

जून 2014 | अंक 20

अशिमका

राजभाषा कार्यान्वयन समिति द्वारा प्रसारित पत्रिका



वाडिया हिमालय भूविज्ञान संस्थान
देहरादून-248001

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राजभाषा कार्यान्वयन समिति द्वारा प्रसारित पत्रिका

संपादक:

डॉ. (श्रीमती) मीरा तिवारी

सदस्य:

श्री रामबीर कौशिक

प्रकाशक:

राजभाषा कार्यान्वयन समिति
वाडिया हिमालय भूविज्ञान संस्थान
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मुद्रण स्थल:

एलाइड प्रिन्टर्स
84, नहर वाली गली, देहरादून
फोन : 0135-2654505

आवरण चित्र :

जम्मू के निकट स्थित सुरिन्सर झील का मनोरम दृश्य

छायाकार :

रामबीर कौशिक

पत्रिका में प्रस्तुत विचार लेखकों के स्वयं अपने हैं। संपादक मंडल/विभाग/प्रकाशक का उनसे सहमत होना आवश्यक नहीं है।

विषय सूची

fun'kd dh y[kuh l	i
lEikndh;	ii
1- U;Vu	je'k pUn 1
2- fo'o rkihdj.k %Xyky okfex%	lj'k pUn t'k'kh ,o dkenh t'k'kh 3
3- HkfoKku rFkk ekuo t'hou	ehuy feJk 7
4- xM Qkj ufFkx	vfhk"kd feJ 10
5- ty l l k/ku fodk l % HkfoKku	dkenh t'k'kh 14
6- mUkj[k.k.M ikdfrd vkink tu 2013%	ihE, lE uxh 18
,d oKkfud foopu	
7- vkinkvk l pukfr; k% l{kerk ij loky	vt; dekj fc; kuh 24
8- vUrj g flQ nf"Vdk.k dk	eRL;Un dekj 'kDyk 26
9- njLFk f'k{kk i.kkyh e HkfoKku d c<r dne---	ehuy feJk 27
10- lxBukRed iHkko'khyrk ,o ic/ku e Hkxhnhkj	,uE dE frokj 30
11- v.Meku % dky ikuh dk dkyk lp	l tho Mcjky 33
12- Mk;jh d iUu	et ir 36
13- lLej.k	dk'ky fd'kkj 'kDy 39
14- Hk&oKkfud vkj l kfgR;dkj	et f}onh 42
15- ;knnk'r %eekjh%	,uEdE frokj 44
16- lxhr dk foKku	uhjt frokj 46
17- ekrHk"kk d ifr gekjh vfHk : fp	lhek iky ,o vt; iky 49
18- ukedj.k	v'kkd nc 51
19- cnyr fj'r	lfpu dekj vkfnR; 52
20- Hk&foKku xhr	vej no cgx.kk 53
21- rjy leko'k	fnu'k dekj pkgku 55
22- lkp	dYiuk pUny 56
23- ryk'k	et ir 57
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निदेशक की लेखनी से

अशिमका का बीसवां संस्करण आपके सामने प्रस्तुत है। ‘अशिमका’ मातृ भाषा के प्रति लगाव का एक प्रतिबिम्ब है। हमेशा से ही वैज्ञानिक लेख इस पत्रिका का एक महत्वपूर्ण हिस्सा रहे हैं और मेरा यह मानना है कि जितने अधिक उच्च स्तर के वैज्ञानिक शोध कार्य इस पत्रिका के माध्यम से वैज्ञानिक लेखों के रूप में जागरूक जनता तक पहुँचेंगे उतना अधिक भूविज्ञान के क्षेत्र में किये गए कार्यों का वास्तविक रूप में प्रचार, प्रसार होगा और अशिमका सही मायने में जन कल्याण का माध्यम बनेगी। प्रति वर्ष हिंदी के प्रति रुचि रखने वाले लोगों का उत्साह अशिमका के लिए बढ़ता जा रहा है। इस उत्साह का कारण इसमें छपे लेखों का स्तर है। वैज्ञानिक लेखों से लेकर सामान्य ज्ञान, संस्मरण, कहानी, कवितायें सभी का समावेश अशिमका में सामान रूप से हुआ है। इस उत्साह को जगाये रखने के लिए मैं सभी लेखकों को बधाई देता हूँ। भविष्य में भी अशिमका उन्नति के पथ पर अग्रसर रहेगी यही मेरी शुभकामना है।

अनिल कुमार गुप्ता

सम्पादकीय....

28 Qjoj] 1928 dk ç[;kr Hkkjr h; Hkkrrdfon l j l h oh jeu u jeu çHkko dh [kk t dh FkhA 1986 e jk"Vh; foKku vkj çk | kfxdh l pkj ifj"kn u Hkkjr l jdkj dk 28 Qjoj dk jk"Vh; foKku fno l ?kkf"kr dju dh lykg nhA rc l 28 Qjoj dk l Hkh oKkfud] rduhdh] fpfdRIk vul/kku l LFkkuk d l kFk l kFk ;g Ldyk] dkytk rFkk fo'ofolky; k e bjk"Vh; foKku fno l B d : i e euk; k tku yxk gA ,d Fkhe ;k fo"k; Hkh bl fnu dk euku d fy, fn;k tkrk gA bl o"k ;kfu dh 2014 d fy, fo"k; Fkk ^oKkfud l kp dk c<kok**A njvly oKkfud l kp ,d /kkj.kk g ft l d vrxr ,d oKkfud dk loçFke mÍ'; iokxg l jfgr gkdj viu dk; l l Ecf/kr vkdM ,df=r djuk vkj mudk ijh{k.k djuk gA viu mUjnkf;Ro dk ijh bekunkjh l le>r vkj fuHkkrr g, xgu] xHkhj] fu"i{k fpru vkj ml ij fØ;kUo;u l m l dk fo'y" k.k djuk g vkj ifjdYiuk, cukuk gA u doy foKku cfYd thou d gj {k= e oKkfud -f"Vdk.k d l kFk dke dju l 0;kid l kcf t d cnyko dh vi{kk dh tk l drh gA lekt e Qyh djhfr;k doy oKkfud l kp j[ku okyk 0;fä gh feVl l drk gA ijUr ; vdy 0;fä dh l kp l l Hko ugh] bl d fy, 0;kid cnyko dh t : jr gA oKkfud l kp dk vke vkneh d thou dk fg l l k cuku d fy, Ldyh f'k{kk l 'k#vkr djuh iMxhA loçFke f'k{kk dk çpkj vkj f'k{kk ç.kkyh e ifjoru cgr vko'; d gA f'k{k d vkj Nk=k dk fo"k; d ckj e fdruh le>g] bl le> dk mud thou e fdruk mi;kx g] f'k{kk d }kjk ,d Nk= d vnj fo"k; dk le>u dh mRdBk tkxr djuk ft le og jV & jV; rjhd l ugh cfYd jpukRed {kerk l fo"k; oLr dk le> vkj m l dk fo'y" k.k dj] ;g egRoi.k fcn gA bl {kerk dk fodflr dju d ç;k l dju iMx rkfd vkx tk dj ;gh {kerk m l gj ifjLFkfr e oKkfud -f"Vdk.k viuk dj m l dk gy fudkyu e enn djxhA vkj bl le> l m l dk mÍ'; f'k{kk }kjk lekt e l dkjRed ifjoru yku dk gkxk u fd cgr l kj ucj yku dkA doy l fo/kkvk l l iUu ukdfj;k ik yuk gh vfre y{; u gkdj og fdruk cgrj bl ku cuk vkj lekt e D;k y dj x;k ; cgr egRoi.k gA vkb; ge l c oKkfud l kp dk Qyu Qyu dk y{; fu/kkfjr dj vkj ,d mUur lekt dk fuek.k dju e viuk ;kxnu nA

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yklyk l u ^eduhd lyLV* "kh"kd d ,d xUFk e
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ij 0;k[k; k foLrkj l nh x;h gA

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thou] mu d oKkfud dk;k] rFkk mu dk;k dh
i"kl e vud y[k rFkk iLrd fofHkUu Hkk"kkvk]
e[;r% vxth e idkf"kr gk pdh gA bue , l
pUn"K[kj dk xUFk Hkh l fEefyr gA djUV l kbl

if=dk e idkf"kr ,d y[k e vkj ujflg u tk
fy[kk g og U;Vu d oKkfud dk;k dk ,d vuk[kk
eY;kdu gA mud vulkj chl oh lnh d egkure
Hkkfrdhfon ,YcV vkbLVkbu d d{k e U;Vu dk
,d fp= Vxk jgrk FkkA ,lk fofdihfM;k e Hkh
fy[kk gA

U;Vu ij fgnh ei ppki

bl y[k e vxth "kOnk dk i;kx fgnh dh ugh
y[kd dh lhekvk d dkj.k gA ,d Kkuh d gkFkk
oreku fo"kk;k d ifr fgnh e i.k U;k;k; fuf"pr : i
l lEHko gA



आप कोड़ा पीरल रहिगये। बी. अशिम, श्री. अशिम पूरा होले ही आपके
कामन ही सदाय रहिगये कर ही जायगी।

विश्व तापीकरण (ग्लोबल वार्मिंग)

Ij:'k pUn: tk'kh ,o dkenh tk'kh

t hchihvkb,pbMh(Jhuxj ¼x<oky½ Hkkjrh; HkoKkfud lo{k.k] Hkou"oj

Xykcy okfex ¼fo"o rkih dj.k½ vkt ,d ,lk ToyUr fo"o; g tk iFoh d cPp&cPp dk Kkr ga ikÑfrd o eu"; tfur djrrk dh otg l okrkoj.k e xhu gkm l xlk dh c<rh l kUnrk l Xykcy okfex gk jgh g rFkk ek le ifjoru HkhA mDr xlk e dku&Mkb&vkD l kbM ,d egRoi.k rRo g D;kfd ;g okrkoj.k e T;knk ik;h tkrh ga dku&Mkb&vkD l kbM dh l kUnrk vk |kxhdj.k ¼ty;x½ d vku ij 31 ifr"kr rd c< xb ga vFkk 280 molmol⁻¹ l 380 molmol⁻¹ vkj bl lnh d vUr rd ;g yxHkx 550 molmol⁻¹ gk tku dh l Hkkouk ga ou fou"Vhdj.k d dkj.k 2-3Gt ,o to b/ku tyu l 5-7Gt dku&Mkb&vkD l kbM okrkoj.k e vkrh ga ;g 8Gt dku&Mkb&vkD l kbM okrkoj.kh; Lrj ij 0-5 ifr"kr ifro"o tkMrk ga ft le 4-7Gt lenh rFkk LFkyh; ik/kk }kjk ifro"o lk[k fy;k tkrk g rFkk 3-3 okrkoj.k e dku&Mkb&vkD l kbM dh l kUnrk c<krk ga dku&Mkb&vkD l kbM o vU; xhu gkm l xlk dh okrkoj.kh; l kUnrk iFoh dh lrg d rkieku e vHkr io of) dj jg ga vud v/;uk l Kkr gkrk g fd chl oh lnh e iFoh dh lrg d ikl dh gok d rkieku e 0-8°C dh of) gk pdh ga ,d vueku d vulkj ;fn blh nj l rkieku e c<kUkjh gkrh jgh rk lnh d vUr rd 2 l 4-5°C rkieku Åp kb ,o v{k"o d vk/kkj ij c< tk;xkA rkieku e lEHkko; ;g of) fofHkUu thok t l ik/kk] i"kvk o thok.kvk d forj.k] ipjrk rFkk mRikndrk e mud :ij ljpuk] "kkjhfdh ,o to jlk;fud ifØ;k e vUrj ykdj iR;{k ,o viR;{k iHkko NkMxhA bl rjg pØUR e nfu;k Hkj d n"kk d vFkrU= jktuhfr

,o l kLÑfrd fodkl ij iHkko iMxkA lgt ok;eMyh; iÑfr d dkj.k m".k dfVc/kh; n"kk e bl dk T;knk iHkko fn[kkb nxk t l Hkkjr] ikfdLrk] bUMku"o;k;k] ?kkuk] ukb thfj;k bR;kfnA ;g vR;f/kd egRo j[krk g fd Xykcy okfex d lEHkfor dkj.k rFkk i;koy.k ifjoru] bl d ifj.kke] i"keu ,o mi;kx dh tk ldu okyh ;ktuk dk ;)Lrj ij ykx fd;k tk l d rkd tyok; ifjoru ¼DykbeV pUt½ dk lgu ;kX; cuk;k tk l dA

