .M l kſkyTe] i w m-] i' B&519 A
- 11- mijkDrA
- 12- jkeplnzx[rk] i w m-] i' B&83&85A
- 13- t; izdk'k ukjk; .k] , i hŌkſ fjdULVDI u bu bf.M; k i Mſy l h] i' B&90&92A





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I u~1857 dk fonkg % tkrh; nalk



& Mkw eks vl Qj [kku
vfl LVVV i kQd j &
bfrgkl foHkx]
i w; HkkAjko nopl egkfo|ky;]
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asfark4@gmail.com

djhc , d l nh rd fcfV'k gphr eajgdj cakky usml l s
vi uk ey fcBk fy; k FkA fdl ku vdky l scjckn gksx; svk; u; s
vkfFkd cks>kal sfi l jgsFkA u; si <&fy[ksyx i f'pe dh rjQ nsk
jgsFksvk; ; g mEehn dj jgsFksfd vxst h mnkjr k ds tfj; srjDdh
gksxA ; gh ckr deks k nf{k.kh vk; i f'peh fglnrk u e] enkl vk;
cEcbZeaFkha yfdu mRrjh l wkaeabl rjg dk dkbZ Hkh >plko ; k
Qjekcnkj h ugha Fkh vk; fonkg dh Hkkouk vke turk e] vk;
[kkl rk; l sl kelloknh l jnkjkavk; mudsvuq kf; ; ka e] c<+jgh Fkha
turk ea Hkh vl rksk vk; tkjnkj fcfV'k fojkskh Hkkouk, a [knc Qsyh
Fkha Åps oxl ds yxka dks bu fonf'k; ka dh vdm+ vk; mudk
viekutud 0; ogkj cgr v[kjrkA turk dksbLV bf.M; k dEi uh
dsvQl jkadskyyp ; k vutkui u dh otg l scgr ed hcramBkuh
i Mfha ; svQl j mudh cgr vl l sipfyr jhfr; ka dh vogsyuk
djrsvk; ns kokfl ; kadsfopkj kadk dkbZ/; ku gh ughansA , d cgr
cMh vkcknh i j euekuh djusdh rkdr l smudsfnekx fQj x; sFks
vk; muga dkbZ Hkh jkd ; k yxke cnkz r ugha Fkha ; gk rd fd ubZ
U; k; &iz.kkyh] tksmugkausdk; e dh] og Hkh , d vkrad dh phit cu
xbZ D; kfid , d rksml ea cgr & l h my>ua Fkha vk; ml jsU; k; k/kh'k
ns k dh Hkk'kk vk; i FkVkal svi fjfpr FkA

I u~1817 ea gh I j Vkh l eujks us xouj tujy ykMZ
gsLVlt dks fcfV'k gphr dsQk; nsckusdsckn dgk& ^yfdu ; s
Qk; ns cgr egas i Mga turk dh vktkn] jk'Vh; LoHkko vk;
turk dks tksphit Hkh l Eekuuh; cukrh g; ml dscfyngu dh dher
i j ; sQk; na [kjhsx; sgA bl fy, vxst h rkdr l sfglnrk u dks
thrusdk urhtk ; gk dh turk dksmBkusdh txg ml dksfxjkuk
gkska 'kk; n thr dh , d h dkbZ Hkh fel ky ugha g; ft l eans kokfl ; ka
dks l jdkjh dke l sbruk T; knk vyx dj fn; k x; k g; ftruk fd
fcfV'k Hkkjr ea**

bl rjg eujks us gphr <kps ea fglnrk fu; ka dks 'kkfey
djus ds fy, dgkA , d l ky ckn eujks us fQj dgk& ^fon'skh
fotrkvka us ns kokfl ; ka ds l kFk fga k dk vk; vDI j cgr T; knk
cjgeh dk cjrk fd; k g; yfdu fdl h usHkh mul sbruh uQjr dk
cjrk ughafd; k] ftruk geusfd; k gA fdl h usHkh l kjh turk dks
vfo' l uh; crkdj] b&ekunkjh dsfy, vl eFkZcrkdj] bruk dyidr
ughafd; k] ftruk geusfd; k gA geusfl QZml h txg mudksHkriZ
djuk Bh d l e>k] tgl gekjk dke mudsfuc py ugha l drk FkA
; g ckr fl QZvupkj gh ughaekye nrh] cfYd cst k gsf d ge foftr



turk dspfj = dksgh dyidr dj nā^{1**}

nks fl [k yMkb; ka ds ckn l u~ 1850 rd fcfV'k gphr iatkc eaQSyk nh xba egkjktk jat hr fl g] ftl us iatkc dh fl [k gphr dks c<k; k vks dk; e j [kk Fkk] mudk l u~1839 eafu/ku gksx; ka l u~1856 eavo/k dksNhu fy; k x; ka oS srksdjhc i pkl cjl ka l svo/k fcfV'k gphr eagh Fkk] D; kad og , d v/khu jkT; Fkk ogkadk uke ek= dk 'kkl d csl Fkk vks cgr fcxMk gvk Fkk vks ogka i j fcfV'k jst hM/ l oZ kfDreku FkA ml ead hcrkadh gn gksxbZ Fkh vks l gk; d l d ds<kpsdh l kjh cjk b; k fn [kkbZnsr FkhA

eb] l u~1857 eaej B dh fgnl rkuh QkSt us cckor dhA fontg dk [kQ; k rks ij cgr vPNk l xBu fd; k x; k Fkk] yfdu fu; r l e; l sigysgh bl mHkkj l surkvkadh l kjh; kst uk gh fcxM+xbA; g fl QZ, d QkSt h cckor l sdghaT; knk cMh phT FkhA ml uscMh rsth l sfontg dk : i ysfy; k vks og fgnl rkuh vktkn dh yMkbZ gksxbA vke turk ds ykdfiz fontg ds : i ea; g yMkbZ fnYyh] l a pr i klr vorZeku mRrj ins kZ fcgkj vks e/; fgnl rku ds dQ fglI kard gh l hfer FkhA [kkl rks l srks; g , d l kellrokn fontg Fkk] ftl ds vxvk l kellrokn l jnkj ; k muds l kFkh Fks vks ftl eafons kh&foj kkh 0; ki d Hkkoukvka l sl gk; rk feyha ykfteh rks ij bl dh fuxkg cp& [kpsk y jktoak ij Fkh] tksvc Hkh fnYyh ds egyka ea Fkk] yfdu nqy] v'kDr vks c<k gksx; k FkA bl fontg eafgnl rku vks ed yekuk nkskausgh fglI k fy; ka

bl fontg ea fcfV'k gphr dks viuk ijk&ijk tjs yxkuk i MhA yfdu vkf[kj ea ml dk neu fgnl rkuh enn l sgvka ijk gh gphr dh l kjh i nk; 'kh detksj; k Aij vk xba ; g gphr fons kh jkT; dks m [kkM+Qdus dh viuh vkf[kj th&rkM+ dks'k'k dj jgh FkhA l kellrokn l jnkj ka dks foLr i ns kkaeavke turk dh l gkufk i klr Fkh] yfdu os ykpj Fk vl xBr Fks vks muds l keus dkbZ jpukRed vkn'kZ; k l kfgd fgrdj edl n ugha FkA bfrgk ea os viuk dke ijk dj pds Fk vks vkxs mudsfy, dkbZ txg ugha FkhA muea, d shkh cgr l s ylx Fk ftudh fons kh jkT; ds f[kykQ gks okys

fontg l sl gkufk i rks Fkh] yfdu ml gkaus l ; kusi u l s dke fy; k vks vyx [kM+gq bl ckr dks n [krs jgs fd dks l k i {k vf/kd l cy gsvks fdl dh thr dh l Hkkouk gS cgr l sykskausns knksf; kadk dke fd; ka dy feyk dj fgnl rkuh j tokM+; k rks vyx jg; ; k ml gkaus vaxt ka dh enn dh (D; kad tks dQ Hkh muds i kl Fkk] ml stks [ke ea Mkyusea ml ga Mj yxrk FkA uskvka ea dkbZ Hkh dks , drk ykusokyh Hkkouk ugha Fkh] fl QZ, d fons kh&foj kkh Hkkouk Fkh vks ml dsl kFk vius l kellrokn fo'kksf/kdkj ka dks cuk; s j [kus dh bPNk Fkh vks ; g ml jk'Vh; Hkkouk dh txg ughays l drh FkhA

vaxt kadksxj [kkadh enn feyh] yfdu ml l s Hkh T; knk rkTt dh ckr ; g gSfd ml ga fl [kka dh enn feyhA fl [k muds nqeu jgs Fks vks vaxt ka us dQ gh cjl igys muds gkj; k FkA ; g l pep gh vaxt kadsfy, , d rkjhQ+dh ckr Fkh ; k cjk bZ dh] ; g vius&vius [k; ky dh ckr ga gk] ; g t: j tfgj gS fd ml oDr fgnl rkuh turk dks, dl ea ckkus okyh dks Hkkouk dh deh FkhA vkt dy t h dks; r rksvHkh vkus dks Fkh (vHkh fgnl rku dks cgr rdyhQ+vks ed hcr l guh Fkh] bl ds igysfd og ml l cd dks l h [kkr] tks ml sl Pph vktkn nsrka fdl h ijkftr vkn'kZ dsfy, ; kuh l kellrokn <kpsd fy,] yMusl svktkn gkfl y ughags l drh FkhA

fontg ea Nki ke j yMkbZ dj usokys dQ ekd dsurk l keusvk; A muea l s, d rksfQjkt+kkg Fkk (tks fnYyh ds cgknj'kkg dk fj'rnkj FkA yfdu muea l cl s T; knk i fr Hkkoku usk Fk rkr; k vks ftl us vaxt ka dks ml oDr Hkh fdrusgh eghu kard ijs kku fd; k] tcf d gk ml dsl keus l kQ+rks ij fn [kkbZns jgh FkhA vkf[kj eatc og uehk dks i kj dj dsej k Bk i ns kkaeavi usgh vknfe; ka l sl gk; rk i kusdh vk'kk l s i gpk] rks fl QZ ml dk Lokx gh ugha gvk] cfYd ml dsl kFk nxk Hkh dh xba bu l cds Aij , d uke vks gSftl dsfy, turk eavc Hkh bTtr gS vks og uke gSy {ehckbZ dk] tks>k] h dh jkuh Fkh (ftl dh mez chl cjl dh Fkh tksy M+&Y M+sejkh xba mu vaxt l uki fr; ka us ftl gkaus ml dk epkcyk fd; k] ml ds ckjsea; g dgk fd og ckx uskvkae ml okre vks



I cl sT; knk cgnjg** FkA

xnj ds vaxstH Lekjd dkuig eavkš nū jh
txgkaecuk fn; sx; sgA mu fglūrkfu; kadsftūgkaus
viuh tkuanh dkbZLekjd ughagA dHkh&dHkh fontggh
fglūrkfu; kauscMk Øij vks ccjrk i wZ0; ogkj fd; k(
osyks vl æfBr Fkš ncsqg Fks vks osvDI j fcfV'k
vR; kpkjka dh [kcjkaI sukjkt+gksmBr sFkA yfdu bl
rLohj dk , d nū jk igyW Hkh gsftI usfglūrkfu ds
fnekx ij viuh Nki Mkyh vks ejst nsearks [kkl rks
I } xkp vks dLckæj ml dh ; kn cuh gpbZgA gj 'k[+
ml dksHkny tkuk pkgxk] D; kkd og , d cMk Hk; kud
vks ?k.kkLin rLohj gs vks vaxst orēku ; q) ea
ukfRI ; ka } kjk ccjrk dsu; seki n. M cu x; sgš fQj
Hkh ; g dgk tk I drk gsfd ml eabā ku viuh cgh
I h&cgh 'kDy ea I keusvkrk gA yfdu ml dksfl Qz
ml oDr gh Hkyk; k tk I drk gs vks ml dsckn ml
oDr gh og vukl fDriwZvks vfhk0; Dr gksl drh gs
tc og I pep gh xqtjs tekusdh pht+gks tk; vks
ml dk ekstmk oDr I sckbzrkYypd u jgA yfdu tc
; kn fnykus okyh dfm+ k ekstm gA vks tc mu
?kVukvka ds i hNsdh Hkkouk cuh gpbZg vks fn [kkbznrh
gs rksgekjh turk eamudh ; kn Hkh cuh jgsxh vks
ml dk vl j fn [kkbz nrkA rLohj dks <d nsus dh
dks'k'k I sog feV ughatkrh] cfYd og fnekx eavks
Hkh T; knk ?kq tkrh FkA fl QZLokHkkfod : i I sml I s
cjrusi j gh ml dk vl j de fd; k tk I drk gA

fontg vks ml dsneu dk bfrgkl eacgr gh
xyr vks >Bk fp= fn; k x; k gA ml ds ckjs ea
fglūrkfu D; k I kprsgš ; g ckr fdrkc ds i lūkaea
'kk; n gh ugha i rk yxrh gkA I kojdj us'fn fglVh
vkd fn okj vkD bāM; u bāMi bāI * uked fdrkc
djhc rhl I ky igysfy [kh] yfdu og fdrkc Qks u
gh tCr dj yh xbZ vks og vc Hkh tCr gA dN
Li "VHkk"kh vks I Eekuuh; vaxst+ bfrgkl dkjka us
dHkh&dHkh inkz mBk; k gs vks gedks ml tkrh;
vgd kj vks ml gplēr h eukofrr dh >yd feyh gs
tks, d cgr cMsi s kus i j 0; ki d Fkh] vks esyh u dh
'fgLVh vkD fn E; fVuh' eavks VKk I u vks xšV dh
'jkb t , . M Qy fQy eav vkD fcfV'k : y bu bf. M; k*
ea tks c; ku fn; s x; s gs mudh Hk; d jrk I svkneh

cpš gksmBrk gA ^gj , d fglūrkfu] tks vaxst ka dh
rjQ I syM+ughajgk Fkk] vks rkavks cPpkadk GR; kjk
ekuk x; kA fnYyh dsjgusokyka dk ¼vks muea, d shkh
yks Fkš tks gekjh I Qyrk dh [kys rks ij viuh
bPNk idV d jrs Fkš dRysvke djus dk gpe nsfn; k
x; kA** rēij vks ukfnj' kkg dsfnu ; kn vk x; } yfdu
; g u; k vkrd gksbrusT; knk oDr rd jgk vks brus
cM+fgLI ka ea fd muds dkjuka Hkh Qhds i M+ x; A
yWekj dh I jdkjh rks ij , d grrsdsfy, btktr
feyh vks og djhc , d eghusrd tkjh jghA ml ds
I kFk dRysvke Hkh tkjh FkA

tuju uhy us viuh [kuh eplnea fd; A
^fl i kgh vks xš&fl i kgh I Hkh [kuh eplnead j jgs Fks
vks osmez; k L=h&i # "k dk fygt fd; sfcuk eplnea
ds gh ns'kh vknfe; ka dk dRy dj jgs FkA fcfV'k
i kfyZ keV ds jgusokx tkaexouj tuju dh fji kVka
ea; g ckr ntZgsfd ^ckfx; ka dh rjg ckr vks rkavks
cPpkadk Hkh cfynku dj fn; k tkrk gA** mudks
bjknru Qkl h ughanh xbZ cfYd xpkaeavks yxkdj
gh mudks ekj Mkyk x; k---- vks tks cps jgs mudks
xkyh ekj nh xbA** ^Qkl h nsusokysLo; d oadkadsny
ftyseax; svks ml oDr 'kkšd; k Qkl h nsusokyka dh
deh ugha FkA , d 'k[+ usrkscMk rkjhQ+dsI kFk mu
ykska dh fxurh crkbZ ftudks ml us , d ^dykRed
<æ I š [kRe dj fn; k FkA dN dksml usvke ds i Mka
ij yVdkdj Qkl h nsnh Fkh] dN dksml usgkFkh dh
i hB ij I s i Vd fn; k Fk vks bl txyh U; k; ds
f'kd kj gg ykska dks rQjhg dsfy, vkB ds vad dh
'kDy ea , d I kFk ckak x; k FkA** ; gh ckr dkuig ea
gpbZ y [kuA eapbZvks nū jh txgkaeapbA

tuju uhy dh ml ds drK ns'kokfl ; ka } kjk
efirZ [kMk dh xbZ fglūrkfu ds [kpš I A og efirZ rks
fcfV'k jkT; dh I Pph i rhd gs tš h og ml oDr Fkh
vks ckn eajghA fudYI u dh efirZ i jkuh fnYyh eavc
Hkh uach ryokj rkus [kMk gA²

bl i gkus bfrgkl dk ftØ djuk cjk gs
yfdu mu ?kVukvka ds i hNs tks Hkkouk Fkh] og mu
?kVukvka ds I kFk gh [kRe ughapbA og ckdh cp jgh
vks vc Hkh tc dHkh dkbZ I dV vkrk gs rksogh pht+
fQj fn [kkbznrh gA verI j vks tfy; kkyk cks+ds



ckjseanf; k tkurh g\$ yfdu xñj dsckn tksdñ
g\$ ml dk ml dksirk ughag\$; gk rd fd mudk
Hkh tksgekjsgh tekuseag\$ g\$svk\$ ftl usubzi h<ea
dMøgv Hkj nh g\$ l ketT; okn vk\$, d jk"V^a dk
nñ jsjk"V^a ij jkT; cjk gkrk g\$; gh ckr tkrh;
vgøkj ds l kfk g\$ yfdu vxj l ketT; okn vk\$
tkrh; vgøkj tñ+tk; ð rksmul srks , d cgr gh
Hk; ðj gkyr gkxh vk\$ vkf[kj eam l l sl Ecfu/kr l Hkh
yxska ea fxjkoV vk; xhA bñyM ds Hkfo"; ds
bfrgkl dkjka dks bl ckr ij xk\$ djuk gkxk fd
bñyM dsiru eam dsl ketT; okn vk\$ ml dstkrh;
vgøkj dk fdruk vl j jgk& mu phtka dk vl j
ftl gkaus ml ds l kozfud thou dks nñ'kr dj fn; k
Fkk vk\$ ftl gkaus ml svi usgh bfrgkl vk\$ l kfgR; ds
i ki kadk folej .k dj k fn; k Fkka

tc l sfvDj e'kgj g\$ vk\$ teZuh dk
fMDV\$ j cuk gedks tkrh; vgøkj ds ckjseacgr
dñ l qusdksfeyk g\$ mu fl) kùrkadh funk dh xbz
g\$svk\$ vkt Hkh l a ðr jk"V kadsurk mudh funk djrs
g\$ tho&foKku dsfo'k\$K crkrs g\$fd tkrh; rk , d
dkjh dkYi fud pht+g\$svk\$ vf/ki fr&tkfr tñ h dkbZ
pht+ughag\$ yfdu tc l sfvV'k jkT; 'kq g\$ vk\$
gedks fglñrku ea tkrh; vgøkj dh l kjh 'kDya
nñ kusdksfeyh g\$ bl gñer dk l jk vkn'kòkn ml
vf/ki fr&tkfr dsfl) kùr ij Fkk vk\$ l jdkjh <kpk
ml h dh cfu; kn ij [kMk Fkka vl fy; r ea
vf/ki fr&tkfr dh Hkkouk rks l ketT; okn ea tletkr
g\$ ml eadkbZ/kk\$kk ughaFkk tksyxs gñer dj jgs
Fk\$ mlgkaus bl dh Li"V 'kCnka ea ?k\$K. kk dhA 'kCnka l s
T; knk rkdñ ml cjrko ea Fkh tks turk ds l kfk
fd; k tkrk Fkka ih<h&d&ckn ih<h eñ
, d&d&ckn&nñ js l ky eñ fglñrku ds l kfk , d
jk"V^a ds : i ea vk\$ fglñrkfu; ka ds l kfk 0; fDrxr
: i eacbtTñr vk\$ uQjr l shjk g\$ cjrko fd; k
x; k g\$ gedks crk; k tkrk Fkka fd vaxtka dh , d
'kgh tkfr Fkh ftl dksge ij gñer djusdk vk\$
gekdsxykeh eaj [kusdk nñh vf/kdkj feyk g\$ Fkka
tc ge fojksk djrs Fk\$ rks gedks 'kgh tkfr dsfl g
LoHko dh ; kn fnykbZ tkñA , d fglñrku dh rjg
; g fy[krsgg eñ's'kezegl ð gkrh g\$ D; kñd ml dh

; kn l srdyhQ igprh g\$vk\$ ftl ckr l svk\$ Hkh
T; knk rdyhQ gkrh g\$ og ; g g\$fd bl cbTñr ds
l keusgeusvj l srd l j >ðk; k vk\$ ml dkscnkZ r
fd; kA bl dsf[kykQ eñsrksfd l h Hkh <x l sfojksk dks
i l lñ fd; k gkrk pksml dk urhtk dñ gh D; kau
vkrka vk\$ fQj Hkh ; g vPNk g\$ fd vaxt vk\$
fglñrkuh nkska gh ml dks tku yñ D; kñd ; g rks
bñyM ds fglñrku ds l kfk l Ecu/k dh euk\$Kkfud
i "BHñe g\$ euk\$R dh vgfe; r gkrh g\$vk\$ tkrh;
Lefr; k xgjh gkrh g\$

, d mnkgj .k Lo: i m) j .k l sge ; g egl ð
dj l dksfd fglñrku ea T; knkrj vaxtka ds D; k
[k+ky g\$vk\$ osfd l rjg cjrko djrs g\$ l u-1883
ea bYcV&fcy&vkñkyu ds l e; l vudj uñ tks
fglñrkuh l jdkj dsfon\$ l fpo jgs Fk\$, syku fd; k
fd ^; g fcy ml fiz fo'okl dsfo#) tkrk g\$ rks
fglñrku eaj vaxt dsfny eaj pksog fdruh gh
cMh txg ij gks; k Nks/h txg ij gk\$ pksog phQ+
dfe'uj gks; k ok; l jk; gks; k pk; &ckxku dsekfyd
dk l gk; d gk& fd og ml tkfr dk l nL; g\$
ftl dks bz oj us thrus vk\$ gñer djus ds fy,
cuk; k g\$**3

l nHkZ xñFk l ðh

- 1- , MoMZVkel u jkjk 'fn efdx vkñd fn bf.M; u fiñ st*
ñ1943½eam} rA i "B& 273&74
- 2- , l - , - , fjToh ñ ñ YñMe LVxy bu mRrj iñskI
y[kuÅ] 1957] i "B& 458A
- 3- , MoMZVkel u jkjk jkbt+, .M QyfoYen vkñd fcfV'k
: y bu bñM; k* eam) rA





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I jdkj }kjk i nwk.k ds jksdFkke ds fy, i kfjr
dkuu , oa lk; kbj.k I ECU/kh tu tkx#drk



I kjka k

& MkW m"kk 'kPyk
vfl LVUV iksQdj &
ch- , M- foHkx]
n; kuln xYlZ ih- th- dkyst]
dkuig &208001 %mRrj ins k½

b&esy %

dr.ushadgcollege@gmail.com

I jdkj us i nwk.k ds jksdFkke ds fy, dkuu i kfjr fd, g&
vki ds fopkjkuq kj i nwk.k I ECU/kh dkuu ds i Hkko"kyh u gksus dk
dkj.k D; k g& D; k vki ds fuol {ks= eadMsdh I eL; k] xUnk ty
fudkl h dh I eL; k ; k fdl h vU; i nwk.k dh I eL; k ds fujkdj.k ds
fy, ekgyYk fuokfl ; kaus I afBr gkdj dkbZ iz kl fd; k g& D; k
vki i ; kbj.k I j {kk I sl EcfU/kr fdl h I afBu dh I nL; g& D; k vki
bl I sl ger g&fd i nwk.k dh I eL; k iz-fr dh vfu; fl=r nkgu ds
dkj.k mRiUu gpZ g& fdUr q i k—frd I d k/kula dk mi ; ks ekuoh;
I H; rk ds fodkl ds fy, vko"; d g& D; k vki bl eal ger g&fd
dN fo"kskKla dk ; g dguk g&fd Hkko dh xgjkBZ I sckjxak djds
ml dk i kuh fudky yusl shkfxr ty dk I kr de gksjgk g&rFk
dNkaei kuh dh deh gksjgk g& D; k vki bl fopkj I sl ger g&fd
uxjh; {ks= eavud , d sm | ks /ku/ksLFkfi r g&ftuds}kjk ok; j ty
v& /ofu i nwk.k mRiUu g&rk g& uxj ea; krk; kr I smRiUu "k&jxg
dksfu; fl=r djus ds fy, vki D; k I p-ko nakh D; k vki ; g vutko
djrh g&fd Ldwy dkyst ea i ; kbj.k f"kk dks i k B; Øe dk vax
cuk; k tkuk pkfg, \

lk; kbj.k I ECU/kh tkx#drk vR; Ur vko"; d g& I ekt ds
i R; d oxL dks bl ds i fr tkx#d g&uk pkfg, A vf/kdk&kr% yks
i ; kbj.k ds i fr mnkl hu Hkkouk j [krs g& I kekU; nF'Vdksk ea
i ; kbj.k dks mPpre LFkku rks i klr g& i jUr q I t&r dk vHkko g&
or&ku vkys [k ea i ; kbj.k I ECU/kh tkx#drk , oa I kekU; nF'Vdksk
I sl EcfU/kr rF; kadh i q'V ds fy, mUkj nkrkv&al stksi z'u i nNsx; soks
bl i d&j g&&

D; k vki dks Kkr g&fd I jdkj us i nwk.k ds jksdFkke ds fy,
dkuu i kfjr fd, g& vki ds fopkjkuq kj i nwk.k I ECU/kh dkuu ds
i Hkko"kyh u gksus dk dkj.k D; k g& D; k vki ds fuol {ks= eadMsdh
I eL; k] xUnk ty fudkl h dh I eL; k ; k fdl h vU; i nwk.k dh
I eL; k ds fujkdj.k ds fy, ekgyYk fuokfl ; kaus I afBr gkdj dkbZ
iz kl fd; k g& D; k vki i ; kbj.k I j {kk I sl EcfU/kr fdl h I afBu
dh I nL; g& D; k vki bl I sl ger g&fd i nwk.k dh I eL; k iz-fr



rkfydk I a; k & 1

D; k vki dks Kkr gSfd I jdkj us i ntk.k ds jkdFkke dsfy, dkun i kfjr fd; sgA
¼ kSfd I ri dk i Hkko½

क्र. सं.	शैक्षिक स्तर	कुल संख्या	हाँ	नहीं	कुल प्रतिशत
1.	अशिक्षित	40	-	40(10%)	10%
2.	प्राइमरी	0	-	-	-
3.	हाईस्कूल	40	20(5%)	20(5%)	10%
4.	इण्टरमीडिएट	80	20(5%)	60(15%)	20%
5.	स्नातक	100	80(20%)	20(5%)	25%
6.	स्नातकोत्तर	140	140(35%)	-	35%
		400			100%

dh vfu; fu=r nkgu ds dkj.k mRiUu gPz gS fdUrq
ik—frd I d k/kuka dk mi; kx ekuoh; I H; rk ds
fodkl dsfy, vko”; d gS D; k vki bl eal ger gS
fd dN fo”kskKka dk; g dguk gSfd Hkfe dh xgjkBz
I sckfjx djds ml dk i kuh fudky yus I s Hkfe x
ty dk I kr de gksjgk gS rFkk d pkae i kuh dh deh
gksjgk gS D; k vki bl fopkj I sl ger gSfd uxjh;
{k= ea vucl, d sm | kx /ku/ks LFkfr gS ftuds }kj
ok; ij ty vks /ofu i ntk.k mRiUu gkrk gS uxj ea
; krk; kr I smRiUu “kkj xg dksfu; fu=r djusdsfy,
vki D; k I pko naxh D; k vki; g vuHko djrh gSfd
Ldny dkyst ea i; bj.k f”k {kk dks i k B; Øe dk vx
cuk; k tkuk pkfg, \ I kekl; ty dks i ntk.k dh

I eL; k dsdkj.k vks fuokj.k I svoxr djkusdsfy,
D; k fd; k tkuk pkfg, \ cgdk jSM; k@Vsyhfotu ij
i; kbj.k I j {kk I Ecu/kh dk; Øeka dk in”ku fd; k
tkrk gA vki ds fopkjkuq kj bu dk; Øeka dk D; k
i Hkko i Mk gS, d k dgk tkrk gSfd jSM; kSfe r k
ijek.kqce ij h {k.k bR; kfn ds }kj ok; p. My ea i ntk.k
dh I eL; k mRiUu gksjgk gS rFkk tyok; qvks ekuo
LokLF; ij budk ifrdny i Hkko i M+jgk gA D; k vki
bl fopkj I sl ger gS D; k vki i; kbj.k I j {kk ds
fy, D; k I pko nax i I Un djxhA

mi; Dr I Hkh i’u v/; ; u {k= nB fun”ku
i) fr dsvk/kkj ij p; fur 400 efgykval si nSx; A
mUkj nkrkval si ktr mUkj kadsl jy rkfydk ds: i ea

rkfydk I a; k & 2

vki ds fopkjkuq kj i ntk.k I Ecu/kh dkun ds i Hkko’kkyh u gkus dk dkj.k D; k gS
¼ kSfd I rj dk i Hkko½

क्र. सं.	शैक्षिक स्तर	कुल संख्या	सरकारी तन्त्र का भ्रष्ट होना	कानून सम्बन्धी दोष	पूँजी पतियों की आर्थिक शक्ति	हाँ	नहीं	कुल प्रतिशत
1.	अशिक्षित	40	-	-	-	-	40(10%)	10%
2.	प्राइमरी	0	-	-	-	-	-	-
3.	हाईस्कूल	40	20(5%)	-	-	20(5%)	-	10%
4.	इण्टरमीडिएट	80	60(15%)	-	-	20(5%)	-	20%
5.	स्नातक	100	40(10%)	-	-	60(15%)	-	25%
6.	स्नातकोत्तर	140	40(10%)	-	-	100(25%)	-	35%
		400						100%



rkfydk I a; k&3

D; k vki ds fuokl {ks= ea dM dh I eL; k] xUnk ty fudkl h dh I eL; k ; k fdl h vU; i nWk.k dh I eL; k ds fujkdj.k ds fy, ekgyk fuokl ; ka us l æfBr gkdj dkbZ iz; kl fd; k gS ¼ kS{kd Lrj dk i Hkko½

क्र. सं.	शैक्षिक स्तर	कुल संख्या	हाँ	नहीं	कुल प्रतिशत
1.	अशिक्षित	40	-	40(10%)	10%
2.	प्राइमरी	0	-	-	-
3.	हाईस्कूल	40	20(5%)	20(5%)	10%
4.	इण्टरमीडिएट	80	20(5%)	60(15%)	20%
5.	स्नातक	100	60(15%)	40(10%)	25%
6.	स्नातकोत्तर	140	80(20%)	60(15%)	35%
		400			100%

inf"kr fd; k x; k , oaml s l E; d : i l sfo"yfr djus dk iz; kl fd; k x; k gS tks bl izdkj g& ¼rkfydk I a; k&1 nf[k; ¼A

Rkfydk&1 l s; g Li 'V gkrk gSfd v/; ; u ds Øe ea l fEefyr mUkjnrkvka ea Øe"%" vf"kf[kr] i kbejh] gkbZdny] b. VjehfM, V] Lukrd] LukrdkSjA mUkjnrkvka ea l s Øe"%" 00 ifr"kr] 00 ifr"kr] 5 ifr"kr] 5 ifr"kr] 20 ifr"kr] 35 ifr"kr mUkjnrkvka us dgk fd mUga Kkr gSfd l jdkj us i nWk.k ds jkdFkke dsfy, dkum i kfjr fd, gA tc fd Øe"%" 10 ifr"kr] 00 ifr"kr] 5 ifr"kr] 15 ifr"kr] 5 ifr"kr] 00 ifr"kr mUkjnrkvka us dgk fd mUga Kkr ughagSfd l jdkj us i nWk.k ds jkdFkke ds fy, dkum i kfjr fd, gA

bl l s; g Li 'V gkrk gSfd v/; ; u ds Øe ea l fEefyr mUkjnrkvka ea l s 65 ifr"kr mUkjnrkvka ds vuq kj mUga; g Kkr gSfd l jdkj us

i nWk.k ds jkdFkke dsfy, dkum i kfjr fd, gA tc fd 35 ifr"kr mUkjnrkvka ds vuq kj mUga; g Kkr ughagSfd l jdkj us i nWk.k ds jkdFkke dsfy, dkum i kfjr fd, gA ¼rkfydk I a; k&2 nf[k; ¼A

Rkfydk I a; k&2 l s; g Li 'V gkrk gS fd v/; ; u ds Øe ea l fEefyr mUkjnrkvka ea Øe"%" vf"kf[kr] i kbejh] gkbZdny] b. VjehfM, V] Lukrd] LukrdkSjA mUkjnrkvka ea l s Øe"%" 00 ifr"kr] 00 ifr"kr] 5 ifr"kr] 15 ifr"kr] 10 ifr"kr] 10 ifr"kr mUkjnrkvka us dgk fd mUds fopkjkuq kj i nWk.k l ECU/kh dkum dsi Hkko"kyh u gkusdk dkj. k l jdkjh rU= dk HkzV gkus gS, oa Øe"%" 00 ifr"kr] 00 ifr"kr] 5 ifr"kr] 5 ifr"kr] 15 ifr"kr] 25 ifr"kr mUkjnrkvka us dgk fd mUds fopkjkuq kj i nWk.k l ECU/kh dkum dsi Hkko"kyh u gkusdk dkj. k tutkx#drk dk vHkko gStc fd Øe"%" 10 ifr"kr] 00 ifr"kr] 00 ifr"kr] 00 ifr"kr] 00 ifr"kr] 00

rkfydk I a; k & 4

D; k vki i ; kbj. k l j {kk l s l EcfU/kr fdl h l æBu dh l nL; k gA

¼ kS{kd Lrj dk i Hkko½

क्र. सं.	शैक्षिक स्तर	कुल संख्या	हाँ	नहीं	कुल प्रतिशत
1.	अशिक्षित	40	-	40(10%)	10%
2.	प्राइमरी	0	-	-	-
3.	हाईस्कूल	40	-	40(10%)	10%
4.	इण्टरमीडिएट	80	-	80(10%)	20%
5.	स्नातक	100	-	100(25%)	25%
6.	स्नातकोत्तर	140	-	140(35%)	35%
		400			100%



rkfydk l a; k & 5

i nwk.k dh l eL; k iz-fr ds vfu; fu=r nkgu ds dkj.k mRi l u gpl g\$ fdUr q i k—frd l d k/kuka dk mi; ksx ekuoh; l H; rk dsfodkl dsfy, vko'; d g\$ D; k vki bl l sl ger g\$

¼ k\$ {kd Lrj dk i Hkko½

क्र. सं.	शैक्षिक स्तर	कुल संख्या	सहमत	असहमत	पता नहीं	कुल प्रतिशत
1.	अशिक्षित	40	-	-	40(10%)	10%
2.	प्राइमरी	40	-	-	-	-
3.	हाईस्कूल	40	20(5%)	20(5%)		10%
4.	इण्टरमीडिएट	80	40(10%)	40(10%)		20%
5.	स्नातक	100	60(15%)	40(10%)		25%
6.	स्नातकोत्तर	140	100(25%)	40(10%)		35%
		400				100%

i fr"kr mÜjnkrrkvkausdgk g\$fd mÜga i rk ughag\$fd i nwk.k l ECU/kh dkumu ds i Hkko"kk y u gkaus dk dkj.k D; k g\$

fdl h Hkh "k\$ {kd Lrj dsmÜjnkrrkvkausdkumu l ECU/kh nksj i mchi fr; ka dh vkfFkd "kDr dks i nwk.k l ECU/kh dkumu ds i Hkko"kk y u gkaus dk dkj.k ugha crk; k g\$

bl l s; g Li 'V gkrk g\$fd v/; ; u ds Øe ea l fEefyr mÜjnkrrkvkaeal s50 i fr"kr mÜjnkrrkvkads vuq kj i nwk.k l ECU/kh dkumu ds i Hkko"kk y u gkaus dk dkj.k tutkx#drk dk vHkko crk; k g\$, oa 40 i fr"kr mÜjnkrrkvkadsvuq kj i nwk.k l ECU/kh dkumu ds i Hkko"kk y u gkaus dk dkj.k l jdkjh ra= dk HkzV gkau crk; k g\$ tcf d 10 i fr"kr mÜjnkrrkvka ds vuq kj mÜga; g i rk ughag\$fd i nwk.k l ECU/kh dkumu ds i Hkko"kk y u gkaus dk dkj.k D; k g\$ ¼rkfydk l a; k&3 nf [k; ¾A

Rkfydk l a; k&3 l s; g Li 'V gkrk g\$fd v/; ; u ds Øe ea l fEefyr mÜjnkrrkvka ea Øe" k% vf"kf {kr} i kbejh] gkbLdny] b.VjehfM, V] Lukrd] Lukrdk\$kjA mÜjnkrrkvkaeal sØe" k%00 i fr"kr] 00 i fr"kr] 5 i fr"kr] 5 i fr"kr] 15 i fr"kr] 20 i fr"kr mÜjnkrrkvkausdgk fd mudsfuokl {ks= eadMsdh l eL; k} xlnk ty fudkl h dh l eL; k ; k fdl h vU; i nwk.k dh l eL; k ds fujkdj.k ds fy, ekgYyk fuokl f; kausl æfBr gkdj iz l fd; sg\$ tcf d Øe" k% 10 i fr"kr] 00 i fr"kr] 5 i fr"kr] 15 i fr"kr] 10

i fr"kr] 15 i fr"kr mÜjnkrrkvka us dgk fd mudsfuokl {ks= eadMsdh l eL; k} xlnk ty fudkl h dh l eL; k ; k fdl h vU; i nwk.k dh l eL; k ds fujkdj.k ds fy, ekgYyk fuokl ; kausl æfBr gkdj dkbzi z kl ughaf d; k g\$

bl l s; g Li 'V gkrk g\$fd v/; ; u ds Øe ea l fEefyr mÜjnkrrkvkaeal s45 i fr"kr mÜjnkrrkvkads vuq kj mudsfuokl {ks= eadMsdh l eL; k} xlnk ty fudkl h dh l eL; k ; k fdl h vU; i nwk.k dh l eL; k ds fujkdj.k ds fy, ekgYyk fuokl ; kausl æfBr gkdj iz kl fd; sg\$ tcf d 55 i fr"kr mÜjnkrrkvkads vuq kj mudsfuokl {ks= eadMsdh l eL; k} xlnk ty fudkl h dh l eL; k ; k fdl h vU; i nwk.k dh l eL; k ds fujkdj.k ds fy, ekgYyk fuokl ; kausl æfBr gkdj dkbzi z kl ughaf d; k g\$