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o" k rd e ifjofrr gkr jgr g] e e[; 22 o" k d
pØ e l; d vUnj pEcdh; x.k/kek e ifjoru
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vku l jkdrh g bl l dN le; d fy, ekle e
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g ft l l fupy ok; eMy e xhu gkm l bQDV dh
otg l rkieku c< tkrk gA xhu gkm l tl NkV
rjx n/; okyh xl l; fdj.kk dk lk[ku ,o
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dk rkih; lUryu cny tkrk gA ok; eMy dN
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o mojd 12-5%] to b/ku ik lflx 11-3%]
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(CO₂), ehFku (CH₄), ukbV l vkD lkbM (N₂O),
vk tku (O₃), lYQj gD l k ¶ykjkbM (SF₆) gkbMk
¶ykjkb dkcu (HFC_s) o] ij ¶ykjkb dkcu (PFC_s)
gA bu lc xlk dk Xykcy okfex ikVkfU" k; y
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okrkj.k e lcl ie[k xhu xl gA fo" o e vkl r
Hkki dh mRikndrk lh/k eu"; tfur dek dk Qy
ugh g fQj Hkh ;g ,d ifr lpuk rU= dh rjg dk
jky djrh gA okrkj.k e ifr ,d fmXh lfy l; l
rkieku of) 6% vf/kd ikuh dh Hkki dk /kj.k
dju dh "kfDr inku djrh gA

dkcu Mkb vkD lkbM ¶ 60% l T; knk xhu gkm l
bQDV d fy, dkcu&Mkb&vkD lkbM ftEenjk gA
lu 1950 l] gokb }hi dh ekuk yvk vkC tjoVjh
e] len lrg l 11] 141 QhV Åij] bl dk lKun.k
ge"kk ekik tk jgk gA okrkj.k e bl dh lKunrk
ifjoru "khy fdUr c<r dh vkj g rFkk fo" o
rk ihdj.k foHko ,d ekuk tkrk gA

ehFku ¶ ehFku e[; r¶ to inkFkk d vkD lhtu&
fuji{k VVu l] pkoy dh [krh l ,o ikf.k; k dh
vkr e Hkk tu d [kehjdj.k l ink gkrh gA
vk|kxhdj.k l igy ;g 770 ihihch Fkh o vkt
yxHkx 1745 ihihch gA bl dh me okrkj.k e 12

o"o fo"o rkihjdj.k foHko 62 gA ;g dku&Mkb&vkDI kbM I yxHkx vk/kh xeh jkd j[krh gA ukbV I vkDI kbM % ukbV I vkDI kbM dk e[; I kr mojd] to b/ku rFkk to Toyu gA bldk I kUn.k vk|kxhdj.k I vc rd 280 I 314 ihich gk x;k gA ;g okroj.k e 120 o"o rd jg ldrh g rFkk fo"o rkihjdj.k foHko yxHkx 300 gA

vktku % vktku rhu rjg I fo"o okroj.k dk iHkkfor djr g %1½ vPN vktku dh Ij{kk ijr LVVQLQh; j e %2½ cj vktku vFkk r VkiLQh; j e Lekx] t gk ;g ;g CO₂, CH₄ o ukbVktu vkDI kbM dh mifLFkr e curh gA bldk I kUn.k 20% I 50% rd igppdk gA ;g buYkjM fdj.kk dk I k[krh g %3½ vf/kdre vktku I kUn.k 20 fdeh I Åij 1@100]000 I T; knk ugh gA

, I 0, Q06] , p0, Q0 I h0] i h0, Q0 I h0 % ; "kfDr; Dr xI fofHkUu vk|kfxd i f0; kvk ; Fkk , Y; ehfu; e xyu I] I eh dUMDVj cuku I] , e I h , Q I h&22 cuku I] fctyh d forj.k vkfn I curh gA budh yEch okroj.kh; vk; g rFkk dkQh buYkjM I k[krh gA

tho tfur % xI Dykj k flykj dku (CFCs), dku ekuk vkDI kbM (CO), ukbVktu Mkb vkDI kbM (NO₂), IYQJ Mkb vkDI kbM (SO₂), okroj.kh; Hkj ckny o , jk I ky vkfn eu"; @to tfur xI gA ekUVh; y ikVdky d rgr gykftuM xI k dk mR I tu jkd fn; k x; k g fQj Hkh ;g yxHkx 12 ifr"kr xhu gkm I bQDV d fy; fteenkj gA dku ekuk vkDI kbM dku ; Dr inkFkk d v/kj tyu , o ou fou"Vhdj.k I ink gkrh gA bldh otg I CH₄ , o VkiLQ; j dh vktku dk I kUn.k c< tkrk gA vktku dk I kUn.k ikiu] C; Vu] bFku o ukbVktu&Mkb&vkDI kbM dh otg I Hkh c<rk gA ukbVktu&Mkb&vkDI kbM e[; r% rfMr d Ie; enk e I{e thok.kvk d

0; ogkj I , o ty I ink gkrh gA okroj.kh Hkj ckny %ckmu DykmM% vktku] /k,] "kV] ukbVktu vkDI kbM] dku , o in"o.k dh NkVh cn g tk fgUnd"o fgeky; fr0cr d xyf"o; jk e dkfy[k d : i e te jg gA

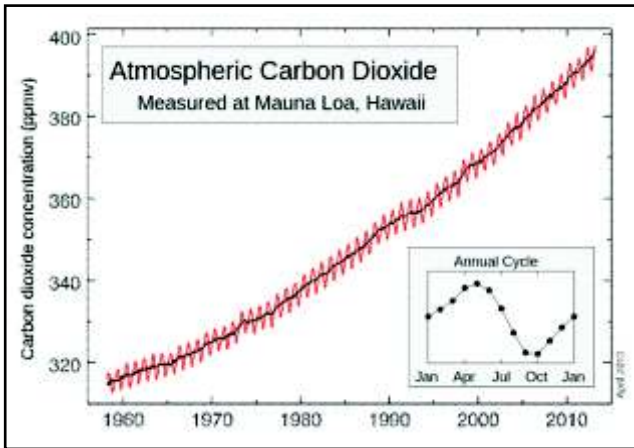
Xykcy okfex dk vIj bruk [krjukd gk I drk g fd bl fo"o foukk"o dk gfFk; kj ekuk tk jgk gA vr% bl jkdu d fy, Hkh m I h Lrj ij tu e"kk gA t I &

- 1- to b/ku dk i; kx de djuk@de b/ku I vf/kd Åtk ikr djukA
- 2- ou fou"Vhdj.k dk jkduk A
- 3- ouhdj.k , o iouhdj.k d dk; Øe dk Hkkjh Hkjde rjhd I ykx djukA v/; ; uk }kj ; g irk fd; k tk jgk g fd dku&dku I o{k vf/kdre dku&Mkb&vkDI kbM I k[k I dr g rkfd mUgh dk jki.k vf/kdre fd; k tk I dA
- 4- I L; I Ecu/kh ouhdj.k dh "k: okr o fodk I djuk rkfd Hkk tu I Ecu/kh vko"; drkvk dh ifr Hkh gkrh jgA
- 5- Hkk tu I Ecu/kh vko"; drkvk dh ifr gr de tkuh igpkuh Q I yk dh I j{kkA
- 6- ?kk I d enkuk dk fodk I djukA dN v/; ; uk I Kkr gvk g fd xgj gj rFkk Hkhx ?kk I d enku txyk dh ryuk e T; knk dku&Mkb&vkDI kbM I k[kr gA
- 7- xhu gkm I xI mR I ftr u dju okyh I kQ I Fkjh rduhdh dk fodk I djukA
- 8- fiNy dN o"kk e *dku ekjdfVx* vFkok *I h& ekjdfVx* dh vo/kkj.kk d rgr fodf I r n"o fodk I "khy o fodf I r n"kk dk I kQ I Fkjh Åtk rduhd miyC/k djok jg g rkfd xhu gkm I xI de mR I ftr gA
- 9- dku&Mkb&vkDI kbM dk nckjk BUMd ink dju okyh xI dh rjg bLrekj djukA



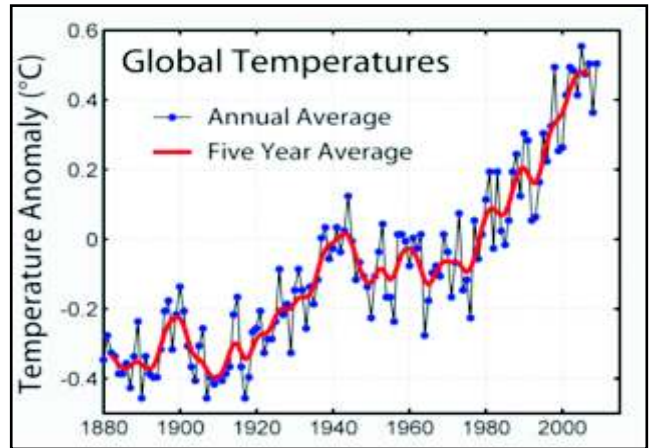
xhu gkm l i hko %fofd i hfM ; k l ½

- 10- len e ykg d ch t Mkyu l ; g ifro" k 3
l 5 fcfy ; u Vu dkc Mkb vkD l kbM l k [k
ldxk tk fd txy yxku l yxHkx 10
xuk l Lrk gA
- 11- ub rduhdh l ?kj QDVh bR ; kfn cukuk rkfd
okrkoj.kh ; ifjoru lg ; gk l dA
- 12- QfDV ; k dh Åtk dk ; {kerk c < kuka



okrkoj.k e dkc MkbvkD l kbM e gku okyh c < krjh
%fofd i hfM ; k l ½

- 13- QfDV ; k d dM , o to vi 0 ; ; l iu % vkifr
LFkk ; h Åtk mRiknu djuka
- 14- thok" e b/ku d LFkk ij ub Åtk rduhdh
dk bLreky djuk t l l k j Åtk ok ; Åtk
Hkrkih ; Tokj HkV dh Åtk len rkih ; Åtk
ty Åtk to x l to Åtk U ; fDy ; j Åtk
bR ; kfnA
- 15- okrkoj.k l dkc tCr dj yuk bld fy ; Hkh
nk l > ko g HkoKkfud tCrhdj.k , o [kfut
tCrhdj.kA
- 16- ehFku dk Hkfe Hkjko dk ; y dh [kkuk , o
[kfut ry , o x l f l l Ve e Åtk gr i ; kx
djuka
bud vykok Hkh cgr l fopkj oKkfud , o
rduhdh txr e py jg g ftudk m } " ;
ikÑfrd l l k / kuk dk U ; k ; kfpr mi ; kx g rkfd
Hkfo" ; e / k j rh dk cpk dj thouki ; kxh cuk ;
j [kk tk l dA



HkeMyh ; Å'ehdj.k %fofd i hfM ; k l ½

भूविज्ञान तथा मानव जीवन

ehuy feJk

foKku fo|kihB|

bfnjk xk/kh jk"Vh; eDr fo"ofu|ky;] ub fnYyh

t c Hkh HkfoKku fo"k; dh ppk gkrh g] gekj ftKk l
eu e vud idkj d i'u mHkj r g t l HkoKkfud
D;k djr g\ gekj thou dk HkfoKku d l iHkfor
djrk g\ gekj lekt e HkfoKku dh D;k Hkfedk
g\ vkb; ge bUgh i'uk d mUkj <<A D;k vkidk
, glkl g fd gekjh lH; rk rFkk /kjr d ikÑfrd
l l k/kuk dk fdruk xgjk lEcu/k g\ vkfndky l
gh ekuo u f'kdj d fy, iRFkj l cu g, gfFk; kj
mi; kx fd; rFkk xQkvk e 'kj.k yh FkhA bruk gh
ugh vfXu iTtofy dju d fy; Hkh ekuo u
fo'k" idkj d iRFkj t l fQYV dk i; kx fd; k
FkkA HkfoKku dk Kku ikÑfrd okrkoy.k dk le>u
rFkk ekuo thou dk lfo/ktud cuku d fy,
vko'; d gA HkfoKku fo"k; ge gekjh iFoh vkj
m l d l l k/kuk dh cfu; knh le> rFkk mud lrr
: i l mi; kx dju dh lkp inku djrk gA

ge viu nfud thou e ftu lHkh ikÑfrd
l l k/ku] mnkgj.k d fy, ty] [kfut] /kkr]
thok'e] b/ku bR; kfn dk i; kx djr g] ge iFoh l
gh iklr gkrh gA HkfoKku gekj jktejk thou e
ntuk ckj io'k djrk gA ;fn ge bld fo"k; e
xgjk b l lkp rk ekuo thou dk dkb Hkh igy
b l l vNrkh ugh ik; xA

vki dh lcl fi; oLr ft l d cxj vki viu
thou dh dYiuk Hkh ugh dj l dr g] ; kfu
ued@dkeu l kYV ge gykbV uked [kfut l
ikl gkrh gA blh idkj il k/ku l kfx; k d
mRiknu e Hkh [kfut mi; kx gkrh gA Vkyd rFkk
Dy %cUVkukbV] D; kfyukbV % [kfut gA

bld vykok [kfut k dk mi; kx mojd] jx
vkj o.kd] byDVkfud l rFkk vi?k" k.k %vcflo%
m | kx e gkrh gA pVVkuk l QkLQkj l] ikvf'k; e]
lYQj vkj exuhf'k; e t l ik"kd rRo iklr gkr
gA ; lHkh ik"kd rRo [kfut k e gkr gA ; g ik"kd
rRo fofHkUu [kfut k l pVVkuk dk vi{k; .k gku d
dkj.k ekfpr %fjyht % gkr g] tk fd ik/kk d c<u
d fy, vfr vko'; d gA jx vkj o.kd m | kx e
lYQj oky [kfut mi; kx e yk; tkr gA
byfDVdy midj.kk e blyVj d : i e vcjd
; kfu ekbdk dk i; kx fd; k tkrh gA

vi?k" k.k m | kx e flfydk lM] ghjk] d : .M
bR; kfn dk mi; kx gkrh gA iVky; e m | kx e
Á; kx gku oky fmfyx fcV l e vi?k" k.k d x.kk
oky [kfut k dk mi; kx fd; k tkrh gA ?kM; k]
byDVkfud l rFkk dEl; Vj midj.kk e DokVt
uked [kfut k dk mi; kx gkrh gA 'k) flfydku
dk fuek.k cky ; kfu jr l fd; k tkrh gA
flfydku d mi; kx l vki Hkyh Hkfr ifjpr
gkx flfydku d Á; kx l vk/kfud fo'o dh vFk
0; oLFk ij cgr iHkko iMk gA eDr flfydku
LVhy fjQkbfux] ,Y; ehuf; e dkfLVx vkj j l k; u
m | kx e i; kx fd; k tkrh gA mPp Lrjh; 'k) rk
okyk flfydku egRo i.k g D; kfd , dhÑr
%bVhxVM% lfdV e bld i; kx dEl; Vj tkr dk
vk/kkj gA vk/kfud ik | kfxdh bl ij dkQh gn rd
fuHkj djrh gA cgeY; rFkk v/kcgeY; jRu t l
fd ghjk] iUuk] i [kjkt bR; kfn pVVkuk e ik; tkr
gA ; g lHkh jRu ltkoVh i; ktuk d fy; ekuo
}kj k mi; kx fd, tkrh gA

I H;rk dh 'k:okr l gh ekuo pednkj vkj jxhu jRuK l ekfgr jgk gA jRu 'kkfr] l ef) vkj [k'kh d irhd eku tkr gA nfu;k d ikphu xFkk e fy[kk ik;k x;k g fd jRu ekuo d HkkX; vkj fu;fr dk Hkh iHkkfor djr gA bld vykok /kkr, t l ,Y;ehfu;e] tLrk] exuh t] l kuk rFkk pknh gekjh I H;rk d fodkl l vfuok; : i l tMh gb gA bu l Hkh /kkrvk dk fu"d"n.k.k ¼, D l VD'ku½ bud v;Ldk l fd;k tkrk gA HkoKkfudk dk dk; [kfut rFkk v;Ldk dh [kk t rd gh fufgr ugh gA o budh mRifÜk d dkj.kk dk Hkh v/; ;u djr gA HkoKkfudk u fujrj 'kk/k l /kjr dh mRifÜk] iFoh ij thou d fodkl dh tkudkj ekuo lekt dk nh gA iFoh ij thou d fodkl dk irk dju dk vk/kkj thok'e gA thok'ek rFkk vU; l crk dh enn l ge iFoh ij mRifÜk vkj thou d fodkl d ckj e le> l dr gA thok'e pVVkuk dh me] ikphu Hkxky rFkk tyok; d fo"n; e tkudkj inku djr gA tjfld ikd uked fQYe Mkbuk l kj d dky dk thou n'kkrh gA HkoKkfudk d fujrj 'kk/k rFkk egur d QyLo: i gh ge m l dky d thou dh tkudkj iklr dj ik; gA blfy; ge ;g dg l dr g fd HkoKkfudk dk fQYe m l kx e Hkh ;kxnu jgk gA

vVVkfydkvk] Hkouk] l Mdk rFkk bthfu;fjx ifj;ktuk d fuek.k d fy, lhev] cky@jr rFkk fcfYMx LVku l t l DokVtkbV] cyvkiRFkj] xukbV bR;kfn mi;kx fd;k tkrk gA lhev m l kx e puk iRFkj ¼ykbeLVku½ dk bLreky gkrk gA fd l h Hkh ifj;ktuk d fuek.k dh ykxr de dju d fy, vf/kdrj LFkkuh; Lrj ij miyC/k gku okyh fuek.k l kexh mi;kx e yk;h tkrh gA bli fuek.k l kexh d ifjogu dh ykxr de gkrh gA

ty thou dh cfu;knh vko';drk gA ge n[kr g fd nfu;k e ty dh =kfg&=kfg pkjk vkj g vkj fnu&ifrfnu ty dk l dV c<rk gh tk jgk

gA Hkkjr Ñf"n i/kku n'k g blfy, ty rFkk fo|rh dj.k ij gekjh fuHkjr c< tkrh gA HkoKkfud Hk ty l j{k.k e egRoi.k Hkfedk fuHkk l dr gA mfpr ;ktukvk vkj 'kk/k d }kjk o"kk l iklr ty rFkk Hkfexr ty dk l j{k.k fd;k tk l drk gA

vki tkur g fd fd l h Hkh lekt d fodkl d fy, fctyh mRiknu cgr egRoi.k igy gA D;k vki viuk thou fctyh] iVky rFkk Mhty d fcuk vuHko dj l dr g\ fcydy ugh! D;kfd gekjh thou 'kyh bu l fo/kkvk dh bruh vH;Lr gk pdh g fd bu l Hkh d fcuk ge viu thou dh dYiuk ek= l gh dki tkr gA Åtk mRiknu d fy, ikÑfrd l l k/ku ge iFoh l iklr gkr g t l dk;y] ry rFkk ikÑfrd x l] ijek.k [kfut rFkk Hkrkih; Åtk bR;kfnA HkoKkfud iFoh l iklr gku oky ikÑfrd l l k/ku ¼tk Åtk rFkk 'kfdR inku djr g½ dk 'kk/k rFkk vUo"n.k djr gA dk;y ?kjj vkj vk|kfxd dk;k d fy, vko';d gA dk;y fo|r mRiknu d fy, rki fo|r l ;=k e bLreky fd;k tkrk gA gekj n'k e db fctyh ?kjk e fctyh mRiknu d fy, dk;y dk mi;kx fd;k tkrk gA

HkoKkfudk dk;y rFkk iVky;e l l k/kuk d uohu L=krk dh [kk t e fujrj lyXu gA ijek.k [kfut l fctyh mRiknu vkt dy pppk e gA ijek.k Åtk Hkh fo|r mRiknu vkj n'k d fodkl d fy, egRoi.k b/ku gA vHkh geu Åtk mRiknu e HkoKkfudk dh Hkfedk dk o.ku fd;k gA

bthfj;fjx ifj;ktukvk t l fd ck/k] l jx] iy] jktekx bR;kfn d fuek.k dh l Qyrk e Hkh HkoKkfudk dh vge Hkfedk gA HkfoKku dk Kku txg d p;u l 'k: gkdj ifj;ktuk dh lekflr rFkk j[k&j[kko l Hkh d fy, vR;r egRoi.k gA HkoKkfud [kk t rFkk v/; ;u l ekuo tkfr dk ikÑfrd vkinkvk l gku oky

[krjk l cpk ldr gA {k=h; HkfoKku rFkk vkink ic/ku l gku okyh vkink d ud lku dk de fd;k tk ldrk gA mnkgj.k d fy, fd lH Hkh fo'kky ljpuk d fuek.k e loiFke ;g v/;;u fd;k tkrk g fd fd l HkdEi io.k cYV e iMrk gA HkL[kyu vkj fgeL[kyu xflr {k=k e HkfoKku dh t kudkjH cgr egRo i.k gA

Ñf"n HkfoKku] HkfoKku dh mHkjrH 'kk[kk gA HkoKkfud Ñ"kdK dk feVVh dh ljpuk] Hkfexr ty l lK/kuk] o"kk ty lp;u vkfn d ckj e ijke'k inku dj ldr gA

HkfoKku ekuo thou d iR;d {k= l tMk gA tGk Hkh vki utj nKMk; pkg og ?kj gk ;k nIrrj vkid thou dk lfo/kk tud cuku d fy, HkfoKku vkidH lok e lno rRij gA



पेट्रोलियम



कोयला



यूरेनियम



न्यूक्लियर प्रोजेक्ट



नमक



पेन्ट



सिरामिक



असबक



अपघर्षक



विसंवाहक



रत्न



सौंदर्य प्रसाधन



उर्वरक



निर्माण सामग्री



प्लास्टिक

ग्रेफाइट



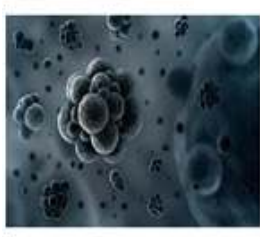
पानी



थर्मल पावर



आपदा शमन



जीवन की उत्पत्ति



जुरेसिक पार्क



विद्युत उत्पादन



इंजीनियरिंग परियोजनाएं



गुड फॉर नथिंग

vfHk"kd feJ

f'kjh"q] ; 'koUr uxj] ek[ke dkyt d fudV] >kj[k.M

fl/k fo'ofolky; d foKku Hkou dk l Hkkd{k
[kp[kp Hkjk gvK FkKA gkrk Hkh D;k u] vkt og
viu ml ijku Nk= dk lEeku tk dju okyK Fkk
ftlu viufopkjK vkj [kk tk d ek/;e l ijh
nfu;k dk /;ku ekuo lH;rk dh fodkl ;k=k d
mu vutku igyvk dh vkj [khpK Fkk tk gky rd
vuly> Fk vkj ftu ij foKku d Hkfo"; d vkj
Hkh db vk;ke lkeu vku oky FkA lHkh jkt dk
brtkj dj jg Fk] tk vHkh viufHkx d xfy;kj
e viuh dN ijkuh ;knk d l=k dk lEvu dh
dkf'k'k dj jgk FkKA blh fo'ofolky; l
LukrdkUkj d ckn og ml foHkx l 'kk/k djuk
pkgrk Fkk tk mldh utj e ml viufopkjK dk
ldkj :i nu e lgk;d fl) gk ldrk FkKA
tyok; foKku foHkx&ckM ij fy[k ; 'kCn ml
ml fnu dh Lefr;k e y x; tc cM mRlg d
lkFk ,d o"K dh egur l cuk; flukflil dk og
viu l ijokbtj iK v#.kkn; flg dk fn[kku y
x;k FkKA iK flg dh ifrfØ;k vkt Hkh mldh
;knk e ol gh rktk Fkh t l dy gh dh ckr gk&
**jMhD;y l! ; flukflil cukdj yk, gk re ,d

lky e \ vkj] okg&okg] D;k gkbikFkhf l l nh g fd
ikphu vkfnok l h tutkfr;k dk ,L=kukeh dk Kku
Fkk! ;gh ugh] DykbeV pt u mud ekbx'ku dk
iHkkfor fd;k Fkk!!! OgkV jfc'k! vefjdk ;k fcVu
d fd l h iij e ,lk dkb ftØ n[kk g dHkh\ bl
lkp d lkFk ih,pMh dju vk, gk] vkfnok l h vkj
l kbl] gg!**

rerekr g, iK v#.kkn; flg u flukflil
d dxxt njokt dh vkj Qd fn, FkA jkt le>
x;k Fkk fd mu dx tk d lkFk mldh ih,pMh d
liu Hkh ml njokt l ckgj Qd tk pd gA iK
v#.kkn; flg tyok; foKku d {k= e n'k d ,d
egRoi.k uke Fk] bl hfy, jkt mud ekxn'ku e
ih,pMh djr g, tyok; vkj ekuo itkfr d
ijLij iHkkok ij ,d u, nf"Vdk.k dk foKku
lEer Lo:i nu dh bPNk j[krk FkKA exj vkt d
bl ?kVukØe u mldh mEehn rkMdj j[k nhA c>
dnek l og gkLVy dh vkj ykV pyKA dejt u
13& ;gh ok dejt Fkk tgk jgr g, mlu viuh
ih,pMh dk ydj db vjeku l tk; Fk] exj vc
og bl NkM dj tk okyK FkKA dejt e et d dku



ij iM ,d fyQkQ u mldk /;ku viuh vkj
[khpka >kj[kM d lnjorh bykd e ,d ekbfx
iktDV e HkoKkfud d :i e fu;fDr dk dky
yVj Fkk ogA jkt u igy bl lUnHk e xHkhjrk l
ugh lkp k Fkk] exj vc mld lkeu ;gh
rkRdkfyd fodYi Fkka mlu ;gk l lh/k >kj[kM
tku dk fu'p; dj fy;kA ol Hkh ;gk viu
'kHkfprdk] fe=k d mu vlg t lokyk dk ok
lkeuk djuk Hkh ugh pkgrk Fkk] tk mldh ih,pMh
dk ydj fd; tkrA Vu d jlrkj idMu d lFk
gh jkt dk Hkh u;k lQj 'k: gk pdk Fkka >kj[kM
d ,d vutku l dku l ,d ub 'k#vkr mldk
br tkj dj jgh Fkha