Rkfydk l a; k&4 l s; g Li 'V gkrk g\$fd v/; ; u ds Øe ea l fEefyr mÜjnkrrkvka ea Øe" k% vf"kf {kr} i kbejh] gkbLdny] b.VjehfM, V] Lukrd] Lukrdk\$kjA mÜjnkrrkvkaeal sØe" k%10 i fr"kr] 00 i fr"kr] 10 i fr"kr] 20 i fr"kr] 25 i fr"kr] 35 i fr"kr mÜjnkrrkvkausdgk fd og i; kbj.k l g {kk l s l EcfU/kr fdl h l æBu dh l nL; ughag\$

fdl h Hkh "k\$ {kd Lrj dsmÜjnkrrkvkaus; sugha dgk g\$fd og i; kbj.k l g {kk l s l EcfU/kr fdl h Hkh l æBu dh l nL; k g\$

bl l s; g Li 'V gkrk g\$fd v/; ; u ds Øe ea l fEefyr mÜjnkrrkvka ds vuq kj l Hkh "kr&i fr"kr



og i ; kbj.k l g{k l s l EcflU/kr fdl h l xBu dh
l nL; k ughagA ½rkfydk l d[; k&5 nf[k; ½

Rkfydk l d[; k&5 l s ; g Li 'V gkrk gS fd
v/; ; u ds Øe ea l fEefyr mÜkjnrkvka ea Øe"K%
vf"kf(kr) i kbejh] gkbLdwy] b.VjehfM, V] Lukrd]
LukrdkikjA mÜkjnrkvka ea Øe"K% 00 i fr"kr] 00
i fr"kr] 5 i fr"kr] 10 i fr"kr] 15 i fr"kr] 25 i fr"kr
mÜkjnrkvka usdgk fd og l ger gSfd i ntk.k dh
l eL; k iz-fr ds vfu; fl=r nkgu ds dkj.k mRiUu
gþZ gS fdUrq i k-frd l d k/kuka dk mi ; kx ekuoh;
l H; rk ds fodkl ds fy, vko"; d gS, oa Øe"K% 00
i fr"kr] 00 i fr"kr] 5 i fr"kr] 10 i fr"kr] 10 i fr"kr
mÜkjnrkvka usdgk fd og vl ger gSfd i ntk.k dh
l eL; k iz-fr ds vfu; fl=r nkgu ds dkj.k mRiUu
gþZ gS fdUrq i k-frd l d k/kuka dk mi ; kx ekuoh;
l H; rk ds fodkl ds fy, vko"; d gS tc fd Øe"K%
10 i fr"kr] 00 i fr"kr] 00 i fr"kr] 00 i fr"kr] 00
i fr"kr] 00 i fr"kr mÜkjnrkvka usdgk fd mUga i rk
ugha gSfd i ntk.k dh l eL; k iz-fr ds vfu; fl=r
nkgu ds dkj.k mRiUu gþZ gS fdUrq i k-frd l d k/kuka
dk mi ; kx ekuoh; l H; rk ds fodkl ds fy,
vko"; d gA

bl l s ; g Li 'V gkrk gSfd v/; ; u Øe ea
l fEefyr mÜkjnrkvka ea l s55 i fr"kr mÜkjnrkvka ds
vuq kj og l ger gSfd i ntk.k dh l eL; k iz-fr ds
vfu; fl=r nkgu ds dkj.k mRiUu gþZ gS fdUrq
i k-frd l d k/kuka dk mi ; kx ekuoh; l H; rk ds
fodkl ds fy, vko"; d gS, oa 35 i fr"kr
mÜkjnrkvka ds vuq kj og bl l svgl er gS tc fd
10 i fr"kr mÜkjnrkvka ds vuq kj mUga; g i rk ugha
gSfd i ntk.k dh l eL; k iz-fr ds vfu; fl=r nkgu ds
dkj.k mRiUu gþZ gS fdUrq i k-frd l d k/kuka dk
mi ; kx ekuoh; l H; rk ds fodkl ds fy, vko"; d
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bu fu'd'K&ds vk/kkj i j ge dg l drsgSfd
i ; kbj.k l EcU/kh tkx#drk i jeko"; d gS vkS ekuo
dksbl sl keU; nf'Vdks k l smBdj ns[kuk pkfg, A

l UnHkZ xUfK l ph

1- पर्यावरण तथा प्रदूषण - सुधीर शर्मा, आधुनिक प्रकाशन, नई

दिल्ली।

- 2- इक्कीसवीं सदी का पर्यावरणीय आन्दोलन-चिन्तन के विविध आयाम-डॉ. वीरेन्द्र सिंह, ओमेगा पब्लिकेशन, नई दिल्ली।
- 3- हमारा पर्यावरण - गाँधी शांति प्रतिष्ठान, विज्ञान और पर्यावरण केन्द्र, नई दिल्ली।
- 4- पर्यावरण कानून एवं न्यायपालिका- डॉ. विनय कुमार पिंजानी, गौतम बुक कम्पनी, जयपुर।
- 5- जनसंख्या एवं पर्यावरण - डॉ. गोविन्द प्रसाद, अनुपम पाण्डेय - शुदेन्दु किसलय।
- 6- इक्कीसवीं शताब्दी की पर्यावरणीय समस्याएँ मीनाक्षी सिंह, राधा पब्लिकेशंस, नई दिल्ली।
- 7- शोध विमर्श कानपुर - वाल्यूम - 14, अगस्त 2015।
- 8- ग्लोबल ग्रीन्स - राष्ट्रीय हिन्दी मासिक पत्रिका, दिसम्बर 2015।





Received: 20 May, 2022; Accepted: 28 Jun-2022, Published: July-December, 2022, Issue

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mr.aksingh56@gmail.com

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l e; rd , d l æfBr <kpst stMajgrsgávkj ; gh dkj .k gsfdd vc
mlga'fodkl dñæka , oa'fodkl fclnq/ká dsi ; k; okph ds: i eatkuk
tkrk gá¹ bl idkj fdl h {ks= fo'kSk dh l kekfdd , oa vkfFkZd
fLFkr; kadk ; FkkFkZ i frfcEcu bu uxjka dsek/; e l sgstkrk gá bl
l adYiuk dk eny vkekkj ; g gsfdd bu uxjh; vf/kokl ka dh fLFkr]
bl dkj .k 'kkpuh; ughagSfd ; sl arlr gksx; sgá cfYd eny dkj .k ; g
gsfdd bueal kepkf; d l okvkadsforj .k dh fLFkr vR; Ur n; uh; gks
xbz gá tcfdd nñ jh vkj nl y{kh; egkuxj , oa uxj l eny , d
l hfer {ks= eavR; f/kd uxjhdj .k dsdkj .k vR; r xñkhj l kekfdd
 , oavkfFkZd l eL; kvkal sxfl r gksr tk jgsgá² mRrj Áns k jkT; ea
o"K 2023 ds l eadka ds vk/kkj ij uxj fudk; ka ea 17 uxj fuxe
¼ Ei wK fudk; ka dk 2-23 Áfr'kr¼ 200 uxj i kfydk i fj"kn ¼26-25
Áfr'kr½ rFkk 545 uxj i pk; ra¼71-52 Áfr'kr½ gá
uxjh; fodkl dspj .k &

1- jkMI kbM & Hkkjh ; krk; kr okysl Melkadsfdukjsuxjh;
vf/kokl dsÁkjFEHkd pj .k ds: i eadl h cLrh ftl ea, d nksedku]
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3- xkp & bl dh tul æ; k dk vkdkj 150 l s10]000 rd gks
l drh gá ; g ÁkFkfdd vkj f}rh; d l ok dñka ds vñrxñ vkrk gS
vkj bl dsvñj Ldñ] cktkj] Mkd?kj] vkSk/kky; vkfn gksrsgá

4- 'kgj & bl dsvñj uxj i kfydk gksr gS; k fQj ; g {ks=
vf/kl fñpr {ks=h; l fefr ds vñku gksr gá tul æ; k 2]000 l s20]000
rd gksr gá bl earrh; d dk; ka dh Áedkrk gksr gS rFkk dbZphtka
dseæ; ky;] LVs ku] dñyst vkfn gksrsgá

5- uxj & bl dh tul æ; k 1]00]000 l svf/kd gksr gSvkj
bl eajsyostD'ku ; k fo'ofa | ky; gksl drk gá

6- dksujcd u & iñ xñMht uso"K 1915 ea igyh ckj bl
'kCn dk Á; ks fd; k FkkA m | ks dsfoLrkj gksusdsdkj .k uxjka vkj
'kgjka dk vki l ea l ay; u gksr jgrk gSvkj vkfFkZd : i l sos, d



l kfk fodfl r gkrs gā fdūrq jktuhfrd : i l s
vyx&vyx gkrs gā

7- eā/ki ksyhl & bl dh tul ā; k
10]00]000 yk[k gkrs gsvkš bl s dklēki kfyVu 'kgj
Hkh dgk tkrk gā

8- exkyki ksyhl & dbz eā/ki kfyVu {ks=ka
dksfeykdj exkyki ksyhl cuxka bl dk Lo: i egk
eā/ki kfyVu dk gskā

9- Vkbjsuki ksyhl & ; g nsk dsiyh rjg l s
uxjhḡr gsk tkus dh volFkk gā bl eān'sk ds vlñj
'kr&Āfr'kr uxjh; dj .k gsktk; xka

10- , D; kēksuki ksyhl & fo'o uxjh; dj .k
dk ; g vlñre pj .k gā o"l2050 dsvkl & ikl fo'o
dks'kgjh fodkl dsbl vlñre nks l s xqj juk i Māx
vkš ykxkadksi Foh dsyxHkx 78 Āfr'kr HkxkaeaQsYs
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v/; ; u {ks= dk Hkxskfyd ifjp; &

vkš\$ k tuin mRrj in'sk jkT; ds dkuig
e.My eamRrj&if'pe fn'kk eavofLFkr gā bl dk
v{kkWkh; foLrkj 26° 21* mRrjh v{kkWk l s 26° 55*
mRrjh v{kkWk rd rFkk 79° 12* i mhzns'kkurj l s 79° 45*
i mhzns'kkurj dse/; gā bl tuin dh i mZl sif'pe
yEckbz65 fdeh- rFkk mRrj l snf{k.k pkā/kbz47 fdeh-
gā v/; ; u {ks= dk l Ei wkZ {ks=Qy 2045 oxzfdeh- gā
l epzry l sv/; ; u {ks= dh vkš r Āpkbz459 ehVj
gā mRrj in'sk jkT; dsnf{k.k kh&if'peh Hkx eāfLFkr
vkš\$ k tuin dsnf{k.k fn'kk estkykū tuin] mRrj
fn'kk eāduukst tuin] i mZ eādkuig tuin rFkk
if'pe eābVkok tuin fLFkr gā l oā Fke 17 fl rEcj]
1997 dksvkš\$ k tuin viusvflrRo eāvk; kA bl l s
i mZ; g bVkok tuin dk Hkx FkA l kekl; r% tuin
dk vkdkj vk; krkdj gā orēku vkš\$ k tuin nks
rgl hykafo/kuk o vkš\$ k dksfeykdj cuk; k x; k gā
bl ds vlñx 7 fodkl [k.M Øe'k% ,jok dVjk]
vNYnk] fo/kuk] l gkj] Hkx; uxj] vthrey rFkk
vkš\$ k gā

'kks'k&vkys[k &

ekuo vf/kokl dk i k jEHk i kxšrgkfl d dky
l sekuk tkrk gā xāk; epk dseñku eā l oā Fke
vf/kokl dk i k jEHk gvk FkA xke vf/kokl vR; f/kd
l xfbR , oā LokoyEch bdkbz FkA xqir 'kkl udky eā

vf/kokl ka dks jkT;] in'sk vkš tuinka eā foHkfr
fd; k x; k FkA vf/kokl fodkl dh ifØ; k eā i k jEHkd
vf/kokl ds prññd i l j.k i k jEHk gkrs gā i l k j
ifØ; k dsfofHku i gyp/kadsv/; ; u eā gSjLV³ vkš
VQ ekšjy , oā xkšM⁴ rFkk ckbyqM⁵ dk iz kl
egRoiwkZ gā bl Øe eā txyka dk folr : i eā
l Qk; k i k jEHk gvk vkš ekšyd vf/kokl ds prññd
vuod df'k mRiñd {ks= LFkfr gksx; A dkykūj eā
ekšyd vf/kokl l okdñnz ds: i eāfodfl r gksx; A
rRi'pkr- ekšyd vf/kokl l s fudVorhZ {ks=ka dh
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u; k vfeokl fodfl r gvk vkš /khj&/khjs ml
vf/kokl usHkh dññh; Lo: i ēkkj .k fd; k vkš l okdñnz
ds: i eāfodfl r gksx; A bl h fdz k dh i qjki fūkl l s
u; suxj curspysx; A uxjh; vf/kokl kadsforj .k ds
l E; d v/; ; u eā muds ifj{ki .k ds Lo: i dk
Li "Vhdj .k vko"; d gsk tkrk gā ftuds vk/kkj ij
{ks=h; fo'kškrk; aLi "V gsk tkrh gā uxjh; vf/kokl kads
ifj{ki .k dsLo: i ij i k dfrd , oā l dfrd nksukagh
rRo vf/kd i Hkko Mkys jgs gā foHkku uxjh;
vf/kokl ka dh fLFkr ds foopu djus l s uxjh;
vf/kokl kadsforj .k i k: i dksLi "V fd; k tk l drk
gā bl fn'kk eāfoHkku fo}kuka usfoHkku fof/k; ka dk
mi; kx fd; k gā tuin vkš\$ k ds l Hkh 9 uxjh;
vf/kokl ka dks l k j .kh Øekad & 1 eā n'kz k x; k gā
¼l k j .kh Øekad&1 vxysi "B i j nf[k; ½

l k j .kh Øekad 1 dsvk/kkj ij tuin vkš\$ k eā
dy uxjh; vf/kokl ka dh l ā; k 9 gā tul ā; k ds
vk/kkj ij l cl scMk uxj vkš\$ k gsftl dh tul ā; k
87736 0; fDr gā tul ā; k ds gh vk/kkj ij l cl s
Nk/k uxj tegk 7139 0; fDr gā {ks=Qy dks vk/kkj
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gh vk/kkj ij gh l cl s Nk/k uxj tegk ¼tux.kuk
uxj ½ 2-37 oxzfdeh- {ks=Qy okyk tux.kuk n'kd
2011 dk uxj gā

tul ā; k ds vk/kkj ij uxjh; ifr: i dk
v/; ; u djus i j ge i krs gā fd vkš\$ k uxj 87736
0; fDr; kads l kfk i Fke dksV dk uxj gā tgkwl Ei wkZ
uxjh; tul ā; k 234222 0; fDr; ka dh 37-46 ifr'kr



सारणी क्रमांक - 1

जनपद औरैया : नगरीय अधिवास वितरण एवं घनत्व (2011)

क्र० सं०	नगर का नाम	क्षेत्रफल वर्ग किलोमीटर में	कुल जनसंख्या	प्रतिशत में घनत्व प्रति वर्ग किलोमीटर में
1.	औरैया(नपाप)	9.00	87736	37.46
2.	विधूना (नप)	10.00	32252	13.77
3.	बाबरपुर अजीतमल (नप)	5.00	29284	12.50
4.	दिबियापुर (नप)	10.00	27237	11.63
5.	फफूंद (नप)	5.05	17637	7.53
6.	कस्बा खानपुर (जन)	8.00	11938	5.10
7.	अटसू (नप)	8.00	11568	4.94
8.	अछल्दा (नप)	6.00	9431	4.03
9.	जमुहौं (जन)	2.37	7139	3.05
	योग जनपद	63.42	234222	100.00

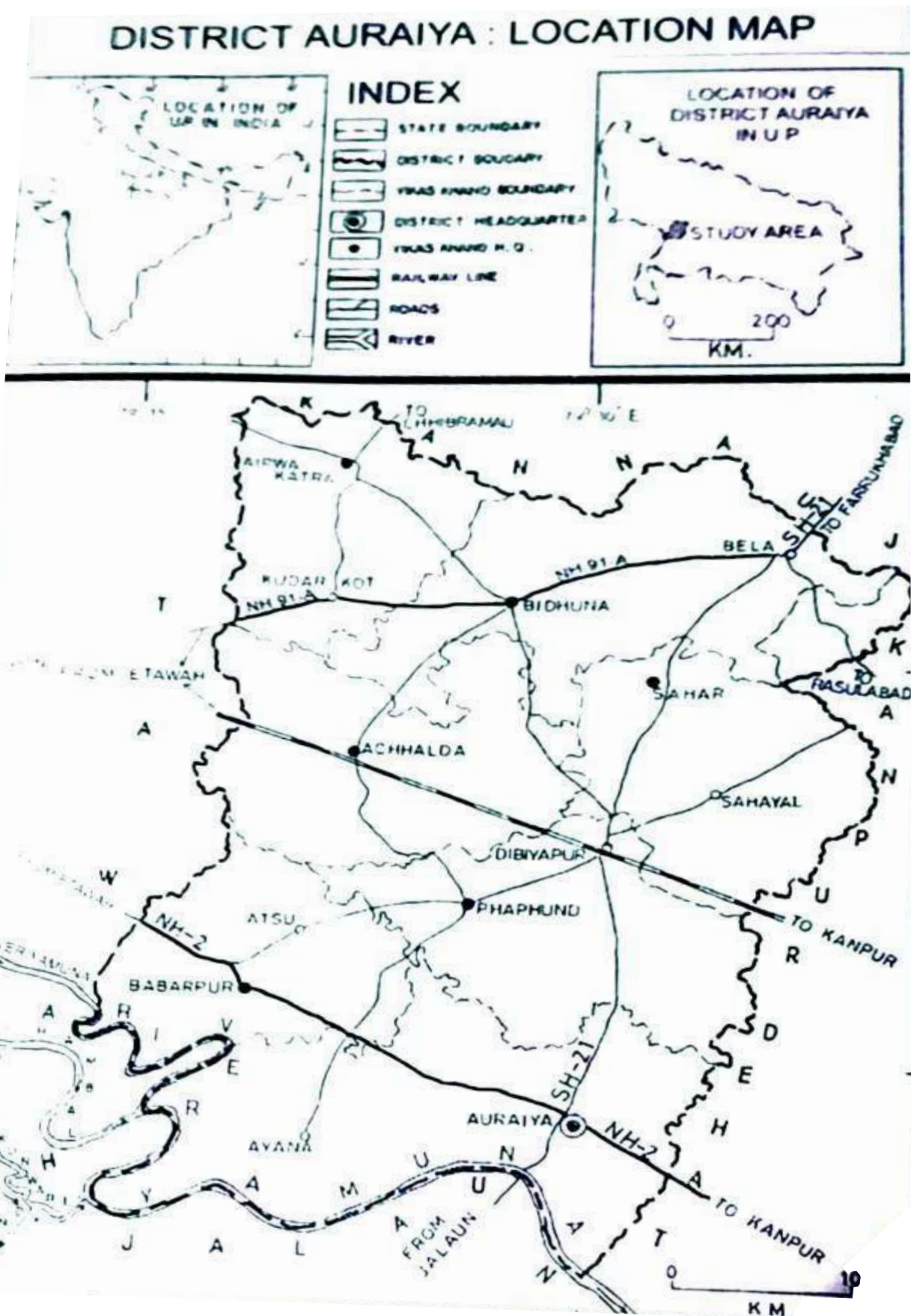
स्रोत :- गणना पर आधारित, 2011, जनपद औरैया

tul ६; k fuokl djrh g 13-77 ifr'kr tul ६; k ds
l kfk fo/kuk uxj tksrgl hy eq; ky; Hkh g f}rh;
LFkku ij g ६ ckcjij & vthrey uxj 29284 0; fDr; ka
okyk rrrh; dksV dk uxj g tgkWI Ei wkd dh 12-50
ifr'kr tul ६; k fuokl djrh g ६ fnfc; kij uxj
prfkz dksV dk uxj g tgkWI Ei wkd dh 11-63 ifr'kr
tul ६; k fuokl djrh g ६ QOm uxj 16637
0; fDr; ka o 7-53 Afr'kr tul ६; k ds l kfk i kpos
LFkku dk uxj g NBsLFkku ij dLck [kkuig 11938
0; fDr; ka o 5-10 Afr'kr tul ६; k j [krk g l krok;
cMk uxj vVI w, oarRi 'pkr vNYnk uxj vkBok; cMk
uxj g tegk; tksl cl sNk/k uxj 7139 0; fDr; ka dks
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tul ६; k 12216 0; fDr gks xba tux.kuk o"z1941 ea
uxj dLcka dh l ६; k c<ej 2 , oa tul ६; k c<ej
15704 0; fDr gks xba tux.kuk o"z1951 ea uxj ka dh
l ६; k 2 rFkk tul ६; k c<ej 18705 gks xba rFkk
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tux.kuk o"z1961 ea uxj ka dh l ६; k 2 gh
jgh vk\$ dy tul ६; k Hkh ?kVdj 17463 0; fDr jg
xbA tux.kuk o"z1971 ea uxj ka dh l ६; k rks 2 gh
jgh ijUrqdy tul ६; k c<ej 25517 0; fDr gks xba
tux.kuk 1981 ea uxj ka dh l ६; k i p%7 gks xba l jUrq
tul ६; k earhoz of) 261-70 ifr'kr dh of) vdr





सारणी क्रमांक - 2

जनपद औरैया : नगरीय जनसंख्या वृद्धि 1901-2011

जनगणना दशक	औरैया	दिबियापुर	फफूंद	अटसू	अजीतमल	अछल्दा	विधूना	कुल योग	वृद्धि प्रतिशत
1901	7393	---	7605	---	---	---	---	14998	---
1911	5836	---	6156	---	---	---	---	11992	-20.04
1921	6470	---	5604	---	---	---	---	12074	+00.68
1931	7087	---	5129	---	---	---	---	12216	+01.18
1941	9840	---	5864	---	---	---	---	15704	+28.55
1951	13378	---	5327	---	---	---	---	18705	+19.10
1961	17463	---	000	---	---	---	---	17463	-06.60
1971	25517	---	000	---	---	---	---	25517	+46.12
1981	35815	8328	9599	7280	13423	5688	12163	92296	261.70
1991	50772	13687	12190	8528	18332	7144	19275	129928	+40.77
2001	64740	20595	15340	10593	24549	8361	24789	168967	+30.05
2011	87736	27237	17637	11568	29284	9431	32252	215145	+27.33

स्रोत : विभिन्न जनगणना पुस्तिकायें, जनपद औरैया

dh xBA tux.kuk 1991 ea uxjka dh l d; k ; Fkor-
rFkk d; uxjh; tul d; k 129928 0; fDr i g p x b z
v k j 2001 dh tux.kuk ea; g of) 168967 0; fDr gks
xbA folRr foj.k g r q l k j . k h Øekad 2 n"V0; gA
tux.kuk 2011 ea uxjka dh l d; k c < d j 9 , o a d y
uxjh; tul d; k 234222 0; fDr gks x; h gA tux.kuk
2011 e a n k s u ; s tux.kuk uxj (Census Town) d L c k
[k k u i g 1/4 tul d; k 11938 0; fDr 1/2 o t e g k 1/4 tul d; k
7139 0; fDr 1/2 l f e e f y r g k s x ; s g A m f Y y f [k r f o o p u
l s L i " V g S f d 2011 dh tux.kuk ea 19077 u ; s
uxjh; 0; fDr 1/8-14 A f r ' k r 1/2 v k j c < + x ; A f o l R r
f o j . k g r q l k j . k h Ø e k a d & 2 n " V 0 ; g A
1- uxjh; tul d; k of) % uxj v k j \$ k 1/4 uxj
i k f y d k i f j " k n 1/2 &

l k j . k h Ø e k a d 2 d k s n f k u s l s L i " V i n h r g k r k
g S f d v k j \$ k uxj] t u i n d k l c l s c M k uxj g A

t u k i d d h ; l e n k a d s v k / k j i j n f k k t k ; s r k s o " k z
1901 dh tux.kuk ea uxj dh d y tul d; k 7393
0; fDr Fk t k s 1911 ea 21-06 i f r ' k r dh x f r l s ? k V r h
g b z 5836 0; fDr g h j g x b z F k h A 1921 dh tux.kuk ea
c < r dh i o f R r 1/10-86 i f r ' k r 1/2 n f k h x b z v k j
tul d; k c < d j 6470 0; fDr gks xbA tux.kuk o" k z
1931 l s y d j 2001 r d dh tul d; k e a m R r j k R j
of) g b z g A 1961 r d of) n j 40 i f r ' k r l s u h p s j g h
r F k k 1971 ea 46-12 i f r ' k r j g h A ; g k a m Y y f k u h ; g S f d
tux.kuk o" k z 1981 ea l o k Ø e k d of) 131-39 i f r ' k r
v i d r dh x b z t k s v i u s e a , d f j d k M z g A r R i ' p k r -
1981 ea of) dh n j 40-36 i f r ' k r r F k k o" k z 1991 dh
tux.kuk ea 41-70 i f r ' k r j g h A o" k z 2001 ea tul d; k
dh of) n j e a f x j k o V j g h t k s 27-51 v i d r dh x ; h
r F k k tul d; k c < d j 64740 0; fDr gks x; h A f o l R r
f o j . k g r q l k j . k h Ø e k a d 3 n " V 0 ; g A uxj dh ' k q



सारणी क्रमांक - 3

नगर औरैया : नगरीय जनसंख्या वृद्धि 1901-2011

क्र.	जनगणना दशक	औरैया	शुद्ध वृद्धि/हास	वृद्धि/हास % में
1	1901	7393	—	—
2	1911	5836	-1557	21.06
3	1921	6470	634	10.86
4	1931	7087	617	09.54
5	1941	9840	2753	38.85
6	1951	13378	3538	35.96
7	1961	17463	4085	30.54
8	1971	25517	8054	46.12
9	1981	35815	10298	40.36
10	1991	50772	14957	41.76
11	2001	64740	13968	27.51
12	2011	87736	22996	35.52

स्रोत : जनगणना सी0डी0 वर्ष 2011

तुल [; k of) o ekufp=h; i n'kz Øekad 2 ean'kkz k x; k gA ¼ kj .kh Øekad&3 nf[k; ½
2- uxjh; तुल [; k of) % uxj fo/kuuk ¼uxj i pk; r½&

I kj .kh Øekad 4 dks i f j y f {kr d j u s l s L i "V gkrk gsf d fo/kuuk 1981 dh tux.kuk l sgh uxj dksV dsvlr x r vk; kA bl tux.kuk ea; gkad h तुल [; k 12163 0; fDr Fkh tks1991 eac<dj 17275 0; fDr jg x b A c<f dh nj tux.kuk o"lz 2001 rd yxrkj cuh jgh vkj I okz/kd ¼58-47 i fr'kr½ c<r 1991 ea v fdr dh x b A f u j l r j c<f h t k j g h तुल [; k d k i f j .k k e ; g f u d y k f d 2001 dh tux.kuk ea; g uxj 24789 0; fDr; kaokyk uxj gksx; kA foLr r fooj .k g r q I kj .kh 4 n f k h t k l d r h g A ¼ kj .kh Øekad&4 o 5 v x y s i "B i j n f [k; ½

3- uxjh; तुल [; k of) % ckcj i j v t h r e y ¼uxj i pk; r½&

I kj .kh Øekad 5 dks n f k u s l s L i "V i f j y f {kr gkrk gsf d v t h r e y d L c k l o f F k e t u x . k u k o " l z 1981 ea uxj dksV ea vk; k vkj m l d h r R d k y h u तुल [; k 13423 0; fDr FkhA tks1991 ea36-57 i fr'kr dh nj l s c < d j 18332 0; fDr gksx b A

tux.kuk o"lz1991 ea b l dh तुल [; k c < d j 18332 0; fDr gksx b l vkj I okz/kd 36-57 i fr'kr dh of) nj v fdr dh x b A tux.kuk o"lz1991 l s 2001 d s e / ; of) nj c < d j 33-91 i fr'kr j g h vkj d y तुल [; k 24549 0; fDr gksx b A foLr r fooj .k g r q I kj .kh Øekad 5 n "V 0; g A

4- uxjh; तुल [; k of) % f n f c ; k i j ¼uxj i pk; r½&

I kj .kh dks n f k u s l s K k r gkrk gsf d 1981 dh tux.kuk ea f n f c ; k i j i g y h c j d L c k c u k F k k vkj b l dh तुल [; k 8328 0; fDr FkhA o"lz 1991 ea तुल [; k c < d j 13687 0; fDr gksx b A tux.kuk o"lz



सारणी क्रमांक - 4

नगर विधूना : नगरीय जनसंख्या वृद्धि 1981-2001

क्र.	जनगणना दशक	औरैया	शुद्ध वृद्धि/ह्रास	वृद्धि/ह्रास : में
1	1981	12163	-----	-----
2	1991	19275	7172	58.47
3	2001	24789	5514	28.60
4	2011	32252	7463	30.11

स्रोत : जनगणना सी०डी० वर्ष 2011

सारणी क्रमांक - 5

नगर अजीतमल : नगरीय जनसंख्या वृद्धि 1981-2001

क्र.	जनगणना दशक	औरैया	शुद्ध वृद्धि/ह्रास	वृद्धि/ह्रास % में
1	1981	13423	-----	-----
2	1991	18332	4909	36.57
3	2001	24549	6217	33.91
4	2011	29284	4735	19.29

स्रोत : जनगणना सी०डी० वर्ष 2011

2001 ea; gk; dh tul d; k 37-24 ifr'kr dh nj l s c<rh gbl21142 0; fDr gksxbA folRr tkudkjH grq l kj.kh Øekad 6 n"V0; gA ¼ kj.kh Øekad&6 vxys i"Bi j nf[k; ½

5- uxjh; tul d; k of) % uxj QOm ¼uxj i pk; r½&

vkj\$ k dh gh Hkkfr QOm uxj 1901 l sgh uxj dh dksV eagA bl tux.kuk ea; gk; dh dy tul d; k 7605 0; fDr Fkh tks1911 ea?kVdj 7156 0; fDr gksxbZ gA 1921 dh tux.kuk ea½&½8-97 ifr'kr dh nj l s ?kVr i¼%1931 ea8-48 ifr'kr dh ?kVr vkj 1941 dh tux.kuk eaØe'k%14-33 ifr'kr dh of) 1951 ea, oa ½&½9-16 ifr'kr dh ?kVr vñdr dh xbA tux.kuk 1961 o 1971 eabl uxj dksvoxhñdr dj fn; k x; k rFkk 1981 dh tux.kuk ea i¼% uxj ?kks"kr fd; k x; kA rRi'pkr vkt rd of) dh iñfRr cuh gblZgA

tux.kuk o"kZ1991 ea l okZ/kd ¼\$26-99 ifr'kr½of) vñdr dh xbZ FkhA tux.kuk n'kd 2001 ea \$25-84 ifr'kr dh nj l s tul d; k c<+jgh gA o"kZ1991 dh rnyuk ea?kVh of) nj bl rF; dh ifjpk; d gSfd vc ykxkaei fjokj fu; kstu dsifr tkx#drk vk xbZgA folRr fooj.k grql kj.kh Øekad 7 n"V0; gA ¼ kj.kh Øekad&7 nf[k; ½

6- uxjh; tul d; k of) %vVI w¼uxj i pk; r½& l kj.kh Øekad 8 dksn\$kusl si fjyf{kr gkrk gS fd vVI wñkh o"kZ1981 l sgh uxj dksV eavk; k gA bl l e; ; gk; dh tul d; k 7280 0; fDr Fkh tks1991 ea c<dj 8258 rFkk 2001 ea c<dj 10593 gks xbA rRi'pkr 17-14 ifr'kr dh nj l s c<rh tul d; k 1991 ea8528 0; fDr o 24-21 ifr'kr dh nj l s c<dj 2001 ea 10593 0; fDr gks xbA folRr fooj.k grq l kj.kh 8 n"V0; gA ¼ kj.kh Øekad&8 nf[k; ½

7- uxjh; tul d; k of) % vNYnk ¼uxj



सारणी क्रमांक — 6
नगर दिबियापुर : नगरीय जनसंख्या वृद्धि 1981-2001

क्र.	जनगणना दशक	औरैया	शुद्ध वृद्धि/ह्रास	वृद्धि/ह्रास % में
1	1981	8328	-----	-----
2	1991	13687	5359	64.35
3	2001	20595	6908	50.47
4	2011	27237	6642	32.25

स्रोत : जनगणना सी0डी0 वर्ष 2011

सारणी क्रमांक — 7
नगर फफूंद : नगरीय जनसंख्या वृद्धि 1901-2001

क्र.	जनगणना दशक	औरैया	शुद्ध वृद्धि/ह्रास	वृद्धि/ह्रास % में
1	1901	7605	---	---
2	1911	6156	-1557	-19.05
3	1921	5604	-552	-8.97
4	1931	5129	-475	-8.48
5	1941	5864	735	14.33
6	1951	5327	-537	-9.16
7	1961	अवर्गीकृत	-----	-----
8	1971	अवर्गीकृत	-----	-----
9	1981	9599	-----	-----
10	1991	12190	2591	26.99
11	2001	15340	3150	25.84
12	2011	17637	2297	14.97

स्रोत : जनगणना सी0डी0 वर्ष 2011

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tuin vk\$ \$ k ea fLFkr vNYnk Hkh i Fke ckj
tux.kuk o"z 1981 ea uxj dksV ea l fefyr fd; k
x; k vk\$ bl tux.kuk ea bl dh tul & ; k 5688
0; fDr FkhA vkxkeh n'kd 1991 ea 25-60 ifr'kr dh
nj l sc<rh gpbZl dh tul & ; k 7144 0; fDr gksxbA
o"z 2001 ea 17-04 ifr'kr dh of) ds l kFk uxj dh
tul & ; k c<dj 8361 0; fDr gksx; hA foLr'r fooj.k

grql kj.kh 9 n"V0; gA %l kj.kh Øekad&9 nf[k; %
fu; kstu , oami l gkj &
uxj fu; kstu dk ; | fi fHkUu&fHkUu 'kCnka l s
; k <aka l s ifjHkkf"kr fd; k x; k g\$ fdUrq l Hkh
ifjHkk"kkvkaeai k; %l kE; i k; k tkrk gA uxj thou dks
l q[kh] LoLFk l qnj , oal fo/kk l EiUu cukusdsfy; s
fd; s tkusokys i z kl k dk; kArFk okLrfod dk; Øeka
dks uxj fu; kstu ds vFkZ ea 'kkfey djsr gA⁶ uxj



सारणी क्रमांक -8

नगर अटसू : नगरीय जनसंख्या वृद्धि 1981-2001

क्र.	जनगणना दशक	औरैया	शुद्ध वृद्धि/ह्रास	वृद्धि/ह्रास % में
1	1981	7280	-----	-----
2	1991	8528	1248	17.14
3	2001	10593	2065	24.21
4	2011	11568	975	09.20

स्रोत : जनगणना सी0डी0 वर्ष 2011

सारणी क्रमांक - 9

नगर अछल्दा : नगरीय जनसंख्या वृद्धि 1981-2001

क्र.	जनगणना दशक	औरैया	शुद्ध वृद्धि/ह्रास	वृद्धि/ह्रास : में
1	1981	5688	-----	-----
2	1991	7144	1456	25.60
3	2001	8361	1217	17.04
4	2011	9431	1070	12.80

स्रोत : जनगणना सी0डी0 वर्ष 2011

fu; kstu , d 0; ki d fo"K; gSftI dsvlrxr uxj ds
 fHkUu&fHkUu ?kVdka ds fodkl] l qkkj ; k i fuækz k rFkk
 u; s{ks=kadsfuekz k ; k fodkl dh ; kst ukvka dks l eL; k
 jfgr cukus dk dk; Z gkrk gA uxj fu; kstu dk
 mnñs ; u dny orëku uxjh; thou dks vkn'kZ ds
 vf/kd ds vf/kd fudV i gpkus dk iz kl djuk gS
 cfYd uxj dh Hkkoh of) dks/; ku eaj [krsgq sHkfo";
 dsuxjh; thou dks Hkh dfBukb; ka l s; Ør j [kus dh
 r\$ kjh djuk gA⁷

I nHkZ xJFk l yph

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6. fl g] i ne ½2018½ 'kgjka dh l k dfr] Ádk'kd & dq {ks= fo' ofo | ky;] dq {ks= ½gfj ; k. kk½ i "B 170A
7. jk;] mn; ukjk; .k ½2016½ Ákphu Hkkjr ea uxj rFkk uxjh; thou] fglñkRkkuh , dMeh] Á; kxjkt ½jgkuk uke bykgkckn½ i "B 7&8A