>kj[kM % ,d ,lk jkT; tgg db tutkfr o
lenk; vkt Hkh viuh ikphu ijijj dk dk;e j[k
g, FkA {k= d db Hkxk e ik, tku oky ikphu
jkd vkv t lh 'kyh d oky ifVXl ;gk d ?kj dh
nhokj ij ikjifjd lTtk d rkj ij vkt Hkh
dk;e gA vud ikphu ijijj, vkt Hkh mud
fu;fer 0;ogkj e 'kkfey Fkha ;gk rd fd erdk
dh Lefr e Åp i'kk.k LFkfkfjrdjuk ftUg ijrRo
foKku dh Hk'kk e *exkfyFk* dgr g& Hkh gky rd
mudh ijijjvk e 'kkfey Fkha lkbV ij vkr&tkr
jkt dh oKkfud vkj tkx:d utj vkl&ikl d
,l gh ,d egkik'kk.kh; LFky ij iMrh Fkha
xkykdj ?kj e [kM ;k crjrhc iM bu egkik'kk.kk
dk n[k ge'kk ml yxr k Fkk fd ; ; gh ugh iM gA
LFkkuh; xkeh.kk l iNu ij Hkh ml ek= bruk gh
irk pyk fd ok vkj mud cM&c< bu g viu
cpiu l gh n[kr vk jg gA ; egkik'kk.k vkt Hkh
bu dh ijijjvk e 'kkfey g vkj dN ykx vHkh Hkh
viu er ifjtuk dh vLFk;k feÍh d ,d ik= e
Mky ;gh xkMr gA blfy, bud fy, ;g de
*ifo= lldkj d ek;u Hkh j[krk gA

jkt dh fo'y"kk.Red utj bl ckr dk Hk i
jgh Fkh fd tfgjk rkj ij *crjrhc* l fn[kr ;
egkik'kk.k fd lh fo'k"i ;ktu l gh mDr 0;oLFk

l j[k x, gkxA blh nkjku mldk ifjp;
u&foKku dh LFkkuh; 'kk/k Nk=k i tk l gvka i tk
d lFk ppk d Øe e mlu le>k fd
ikxfrgkfd dky e egkik'kk.kk dk mi;kx nk
ie[k mÌ';k l fd;k tkrk Fkka ,d rk erdk d
vfre lldkj l tM dk;k d fy, Fkka viu
vkrh; tuk d 'kok dk iÑfr vkj i'kvk vkfn l
{kr&fo{kr gkr n[k mu vkfnekuok d eflr"d e
mud 'kok dk lEeku vkj l j{kk lfuf'pr dju
gr ;g fopkj mi tk gkxk&ftld vrxr mu d
'kok ;k vo'k"kk dk tehu e xkM mu ij mudh
Lefr e egkik'kk.k LFkfkfjrd; x,A nlj mÌ';
Fkk /kkfed ;k ikjifjd vk;ktuk d lUnHk e
egkik'kk.kk dh LFkkuh bue l dN d [kxkyh;
lc/k Hkh Kkr g, gA dN fof'k"V egkik'kk.kk dk
i;kx bu nkuk gh lUnHk e gkrk Fkka rkRdkfyd
Kku e mUkjUkj fodkl dk iHkko mudh ik'kk.k
jpukvk e Hkh ifjyfk gkrk jgk vkj ; egkik'kk.k
mud [kxkyh;] Hkxkfyd vkj xf.krh; Kku dh
vfhkO;fDr dk Hkh ek/e cuu yxA mnkgj.k d
fy, bXy.M dk LVku gt ¼1500 BC½ & tk e[;r%
lkekftd o /kkfed fØ;kdykik d fy, i;Dr
gkrk irhr gkrk g] ijr bl d lkyfLVd t lh
[kxkyh; ?kVukvk d v/;u e i;Dr gku d Hkh
iek.k fey gA ml vkhk l Fk fd fon'kk e rk bl
rjg d db egkik'kk.kh; LFky Kkr vkj l jf[kr g]
fdUr Hkkr tk ikphudky l gh db tutkfr;k d
iokl dk ,d ie[k fcn vkj mudh
lH;rkvk&lÑfr;k d ijLij feJ.k dk dUn jgk
g&e bu vo'k"kk dh [kkt vkj mud egRo ij
vi{kkÑr de /;ku fn;k x;k gA exj og bl
LFky dh lVhd [kxkyh; mi;kfxrk dk le>ugh
ik jgk Fkka lglk gh ml i tk d lFk ikl dh
igkfM;k e gky gh e n[k mu fhkfk fp=k dh ;kn
gk vkb ftue l ,d e nk igkfM;k d e/; l
fudy jg l ; dk ,d ijkfgr t l k 0;fDr fugjkr
fn[k jgk Fkka mld eflr"d e ,d fopkj dk/kk

vkj mlu ifrfnu ikr% dky bl LFky d
voykdu dk fu'p; fd;KA fu;fer voykdu
djr g, ml ;g egl l gvk fd ;gk xkM dj [kM
fd; x; nk LrEHkdkj egki k"kk.k] tk ijLij *oh*
ln'; vkÑfr cukr g] dh n';&j[kk e gh jkt
l cg l ; dk mxr n[kk tk l drk gA vkt 21 eksp
Fkk& bfDoukDI dk fnu tc l ; fo"kor j [kk ij
gkrk g vkj fnu&jkr dh le; kof/k cjkj gkrh gA
vkt ljt Hkh yxHkx ml *oh* d e/; l mxrk
irhr gvk Fkka ml ;kn vk;k fd db ikphu
lH;krk, bl fnu dk l ; d u, tUe l tkMrh Fkh]
D;kfd mudh rRdkyhu eku; rkul kj l ; bl frfFk
dk iFoh d dYifud *dUn* ij jgrk g] vkj fQj
Øe'k% bld mUkj %mUkj; .k% vkj nf{k.k
%nf{k.k; .k% Hke.k d nkju o"e nk ckj Bh d bl h
LFky ij mfnr gkrk gA [kxkyh; Kkukt d
ikjfhkd nkj e bl b'ojh; peRdkj ekur g, dN
/kkfed LFky Hkh , l LFkku ij gh LFkkfir fd; x,
Fk tk oLrr% , d idkj dh ikxfrgkfld o/k'kkyk,
gh Fkh ftudk [kxkyh; egRo vc idV gvk gA
olh gh o/k'kkykvk e l , d d lkeu jkt vutku
e gh [kMk Fkka bldh ikphurk dk vkdyu mld
fy, lHko Hkh ugh Fkk] D;kfd iokl djrh vkfne
tutkr; k le; d vyx&vyx pj.kk e viuh
ijijk, db txg LFkkfir djrh xb vkj >kj [kM
t l h txg Hkh Fkh tgk mudh db ijijk, gky rd
0;ogkj e ipfyr FkhA blfy, mlu bld oKkfud
igyvk ij /; ku dfr djuk gh mfpr le>ka

vc [kk t dk vxyk pj.k Fkk l kj v;ukr ;k
lkfyfLVd dk voykdu djukA tu e ml bldk
Hkh vol j iklr gk x; k] tc , d fcn rd tkrk fn[k
jgk l ; iu% e/; fcn dh vkj vkrk irhr gku yxk
vkj] fQj 23 flrcj dh og ?kMh Hkh vkb tc l ;
iu% ml h *oh* d djhc Fkka bl ifØ; k d xgkb l
voykdu d nkju jkt u ; g Hkh egl l fd; k fd
bfDoukDI vkj lkfyfLVd dh eku; frfFk; k] tk fd
Øe'k% 21 eksp vkj 23 flrcj rFkk 21 tu vkj 22

fnlcj g] dk l ; dh fLFkr vuekfur lVhd fcn
l FkkMh fHkUu gA ; g ckr ml fopfyr dj jgh Fkh
fd D; k mu ikphu [kxkyfonk }kjk dh x; h
lVhd x.kuk e dkb =fV jg xb ; k dkb vkj
[kxkyh; dkj.k g\ bl chp dk; ky; d dke l
ml jkT; dh jkt/kkuh jkph tkuk iMka ekx e
mldk /; ku , d /k/kyk; l ckM ij iMk] ft l ij
fy[kk Fkk ; gk l dd j [kk xtjrh g & bl , d
okD; u mldh lkp dk ub fn'kk n nhA mldk
fjlp rk NV x; k Fkk] exj tyok; foKku e
mldh :fp cjdjkj FkhA , d vUrk"Vh;
'kk/k&foKku if=dk %tuy% ftldh mlu
vkuykbu lnL; rk yh Fkh] e i<g; , d y[k dh
ml ;kn vk x; h ft le oKkfudk }kjk iFoh d v{k
d >dke e ifjoru dk VkiDI ij iHkko vkj
mll tyok; e ifjoru dh lHkkouk ij fopkj
fd; k x; k Fkka mld fneke dN loky dk/k
jg FkA dgh ; g dd j [kk igy ml h egki k"kk.k
LFky l rk ugh xtjrh Fkh\ D; k iFoh d v{k'kk
e ifjoru d dkj.k rk ; g vkt ; gk l ugh
xtj jgh\ D; k ble cnyko dh otg l igy
tk tyok; oh; ifjoru g, gkx mud dkj.k
ikphu dky e ekuok dk ekb'ku d fy, rk
foo'k ugh fd; k\ , l db i'u Fk ftud tokc , d
d'ky i; o{k d d fcuk << ikuk dfBu Fkk] vkj
; gk vkdj ml fo'ofokly; d ekgky dh deh
T; knk [kVd jgh FkhA ml egl l gk jgk Fkk fd
vkfd; kyk th] , Ufkkiky th vkj DykbeVkyk th
d lg&lc/kk ij Hkh iu% 'kk/k dju dh fdruh
xtkb'k g! ml viu foHkx d ofj"B ikQl j
Mk Jhfuoklu dk dFku ; kn vk jgk Fkk fd
fjlp& kfu fd l h [kk t ij nkckjk eflr"d eFku
djuk vkj u; k fopkj ; k u; h 0; k [; k iLrr
djukA vkt bu 'kCnk e fNi g; ln'k dk le>
dj bl ckj e iu% 'kk/k dh vko'; drk vkj
egRo dk jkt egl l dj ik jgk Fkk-----exj
ekxn'ku d fy, ik Jhfuoklu ikl e dgk Fk!

okLrfod txx e pkg mldk exn'kd dkb
 ugh Fkk exj ,d {kh.k lh mEehn Fkh& mld gkFkk e
 Fkeh ,d if=dk e Ni foKkiu d :i eA ;g ,d
 l[kn l ;kx gh jgkA foKkiu d vulkj Hkkjr
 ljdkj d vrxx dke dju okyh lLFkk *foKku
 i l k j * nokjk oKkfud fo" k ; k ij cuh y?k fQYek dh
 in'kuh gr ifo"V ; k ekxh xb FkhA jkt u Hkh mDr
 rF ; k vkj lHkkfor i'uk d l k Fk bl LFky ij n[kh
 xb l ; d vdk'k xeu dh ifØ ; k dk ,d ohfM ; k
 ik : i e leV viuh ifo"V Hkt nhA ml rlyyh
 Fkh fd mlu viuh vkj l ; Fkk l Hko i ; k l dj
 fy ; k gA og okil viuh dke e lyXu gk x ; kA
 ,d nkigj tc ok ,d foHkkxh ; Mkbx d v/ ; ; u e
 0 ; Lr Fkk fd ml nk i = iklr g , A mld vk'p ; dk
 fBdkuk u FkkA igy i = e mldh y?k fQYe dk
 tyok ; ifjoru dh J.kh e 'kkfey fQYek e T ; jh
 dk fo'k" k ijLdkj feyk Fkk vkj nlj i = e mld
 fy , vke=.k Fkk& ml T ; jh d v/ ; {k egkik"kk.k
 lH ; rk d v/ ; ; u d {k = e vUrk"Vh ; [; kfr iklr
 'kk/kdrk vkj fcVu fLFkr nk l & xkge QkmM'ku d
 lLFkkidk e l ,d Jh 'kHkk'kh" k nk l dh vkj l
 viuh lLFkk e 'kk/k dk ; d fy , A jkt dk viuh
 Hkfo" ; dh fn'kk fey pdh FkhA ,d u ; k lQj] ,d
 u ; k iMko db u , lokyk vkj tokck d l k Fk
 mld brtkj e Fkk vkj l k Fk gh ; g , glkl Hkh fd
 ^gh e ch xM Qkj uffkx] cV n ; j bt leffkx fop
 bt xM Qkj fge---^