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vishnushukla073@gmail.com

nfu; k dh vk/kh vkcknh fL=; ka dh gA ekuo thou ds
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l cl scf) eku çkf.k; kadh Js kh eavkrh gA vi uh cf) dh otg l sgh
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nksukaçkf.k; kadsvf/kdkjka dh ckr vkrh g\$ rks, d&nh jdsdsvf/kdkjka
ea tehu vkl eku dk vlurj fn[kkbZnrk gA l f"V usrsnksukadsfy,
gok&i kuh] tehu&vkl eku dh l eku 0; oLFk dh gA exj i # "k tkfr
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dk vfrØe.k fd; k tkrk jgk gA i # "k Lo; arksLoPNn thou thuk
pkgrk g\$ i jUrqefgykvkai j i kcfUn; k; pkgrk gA i kcfn; kai j /keZdk
vkoj.k p<kdj i # "k efgykvka i j inkj k i .k] (yxHkn] okd~, oa
vfHk0; fä i j vndqk] igukos, oal kt&l Ttk i j çfrclU/k] ÄjyWçgl k]
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fL=; kadsvf/kdkjka, oavtknh dks i # "k tkfr }kjk vfrØfer fd; k
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ifjorZu dk ; & FkA ml ds f[kykQ gks jgs blgE 'kksk. kka ds fo#)
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l kE; oknh vk\$ xk/khoknh fopkj/kjk dsçosk ds l kFk gh fL=; kadsçfr
tkstxj.k py i Mk Fkk] dkunh : i ysuk 'kq dj fn; kA ngst çFkk]
(yxHkn] vf' k{kk} l rh çFkk t\$ h dg hfr; ka l srks oks i hfMf gh Fkh]
yfsdu f' k{kk vk\$ pruk ds of) ds l kFk vk\$ rka ds f[kykQ fur&u; s
vi jk/kkaHk k gr; k] vkujfdçyx] , d rjQk çæ dsHkæ t\$ svij k/kkaus
Hkh tle ysuk 'kq dj fn; kA

fujkyk us L=h vf/kdkjka ds çfr l t xrk fn[kkrs gq 'L=h
Lora-rk* dksfoLr vfkZçnku fn; kA mudsvud kj ekuo ds: i ea
feyaçk—frd vf/kdkjka dk fuokZk , oaLoPNUn ç; kx gh 0; fä dh
Lora-rk gA l kefgd ; k l keftd Lora-rk ds l anHkZeaosukjh tkfr
fd cká LorU=rk ds i {ki krh gA mUgkaus L=h vf/kdkjka dks yd j , d
cgr egYoi wkZys[k fy[kk— ^ckgjh Lok/khurk vk\$ fL=; k* vk\$ bl ds
vlurxZ ukjh ds vf/kdkjka vk\$ vktknh dsckjseafy[kk&^geafL=; ka
dh cká Lora-rk] f' k{kk&nh{k k i j fo' ksk /; ku nus dh t: jr g\$



vU; Fkk vc dsi # "kadh rjg mudscPpsHkh xgykeh dh vdkjh jkr ea mMus okys xhnM+gkA Lok/khurk ds çdk'k eangMūsokys'kj ugē gksl drA**1

fujkyk fL=; kads'kfä ds: i eans[kuk pkgrs FkA muds le; ds jpukdkj viuh jpukvka ea ân; xr HkkokadsI kFk mudh fLFkr; kadk o.ku dj jgs FkA dkbZ^vcyk thou gk; rñgkj; gh dgkuh* fy[k jgk Fkk rksdkbZ^ukjh rñ dñy J) k gk dgdj fL=; ka dsçfr l gkukñr 0; ä dj jgk FkA , d s ea fujkyk fL=; ka dksHkkokadsbl Äjs l sckgj fudkydj ; FkFkZ ds/kjkry ij muds l kFk ÄFvR gksjgh ÄVukvka l s 0; fFkr gksml s'kfä ds: i eans[kuk pkgrsFkZ ftl l s og vius l kFk ÄFvR gksjgs vU; k; ka dsf[kykQ e[kj gksl dA 'l qkk if=dk* eafy[ks vius y[k ea L=h ds fy, ^vcyk* 'kñn dsç; kx dk fojksk fd; k—^mUgkaus bl fVli .kh ea l —r vksj fglñh l kfgR; eafL=; kads vcyk dgusdk cysk fojksk fd; ka

bfrgkl ea reke l k; ka }kjk fL=; ka ds l kgfl d dk; kadk mYy[k djrs gq vius ; q dh ukfj; ka l s eDr eñku ea vkus dh vokt yxkbA ^mUgkaus vkt ds mér ; q ea fL=; ka ds fy, ç; ä ^vcyk* 'kñn dks for.Mk&ek=* dgk vksj ukfj; ka dks fu#ik; l kfr djusokysbl 'kñn dks ^ÄkÄk if.Mrka dh nñl ^nf<+ ky eYykvka dk oge* vksj 'i # "kadh çFke Jskh dh e[kk* cryk; kA**2 fL=; kadh fLFkr ij çprk 0; ä djrs gq fujkyk th fL=; kadh bl fLFkr dks eYykvka vksj i fMrka dk cuk; k fo/kku ekurs g—^eYykvka vksj if.Mrka dh —ik l s innfyr fglñrkuh ukjh vo'; vcyk dgh tk l drh gñ ml ds vf/kdkj ka dks blgē nkuka tUrqfo' kñka us jkgq ds l eku viuk l oZkgh eñ [kkydj gM+ fy; k gA**3 fujkyk 'l qkk* if=dk dk l Eiknu dk; ZHkh fd, A bl nks ku blgkaus vius l Eikndh;] vius y[kka }kjk L=h tkx#drk dsçfr fo'kks /; ku fn; ka budk ekuuk Fkk ftl Äj ea L=h f'kf{kr gkskh] etcir gkskh] og Äj etcir gkskh] ml Äj dscPpsf'kf{kr gkskh] vksj çxfr dj l dA 0; fä] Äj] ifjokj dh çxfr l s l ekt vksj jk"V^a dh çxfr gks l dschA L=h dks [kñ fglñ&'kkL=kA vksj l keftd 0; oLFkkvka ds fo#) vius gd vksj vf/kdkj kadsfy, l Ä"Zdjuk gkskhA bl l Ä"Zdsfy,

L=h dks Äj dh pgkj nhokjh l sckgj fudyuk t: jh gA ukjh eDr rc rd l Hko ugē gñ tc rd og Lo; a f'kf{kr , oa tkx#d gks vius vf/kdkj ka dks çklr djus dsfy, [kñ ij Fkks h x; h 'kkL=kñ ij Eijkvka, oa: f<+ ka dsfo#) Økñr dsfy, vkxsugē vkrhA fL=; ka ij gks jgs vR; kpjka ds fo#) fujkyk us vius l ä kn dh; ea dñ l oky NkM& ^D; k fglñwl ekt dsukstoku vksj l fn; ka l s bu 'kkL=h; vR; kpjka dks pñ pki l gu djusokyh fglñwukfj; kadh orëku f'kf{kr i f=; kñ /keZ ds uke ij gkaus okys bl Hk; äj i ki kpj ds fo#) vkñksyu u djæh\ D; k pjka vksj Økñr dh vkx HkMūs ij Hkh orëku fglñw/keZ dh bu vR; kpj i wZ : f<+ kadk uk'k u gkskh\ D; k l ä kj Hkj dh vcykvka ds l cyk gks tkus ij Hkh gekjh fglñ&cgus vcyk gh jgæh**4

fujkyk th vius; q ea i <h&fy[kh fL=; ka l } ukjh vf/kdkj ka dh j{kk vksj ml s vU; fL=; ka rd i gpkus dsfy, ç; kl djus rFkk , d cMk vkñksyu djus dsfgek; rh FkA mUgækye Fkk fd vk/kh vkcknh dksml dk gd rHkh fey l drk gñ tc L=h tkx#drk , oa vf/kdkj dsfy, fd, tk jgs l Ä"Z, oa ç; kl ka ea mudh Hkh l ghkfxrk gkA fujkyk th ftl rjg ds foækh jpukdkj FkZ oñ k gh foækh djus dsfy, fL=; ka l smEhn djrs FkA fujkyk th dh Lo; ays[kd fcjknjh ea ugē cBh] y[ku ea ij Eijxñ : f<+ kñ ij Eijkvkñ 'kñy; kñ Nñka vkfn ds çfr mudk foækh tkuk& i gpkuk gA dfork ds{k= eavñkar dforkvka dsçfr mudsç; kx vkt ds nks eackdk; ns LFkfi r gks pñs gA L=h gkñ nfyr gkñ xjhc gh l cdsçfr mudh vkLFkk jgh gA ; k ; pñgs 'kñ"kr oxZdsosfrjys[kd jgsgA ftl l kE; okn dk vkxkt fglñh l kfgR; ea 1936 ea y[kuÄ ds çxfr'khy y[kd l Ä dh cBd ds ckn gkñk gA l gh ek; us ea fujkyk th ml dk ekyd Hkñrh; l ädj.k FkA mudk ekuuk Fkk l keftd : f<+ kñ ftl rjg 'kæadksnkl cuk; sgq gñ ml h rjg fL=; ka ds vf/kdkj ka l s Hkh mUga oñr fd, gq g—^çkphu 'kh.krk us uohu Hkñr dh 'kfä dks eR; q dh rjg gh Äj j [kk gA Äj dh Nks/h l h l hek eacdkh gñZ fL=; kñ vkt vius vf/kdkj viuk xñs o] nñk rFkk l ekt dsçfr viuk dñk; l c dñ Hkñh gñZgA**5



fdl h Hkh jpukdkj dk l jkdj tu l sgkrk
gA tksjpukdkj viuk ; g l jkdj [kksnrk gS ml dk
otm Hkh ml h rjg [kks tkrk gA fujkyk ds l Ei wLz
yS ku dh l eh{k dh tk, rks gekjs l e{k ; s rF;
fufobkn : i eamHkj dk vkrk gSfd fujkyk dk ; g
l Ä"lZ yS ku dh nfu; k eagh ugE jgk] cYd mUgkaus
Lo; aHksnHkko] vkfFkZd raxh] xjhch] Hkq[kehj dksnS[kk , oa
Hkksk FkkA vr% mudk tksHkh fy[kk gA gekjs l e{k
feyrk gS gdhdr ea; g mudk Hkksk gA Hkh gA os
l gkufkr okys jpukdkj ugE gA os Lokufkr okys
jpukdkj gA bl hfY, gekjs l ekt eafL=; kadh fLFkr
dks nS[kdj os 0; fFkr Fks vLj muds vf/kdkj ka vLj
vktknh ds cfr l fØ; HkhA i#k ds vfroknh l kp]
: f<+vLj i jEijk l sosn[kh FkA fL=; kadscfr mudh
l osnuk vkdkiki wLz 'kOnka eamudh dye l se[kfjr
gA ge ykx Lo; aftl rjg xAye gS ml h rjg
viuh fL=; ka dks Hkh xAye cuk j[kk gS cYd mUga
nkl kadh nkl; k dj j[kk gA bl egknR; l smUga
'khÄzeDr nuh pkfg, A rHkh gekjh nkl rk dh cSM; k
dV l drh gA**6

fujkyk efgykva dh bl n; uh; fLFkr dk
dkj .k mudh vkfFkZd i jk/khurk dksekursFkA mudk
ekuuk Fk fd vkfFkZd i jk/khurk ds dkj .k gh mUga Äj
dh pgkjnhokjh ds vUnj cUn gks Äkj ; kruk; a , oa
vR; kpj l gusi MfsgA mudk ekuuk Fk fd ekuo dks
uS fxZ : i l s çnYk Lora-rk dk vf/kdkj mUga
feyuk pkfg, A ySdu i#k oxL }kj [kp rks og
vf/kdkj blræy fd; k tkrk gS ySdu fL=; kadksml
vf/kdkj l soPr j[kk x; ka efgykva dh fLFkr ea
vxj cnyko ykuk gS rks mUga mudk vf/kdkj nuk
gkskA tc rd os Äj l scgJ ugE fudyax rc rd os
vkfFkZd : i l s l Ei é ugE gks l dæhA mUga i jh mEhn
gSfd fL=; kadksmudk ; g vf/kdkj vkt ugE rksdy
mUga t: j feysk& ^efgykvadh Lora-rk gh muds
thou dh l c fn'kkvka dk fodkl djsxA geaf l QZ
mudh Lora-rk dk Lo: i crykuk gA vLj ; g Hkh gS
fd i#k kadk fujknj djus i j Hkh L=h 'kfä dk fodkl
#d ugE l drk] u og vc rd dgE #dk gA**7

fujkyk dk ekuuk Fk fd L=h i#k kadSfy,
vyx dkuu vLj efgykva ds fy, vyx dkuu ugE

pyskA i#k fo/kj gkstt; rksnH jk fookg dj l drk
gS i#k fo/kj gq fcuk Hkh vud l fRu; k j[k l drk gS
j[kSykaos ; kvkads i kl vk tk l drk gS fdUrqL=h , d k
ugE dj l drhA fujkyk bl 0; oLFk ds f[kykQ gS
tgk i#k l ekt us nkska ds fy, vyx&vyx
vf/kdkj ns j[kk gA i#k l ekt dh bl l kp ds
f[kykQ fujkyk foækg dh ckr djsr gA fujkyk dks
nS[k l svxk/k çæ FkA os; gk dh fuj{kj xjhc turk ds
çfr vxk/k Lug j[krs FkA oseksrFkS fd xkeh.k , oa
'kgjh {ks=ka dh fL=; ka dh Lora-rk] jgu&l gu vLj
i j fLFkr; ka ea tehu&vkl eku dk QdZ gA tc rd
xkeh.k fL=; kadh f'k{k dk çpkj u gksk] tc rd os
f'kf{kr ugE gksk] rc rd L=h vf/kdkj pruk , oa
LokoyEcu dh ckr djuk cbækuh gA fL=; ka ds
vf/kdkj ka dks mUga fn; scxS] mudh Hkyk bz gks gh ugE
l drhA bl ds fy, t: jh gS, d Økär dh nfyrk
'kS'krka , oa fL=; ka ds fy, , d l kekftd Økär dh
t: jr gS tc ostkx#d gkstt; æsrks vius vf/kdkj ka
dks çklr djus ds fy, [kp gh vkUnksyr gkstt; æA
^egku folyo gh gj , d l qk] dk eny gA fL=; k mu
folyoka ds l kF&l kF] vf/kdkj l Ecu/kh tS &tS s
i fforZ l ekt eagkrsx,] os sgh os sviuk i wLz: i
cnryh xbA**8

; jki vLj Hkjr dh fL=; kadh fLFkr; ka eacgr
cMk vUrq gA ckr f'k{k dh gS Lora-rk dh gS Hkæ.k
dh gks; k l ekurk ds vf/kdkj kadh gS Hkjr eabu l c
ekeyka eafL=; kadh l ekurk , oa l Eku fl QZ dks th
i fYUnk gA xBfka eacMh&cMh ckra feyaxh] fL=; ka ds
i{k ea yEc&yEc d l hns feyaxA i jUrq ; FkFkZ ds
/kj kry i j muds l kF HksnHkko vLj 'kS.k .k ds fl ok d
Hkh ugE gA muds Äj i#k kadS }kj cuk; sx, fu; e]
: f<} i jEijk; a vLj muds ykxw djus ds fy, [k i
i p; rka ds ræydh Qjeku] muds Lora- : i dh
thou 'kSyh i j vadqk yxkrs gA l kerh 0; oLFk dh
çkphurk Hkjr eaftruh i jkuh gS mruh gh i jkuh
fL=; ka i j 'kL= dk cak djus okyh 0; oLFk HkhA
vud l kl—frd , oa l kekftd vkUnksyuka ds ckotm
: f<ækn dh tMæ l ekt eaxgjk bz ds l kF te f gLgA
fL=; kadks l tx vLj l fØ; gkdj bl : f<+dsf[kykQ
vkUnksy dj rkmuk gkskA i#k ds l eku l ekurk ds



vf/kdkjka dks i kuk gksxkj rHkh muds thou eacnyko
vk l drk gā fl=; ka dks i # "kka, oa 'kkL=ka }kjk Fkks h
xbz feF; k uŕdrk ds vkoj .k dks rkbhuk gksxkA
fujkyk usbl feF; k uŕdrk dsf[kykQ 0; x; i wkz<æ
l svkykpuk djrs gq fy[kk& ^egkjkt n'kjFk ; k
okftn vyh'kkg dh rjg ; fn vudl fl=; ka dks , d
ifr gksuk 'kkL= l ær gŕ rksæks nh dh rjg , d L=h
ikp ifr; ka l shkh jfr dj l drh gŕvksj ml dk l; kj
ej ugē l drkA gk fdl h , d dsçfr vf/kd Hkysgh
gkA gekjsi # "kkadks; g l c cgr cjk yxsxkj D; kfd os
pkgrs gŕ fd ge l cdh fl=; ka dh rjQ nŕ[kj
gl h&etkd dj ij gekjh L=h fnu&jkr gekjs gh
/; ku eaMch jgā Bhd euŕ; dh rjg bruh gh mpkbz
ij <gdj fopkj djus ij] pkfj=d vdkd'k&dd ŕ
fQj iFoh ij gh [kyæ& vksj vkn'kz dk vdkd'k&
vdkd'k gh l k 'kū; cudj çdk'k yŕk&jfgr gks
tk, xkA**9

^vlljk* miU; kl dh ukf; dk ^dud* tksfd
os; k iæh gŕ dksguj LVst ij nt; ũr ds osk ea
jktdeŕj l s Hkh/ gksus ds mijkũr ml ds vũnj dk
L=hRo tkx mBrk gŕ vksj og jktdeŕj dksvfHku; ds
: i eagh ugē ifr ds: i eaHkh oj .k djuk pkgrh gā
og Hkh l ekt dh vl; fl=; kadh rjg obkfgd l ldkj
eacdkdj ekrRo l ŕk pkgrh gā og gj dher ij ml
nyny l sckgj vkuk pkgrh gŕ ftl eaekj vksj vl;
fl=; k my>dj viuk thou fuoŕu dj jgh gā , d s
eaml dsekj }kjk fojksk Lo: i ml s l e>kus ds gj
ç; kl foQy gksjgsgā og viusrdkæ l sekj dsç'uka
dk ; Fkkspr tck nŕh gā og dykdj dsotm dks
l e>krh gŕ dyk dseŕ; kadh l ehkk djrh gŕ- ^gk
vEek! eŕdyk dks dyk dh -f"V l snŕkrh gā D; k
ml l svFkZçkflr djuk ml dsegŕo dksÄV k nŕk ugē
gŕ**

^Bhd gŕ ij ; g , d çdkj dk l e>kŕk gā
vFkZ okys vFkZ nŕs gŕ vksj dyk ds tkudkj ml dk
vkulnA l d kj ea, d&nŕ js l s, d k gh l Ecũk gā**
^dyk dsKku dsl kFk gh l kFk dŕn , d h xũnxh Hkh ge
yxska ds pfj= eajgrh gŕ ftl l seŕs l [r uQjr
gā**10

0; fä dk thou thusdk tksvf/kdkj gŕ og

ml s feyuk pkfg, A dud ml h vf/kdkj dks i kuk
pkgrh gā og , d l Eeku tud thou thuk pkgrh
gā bl fy, og viusek; rd dksR; kxdj viusifr dk
oj .k dj ubzftũnxh dh 'kævkr djuk pkgrh gā og
Hkh os; kofŕk vksj dkBsdh nŕu; k l sfudydj l ŕkfxu
dh ftũnxh thuk pkgrh gā

^vydk* miU; kl l ŕk vksj l ekt ds ml
foæi pŕjs dks cudkc djrh gŕ ftl ea rRdkyhu
l ekt l B vksj rkYyŕnkj viuh vehjh dksçdj kj
j [kusdsfy, fl=; kads vaxst kads gkFk çp fn; k djrs
FkA , d k gh vo/k dk , d rkYyŕnkj ckcweŕyh/kj gŕ
tks iŕd fojkl r eafo'kky /ku dk Lokh gā ftl dh
fuxkg vydk ij gā vydk ekeysdks l e>rsgh Hkx
[kMh gksr h gā fQj Hkh eŕyh/kj ml sikusdsfy, ml dk
i hNk djrk gŕvksj vlŕ eaog vydk ds gkFkæ ekj
tkrk gā tc Hkh , d L=h l sthou thusdsvf/kdkj dks
Nhu k tkrk gŕ ml sikusdsfy, [kŕ dks l Ä"lZ djuk
i Mŕk gā bl miU; kl dsek/; e l sfujkyk usL=h ds
, d l 'kä fdjnkj dks fn[kkus dk ç; kl fd; k gā
bl dsek/; e l sfujkyk usL=h dks 'kfäorh cu vius
vf/kdkjka dks i kusdsfy, l Ä"lZ dh t: jr dksfn[kk; k
gā fujkyk usL=h vf/kdkjka dks dgē Hkh detkj ugē
gksufn; k gā vydk miU; kl earst ckcwl sokrkŕki ds
nkj ku ; ŕrh dgrh gŕ ^dgē vki us0; k[; ku eadgk
gŕ efgykvka dks eŕa ũHk ds fuLl he çkæ .k ea jguk
pkfg, A D; k vki dk ; g mŕŕ; gŕfd os çpkjh dHkh
viusÄk yseayks/sgh ugēA**11