bl u , lQj e vc itk Hkh mldh gelQj
 FkhA noUn lR ; kFkh vkj ofj ; j , fYou dh ijijk e
 ,d u ; k uke tM pdk FkkA bfrgkl l Hkfo" ; d
 bl [kk ti.k lQj e ; u flQ lgpj Fk cfYd
 ,d&nlj d ijd HkhA viuh egur vkj yxu l
 buGku db vuly> jgL ; k l ink gVku e
 lQyrk kb] exj fQj Hkh jkt d fny e
 dHkh&u&dHkh ,d Vhl lh mBrh jgrh Fkh viuh gh

fo'ofolky ; l mld fopkjk dk Lohñfr u fey
 iku dh vkj vkf[kjdkj vkt dk fnu Hkh vk gh x ; k
 tc fo'ofolky ; d Hk&foKku foHkkx u bl io
 Nk= dk viuh okf"kd fnol ij lEekfur dju d
 fy , vkef=r fd ; kA vpkud d/k ij fd l h dh
 Fkidh l jkt dh rUnk VVhA mlu n[kk itk
 mldh vkj gh n[k jgh FkhA vk[kk gh vk[kk e mlu
 jkt dh eukn'kk Hkki mldh gFky ; k dk viuh
 gkFkk e y ml vk'oLr l k fd ; kA l Hkkd{k e l Hkh
 mldk brtkj dj jg FkA ml lEeku fn , tku d
 l k Fk gh e[; vfrfFk egkn ; u mll Nk=k dk
 viuh [kk t ; k=k d lc/k e crku dk Hkh vxg
 fd ; kA jkt [kn Hkh Hkfo" ; d liu vc bugh ; ok
 vk[kk e lki tkuk pkgkr FkA mlu mUg Hkh viuh
 bl thou ; k=k d ckj e crk ; k vkj bl ckr ij Hkh
 tkj fn ; k fd foKku vkj 'kk/k dh u rk dkb lhek
 gkrh g u gh c/kuA ; g ij fo'o dh /kjkj g vkj
 gj {k = dk Kku nlj {k = d l k Fk l fefyr dj db
 u , jgL ; mn?kkfVr dj ldrk gA exj vr e tk
 ,d ckr l k j Nk=k d dkuk ext rh jgh ok ; gh Fkh
 fd gj Nk= viuh vki e fof'k" B gkrk gA ; g ugh
 dgk tk ldrk fd ^n vkj xM Qkj uffkx** D ; kfd
 ^n ; j bt MfQuVyh leffkx fop bt xM Qkj
 ne---** bu ifDr ; k e Ni Hkkok dh xt rkfy ; k d
 : i e gj rjQ Qy jgh Fkh] tk 'kk ; n ikE
 v#.kkn ; flg d dkuk rd Hkh igph gkxh vkj
 lHkor% mu tl db vU ; ik / ; kidk rd Hkh tk
 fo[kfFk ; k vkj mud lkp dk ,d ikjifjd < j ij
 Mkyu dk gh f'k{kk dk ml' ; eku cB g] pkg bl l
 Nk= dh ekfyd ifrHkk gh D ; k u /ky e fey tk ; ---
 exj jkt dk ijk Hkjk l k Fkk fd ifjflFkr ; k l nk
 , l h gh ugh jgxh vkj gekj n'k e Hkh 'kk/k dh
 n'kk&fn'kk e ldkjRed vkj LokHkkfod ifjoru
 fd l h d jkd ugh #d ik ; xk---

XXXXXXXX

जल संसाधन विकास : भूविज्ञान

dkenh t'k'kh

Hkkjrh; HkoKkfud lo{k.k} Hkou"oj

ty l l k/kuk d fodkl dk vFk] l h/k&l h/k l keU;
ukxfjd dk thou thu dh cgrj lfo/kkvk]
vl hfer ty fojr Åtk HkMkj l l EiUu djuk gA
Rofjr fodkl vUrjk"Vh; ekudk d vu:i 60%
yKM QDVj d l kFk ;g yxHkx 84000 exkokV
gkrk g vFkr *bUlVkyV diflVh* yxHkx 1]48]700
exkokV g vr% n"e miyC/k tyfojr Åtk dh
l Hkkouk fo"o ifji{k e ikpo LFku ij gA dy
vUrfufgr "kfDr dk vc rd ge yxHkx 275 ty
fojr Åtk l ;U= yxk ik; g ftue yxHkx 813
fojr Åtk mRiknu bdkb;k gA

l keU;r;k ty l l k/ku d fodkl gr ck/k
fojr xg ,o ugj cuk;h tkrh gA bu
vfHk;kf=r of"k"Ve Hkkxk dh l HkkO;rk tkuu
d fy, LFky fo"k"dh l k/kkj.k HkoKkfud
ifjLFkfr;k ft le iFoh dh {k=h; rFkk lrg
l jpuk l l EcU/kr l puk, egRoi.k gkrh g]
tkuuh gkrh gA fd l h iLrkfor ty fojr
ifj;ktuk d fofHkUu vo;ok dh rduhdh
l HkkO;rk d Hkrduhdh vkdyu d fy, fuEu
rhu Lrjk ij Hkvfhk;kf=d vUo"k.k dh vko";drk
gkrh gA

ikjFEHkd pj.k ¼Lrj½ vUo"k.k

fuek.k io pj.k vUo"k.k

fuek.k pj.k vUo"k.kA

ifj;ktuk d fuek.k d i"pkr le;≤ ij
ifj;ktuk d gkykr tkuu gr vul/kku fd; tkr
g] bu g i"p fuek.k pj.k vUo"k.k dgk tkrk gA bu
lc vul/kkuk dk ed ln ,d i.kr;k l jf{kr]
lgt ,o de l de ykx e ifj;ktuk vo;o
r;kj djuk ,o pykuk gkrk gA

ikjFEHkd pj.k vUo"k.k % bl Lrj e e[;
mnn"; ifj;ktuk LFky dk puko djuk gkrk gA
bld fy; 1%50]000 ieku ij {k= fo"k"dh
LFkykÑfr ty foKku] HkfoKku] Hk lrg l jpuk
l EcU/kh tkudkjH HkdEi l EcU/kh tkudkjH rFkk
ifj;ktuk vo;;k dh O;oLFkk dk iFke n"V;k
O;ogkfjdrk Kku djuk gkrk gA bl gr db
l EHkO; LFkyk dk xgu lo{k.k fd;k tkrk g rFkk
mue l loJ"B LFky dk puko ifj;ktuk cuku d
fy; vxk d vul/kkuk gr p;fur fd;k tkrk gA
ikjFEHkd : i l loJ"B l EHkx LFky dk puko ck/k
{kj k Hkfo"; e fy, tku oky dk;k ;Fkk ck<
fu;U=.k flpkb ,o ty vkifr] fojr mRiknu]
eRL; ikyu] i;Vu fodkl] ykfHkr {k= dh
l LFkfr vkfn ij fuHkj djrk gA cgmnn"kh;
ifj;ktuk LFky d puko gr vHkh"V l dN de
ij le>krk dj d vudyre ikjLFkfr
fuokfpr dh tkrh g] D;kfd ,d ;k vf/kd
iLrkfor mi;kxk gr ,d gh LFky vudyre gku
dh l EHkkouk u d cjkj gA

ck/k LFky d puko d fy, ikFkfed fopkj ;g
fd;k tkrk g fd] D;k unh ty vkÑfrdh ,d
l EHkfor ck/k ,o ifj.kke Lo: i jkdh xb ty jf"n
dk ck< fu;U=.k vFkok HkMkj.k vko";drk d
vu: i /kkj.k ,o HkMkj.k dju dh {kerk j[krh g]
vf/kdk" cgrjhu LFky io e gh vU;kU;
ifj;ktukv e fodflr fd;k tk pd g vr% vc
mi;Dr LFky l ;k ,o mikn;rk d vulkj
l hfer gk x; gA

ck/k LFky vul/kku e fuEu fcUn egRoi.k
LFku j[kr gA

- 1- LFkkykÑfr unh dh ,d l djh ?kkVh gkuh pkfg, tgk unh d vkj&Nkj ij nkuk vR;k/kkj vko”; drk vul kj dkQh Åp gku pkfg, A ck/k dh pkMkb ,o Åp kb dk vui kr egRoi.k gA
- 2- ,d vPN ck/k LFky e lyXu ljpukvk t l fLi y o] fo| r xg rFkk vU; ty fudkl dh bdkb; k d fuek.k gr mi; Dr t xg gkuh pkfg, A
- 3- enk ck/k ,o dØhV ck/k d fy, vko”; drk , dne fhkuu gA
- 4- ck/k dh uho rFkk vUR;k/kkj nkuk etcr tyjk/k rFkk HkL[kyu l eDr gku pkfg, rkfd fuek.k dk ck> ogu dj l dA
- 5- ck/k LFky fd l h thfor Hk”k d utnhd ugh gkuh pkfg, A
- 6- lEHkkfor LFky dk HkdEih; bfrgkl Kkr fd; k tkuk pkfg, A
- 7- ifj; k tuk fuek.k l kexh ifj; k tuk LFky l dkQh utnhd gkuh pkfg, rkfd ifj; k tuk ykxr ij ifrdy vlj u iMA
- 8- i; koj.k rFkk foLFkku d enn xHkhjrk l n[k tkuk pkfg, A

fuek.k io pj.k vUo”k.k % ifj; k tuk LFky d puko d i”pk r ml LFky ij fuek.k io pj.k d vul/kku fd; tkr gA

HkvvkÑfrdh lo{k.k.k % ifj; k tuk LFky dk HkvvkÑfrd lo{k.k.k 1%1000 ieku ij 1eh l 2 eh dUVj vUrjky ij i; klr l[; k e cUp ekd@jQjUl fiy j LFkfr dju d fy, fd; k tkrk gA bl lo{k.k.k dk ok; oh; QkVxxQ ,o lVykbV fp=k dk i; kx d jr g, Hkh fd; k tkrk g rkfd ijh ifj; k tuk dk fp= lkdj gk l dA

HkoKkfud vUo”k.k % ifj; k tuk LFky o ml d vki l i d {k= dh pîkuk d idkj ,o Hk ljpuk t l ,.VhDykbu] fluDykbu] QkYV] f”k; j lEcu/kh

vul/kku o ekufp=.k fd; tkr gA ck/k v{k d l kFk&l kFk fLi y o] l jxk dh yEckb rFkk fo| r xg xgoj d HkoKkfud lD”ku r; kj fd; tkr gA ;g v/; ;u “kyk d idkj] mudh 0; oLFkk] <kpkxr x.k fpUgk] vi{k; .k ,o vijnu dk j [kkfdr d jr h gA “ky leg dh Hkkfrd] ;kf=d “kfDr rFkk ikjxE; rk l pdkd] o/ku fNn] [k th fm¶V rFkk ik; yV l jxhdj.k }kjk Kkr fd; k tkrk gA

¼d½ HkoKkfud ekufp=.k % 1%1000 ieku ij HkoKkfud ljpukRed x.k nk”kk dk j [kkfp=.k rFkk enk o Åijh Hkkj lLrj o “kyk d lEid dk] o “kyk e vijnu o vi{k; .k Lrj dk ekufp=.k fd; k tkrk gA bu ljpukvk d vk/kkj ij viuh tkudkj h dk i”V dju gr Hkhkkfrd o o/ku rduhd dk l gkjk fy; k tkrk gA

¼[k½ HkdEih; eY; kdu % {k= dh HkdEih; vrfufgr “kfDr ink dj lduoky ifjPNn rFkk HkdEih; mRifUk Lrj Kkr fd; tkr gA

¼x½ Hkhkkfrd vUo”k.k % ÅifjHkkj ,o “ky d lLi”k ry] Hk”k mifLFkfr LFky] f”k; j tku ,o vU; HkoKkfud ljpuk, rFkk Mk; ukfed VLV l ekM; Yl oY; rFkk mll jkd ekl DokfyVh fudkyu gr Hkhkkfrd lo{k.k.k fd; tkr gA o/ku ØkM Hkh LVfVd ekM; y l oY; Kkr dju gr vYVkl kfud ykfx }kjk Ldu fd; tkr gA

¼/k½ o/ku o NkVh l jx }kjk vf/k l rg vUo”k.k % ÅifjHkkj o “ky lLi”k ry dh xgjk] vi{k; .k flFkfr] Hk”k o lHkx {k= ,o f”k; j tku o ruko “ku; flFkfr; k dh “ky lhek rFkk l jx l j [k.k d mij flFkr “ky@ÅifjHkkj vkoj.k bR; kfn Kkr dju gr db o/ku fNn dju dh ; ktuk cukb tkrh gA o/ku ØkMk dk /; kuiod v/; ;u fd; k tkrk g ,o i; kx”kkyk ijh{k.k gr ueu fy, tkr gA