^çHkkorh* miU; kl dh ukf; dk ^çHkkorh* jkt
i fjokj dh çh gksus ds çkotm viuk oj Lo; aviuh
bPNk l spŕuk pkgrh gā og o; Ld vksj çŕ) eku gŕ
vr%og pkgrh gŕ ml dsbl vf/kdkj eafdl h rjg dk
gŕ{ki u gkA bl çf0; k eaog fir k }kjk ml dsfy,
pŕko fd, x, euok dsl jnkj jktk cyolŕ çl g dks
udkj nŕh gā og vius fir k ds 'k=q ykyx<+ ds
jktdeŕj l sfookg dj yŕh gā ml ds }kjk fy, x,
bl fu.kz eamls l eŕk vudl çdkj dh rdyhQa
vkrh gŕ ijũrq og vius thou l kFk ds p; u dk
vf/kdkj NkMŕs dks rŕ kj ugē gā fujkyk dh ukjh
Lok/hurk dh pruk dk i {k cMk l 'kä gŕ ^efgykvka
dh Lorærk gh muds thou dh l c fn'kkvka dk



fodkl djsxhA geafl QZ mudh Lorærk dk Lo: i crykuk gSvkj ; g Hkh l R; gSfd i # "kka ds fujknj djustij Hkh L=h 'kfä dk fodkl #d ugê l drk vkj u og vc rd dgê #dk gA bl fy, ge L=h Lorærk dsdk; Zeai # "kka l senn djustdsfy, dgrsgj D; käd ukjh gh Hkkoh jk"V" dh fuekzrk gA ev[kz i hfMf ijk/khu ekrk l srstLohj Loræ vkj eskkoh ckyd&ckfydk, i ugê i shk gksl drêj ftl l sjk"V" dk l okæ ttj jg tkrk gA**12

fu#iek miU; kl eaHkh, d sgh rF; kädksmHkkj k x; k gS tglk y[kd us; g fn[kkus dk ç; kl fd; k gS fd vk/kfudrk dspj.k Hkysgh gekjsdjhc vk x, gla ij tkfr] o.kz Hkk"kk vkj çyx ds vk/kkj ij HksnHkko vHkh Hkh gekjsl ekt dks tdmMagg gA firkdh er; qds ckn fu#iek dks jkeij xkp dh teñkjh feyrh gA og ukckfyx gS, d seans[k&j]k eaekek dk glr{ki c<rk gA ml dsekek vkj eejsHkkbz dh utj ml dh l EifYk ij gA vr%/ku nkgu dsfy, fu#iek dsuke ij mudk turk ij dgj tkjh gA fu#iek dk ân; xr çæ —".k dækj l sgjftl dk ml dsekek }kj k fojksk gkrk gA bu reke fojkskHkkk ka ea thou ds l Ecäk eavge fu.kz kadsfy, fu#iek Loræ fu.kz ds fy, NVi Vkrh gA

"rksbl l Ecäk earksrëgagh viusl pkyu dk Hkkj yuk gksxk] rHkh rë l Qy gksxh eärrëgkjh dëy vudpyrk dj l drh gA** l kfo=h nöh fcydy ekj dh rjg feydy ckyhA

"es, d k gh d: xhA dey dsl Ecäk eaeppshke u gypk gkrk] rks ml h jkst esbl dk vHkkk nsxbz gkrhA**13

miU; kl eaUh: vkRel izk ugê djrh] cfYd ml dsf[kykQ gksjgsukuk çdkj ds ntpØkads l kFk /kS j l kgl vkj rkdr ds l kFk epkcyk djrs gq fot; çklr djrh gA

fujkyk ds miU; kl ^pkv dh idM+ dh l tZuk Hkh çæ vkj l kân; Zdh LoPNUnrkoknh i "B Hkne ij gplzgA miU; kl eaurnbh, tkt dsl kân; Zukjh LoHkko dh ç—fr, oaml dsok; oh : i dksçLrç fd; k x; k gA, tkt] çHkdj dsl Ei dZevkusdsckn vius 0; ol k; urbh ds i s k dks NkM+dj Lons kh vkUnkyu

ea l feefyr gkdj viusR; kx , oaçe dk ifjp; nrh gA

fujkyk usmiU; kl kadsL=h i k=kadsek/; e l s fL=; kads l tx] pruj l kgl h , oa l Ä"lz khy fn[kkus dh pSvk dh gA bl ds i hNsdk mudk , d gh edl n gS mudsek/; e l s l ekt dh vl; fL=; kads muds vf/kdkj kads fnykuk vkj thou dks i # "k 'kksk.k ds nyny l sckgj fudkyukA

l nHkZ xJFk l pph

- 1- uflnrk çl g] fujkyk dk x l l kfgR; vkj Lok/khurk dh pruk] ykdHkkjrh çdk'ku] bykgkckn] 2012] i "B l ç; k& 67A
- 2- MkwHkonö i k.Ms] , oe-fujkyk] ok.kh çdk'ku] ubzfnYyh] 2004] i "B l ç; k& 146A
- 3- ogh] i "B l ç; k& 146A
- 4- l Eiknd& uln fd'kij uoy] fujkyk jpukoyh] Hkx 6] jktdey çdk'ku] ubz fnYyh 2006] i "B l ç; k& 261&262A
- 5- l wZklr f=i k Bh 'fujkyk' çclU/k çfrek] jktdey çdk'ku] 2002] i "B l ç; k& 131A
- 6- jke foykl 'kek] fujkyk dh l kfgR; l k/kuk] f}rh; [k.M] jktdey çdk'ku] ubzfnYyh] 2011] i "B l ç; k& 36A
- 7- 'l qkk if=dk' väd fl rEcj] o"lz 1932] l i kndh; i "BA
- 8- 'l qkk if=dk' väd uoEcj] o"lz 1929] l Eikndh; fVli .kh&12A
- 9- jke foykl 'kek] fujkyk dh l kfgR; l k/kuk] Hkx 2] jktdey çdk'ku] ubzfnYyh] 2011] i "B l ç; k& 45A
- 10- l wZklr f=i k Bh 'fujkyk' vydk] jktdey iij cDl] ubzfnYyh] pkfkk l çdj .k 2018] i "B l ç; k& 26A
- 11- l wZklr f=i k Bh 'fujkyk' vydk] jktdey iij cDl] ubzfnYyh] f}rh; vkofYk 2015] i "B l ç; k& 118A
- 12- l Eiknd] uln fd'kij uoy] fujkyk jpukoyh] Hkx 6] jktdey çdk'ku] ubzfnYyh 2006] i "B l ç; k& 361A
- 13- l wZklr f=i k Bh 'fujkyk' fu#iek] jktdey iij cDl] ubzfnYyh] nll jk l çdj .k&2016] i "B l ç; k&123A





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dkfoM&19 vkj vkWuykbu f'k{kk I Ecfu/kr eqns , oa I ek/kku



& MkW xksi ky d".k Hkkj }kt
i kpk; L, oa, I kfl , V i kQd j &
f'k{kk' kkl= foHkkx]
fd'ku f'k{k.k , oai f'k{k.k I LFkku]
i koVk dksVi rpyh] t; i j &302001
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gkbhardwaj72@gmail.com

I kj ka k

vc oDr vk pppk gSfd I ekt dks igysdh Hkkfr gh f'k{kd
f'k{kk nksdk dk; Zf'k{k{dkadksdjuk gksx vls I ekt dk fuelZk djs
grqf'k{k.k i }fr eavkbZ#dkoV dksde djsdsfy, foHkkUu i djk
dsvuq; z kxkadk iz kx djuk gksxA bl grqfMftVy yfuik dh enn
yh tkuh pkfg,] I kFk gh fMftVy f'k{k.k grqi f'k{k.k fnyk; k tkuk
pkfg, A I LFkkrvka dks opjy Dykl : e rFkk ohfM; ks dksQdI æ dh
I fo/kk inku dh tkuh pkfg, A ykbcjh I er f'k{k{dkarFkk Nk=ka dks
?kj cBs i Lrdkadh fMyhojh nksdh 0; oLFkk dh tkuh pkfg, rfd
ykbcjh cln gks i j Hkh mudsKku i klr djsdsnjoktscln u gka
D; kad Nk= rFkk f'k{kd dsfy, i Lrd osvL= gSftl dsne ij os
nfu; k dh gj cMh I scMh tax thr I drsga I kFk gh dN cfu; knh
vko"; drk ij Hkh /; ku fn; k tkuk pkfg, ftl I sfd mlgafdl h
i djk dh vl fo/kk u gka vkWuykbu i <usrFkk i <kusdsfy, I cl s
igysftu oLrpvka dcl scMh t: jr gS og gSfctyh fcuk fctyh
dsu rksQks pktZgsl drsgau gh Vhoh py I drsga bl fy, I cl s
igyk i cl/k rks I jdkj dks; g djuk pkfg, fd og I Hkh xlp rFkk
"kgjkaeaf | r dk blrtke dja fQj bl dscn LekVZQksu] yS VW]
VcyV rFkk dEI; Wj] Vhoh I V dh 0; oLFkk dji ftl dsek; e I s
f'k{k.k I kexh dks i Lr fd; k tk I d; i jUrq; g I fo/kk bruh egach
gSfd buaevf/kdkrk ykxksdh [kjh nusdh vllh fgEer Hkh ugha dj
i k; æ; D; kad , d rks dakyh] Åij I svkVx xhyk ; kuh djsuk dh
otg I sdke /kdk os shlh fNu x; k gA

dkfoM&19 egkekjh dsdkj .k orZku eaf'k{kd rFkk Nk=ksads
Hkfo'; ds I e{k dfBu pppk; k; [kMh gksx; h gA dkfoM&19 usnsk
dh f'k{kk 0; oLFkk ij cgr cjk vl j Mkyk gA os'od Lrj ij ftl
rjg I sbl egkekjh us193 ns'kkadsf'k{k{dkarFkk Nk=ka I er vl; oxka
ds thou dks i Hkkfor fd; k gsvks Hkkjr ts sfodkl "khy ns'k ij rks
; g xg.k dh rjg yx x; k gA ftl dh dkyh Nk; k usf'k{k{dkarFkk
Nk=ka dschp mu e/kg I Ecl/kka ij i kuh Qj fn; k gA ftl usvkt
f'k{kk ds {ks= ea cMscnyko rFkk pppk; ka dks tle fn; k gA bl
egkekjh usofHkkUu LdnykadkystkadsNk= rFkk f'k{k{dkadsl keusvud
ppk; ka dks [kMh dj fn; k gA



dkjksuk ok; j l cM+1/20&160 , u- , e-1/2 f?kjs
gq vkj- , u- , - ok; j l gkrsgftueaQil sgq , dy
thuke gkrsgftuea dkjksuk ok; j l uke yfVu dkjksuk l s
fy; k x; k gA ftl dk vFkZgSrtkA f"kk {ks= eacMs+
cnyko rFkk ppukS; ka dk tle djksuk ok; j l dh
otg l s gh gq/k gA bl egkekjh us fofHkuu Ldnyka
dkystkafo" ofo | ky; kadsNk=ka rFkk f"kk {kdka dsl e{k
fuEu ppukS; kads [kMk dj fn; k gA
i kB; Øe l Ecu/kh l eL; k&

djksuk egkekjh ds dkj.k fo" ofo | ky; ka ea
i < k; k tkus okyk i kB; Øe Hkh iHkkfor gks jgk gS
D; kAd i kB; dæ dh viuh , d l e; l hek gkrh gA

ml h l e; l sfu/kkZjr l e; l hek ds vlr x-
Nk= rFkk f"kk {kd nka feydj ml i kB; Øe dks
l ekir djrs gA bl egkekjh ds dkj.k ml i kB; Øe
dks tl dh rl iLr djuk dfBu gks jgk gA
i kB; dæ dk iz kx djrs gq f"kk {kd Nk=ka dks vius
xr0; rd igpuseaenn djrk gA bl fy, i kB; Øe
dks thou dsfy, rFkk thou thus dsfy, mi; kxh
cukusij tkj nsuk pkfg, A i kB; Øe l Ecu/kh l eL; k
rc vkj xEHkhj gkstrh gStc gekjk ekStmk i kB; Øe
gea djds l h [kusij tkj nrk gS i jUr egkekjh ds
dkj.k vHkh ; g l EHko ughagSD; kAd , d sea u ykbo
Dykl gS u lk; kZr iz kxRed dk; Øe djus gq
mi dj.k u gh LFkuu gSftl ds dkj.k Nk= rFkk f"kk {kdka
eafujk"kk vk l drh gA ekua l d k/ku fodkl ea-ky;
dkjksuk ok; j l ds c<rs [krjs dks ns[krs gq bl
"kSf.kd l =&20&21 ds i kB; Øe vkj Ldny ds ?ka/s
?kVkusij fopkj dj jgk gA

l ek/kku orZeku djksuk dky eafth rjg l s
Nk=ka dks vkWkybu f"kk {kk inku dh tk jgh gA ml
rjg iWZfu/kkZjr i kB; Øe l EHko ughagSD; kAd igys
ftl v/; k; dks djkus ea nks l s rhu fnu yxrs FkA
vkWkybu d {kk ea ml h v/; k; dks djkus ea vc
pkj&ikp fnu yx jgs gA bl rjg l e; nksxpk gks
x; k gA ifj.kkeLo: lk i kB; Øe ijk gkus ea cgr
T; knk l e; yxskA

bl graqf"kk txr l stMpykxkad h fMftVY
forj.k dh dyk dsek/; e l sfØ, fVo rjhds l h [kus
gksvks i kB; Øe blVjuS/ dksHkh cgrA

fu" d" kZ&

vc oDr vk ppk gSfd l ekt dks igys dh
Hkkfr gh f"kk {kd f"kk {kk nus dk dk; Zf"kk {kdka dks djuk
gksk vkj l ekt dk fuekZk djus graqf"kk {k.k i } fr ea
vkbZ #dkoV dks de djus dsfy, fofHkuu izdkj ds
vuqz kxka dk iz kx djuk gkskA bl graq fMftVY
yfuZ dh enn yh tkuh pkfg, l kFk gh fMftVY
f"kk {k.k graq f"kk {k.k fnyk; k tkuk pkfg, A l LFkvka dks
opby Dykl : e rFkk ohfM; ks dMkQil æ dh l fpo/kk
inku dh tkuh pkfg, A ykbcjh l er f"kk {kdka rFkk
Nk=ka dks ?kj cBs i lrdka dh fMyhojh nus dh 0; oLFk
dh tkuh pkfg, rkfd ykbcjh cln gkus ij Hkh muds
Kku i klr djus ds njoktscln u gka D; kAd Nk= rFkk
f"kk {kd dsfy, i lrd os vl= gSftl ds ne ij os
nfu; k dh gj cMh l scMh tæ thr l drsgA l kFk gh
dN cfu; knh vko"; drk ij Hkh /; ku fn; k tkuk
pkfg, ftl l sf d mlgafdl h izdkj dh vl fpo/kk u gka

vkWkybu i <usrFkk i <kusdsfy, l cl sigys
ftu oLrqka ds l cl scMh t: jr gS og gSfctyh
fcuk fctyh dsu rksQku pktZgk l drsgau gh Vhoh
py l drsgA bl fy, l cl sigyk izlU/ rks l jdkj
dks ; g djuk pkfg, fd og l Hkh xkp rFkk "kgjka ea
fo | r dk blrtke dja fQj bl dsckn LekVZQku]
yS Vku] VcyS/ rFkk dEl; Wj] Vhoh l S/ dh 0; oLFk
dj fth dsek/; e l sf"kk {k.k l kexh dks iLr fd; k
tk l dS i jUr; g l fpo/kk bruh egaxh gSfd bua
vf/kdkk ykxksdh [kjh nusdh vHkh fgEer Hkh ughadj
i k; æ D; kAd , d rksdakyh] Åij l svkVx xhyk ; kuh
djksuk dh otg l sdke /kdk os SHkh fNu x; k gA

l anHkZ xFk l ph

- 1- MKW fLerk dks oM&19 % , d u; srjg dk [krjk] ; kstuk]
ebZ2020 o'kZ64] vAd 5] i 'B 11A
- 2- i d kn MKW ds Mh- fl g] MKW Hkkuq irki] ykM Mkmua ea
vkWkybu f"kk {k.k A
- 3- dyke] vCny okbz , l - jktu] Hkkjr 2020 vkj ml dsckn]
i æpu cpl j 2015, lk'B&133A





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Hkkjr vkj phu ds e/; jktukf; d I Ecu/k



& MKW dYiuk ik.Ms
vfl LVUV ikQd j &
jktuhfr foKku foHkx]
Mh-, &oh- dkyst] dkuig&208001
1mRrj ins k½

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kpandey1969@gmail.com

Hkkjr vkj phu nks l cl scMh vFkD; oLFkk; a l pkfyr djus okys nsk gA bu ns kka ds e/; I kldfrd o vkrFkd I Ecu/k i kphu dky I sgh pysvk jsggA phu ges kk gh tki ku dh 0; ol kf; drk I s i Hkkfor jgk gS vkj Hkkjr yxHkx 200 o"z fcl/su dh vkj fuoskd nkl rk I s tdMh jgk gA f}rh; fo'o; q ds i'pkr~ nksuka nsk LorU=rk gkfl y dj ik; A

, frgkfl d ?kVd & phu ea/keZvkj I l dfr dk nh?kdkyhu bfrgkfl ; g inf'kr djrk gSfd ; gk dh I l dfr vkj tu pruk dks dUq; f'k; okn] rkvokn vkj ckS /keZ us feydj orEku Lo: i I kdkj fd; k gA bu rhuka/keZevki I eacgr I h l ekurk; agSvkj , d nh jsl svyx gkusdk nok djus ds LFkk i j vi usfopkj ka vkj fjoktkaI sphuh ykd/keZdks I e) cukusdk dk; Zdjrs jsggA Hkkjr ds }kjk gh ckS /keZdk i pkj o i d kj phu eaf; k x; kA phu ds ykxka us ckS /keZ dh f'k{kk xg.k djus ds fy; s Hkkjr ds fo'ofu | ky; ka 1/4kyUnk , oar{kf'kyk½ dks puk D; kld ml I e; fo'o eavi uh rjg ds; ghanks fo'ofu | ky; f'k{kk dsegROI wkZ dlnz FkA1

1946 eaphu eal kE; oknh 'kkl u dh LFkki uk ghpZfQj Hkh nksuka ns kka ds e/; fe=rki wkZ I Ecu/k cus jgA phu ds I ?k"Z ds i fr Hkkjr }kjk fodkl 'khy nsk dh uhfr , oai p'khy fl) kUr ij vkLFkk i dV dh xbA 1949 ead; sphu dh LFkki uk ds i'pkr-Hkkjr uspj u ds l kFk jktukf; d I Ecu/k LFkkf i r fd; A bl i dZkj Hkkjr phu ykd x.kj kT; dksekU; rk nusokyk igyk xj I ektoknh nsk cukA²