¼M½ i; ; kx”kkyk ijh{k.k % o/kufNnk l iklr ØkMk

dk LoLFkku e “kyk e 0;klr fofHkUu x.k nk”kk d
ijh{k.k gr Hkrduhdh i ;kx”kkyk e fofHkUu Hkkfrd
,o ;kf=d x.kk d fofHkUu ijh{k.kk l xtkjk tkrk
gA bl rjg l fof”k”V x : Ro] yphykiu] rU;rk]
l [kh ,o xhyh fLFkfr;k e ruko lECU/kh] Qyu
lECU/kh rFkk dBkjr k dk Kkr fd;k tk l drk gA

$\frac{1}{4}p\frac{1}{2}$ LoLFkku ijh{k.k % i ;kx”kkyk ijh{k.k l iklr
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okLrfod ifjLFkfr;k l ryukRed : i l x.kuk
dj [knkb d io ,o i”pkr] fo”k”kdj v/kk l rfgd
l jpuvk d lECU/k e ckjEckj Hkkj lgu dh {kerk
o rU;rk lhek dh x.kuk dh if”V dh tkrh gA

$\frac{1}{4}N\frac{1}{2}$ LoLFkku ikjxE;rk ijh{k.k % “ky leg dh
ikjxE;rk dk tk fd ;k rk “ky d.kk $\frac{1}{4}xU$;Yl $\frac{1}{2}$
vFkok Hk”k o pVd $\frac{1}{4}YDpj\frac{1}{2}$ dh otg l gkrh g] ,u
,DI eki d o/ku fNn dk okfNr xgjb rd y
tkdj ekik tk l drk gA ;g uho o vUR;k/kkj dh
ty vikjxE;rk tkuu gr t : jh gA o/ku fNnk e
ekfir ty Mkydj ,o vU; rjhd k l “kyk dk
LoLFkku e ijh{k.k fd;k tkrk gA bl rjg l
fo : i.k x.k] ikjxE;rk rFkk LoLFkku ruko dh
x.kuk dh tk l drh gA

okLrfod HkoKkfud ifjLFkfr;k] vi{k; .k
lhek o ruko eDr “ky fLFkfr;k dh lhek Kkr
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xQk, ,o ekxn”kh iryh l jxk dh ;ktuk cuk;h
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fd;k tkrk gA bl lpuk l vui;kxh “ky dk
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ljpuk] vijnu o vi{k;.k] ikjxE;rk]
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vUo”k.k] ifj;ktuk ljpukvk d fuek.k d le;
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वैज्ञानिकों की चेतावनी हमें प्राप्त हो गई थी अगर उस समय
 हमारी उच्चस्तरीय आणविक प्रबंधन समिति विदेश में आणविक प्रबंधन
 की रेजिंर ले रही थी इसलिए शहर का कूड़ा जलाने से रोका
 हुआ।

उत्तराखण्ड प्राकृतिक आपदा जून 2013: एक वैज्ञानिक विवेचना

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okEfgEHkfoE lE] ngjknu

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fo'k"kdj mPp fgeky; {k=k e tgk udnh Qlyk
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vkfFkd r= fuHkj jgrk g] ;vFk r= gh leklr gk
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y x k r k j d b f n u k r d g b F k h A b l y x k r k j o " k k d
n k j k u m Û k j k [k . M j k T ; d d b { k = k t l / k u k Y V h]
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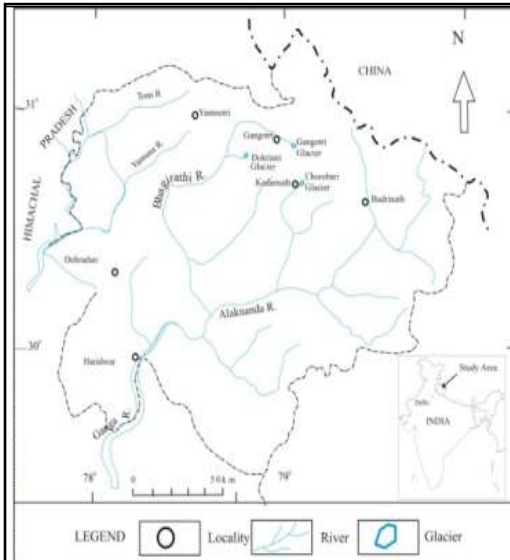
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m M u o k y h e k u l u h g o k v k } k j k t y k b & f l r E c j e
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m l d i ' p k r v Q x k f u L R k k u g k r g ; m Û k j H k k j r h ;
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f e e h o " k k g k r h g t c f d b l o k j 71-5 f e e h o " k k g b
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c p k f n ; k A

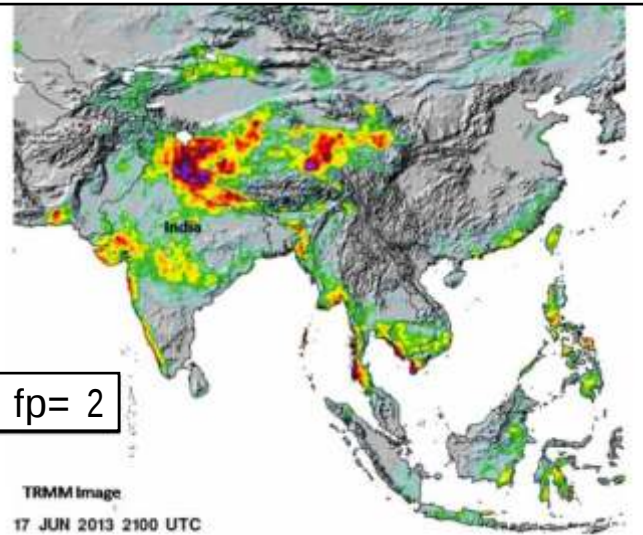
fdUr nHkx; o'k dnkjukFk efUnj i.k : i I Xyf'k; j cgko {k= ij gh fLFkr g] tk fd Xyf'k; j I vk; volkn dh ekVh ijr g rFkk okLro e cgr gh vl?ku gA Åij I efUnj d mÜkjH Nkj ij pkjckjh o dEifu; u Xyf'k; j d eyo dk <j Hkh NkVh&NkVh igkfM; k d : i e tek gA vkink dh ?kVuk I io eUnkduh unh dk ikuh efUnj d nk; I cgrk Fkk ft le fd efUnj d ck; vkj I cgu okyh I jLorh unh dk ikuh Hkh fey x; k FkA fdUr vfrofV d dkj.k pkjckjh&dEifu; u fgeunk e fLFkr eyok Hkh ikuh I lFk cg dj efUnj dh vkj vk x; k QyLo : i nkuk ufn; k dk ekx 16 tu dk gh vo :) gk x; kA I jLorh unh viuh rt /kkjk d lFk viuey LFkku efUnj d ck; I cgdj fo/ol epku yxh rFkk I jLorh unh u lh/k efUnj d ikx.k dh vkj iokg dj dnkjukFk efUnj o mld pkjk vkj clkoV dk /oLr dj fn; kA ogk fLFkr tu&leg Hkh bl vkdfled ck< dh piV e vk x; kA eUnkduh unh e rhu LFkkuk ij iokg Xyf'k; j eyo I vo :) gk x; k Fkk ft l dk fp= 4 o 5 e 1]2]o 3 uEcjk I n'kk; k x; k gA dnkj ?kkVh dh fo'k'k Hk&vkÑfrd I jpuk u bl fo/oldkjH vkink e egRoi.k Hkfedk fuHkkb gA fo'k'kdj dnkjukFk d mÜkj e fLFkr pkjckjh rky d vpkud VVu I Hkh 17 rkjh[k lcg dk Xyf'k; j d eyo d lFk Hk; dj ck< vkb ft lu iu dnkj ?kkVh e tu&/ku o l l k/kuk dk vR; f/kd {fkr igpkb gA efUnj d mÜkj fn'kk e fLFkr Xyf'k; j eyo d <jk d lFk ikuh d rho cgko I bruk T; knk dVko gvk fd ogk yxHkx 60 eh xgjh o 20&30 eh pkMh [kkb; k cu xb ftudk fd fp= 6 e G₁, G₂ o G₃ }kjk inf'kr fd; k x; k gA vkj bl h eyo u dnkjukFk o jkeckMk e iy; dkjh ck< dk Lo : i xg.k dj fy; k FkA eyo d cgko dk pkjckjh rky d QVu I bdVB NV ikuh u Hkh rho xfr I clkoV dh rjQ cgk; k ,o vkink dk vkj rhoxkeh cuk fn; kA pkjckjh rky Xyf'k; j

e[k I yxHkx 85 eh nj 3900 eh Åpkb ij fLFkr g ft l dk fp= 7 }kjk inf'kr fd; k x; k gA xkjH dUM o dnkjukFk d iku 14 fdeh dh ixMMh d e/; e fLFkr jkeckMk Hkh vkink e ley u"V gk x; kA yxHkx 150 NkVh&cMh ndkuk ,o yxHkx 2000 ekuo ?kkjd {kerk okyh ; g cLrh vkt bfrgk l dk fgL l k cu pdh gA fp= 8 , e vkink I igy dk n' ; fn[kkb n jgk g tcf d fp= 8 ch e ?kVuk d ckn dk fp= inf'kr gA jkeckMk ?kkVh {k= , dne eUnkduh unh d rv ij fLFkr gku d dkj.k vf/kdre tu&/ku dh gkfu dk LFkku ekuk tkrk gA okkfud rF; k I ; g l fcr gk pdk g fd pkjckjh rky I uhp rygVh e fLFkr gku d dkj.k jkeckMk o dnkjukFk LFkkuk ij ck< d lFk vR; f/kd Xyf'k; j eyok igp x; k Fkk ft l l vf/kdk'k tu&/ku tehnt gk x; k FkA dnkjukFk cLrh I yxHkx 316 eh o jkeckMk I 884 eh dh Åpkb ij fLFkr pkjckjh rky I rho <yku gku d dkj.k vpkud ck< dh xfr Hkh rhore FkA Xyf'k; jk d ty&cQ&l xg.k {k= 14-39 ox fdeh I Hkh o"kk o cQ fi?kyu dk ikuh bdVBk gkdj cgu I fLFkr vkj Hkh fodjky gk xb FkA {k= e Hkjd {kerk I vf/kd ikuh bdBBk gku d dkj.k LFkkuk; ouLifr Hkh <yuk ij feVVh dk ck/k d ugh j[k l dh ft l l vf/kdk'k LFkkuk ij l rgh HkL[kyu gk x; k FkA dnkjukFk ?kkVh d pkjk rjQ Hkh ; g n' ; mRiUu gk x; k Fkk ½fp= 9½ HkL[kyu o Xyf'k; j eyck unh e cgu I ufn; k d ryNV e tek gk x; k vkj dnkjukFk efUnj d nkuk rjQ cgu okyh ufn; k u viuk iokg ekx cny dj fo/ol epk fn; kA fp= 10 e nkuk ufn; k d vkink I io o vkink d i'pkr unh ekxk dk inf'kr fd; k x; k gA

Hkjjro"k d mÜkjH Hkx e fo'k'kdj mÜkj[k.M e eph bl rckgh dk jk"Vh; ,o vUrjk"Vh; I LFkvvk }kjk ekuoh; nf"Vdk.k I n[kk x; k ,o rnul kj jkgr] cpko o iuokl dk; k e c&p< dj fgL l nkjh Hkh dhA dN i ; koj.kfonk] iÑfr ife; k



fp= 1



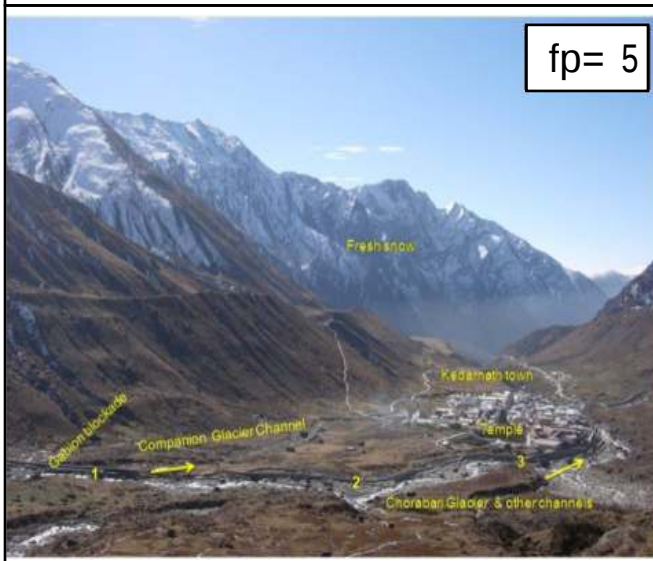
fp= 2



fp= 3



fp= 4



fp= 5



fp= 6



o l k e f t d I L F k v k } k j k b l v k i n k d d k j . k k i j
v i u h f v l i f . k ; k H k h f o f H k U U v [k c k j k] V y h f o t u
p u y k] o c l k b V o v U ; i l k j r U = k } k j k i f " k r d h
g A d b y k x k d k e r F k k f d m U k j k [k . M e g k j g
f o d k l k R e d d k ; k l H k f e & m i ; k x i f j o r u o o u k
d f o u k ' k d k d k j . k g k j g k g A f o d k l d k ; k
f o ' k " k d j l M d f u e k . k] t y f o | r i f j ; k t u k v k d k
e [; f u ' k k u k c u k d j b l v k i n k d f y ; f t E e n k j
e k u k t k j g k F k k A e y : i l c x y k j f L F k r ^ c k / k]
u n h , o e k u o l l E c f U / k r n f { k . k , f ' k ; k { k = d
r U = ** ¼ l U V j i ½ } k j k ; g f o p k j / k k j k t k j & ' k k j l
m B k b x b F k h A o K k f u d l e k t o v k e t u e k u l e

, d i d k j d k H k e o l U n g m R i U u g k x ; k F k k A b l
l c / k e o K k f u d i M r k y d j d i k ; k x ; k f d t u j
2013 e ? k f V r m U k j k [k . M = k l n h d k j k T ; d
H k & m i ; k x i f j o r u l d k b l E c U / k u g h g]
D ; k f d ¼ i ½ ? k V u k o k r k o j . k d V k i k L i h ; j { k = e
i f ' p e h f o { k k H k o H k k j r h ; e k u l u d V d j k u l
g b f t l d k j k T ; d o u f o u k ' k o t y f o | r
; k t u k v k l d k b l E c U / k u g h g A ¼ i ½ H k k j r h ;
m i x g I R S P 6 L I S S - I I I } k j k H k v D V c j 2008 l
e k p 2009 r d o u { k = d e g k u d h i f ' V u g h d h
c f Y d m U k j k [k . M e o u 45-8% o f g e k p y e 26-
37% i k ; x ; A i k Ñ f r d : i l H k h o { k j [k k d

c<u l Hkh ou {k= c< jg gA %iii% bl vkink d
nkjku vf/kd'k ck/k tyk'k;k t l fVgjh] dkykx<]
fNck vkfn u ck< d ikuh dk viu e leVdj
vpkud ck< l {k=k dk l jf{k r j[kk gA

fu"d"kl ,o l >ko

- 1- /kjryh; 'kk/k dk; o Hk&mixg fp=k o
vkdMk d vk/kkj ij ;g dgk tk l drk g fd
mUkj[k.k.M dh vkink tu] 2013 ikNfrd
dkj.kk l ?kfVr gb FkhA fdUr bl vkink l
vf/kd tu&/ku o l lk/kuk dh {kfr} ekuoh;
dk;&dykik fo'k"kdj unh dh iokg LFky o
rV {k=k ij ekuo cLrh c l kuk FkkA
- 2- ;g ?kVuk bl ckr dk mnkgj.k iLrr djrh g
fd mPp f'k[kjh; fgeky; t l n:g o fo'ke
Hkkxkfyd ifjLFkfr;k oky {k=k} fo'k"kdj lnh]
cQokjh o cjlkr d ekle e vkink
cpko&jkgr dk;k gr ,d ub Bkl uhfr cuku
dh vko'; drk g ft le vkink l io o i'pkr
nkuk dh j.kuhfr gkA
- 3- vkink jkgr] cpko o iuokl dk;k e
jkT;&dUn ljdkj d l kFk&l kFk oKkfud]
vfHk;Ur] vkink fo'k"K] Lo;&l oh l LFkfvk
d l kFk LFkkuh; fuokfl;k dh ie[k l gHkkfxrk
gkuh vko'; d gA
- 4- vkink d iokueku gr fgeky; {k=k e ekle
l EcU/kh vkdMk dk ,df=r dju gr Mkiy] o
Lopkfy ekle dUnk dk l ?ku r= LFkffir
gkuk pkfg;A

- 5- mPp fgeky; e fuek.k o iu% fuek.k dju l
io Hk&xHkh;] Hk&vkNfrd] HkdEi ,o vU;
LFkkuh; dkjd t l fgeL[kyu] Xyf'k;j eyck]
unh dVko o iokg cnyko l l EcU/kr v/; ;u
Hkh i.k : i l gkuk pkfg;A
 - 6- fuek.k dk;k l mRiUu eyk dk fu"iknu rFkk
ctj Hkfe dk iumRFkku ck;kb thfu;fjx i jfr l
djuk pkfg; tk fd ifjLFkfrdh;tU;] l Lrh]
lrr ,o Lo; ikf"kr gA bl i)fr l U;ure
i ;koj.k gkl o eyk dk mRi knu gkrk gA
 - 7- vkink d i'pkr vYi dkfyd o nh?kdkfyd
nkuk idkj dh ;ktukvk dk fuek.k iuokl
dk;k d ek/;e l l kftd&vkfFkd r= dk
iuthfor dju gr vko'; d gA
 - 8- fgeky; d lonu'khy {k=k e i ;koj.kh; {kfr
cpku gr vkokxeu d fy; cgr l Md fuek.k
dh txg ekxk dk fuek.k gkuk pkfg;A
 - 9- vkink jkgr] cpko o iuokl lehfr;k dk
xBu xke] fodkl[k.M] tuin Lrj ij dj
LFkkuh; fuokfl;k dk iorkjg.k] cpko vkfn
rduhd l n{k djuk pkfg;A rkfd
ldVdkyhu ifjLFkfr;k e LFkkuh; tu&eku l
dh Hkkxhkhj ikir dh tk l dA
- %ukV% vky[k e iLrr ekle l c/kh vkdM
okfM;k fgeky; HkfoKku l LFkku] ou vul/kku
l LFkku] Hkkjrh; ekle foKku foHkkx rFkk fp=
6] 8B] 9&10 ey : i l bfM;u ,Dlil l ikir
fd; x; gA%

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आपदाओं से चुनौतियाँ: सक्षमता पर सवाल

v t ; d ekj fc ; kuh

HkxHkfoKku foHkx] Mhch, l dky t] ngjknu

15&16 tu] 2013 dk mÙkj[k.M e ty iy; u ij n'k dk cjh rjg l >d>kj fn;k fd fouk'k dk vdkj fd l h Hkh cM l cM Lrj dk gk l drk gA iFoh ij ; rk gj oDr dgh u dgh fouk'k gkrk jgrk g ijUr dnjukFk e gvk fouk'k , l k l dr cu dj mHkj tk ij lekt vFkok n'k dk iÑfr d vx eu"; dh ccl h dk n;uh; fp=.k iLrr djrk gA ccl h dk ;g j[kkdu Hkkjr gh ugh cfYd nfu;k d gj n'k e deko'k , d t l k gh gA dgh ij vf/kd rk dgh ij deA ccl h inÙk fouk'k dk eu"; vkt Hkh l j >dkdj ol gh Lohdkj dj yrk g t l n'kdk vFkok 'krkfñ;k igyA dy vkj vkt e cgr vf/kd vUrj ugh vk;k gA n'k pkg fodflr gk vFkok vfodflrA jg&jg dj i'u ;gh mBrk jgrk g fd D;k gekjh ik l kfxdh vFkok foKku vkinkvk tfur pukfr;k dk l keuk ugh dj l drh gA vkt d eu"; dk foKku , o ik l kfxdh l cgr vf/kd vi{kk g vkj vi{kk, Hkh m l h xfr l c< jgh g ft l xfr l foKku vkj ik l kfxdh fodflr gk jg gA ik l kfxdh l mRiUu l [k dk vuHko eu"; thou d gj {k= e vuHko dj jgk g pkg og fpfdRl k dk gk ;k l pkj dk] ;krk;kr dk gk ;k eukj tu dA bl h l [k u eu"; d vUnj , d vkrfo'ok l mRiUu dj fn;k fd foijhr ifjflFkr e leL;k dk dN&u&dN lek/kku vo'; fudky yxA ;g bl fy, Hkh fd ge vc yxu yxk g fd ik l kfxdh dh rkdr leL;k vFkok l Hkkfor leL;k l vf/kd cy'kkyh gA ik l kfxdh dh ykpjh dk Li"V n'ku rk ge ;k rk dnjukFk vFkok mÙkj vefjdk dk vlguh; rh{k tkMk djrk gA rh{k tkMk rk 'kk;n Xyky okfex dh f[kYyh mMku d fy, gh

vk;k gk] l kFk gh ;g l Un'k Hkh nu dh dkf'k'k dj jgk Fkk fd vc rk codQ cukuk cn dj kA

dnkjUkkFk d l nHk e vxj fopkj dj rk i'u mBrk g fd dgk l fopkj djuk 'k: djA gj vkj Hke gh Hke dk ek;k tky viuh vlQyrk dk Niku d fy, Qyk;k x;k gA ljdkj ;g dgrh g bl vkink e ekuoh; dkj.kk dk Hkh ;kxnu FkA oKkfud Hkh bl eu"; tfur crku dh dkf'k'k dj jg FkA ljdkj vkj oKkfud D;k ;g nok dj l dr g fd vdYiuh; o"kk ekuo }kj tfur FkA cMh ef'dy l Qgkj fxjku yk;d oKkfud l l /ku jfgr vkneh dk o"kk dk dkj.k crk jg gA eu"; g rk dgh rk jgxk gh] D;k m l dk iFoh ij jguk xukg g] vxj xukg g rk 4]5000 ehVj dh Åpkb ij gb Hkkjh ckfj'k d fy, ftEenjk ogk dh fe l h vkj igM gh gk l dr g vkj dkb ugh] FkkMh de Åpkb ij mrj rk ?kk l & Q l vFkok >kfM;k gkxh vkj uhp mrj rk o{k vkj ol; tho tUr gkx bl d ckn eu"; dk uEcj vk;xkA vxj eu"; xukgxkj g rk mij of.kr Hkh lg&xukgxkj gkx ghA dN ihN py rk 2006 e eEcB e gA Hkkjh ckfj'k d fy, Hkh eu"; vkj eu"; fufer Hkou gh gkxA ge D;k ugh ekur fd ;g , d ikÑfrd fØ;k tk eu"; d iHko l ij Fkh vkj bl ikÑfrd fØ;k u le; vkj LFky , l k puk tc ogk ij eu";k dh l [k vf/kd FkA vxj ;gh fØ;k fn l Ecj vFkok tuojh e gkrh rk gkfu dk D;k Lo:i gkrk\ fuf'pr : i l ge viuh rdnhj dk l jkgr fd vPNk gvk ckfj'k , l le; gb tc ogk ij dkb ugh FkA uiky l fgeky in'k d e/; djhc 40]000 ox fdykehVj d {k= e Hkkjh o"kk 48 ?k.V l Hkh vf/kd le; rd gkuk dkrky mRiUu djrk

g fd Hkkjh o"kk og Hkh fo'kky {k= e\ dku l h , l h
ekle dh ifø; k g tk dN gh ?k. V k e cu dj yEc
le; rd dgj cjik ldrh gA dkb tckc nA
bruh cMh o"kk dk r= cuu e ?kV k ugh cfYd db
fnuk vFkok l l rkgk dk le; yxk gkxkA dgk pd
Fkh tk ge bl r= dk idM ugh ik, A idMu dh
dkf'k'k Hkh ugh djx vU; Fkk yu d nu iM tk, xA

o"kk gkuh Fkh gk xBA Hkkjh o"kk vdy dnmjukFk
d vkl ikl 6&7 yk[k ?ku ehVj eyok mij l
fQlykdj uhp ykbA v/kj e fLFkr eyok gekjh
HkoKkfud , tfU l ; k dh fuxkg l d l cp x; k\
Ldyh cPPk dh rjg ; g ckyk tk ldrk g fd
'kk; n , dk, d iÑfr u cuk; k gkxk] cPp dh ckr
xy mrju yk; d ugh g] rk fQjA xk/kh l jkoj d
QVu dk dkj. k m l dh rygVh l fudykA dN
lk ox ehVj dk xk/kh l jkoj] dN ehVj eyo
dh ekVkbA eu rk ugh djrk fd l jkoj ft l dk
uke jk"V dh egku foHkfr ij gk m l cnuke
fd; k tk, A HkL[kyu dk Hkh nk"kh dj kj ugh fn; k
tk ldrk g D; kfd dnmjukFk d vkl ikl
ekeyh l HkL[kyu d fpUg gh QkV k e fn[kr g
l dMk o"kk dh tfVy HkoKkfud fØ; kvk } kj k
tfur fLFkj V kbe ce eyok {k= d HkoKkfud
ifjn'; dk cny n] vkf[kj dkj vk[kk l vk>y
gh jgk FkA fd l dh vk[kk l] tk dnmjukFk e
Hkxoku d ifr viuh J) k 0; Dr dju tkr g
vFkok ok HkoKkfud tk bu xfrfof/k; k d j[koky
gA