1954 ea Hkkjr] phu o E; kækj }kjk 'kkfURI wkZ I gvflrRo ds i kp fl) kUr 1/4 p'khy½ i dfr fd; s x; A i p'khy fl) kUr phu o Hkkjr }kjk fo'o dh 'kkfUR o I g{kk eaf; k x; k , d egROI wkZ ; ksnku Fkk vkj vkt rd nksuka ns kka dh turk dh tcku ij gSi jUrq phu useS h I Ecu/kka dks fdukj s djrs gq 1962 ea Hkkjr ij vkØe.k dj fn; k vkj Hkkjr dh cgr I h Hkfe ij dCtk djrs gq , di {kh; ; q fojke dh ?kSk.kk dj nh rc I svkt rd nksuka ns kka ds e/; I Ecu/k I keU; ughagk i k; sgA phu useS tekgu jS kk dksekuusl sbUdkj dj fn; k vkj 37 oxZfdeh- ds vDI kbZ phu ds {ks= dks dCt sead j fy; k bl ds vfrfjDr tEew , oa d'ehj ds dN fgLI s ea Hkh phu us n[kyUnkth dhA bl ds vykok 90000 oxZfdeh dh Hkkjr; Hkfe tks v#.kkpy ins k dk fgLI k Fkk oks Hkh buds dVvy nkos dk f'kd kj gk x; kA

nksuka ns kka ds fo'kSk i fruf/k; ka us l u-2003 ea l hek fookn gy djus ds fy; sokrkZ tkjh djus i j I gefr 0; Dr dh nksuka i {kka ds



e/; ckrphr dsdbznkş pşysfdu fookn dh fLFkfr
 'ogha dh ogha jghA bu okrkz/ka l s , d i f j . kke ; g
 fudydj vk; k fd l hek i j ' kkrur cgky dh tk; svkş
 vki l eal pukvka dsl k>k fd; k tk; A
 phu vkş Hkkjr dk vkfFkd vH; q; &

'khr; q) dh l ekfir dsckn l snkuka nş kka ds
 vkfFkd fodkl dh j'rkj rsth l sc<h gA vr%nkuka
 gh nş kka ds 0; ogkj eaHkh i fjoz rsth l sf n[kkbznsus
 yxA pñd nkuka i Mkd h gA vr%nkuka dk /; ku , d
 nñ jsi j yxsjguk LokHkkfod gA

Mæ ftiax , d mHkjrsgq phuh usk jgs
 ftl gkaus l u~1978 ea 'vk/kfud phu* dh vk/kkf'kyk
 j [khA ekvks usphu dks tgl; rd i gpkuk Fkk] ml ds
 ckn Mæ ftiax usphu dks vk/kfud Lo: i inku
 fd; kA os vk/kfud phuh vFkd; oLFkk ds fuekZk jgs
 D; kñd mlgkaus gh mnkj vkfFkd l qkkjka ds vUrXr
 'eDr njoktsdh³ uhr* dh 'kæ#vkr dh ftl usfonş kh
 fuosk dks vkefU=r fd; k vkş fo'kş vkfFkd i f j {ks=
 ¼ l s ky bdkuMkd tks ½ dks fodfl r fd; kA bl l s
 phu dh vFkd; oLFkk eafodkl dsnkş dh 'kæ#vkr gA
 phu dks fodfl r jk"V² ds: i eafo'oi Vy i j vxks
 c<kus dk dk; Zphu ds jk"V¹ fr Jh ftiax usfd; kA
 bl gkaus l u~2012 ea l Rrk l Hkkyh vkş i kp o"kkæagh
 viuh dks'k'kka l s phu dks fo'o ds 'kñ"kre nş kka ea
 LFkku fnyk; kA buds'pkbuht Mhe* vkş 'u; s; æ* dh
 ubZ vo/kkj . kkvka us , d ubZ 'kæ#vkr dh vkş phu
 vUrjZVh; Lrj i j i Hkko'kkyh nş kka ea LFkfi r gks
 x; kA

Hkkjr ds fodkl dh dgkuh Hkh ml ds vrhr
 dks nş krs gq de jkp d ugha gA Hkkjr ea vkfFkd
 l qkkjka dh 'kæ#vkr l u~1991 ea gA Hkkjr usfodkl
 ds l Hkh ekudka l dy ?kjy fodkl] fonş kh epk
 Hk. Mkj] 0; ki kj vkorZ fuosk , oavU; dks i jk dj fy; k
 vkş fo'o ea 11ok l cl scMh vFkd; oLFkk okyk nş k gks
 x; kA orëku eabl dh j'rkj bruh rst gSfd 2019 ea
 ; g fo'o dh 5ohal cl scMh vFkd; oLFkk okyk nş k gks
 x; k gA Hkkjr us vius l dy ?kjy fodkl nj dks
 nqkuk djusdk QS yk fd; k gsvkş vk'kk djrk gSfd
 og l u~2024 rd bl vkfFkd y{; dks i klr dj
 yska , f'k; k dsl cl scMhbu nkukans kka ds 0; ogkj ea

fuf' pr gh cnyko fn [kkbznsjgk gA nkukagh nş kka ds
 i kl mHkjrsgq cktkj gñft l l sog vius nñ?kdkyhu
 fodkl dk y{; gkfl y dj l drsgA phu usnf{k.k
 , f'k; k] vYhdK] ySVu] vesjdK] dñh; , f'k; k vkş
 i ZkkUr {ks=ka ea vius vkfFkd opLo gkfl y dj fy; s
 vkş eyDdk dsifr viuh l eL; kvkal sfui Vusdsfy,
 vkş ÅtkZ rFkk 0; ki kfjd vko'; drk dh l EiñZ ds
 fy, bl usleph {ks= i j vf/ki R; tekuk 'kæ# fd; kA
 64 fcfy; u ; w , l - Mkyj dh ykxr l s phu &
 i kfdLrku vkfFkd xfy; kjs dk fuekZk fd; k x; k tks
 phu dks l h/ks vjc&l xj l s tkMfK gA
 phu & i kfdLrku vkfFkd xfy; kjk ¼ h- i h- bZ l h-½ phu
 dh egRo i wZ , oa egkRokdkKh i f j ; kst uk 'cYV , .M
 jkM bfuf'k; sVo* dk , d fgLI k gA phu dh⁴ eL;
 j. kuhfr ; gh gA fd fo'o ds vud fgLI ka ea vi uk
 ijpe Ogjkrsgq os'od i Hkko LFkfi r fd; k tk; s
 vkş egkRokdkKh i f j ; kst uk 'cYV , .M jkM
 bfuf'k; sVo* dks ; FkkFkZ : i l s i f j . kr fd; k tk; A
 bl usHkkjr ds }kjk rş 'kksku dk; Deka dks fo; ruke
 ds rV i j 'kæ# fd; s tkus dk gj l EHko fojZk fd; kA
 nf{k.k , f'k; kbZ nş kka ea phu dh vkfFkd l f/k; ka vkş
 budh vkfFkd rkdra fi Nys o"kkæ ds nkş ku yxkrkj
 c<fh jgh ftl l sbu nş kka dks phu ds l kFk 0; ki kj ea
 533 fcfy; u ; w , l - Mkyj dk upl ku gA Hkkjr us
 dbZ nş kka ds l kFk vius vkfFkd l Ecu/k LFkfi r fd; A
 buds vfrfj Dr Hkkjr us, f'k; kbZ nş kka l s l u~2009 ea
 eDr 0; ki kfjd l e>kş s Hkh fd; A phu dks Hkkjr dh
 yxkrkj c<fh vkfFkd i xfr i l Un ugha gS D; kñd
 Hkkjr Hkh nf{k.k , f'k; k ea phu ds vkfFkd opLo dks
 uki l Un djrk gA nkukans k geskk jktuhfrd dkj . kka
 l s vki l ea fHkMf s jgs gñft l dkj . k muds f } i {kh;
 l Ecu/k okLro eapVVkuh gksx; sgA

bu nkuka i Mkd h nş kka dh l Ükk 'kñ"iz i j jgus
 okys uskvka dks muds l qkkjRed nñ"Vdks k ds fy,
 tkuk tkrk gA Hkkjr h; i Zkuea-h Jh ujñz ekñh vkş
 phuh jk"V¹ fr ftufiax dschp fof'k"V l ekurk; agA
 nkukagh usk fuosk dka dks vkdf"kr d j usdsfy, vi us
 nkñka ds l kFk du/ks l s du/kk feyk dj pyusdsfy,
 tkustkrsgA

tgl; phu us viuh cgy/ Vka l s nfu; k dks



ea-e/k fd; k gS rks Hkkjr vius varfj{k fe'ku ea
eW; oku l pkj mi xgka dks ykUp djrs gq vkxs c+
jgk gA

forrh; {ks= dsi xU/k ea l oU'SB &

phu us1978 eacktkj l eFkd vFkd; oLFkk dh
vkj c+uk 'kq fd; k vkj Hkkjr us1991 ea yfdu
vkfFkd vkj foUkh; cktjk aeal qkkj dsekeyse Hkkjr
phu l s15 l ky vkxs gA fo'ksKka dk ekuuk gSfd
Hkkjr usforrh; {ks= eaphu l scgrj in'ku fd; k gA
Hkkjrh; ckM cktjk dks, f'k; k ea l cl svf/kd rjy ea
, d ds: i ea tkuk tkrk gStksfd vkj-ch-vkbZ }kjk
vPNh rjg l sfodu; fer⁵ vkj byDVkfud gA forrh;
{ks= dks i xU/k r djus ds rjhdse Hkkjr dks nfu; k ds
l oU'SB n'kkaeal s, d eku tkrk gA

vUrfj{k fe'ku dh i fr; kfxrk&

phu vUrfj{k fe'ku eaokLro eacgr vPNk
dj jgk gSfdUrq Hkkjr Hkh l pkj mi xgka dks yxrkj
i {ks=.k ea i hNsughagA Hkkjr usviusth, l -, y-oh, e-
dsAAA dsl kFk viuk l cl sHkkjh l pkj mi xg Hkst k
gA Hkkjr dk y{; 300 vjc Mkyj dsof'pd vUrfj{k
m | kx dk, d cMk fgLI k thruk gA Hkkjr usvius
mUkj h i Mkd h l sizka k vftR djrs gq fjdKMZ 104
mi xgka dks l Qyrki dsl ykUp fd; k gA varfj{k
fe'ku dh 'kq#vkr Hkh phu us1950 dsn'kd vkj Hkkjr
us1962 eadh FkhA

OkekZL; iVdy mRi kn vkj fu; kR&

nok mRi knu vkj fu; kR dks Hkkjr viuh
l cl scMk rkdr ekurk gA bl usfi Nys i kp o"kkZ ea
ySVu vesj dk dks OkekZL; iVdy mRi knka ds fu; kR
vkj phu dks i hNs NkMk gA vkbZoh, Q- dh fji kZ/ea
dgk x; k gSfd 2016 eaphu ds 404 fefy; u Mkyj
eW; dsfu; kR dh rgyuk ea Hkkjr usySVu vesj dk dks
651 fefy; u Mkyj fd mRi kn fu; kR fd; A Hkkjr vkj
vesj dk dsc<rs gq l kefjd l Ecu/kka dks phu vius
fojkskh j.kuhfr ds: i eans[krk gA

[kqjk fcØh ea vi f{kr mNky&

Hkkjr us of'od [kqjk fodkl l pdkd ea
0; ki kj djuseavkl kuh ij 30 fodkl 'khy n'kkaeal kh"KZ
LFkku gkl y djus ds fy, phu dks i hNs NkM+fn; k gA
th-vkj-Mh-vkbZ ds 160a l l dj.k ea Hkkjr dh rst h l s

c<Fh vFkd; oLFkkj i R; {k fonskh fuosk fu; eka ea<hy
vkj vki firZeamNky dks th-vkj-Mh-vkbZ ea'kh"KZ LFkku
ij /kdsyusokys i e[k dkj dks ds: i eacrk; k x; k gA
'kq [kqjk fdØh⁶ ds vkp dM+fn [kkusokys xkQ eaphu
Hkkjr l s vkxs gA, Q-Mh-vkbZ dk fUQM d BUMd l ds
vuq kj Hkkjr phu vkj ckth dscn rhl js LFkku ij
gA

Hkkjr dh Hkkskfyd fLFkr ml dsi Mkd h n'kka
ds l kFk dWuhfrd l Ecu/kka dh n"V l s vR; Ur
puksh i wZ gA; g Li"V gSfd Hkkjr ds i frj{kRed
fgr rHkh l jf{kr jg l drsgA tc fd phu l fgr l Hkh
i Mkd h n'kkaeal LFk; h, oamnkj jktuhfrd o l keftd
0; oLFkk rFk n<+vkfFkd fodkl dh LFkki uk gka bl
i xkj ftl i fji Dork dsl kFk Hkkjrh; , oaphu usRo
usj.kuhfrd erD; dks i kR fd; k gSml h dksky l s
mlga; g iz kl Hkh djuk pkfg, fd mudh 'kDr ea
mUkj kRj of) l s Hkkjr dsi Mkd eavkj vU; LFkkuka i j
'kDr&jktuhfrd dsi n'ku dh i dfr u c<A

Hkkjr, oaphu dschp i kphu dky l spyh vk
jgh es h vk/kfu dky ead bZv fLFkj n'kka l s xqt jr h
jgh gA Hkkjr vkj phu dk l hek fookn vkt rd cuk
gqk gA gkykd ge dj l drsgfd b/kj phu o Hkkjr
dschp l Ecu/kkaeal dN l qkkj gqk gS rks Hkh nksuka n'kka
ds e/; dN vul gy>h l el; k; a ges kk dh rjg
fo l eku jg xkA

bl le; nksuka gh vius&vius 'kfuRi wZ
fodkl ea yxs gA 21oh 'krkCnh ds phu o Hkkjr
i fr}Unh Hkh gS vkj fe= HkhA⁷

l UnHkZ xUfK l ph

- 1- vk/kfu phu dk bfrgk l i ts ds Vh, l - l jkvkA
- 2- dks oM&19 dky ea Hkkjr&phu l Ecu/kka ds i fjo frR
vk; ke] Mkw vHk; "kZj fl g, oa4 vU; A
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fo".kq i gk.kkUrxr Hkksksfyd I kfgR; foopu



& jkts'k dēkj nhf{kr
'kks'kNk= & I ldr foHkx]
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premchaitnyshastri@gmail.com



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kumarsumit9672@gmail.com

ĀLrkouk&

I Ei wKzfo".kq i gk.k 6 vā kka½fo".kq i gk.k ea [k.M ; k LdUn ds
LFkku ij vā k 'kCn dk Ā; kx fd; k x; k gS eafoHkDr djdso.kz fd; k
x; k gā bl eady 126 v/; k; , oarbā g tkj ½23000½'ykd gā

; g ckr fufobkn gSfd gekjs ĀKkl Ei Uu i mēpk; kādks vi us
n'sk dk gh ughaoju-fo'o ds vf/kdkā k HkksHkx dk fo'kn Hkksksfyd
Kku FkA ; g Kku ek= i lrdh; u gkdj 0; kogkfjd n'V I s
oSKkfud vKs Āk; kSxd Hkh gā , frgkfl d vKs I kfgR; d n'V I s
i gk.k kka dh mikn's rk fdruh gS ; g dgus dh vko'; drk ugha gā
i k'pkr; fo}kukaushkh eDrd.B I si gk.k kka dh Ākef. kdrk dks Lohdkj
fd; k gā /kfeD] nk'k'ud {ks=kā ea i gk.k rks I oFk vi fjk; Zgh gā
tu&ekul eavl dh.kz/keZvKs I nkpj ds Āpkj&ĀI kj dsfy, Hkh
i gk.k kka dk I koZkS v/; ; u&v/; ki u&Āpkj I oFk okāNuh; gā

I f"V] Āfrl f"V] oā] elUlrj vKs oākkupfjr ds vfrfjDr
ftu fo"K; kadk o.kz i gk.k kkaeagSmueal oĀFke Hkksy dk uke vkrk
gā Hkksy dk I Hkh i gk.k kkaeal kaks kx foLr'r fooj.k gā igysl Ei wKz
i Foh dk i fjHkx] fQj ĀR; d }hi dh I hek dk mYys[k] muea i oZk
ufn; k] tui nkvKs Hkksksfyd fo"K; kadk ; FkFkZmYys[k ; g crykrk
gSfd i gk.k kkaealHkksy dk 0; ki d fooj.k gā bl h Ādkj vdk'k dsxg
u{k= vkfn dk voLFkku] mudk Hkfe ij i Mūsokyk ĀHkko] muds }kj
mi fLFkr gkus okys i fjoRZ vkfn I c , d s fo"K; I Hkh i gk.k kka ea
; FkLFkku vk tkrsg] ft I s; g dguseal dēp ughagkrk fd Hkksy
vKs [kxky&I Ecu/kh fooj.k Hkh i gk.k kka dk vi uk gh fo"K; gā i gk.k kkae
mi of.kz Hkksksfyd foopu Hkksy ij fy[ksx; sfd I h Hkh xDfK eade
egRo dk ughaekuk tk I drkA

vkt i gk.k kkn ea of.kz Hkksksfyd fooj.k dh ; Fkor~tkb
djusea dbZ ck/kk; mi fLFkr gks tkrh gā igyh ckr rks; g gSfd
i gk.k kka dk Ākef.kd] oSKkfud I ldrj.k mi yC/k ugha gā vr%
Hkksksfyd LFkku I Ecu/kh fuf'pr fopkj djuk cgr dN nq g gh gā
n'jh ckr ; g gSfd geavud i kS kf.kd 'kCn kadsfoof{kr vFkZHkh Kkr
ughā Āpfyr dks kka ea tks fn[kk; s x; s gā mUgha ij gedks fuHk
djuk gSvKs Āk; % i kS kf.kd i kfjHkkr'kd vFkZds mYys[k bu dks kkae
ughafeyrā ge vkt fuf'pr : i I s; g Hkh I e> i krsfd dks I k
o.kz vfrjTtr gS ; k vFkZkn eyd gā fe=feFk us , d cgr
; qDr I xkr ckr dgh gSfd fo'kSk i fjLFkr ea'kkl= ĀfI) jgusi j Hkh
ĀR; {k&Āek.k dk vuq j.k dj Hkksksfyd LFkku dk fu.kz djuk



pkfg, A mlgkaus vR; Ur Li "V Hkk"kk ea bl I R; dk
I knkgj .k foopu fd; k gS&

~rnñ vkâuh; dq Ma dfy; q̄s d'reA
rnRrj Hkkxs i j k. kSfI) fi I | vk=&
okfVdkfudVs dfr; =i; ykd AfI) s fr"Brhfr
I j kfi ÁR; {kfi /okfu Hkki I fi rēgk̄. k'A

; g fu; e Hkk̄sy t̄sfo"̄k; earksI oFkk ekuus
; kx; gSfd ek= 'kkL=okD; kadsvk/kkj ij fu.kz ugha
djuk pkfg, A ok; q&i j k. k eadgk x; k gSfd 'kkL=]
vupekū] ÁR; {k vls̄ mi i fRr I svPNh Ádkj i j h{kk dj
gh ekuuk pkfg, u fd ÁR; {kfi) fo"̄k; dk viyki
djuk pkfg, &

^vxHkknupekukn ; k ÁR; {kknq̄ i fRrr%A
i j h{; fui q̄ka HkoR; k Fk) kr0; a
foi f' prkAA^

; g n[̄kdj vk'p; Zgkr̄k gSfd i w̄zfi) k̄rkaus
ueñk unh dh yEckbz ds fo"̄k; ea bruh ; FkkFkz ckr
d̄s sdgh Fkhafd&

^; kstukuka' kral kxaJersI fjnRrek^A

i k̄s̄kf.kd I kfgR; ea foKku I Ecu/kh vuud
I d̄Yiuk, j miyC/k ḡA ; | fi oñnd I kfgR; vls̄
egkd̄k0; ka ea Hkh foKku I Ecu/kh vo/kkj .kk, j vls̄
I d̄Yiuk, j miyC/k ḡA fdUr̄qmudk vR; f/kd fodfi r
Lo: i i j k. kkaeans[̄kus dksfeyrk ḡA __Xon I sydj
egkd̄k0; kard tksvo/kkj .kk, j vls̄ I d̄Yiuk, j l̄= : i
eamiyC/k ḡA fofHku I fgrkvka vls̄ i j k. kkae mudh
I t̄nj eheda k vls̄ fo'kn 0; k[; k ḡp̄zḡA

Hkk̄sy Ákdfrd vls̄ I k̄dfrd I anHZeai Foh
I fgr v̄lrfj {k ds I elr xgk&mi xgk̄rFkk ykdkaea
'D; k dgk̄ gSvls̄ D; kagS dh Li "V 0; k[; k djusokyk
foKku ḡA i Foh fur; i f̄jor̄k'khy ḡA Ádfr vFok
ekuo }kj̄k tc Hkh /kj̄kry dsLo: i ea i f̄jor̄u gkr̄k
ḡS rc Hkk̄sy dk v/; ; u&{k̄= foLrh.kz gks tkr̄k ḡA
Ákdfrd vls̄ I k̄dfrd i ; k̄bj̄.k gkr̄k ḡS rc Hkk̄sy
dk v/; ; u&{k̄= foLrh.kz gks tkr̄k ḡA Ákdfrd vls̄
I k̄dfrd i ; k̄bj̄.k dk I E; d-v/; ; u Hkh Hkk̄sy ds
v/; ; u&{k̄= ea I f̄efyr ḡA or̄eku : i eamiyC/k
fofHku i j k. kka dk j̄pukdky 2000 b̄l k i w̄z ds
vkl &i kl dk ḡA ftu Hkk̄S̄k̄fyd I d̄Yiukvka dks 14
oha vls̄ 15 oha 'kr̄kCnh ds i'pkr~ fo}kuka }kj̄k

Áfrik̄nr ekuk tkr̄k ḡS mudk l̄= : i ea l̄dr onkaea
vls̄ 0; k[; kRed i f̄j̄p; i j k. kkaeai k; k tkr̄k ḡA

oñnd , oa i k̄s̄kf.kd I kfgR; ds v/; ; u ea
tul kekū; dsfy, yxk; sx; sv̄d̄k ds d̄kj̄.k i j k. kka
ds j̄pukdky ds i'pkr~ ds l̄e; ea Kku i "Bka ea
fl eVdj j̄g x; k ḡA Ákphu Hkk̄j̄rh; I kfgR; dh
0; k[; k ea v̄fHkof) dh n̄"V I s 17 oha 'kr̄kCnh rd ds
dky dks̄v̄l/kdkj̄ ; q̄^dgk tk I dr̄k ḡA ge rksrd
pr̄stc tēl̄ fo}ku-eDl̄ en̄j̄ I fgr dfri; i f'peh
fo}ku-gek̄s̄Ákphu I l̄dr I kfgR; dk v/; ; u d̄j̄ds
Kku dh fo/kkvka dh oK̄kfud 0; k[; k djus yxs vls̄
mlgkaus oñnd rFkk oK̄kfud I kfgR; dks Kku dk
vtL=&L=kr̄ fl) fd; kA gedks; gk̄i j̄ og fy[kusea
fd̄l̄pr~I d̄kp̄ ugha gSfd vkt̄ Hkh ge Ákphu I l̄dr
I kfgR; dh oK̄kfud 0; k[; k djus ea rFkk Kku dk
vtL=&L=kr̄ ekuuseaghurk dk vuñko d̄j̄rsḡA

ōs rks Hkk̄S̄k̄fyd vo/kkj̄.kkvka vls̄
I d̄Yiukvka dh U; w̄kfod ÁLr̄f̄r I elr i j k. kkaeagb̄zḡS
fdUr̄qfo".k̄q i j k. k] ok; q i j k. k] eRL; i j k. k] ekd̄Z M̄s
i j k. k] 'ko i j k. k] ḡf̄jōak i j k. k] v̄fxu i j k. k vls̄ x: M+
i j k. k ea v̄f/kd ḡp̄zḡA bl I e; ek= ÁR; fHkKku dh
vko'; dr̄k ḡA d̄ñ vo/kkj̄.kkvka dk ÁR; fHkKku vls̄
mudh I āñ"V dk Áokl̄ ; gk̄fd; k tk̄j̄gk ḡA

oñnd vls̄ i k̄s̄kf.kd 'k̄Syh eadgk tk; rks
^i ōr̄ka dk t̄le I kx̄j̄ I s̄ḡȳk ḡS ; k ^i ōr̄ I en̄z ea
fL̄Fkr̄ ḡS dgk tk; x̄kA I p̄s̄ i ōr̄] ftl̄ dks i keh̄j̄ ds
: i ea ÁR; fHkKkr̄ fd; k x; k ḡS d̄Sykl̄ vls̄ x̄l̄/keknu]
tksml̄ ds foLrk̄j̄ ḡS fu'p; gh e/; , f'k; k d̄sek̄M̄nk̄j̄
i ōr̄ ḡA fo".k̄q i j k. k ea x̄l̄/keknu vls̄ d̄Sykl̄ i ōr̄ka dh
fL̄Fkr̄ I en̄zeacr̄k; h x; h ḡ&

x̄l̄/keknu d̄Sykl̄ k̄Si w̄z 'pk; rkoñkk̄A
v' khfr; kstuk; kek̄s̄"kk̄H; Ur0; Z̄fL̄Fkr̄k̄A
ekd̄Z M̄s i j k. k ea rks d̄Sykl̄ ds I kFk&I kFk
fgeky; i ōr̄ dh Hkh fL̄Fkr̄ I en̄zeacr̄k; h x; h ḡ&
d̄Sykl̄ k̄sfgeok̄ p̄s̄ n̄fl̄ "ku egkpyk̄A
i w̄z' pk; rkoñko"kk̄H; Ur0; Z̄fL̄Fkr̄k̄A
i k̄s̄kf.kd I kfgR; ea rks I kx̄j̄&ty ds Āij
mBus vls̄ uhp̄sfx̄jus dh fuf'pr̄ uki rd cr̄k nh x; h
ḡ&

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i k\$kf.kd l kfgR; eami yC/k gS%&

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mn; kLreusf"oUnks% i {k; k s%
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fn'kk eaplnek dsmfnr gkus i j l oñk l epz ty l s
i wZgkstkkrk gSvk\$ vLr gkstkus i j {kh.k gkstkkrk gA
; g i wZ l epz vi uh l hek eagh ?kVrk&c<rk gA 'kDy
rFkk d".k i {kka eaplnek dsmfnr , oavLr gkus i j
l kxj&ty ea, d fuf'pr ek=k ea ty dh of) vk\$
gkfu gkrh g&

mn; rhlUnkSi mZrql epn% i w ðrsl nka
A{kh; ek. kscgys {kh; rLrfer sp oAA
vki w ðek. kks gknf/kj kReusbfHk i w ðrA
rrkSos {kh; ek. ks rqlLokReU; o gkz ka {k; %AA
mn; kr-i; l ka; ks kr-i ð. kER; ki ks; Fkk Lo; eA
rFkk l rql epn\$fi o) ðr'kf'kuk; AA
vU; wukufrrfj DrkRek o) ER; ki ksâl flur pA
mn; ðre; spUnk% i {k; k% 'kDrd".k; k\$AA
{k; c) hl epL; 'kf'kof) {k; srFkka

n'kkRrj kf.k i PpMMgg Mxgykuka'krkfu pAA
vik of) {k; kSn"Vh l epn. kklUrqi oA AA

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L=kr gSvk\$ bl ea vudkud HkKSkfyd l dYiuk, W
vk\$ vo/kkj.kk; dghal #: i ea vk\$ dgha0; k[; k : i
eamiyC/k gA fu'p; gh i k\$kf.kd l kfgR; dk
vud U/kukRed v/; ; u gekjs yk\$ddkyk\$dd Kku
dh ifji Dork fl) djuseal gk; d gksk rFkk Hkksy
fo"K; d vud fl) klr vk\$ foaj.k bl l s vfoyc
vl kekl; : i l svkyk\$dr gkA

l UnHkZ xLFk l iph

- 1- HkV/vpk; [jke'kdj] 1963] bfrgkl ijk.k dk
vudkhyu] okj.k kl h i w 1A
- 2- prpñh] fxfj/kj 'kek] 1970] ijk.k ifj'khyu]
i Vuk] i'B& 305A
- 3- Jh fo".kq ijk.k] 1986] xkj [ki] f}rh; vdk]
v/; k; & 2] 'yk 8&9A
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Puranas, New Delhi, P. 52.
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v/; k; & 2] 'yk 42A
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v/; k; & 2] 'yk 91A



विज्ञापन एवं निवेदन

रिसर्च जर्नल में विज्ञापन के संदर्भ में जानकारी प्राप्त करने हेतु प्रबन्ध सम्पादक के पते पर सम्पर्क करें। 'अभिनव गवेषणा' (मल्टी डिस्प्लनरी क्वार्टरली इण्टरनेशनल रेफ्रीड/पियररिव्यूड रिसर्च जर्नल) आप सभी की एक? स्ववित्त पोषित पत्रिका है, अतः पत्रिकी के? लिए किसी भी प्रकार का आर्थिक सहयोग सराहनीय होगा।? कृपया अपनी सहयोग राशि चेक, ड्राफ्ट अथवा आर टी जी एस के माध्यम से निम्नलिखित पते पर प्रेषित करें। - सम्पादक? - 'अभिनव गवेषणा' के-444, 'शिवराम कृपा' विश्व बैंक बर्रा, कानपुर-208 027 (उत्तर प्रदेश, भारत)

प्रबन्धन एवं सम्पादन

'अभिनव गवेषणा' (मल्टी डिस्प्लनरी क्वार्टरली इण्टरनेशनल रेफ्रीड/पियररिव्यूड रिसर्च जर्नल) में अपने शोध पत्रों की प्रकीर्णित करने हेतु नियमित स्थान प्रदान करने के लिए कृपया फुल स्केप कीगज पर टाइप किया हुआ अथवा मेल किया हुआ शोध लेख अपनी स्वीकृति के? साथ भेजें।? भेजने की पता - सेक्टर के - 444, 'शिवराम कृपा' विश्व बैंक बर्रा - कानपुर-208 027 (उत्तर प्रदेश, भारत) मोबाइल नं0 8896244776, 9335597658 E-mail super.prakashan@gamil.com पर सम्पर्क करें। मिलने का समय- सप्ताह में 6 दिन 10.00 से 6.00 (रविवार अवकाश)।



शोधपत्र लेखकों को निर्देश

‘अभिनव गवेषणा’ eYVh fMfLlyujh DokVjyh b.Vju\$kuY jQM@fi ; jfj0; M fjI pz tuY है, जिसमें सभी उपविषयों के? मौलिक? शोध पत्र, शोध समीक्षा, विचार, लेखों आदि की प्रकीर्णन किया जाता है। शोधकर्ता हिन्दी, अंग्रेजी अथवा संस्कृति भाषा में अपने शोध पत्र भेज सकते हैं। शोध पत्र भेजते समय कृपया निम्न बिन्दुओं पर ध्यान दें-

◆ लेखक अपना शोध-पत्र सर्वेश तिवारी (राजन) प्रबन्ध संपादक? - ‘अभिनव गवेषणा’ के-444, ‘शिवराम कृपा’ विश्व बैंक बर्रा-कानपुर-27 को अथवा super.prakashan@gmail.com पर प्रेषित करें।
◆ प्राप्त शोध पत्र पत्रिका में प्रकाशन के पूर्व पुनर्निरीक्षण किये जायेंगे। स्वीकृत शोध पत्र कहीं और प्रकाशित नहीं होना चाहिए और न ही उस शोध पत्र का कोई भी भाग सम्पादक के अनुमति के बिना कहीं और प्रकाशित किया जा सकता है।

◆ अपने शोधपत्र की पाण्डुलिपि निम्न भागों में तैयार करें- शीर्षक, सारांश, पाण्डुलिपि, पुस्तक संदर्भ-सूची। कृपया पुनर्निरीक्षण की गुणवत्ता में सहायता करने हेतु अपना नाम, पता पाण्डुलिपि पर न दें।

◆ शीर्षक - शीर्षक पाण्डुलिपि पर अवश्य दें, किन्तु अपना पूरा नाम, पता, संस्था जहाँ पर अध्ययन अथवा अध्यापन कार्य सम्पादित किया गया हो, आपका विषय, दूरभाष-मोबाइल, फैक्स, ई-मेल पत्राचार हेतु अलग पृष्ठ पर अवश्य दें। उपर्युक्त तथ्य आपके शोध पत्र के शब्द सीमा के अन्तर्गत ही माना जायेगा।

◆ सारांश - कृपया शोधपत्र का सारांश अधिकतम 200 शब्दों में दें।

◆ पाण्डुलिपि - इसके अन्तर्गत मुख्य पाठ्य सामग्री होगी जो 5 से 10 पृष्ठ तक होनी चाहिए। शोध पत्र 10 पृष्ठ से (सारांश, शब्द संक्षेप, सूची समेत) अधिक प्रकाशन हेतु स्वीकार नहीं किया जायेगा। अन्यथा वृहद् शोध पत्र (10 से पृष्ठ से अधिक) प्रकाशन में देर भी हो सकती है। लेखक को यह बात स्वीकार होनी चाहिए कि शोध पत्र पुनर्निरीक्षण के दौरान किये गये संशोधन उन्हें मान्य होंगे। शोध पत्र प्रकाशन के दौरान त्रुटि की सम्भावना न बने इसका पूरा ध्यान रखा जाता है, फिर भी कोई त्रुटि पाये जाने पर लेखक संशोधित री-प्रिन्ट प्राप्त

◆ संदर्भ वर्णमालाक्रमानुसार - शोध पत्र के समापन पर कृपया संदर्भ वर्ण माला क्रमानुसार ही दें। पत्रिका का वर्ष, लेखक, पृष्ठ संख्या, भाग इत्यादि विस्तार से दें। पुस्तक या पत्रिका शीर्षक इटैलिक दें।
◆ पुस्तक - प्रकाशक का नाम, संस्करण, संख्या, प्रकाशन वर्ष, लेखक का नाम, पुस्तक का नाम, पृष्ठ संख्या।
◆ पत्रिका - पत्रिका नाम, लेख का शीर्षक, लेखक का नाम, प्रकाशक का नाम, अंक संख्या, माह, वार्षिक, अर्द्धवार्षिक, त्रैमासिक अथवा मासिक जो भी हो स्पष्ट करें।

◆ संदर्भ ग्रन्थ सूची - कृपया शोध पत्र में कम से कम 8 संदर्भ ग्रन्थ सूची अवश्य दें।
◆ समाचार पत्र - प्रकाशक, तिथि, सन्, पृष्ठ संख्या।
◆ इण्टरनेट - वेबसाइट, पृष्ठ संख्या, मुख्य शीर्षक, अन्तः शीर्षक।

◆ मानचित्र एवं सारणी - मानचित्र एवं सारणी अथवा चित्र शोध पत्र की समाप्ति के अन्त में दें। यह ब्लैक एण्ड व्हाइट ही होना चाहिए। इसका स्पष्ट संकेत पाण्डुलिपि में दें (उदाहरण, सारणी संख्या)।

◆ विशेष - कृपया अपना शोध पत्र ई-मेल करने के बाद डाक से अवश्य भेजें। अपने शोध पत्र के साथ-साथ बायोडाटा, फोटो, अपना पता लिखा लिफाफा (20 रुपये टिकट सहित) भेजें। शोध पत्र हिन्दी, अंग्रेजी अथवा संस्कृति भाषा में ही होना चाहिए। शोध पत्र यदि हिन्दी-संस्कृत में है तो (कृतिदेव-हिन्दी फान्ट 14) में अंग्रेजी में है तो (एरियल - अंग्रेजी फान्ट 12) में तैयार सीडी के साथ दें। शोध पत्र प्राप्त होने के एक सप्ताह के अन्दर लेखक को स्वीकृति पत्र प्रेषित कर दिया जायेगा। ई-मेल (super.prakashan@gmail.com) से प्राप्त शोध पत्र हेतु ई-मेल से स्वीकृति भेजी जायेगी। शोध पत्र प्रेषित करने से पूर्व प्रबन्धक से दूरभाष पर अवश्य सम्पर्क करें। सम्पादक मण्डल अथवा सलाहकार समिति में सम्मिलित करने का अन्तिम निर्णय संस्था का होगा।

◆ सुझाव - लेखकों एवं पाठकों को यह अंक कैसा लगा, इस सम्बन्ध में अपने-अपने विचार अवश्य भेजें, इससे मुझे अपनी त्रुटियों को जानने और भावी योजना बनाने में सहायता मिलेगी।

◆ विनम्र निवेदन- सभी सम्मानित सदस्यों से निवेदन है कि अपने माध्यम अधिकतम सदस्यों को पत्रिका परिवार से जोड़कर संस्था का सहयोग करें।



अभिनव गवेषणा

मल्टी डिसिप्लिनरी क्वार्टरली इण्टरनेशनल
रेफ्रीड/पियर रिव्यूड रिसर्च जर्नल

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श्रीमान् सम्पादक महोदय,

‘अभिनव गवेषणा’

(मल्टी डिसिप्लिनरी क्वार्टरली इण्टरनेशनल रेफ्रीड/पियर रिव्यूड रिसर्च जर्नल)

सेक्टर-के-444, ‘शिवराम कृपा’ विश्व बैंक बर्रा, कानपुर-208027 (उ. प्र.) भारत

महोदय / महोदया,

निवेदन है मैं / हमारा महाविद्यालय आपके ‘सुपर प्रकाशन’ द्वारा प्रकाशित ‘अभिनव गवेषणा’ (मल्टी डिसिप्लिनरी क्वार्टरली इण्टरनेशनल रेफ्रीड/पियर रिव्यूड रिसर्च जर्नल) परिवार का वर्षीय / आजीवन ♦ / व्यक्तिगत / संस्थागत ♦ सदस्य बनना चाहता हूँ / चाहती हूँ? मैं / हमारी संस्था ‘सुपर प्रकाशन’, विश्व बैंक बर्रा, कानपुर-27 के नाम सदस्यता शुल्क रुपये नकद / मनीआर्डर / चेक अथवा बैंक ड्राफ्ट खाता क्रमांक (सुपर प्रकाशन - 52570200000355) IFS Code No. BARB0BUPGBX. बड़ौदा उत्तर प्रदेश ग्रामीण बैंक, शाखा- विश्व बैंक बर्रा (करही) कानपुर-27 के नाम से दे रहा हूँ ↗ ZERO

नाम (श्री / श्रीमती) डॉ. :
पद का नाम (जहाँ वर्तमान में कार्यरत हैं) :
संस्था / निवास का नाम :
पत्र व्यवहार का पूरा पता (पिनकोड सहित) :
:
फोन / मोबाइल नं. :
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प्रबन्ध सम्पादक : सर्वेश तिवारी ‘राजन’

मो. : 8896244776

सम्पादक : डॉ. जया मिश्रा

मो. : 9984578999