dHkh ge i; koj. k dk dnmjukFk d fy, nk"kh
cukr g rk dHkh Xykoy okfex dk A 4&5000 ehVj
d Åij d {k= e fd l i; koj. k dh vi{kk djx
vkj dku lk eu"; dk iHkko ? Xyf'k; jk d
fldMu dk Hkh <<dj nk"kh nr gA Xyf'; j vkt l
rk fldM ugh jg g] okrkoy. k ge , lk [kMk dj
nr g fd Xyf'k; jk d fldMu dh ?kVuk t l
vHkh&vHkh 'k: gb gkA fldMuk l eyok vFkok

ft l HkfoKkuh ekju dgr g og fudyrk gA
fgeky; d Xyf'k; j NkV&NkV gkr g] fdruk ekju
mul fudy ldrk g\ ekVh&ekVh x. kuk dju d
fy, dydyVj dh Hkh vko'; drk ugh iMxhA
Xykcy okfex dk ge _rvk e ifjoru dk dkj. k
ekur gA vPNk g gekjk ikphu /kkfed l kfgR;
foKkunkrvk u ugh i<k g] vU; Fkk vpkud ek le
ifjoru dh ?kVukvk l mUg ifjr gkdj Xykcy
okfex dh frfFk dk ihN f[k l dkuk iMrkA vxj
, lk gkrk rk lHko g bl {k= e bru iktDV
oKkfudk dk ugh feyRA

foKku vkj iÑfr dk vxj *DyhufpV* n n rk
fQj i'u mBrk g gekjh oreku i'kk l fud 0; oLFkk
, d *lfo/kk* e , MtLV gk pd lekt dh A fodk l
dh ekx dh e'kky dk 'kk'or cyUn j[ku dh
eukofUk u igkM ij gj miyC/k bp tehu ij
fuek. k djok; k gA tehu fd l h&u&fd l h rjg
vudy cukb xBA ekx dk /; ku e j[kr g, gj
rjg dh lfo/kk l EiUu fLFkr fufer djh xBA
vkHkk l h vudy dk ifrdyukRed fo'y" k. k dju
dh vko'; drk u l jdkj u le>h vkj u gh lekt
uA igkMh <ky ij fLFkj l fn[ku oky eyo ij
fuek. k ifj. kke rk Hk; kog gku gh Fk] vkt ugh rk
dyA ifj. kke dh fpUrK dju yxx rk dN dj gh
ugh ik, x , l h eukofUk *ckYM* rk cuk nrh g ij
viuh Qly viu dk gh dkVuh iMrh gA ed
n'kd 'kklu vkj i'kk lu rFkk ge vkj gekjh
icy Hkkouk , d vPNk *l: j* mRiUu djrk gA
l: j dc t[e e ifjofrr gk tk, xk bl dk
tkuuk rk nj] l kpu dh Hkh vko'; drk ge ugh
le>r gA T; knk l kpu l rk vPNk fo|kUkek l
igy dk dkyhnl cu dj jguk gA bl h e l Hkh dh
Hkykb gA

ikÑfrd vkinkvk dk jkd k tkuk l Hko ugh g]
; g rF; ge Hkkjh eu l Lohdkj djuk iMxkA dN
vkink, vpkud gkrh g ; Fkk Hkdi] vkj dN vku

d igy vxkg dj nrh g t l mMh l k e dN le;
io vk; rQku d oDr l kj {k= [kkyh dj fn;k
x;k FkkA vxj dgh i;Ru dj tk, rk vkink l
mRiUu gku oky uD l ku dk cgr dN de dj k tk
l drk g c'kr fd gj txg dk vkdyu l {kerk l
gk rFkk vkdyu d i'pkr l epr dk;okgh djh
tk,A , l k gh dN dnkjukFk e gkrk vxj dfBu

vkj nxe {k=k dk 0;kid lo{k.k lgh gkrkA lu
2009 e bVyh d y&vdhyk {k= e ,d HkdEi vk;k
Fkk ft le 100 l vf/kd 0;fDr HkoKkfud r= dh
mnk l hurk ,o vUo" k.k dh ykijokgh d dkj.k ekj
x, FkA tkx:d lek t u ykijokgh d fy, nk"kh
vf/kdkfj;k ij ednek pyk dj mUg ty e cBku
d fy, etcj dj fn;kA

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अन्तर है सिर्फ दृष्टिकोण का

eRL;Uni dekj 'kDyk
okE fgE HkfoE l E] ngjknu

dy gh vkt g vkj vkt gh dy
vUrj g f l Q nf"Vdk.k dk]
dkb thr dj Hkh g n[kh
dkb gkj dj gh l r"V g]
vUrj g f l Q nf"Vdk.k dk]
l c dN i kdj Hkh g dkb cpu]
fd l h dk dN u gkdj Hkh g l [k&pu]
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dkb HkhM e Hkh g vdyk
dkb rUgkb;k e gh g [kyk]
vUrj g f l Q nf"Vdk.k dk]
dkb t rk d fy, g jkrk]
dkb fcu ijk d gh ior yk?k tkrk]
vUrj g f l Q nf"Vdk.k dk]
gkrk ugh dkb NkV k ;k cMk
gkrk ugh dkb Hkyk ;k cjk
vUrj g f l Q nf"Vdk.k dk]
cj l k thdj Hkh jg tkr db xe uke]
dkb nk iy thdj gh dj tkrk nfu;k vi uke]
vUrj g f l Q th u d nf"Vdk.k dkA

XXXXXXXX

दूरस्थ शिक्षा प्रणाली में भूविज्ञान के बढ़ते कदम...

ehuy feJk

foKku fo|kihB|

bfnj k xk/kh jk"Vh; eDr fo"fo|ky;] ub fnYyh

eDr fo"fo|ky; , l fo"fo|ky; g tk njLFk f"kk d mnn"; l LFkfr fd; tkr ga Hkkjr e 14 eDr fo"fo|ky;] 75 fu;fer fo"fo|ky; vkj vU; db lLFk, njLFk v/; ; u dk; Øe pykr ga njLFk f"kk i.kkyh db Jf.k; k d f"kkfFk; k dk mPp f"kk d vol j inku djrh g t l fd $\frac{1}{4}$ d $\frac{1}{2}$ nj l f"kk "k: dju oky 0; fDr($\frac{1}{4}$ k $\frac{1}{2}$ ftu 0; fDr; k d ?kj d ikl mPp f"kk d l/ku ugh g($\frac{1}{4}$ x $\frac{1}{2}$ lokjr 0; fDr($\frac{1}{4}$?k $\frac{1}{2}$ "kfkd ; kX; rk, c<ku d bPND 0; fDr ; k fQj nj&njkt d bykd e jgu okyh efgyk, ftu dk Äj l ckgj fudy dj i<kb dj ikuk lEeo ugh ga o efgyk, njLFk f"kk i.kkyh }kj i<kb ijh dj ldrh ga eDr fo"fo|ky; , l yphy ikB; Øe dk fodYi nr g ftUg o ço"kkFkh y ldr g ftud ikl dkb vkpfd ; kX; rk ugh gkrh ga eDr fo"fo|ky; ; e nkf[kyk yUk dh ÁfØ; k yphyh RkFk LFkku] me] tkfr] /ke] fyx vkj lEkkfTkd RkFk vkfFd Áfr"Bk l fukj i k gkrh ga

eDr ,o njLFk f"kk i.kkyh dk e[; mđ"; vfHkuo rduhd ,o fof/k; k dk bLreky dj lHk dk lrr ,o fo|kFk&dfnr x.koYkk i.k f"kk] dk"ky l/kkj ,o if"kk.k dh lfo/kk miyC/k djuk ga Kku dh lhekvd dk foLrkj dju ,o lrr eDr ,o njLFk f"kk i.kkfy; k d tfj, Kku ilkj dk c<kok nu vkj f"kk l okfNr jg mu ykxk rd fdQk; rh f"kk dh igp lfuf"pr djuk bldk e[; mnn"; ga njLFk f"kk i.kkyh thouki; kxh] d"kyrk l/kkj d tfj;] vkj LFkkuh; fodkl d fy, lkenkf; d Hkkxhnhkj dh c<kok nrh ga njLFk f"kk miyC/krk ,o leku Hkkxhnhkj dh pukfr; k l

fuiVu d fy, , d ljj ,o yphyh i.kkyh ga ; g KkukUe[k lek t d fodkl dh fn"kk lfuf"pr djrh ga eDr ,o njLFk f"kk i.kkyh lhek bykd e Kku d ltu ,o fodkl dh xrfof/k; k dh fn"kk e lrr lg; kx dj jgh ga

eDr fo"fo|ky; vkj njLFk f"kk i.kkyh e fo|kFk dk fu;fer rkj ij lLFkku e tk dj i<kb dju dh t : jr ugh gkrh ga lokjr 0; fDr dk Hkh vkfQl d dk; l vodk"kyu dh t : jr ugh gkrhA n"ky Hkj e db v/; ; u dUæk ij mud ikB; Øe dh i<kb gkrh g] fotvy Dykl : e yfux] bVj, fDVo vku lkbV yfux vkj VfydkuYflx d tfj, fo|kFk n"ky d fd l h jkT; d fd l h "kgj e jgdj ?kj cB i<kb dj ldr ga njLFk f"kk i.kkyh l f"kk xg.k dju oky fo|kFk; k dk ; g vko"; d g fd og v/; ; u dk; e vu"kk l u cuk, j[k vkj lFk gh mudk cgrjhu Vkke eut j gkuk cgr t : jh ga eDr fo"fo|ky; ; e nkf[kyk yUk oky fo|kFk dk vkRe&vUk"kkfLkr rFk vkRe&ÁfjRk gku dh t : jr ga

eDr ,o njLFk f"kk i.kkyh d }kj fd, x, dkLk dh ekU, krk dgh de Ugh vkdh tkrh ga , kg mrUk gh egUoi.k gkrk g ftru fd ikjEifjd dkLkA bLk ek; e Lk f"kk iklRk dju e dkb ij"kkuh ugh vkrh] cl bl ckr dk /; kUk j[kk tk; fd Okg fo"fo|ky; ; vUknku vk; kx l $\frac{1}{4}$; ñ thñ l hññ ekU; rk iklRk gkA

cnyr oDr d lFk cnyrh ifjLFkfr; k dk n[kr g, eDr fo"fo|ky; vkj njLFk f"kk i.kkyh dh egYkk c<h ga lpuk Økfr u njLFk

f"kk d ek;u cny fn; gA f"kk d Lo:lkj mnn";] vkj ek;/ek e Hkh dkQh cnyko vk;k gA bl ckr l Hkh bdkj ugh fd;k tk l drk g fd ft ru fo|kFkh gj l ky ckjgoh ikl djr g mu l cd nkf[ky d fy, gekj ikjEifjd fo"fo|ky;k e txg ugh gA ,l Nk=k d fy, njLFk f"kk ,d cgrj fodYi d rkj ij mHkj jgk gA vc njLFk f"kk doy fçVM l kexh rd gh l hfer gkdj ugh jg x;h gA vc rk VfydkUÝflx vkj eckby d ek;/e l njLFk f"kk dk ykHk mBk;k tk l drk gA vkxkeh ikp Ok"kk e n" d mPp f"kk l LFkkuk e nkf[ky d 15&20 ifr"kr dju d jk"Vh; y{; dk ijk dju dk mYy[kuh; ;kxnu jgk gA

ch vkj vEcMdj eDr fo"fo|ky; vk/k in" k jT; fo/kku eMy d ,d vf/kfu;e d ek;/e l 26 vxLr 1982 dk vflRro e vk;k FkA "k: okr e ;g vk/k in" eDr fo"fo|ky; d :lk e tkuk tkrk FkA bl fo"fo|ky; dh LFkkiuk Hkkjr e viuh rjg dk igyk volj FkA Hkkjr e loiFke gnjkcn fLFkr ch vkj vEcMdj eDr fo"fo|ky; ;chvkj, v@; u HkfoKku dk Lukrd mikf/k dk;Øe e l fefyr fd;kA D;kfd HkfoKku e QhYM od egRoi.k l ?kVd g blfy, ;g cgr cMh pukrh Fkh vc rk db fo|kFkh l Qyrk iod Lukrd mikf/k iklr dj pd gA

bl d i"pkr bfnjk xk/kh jk"Vh; eDr fo"fo|ky; ;bXu½ 1985 e ,d l lnh; dkuu d rgr LFkfiir gvkA bXu u eDr ,o njLFk f"kk d tfj; mPp x.koYkk okyh f"kk miyC/k djok dj l dy nkf[kyk vuikr ;xkl ,jkyeV jf" k; k½ c<ku e cgr cMk ;kxnu fn;k gA Hkkjr e bXu dh mPp f"kk {k= e eDr ,o njLFk f"kk i.kkyh dh djhc 20 Qh lnh Hkkxhnhkj gA bXu f"kk[k] "kk/k] if"kk.k vkj foLrkj xfrfof/k;k e x.koYkk d ifr l efir g vkj ;g eDr ,o njLFk f"kk i.kkyh ;vkiu fMLV l

yfux½ e fo"kkKrk ,o <kpxr l fo/kk dk jk"Vh; l l/ku dn gA bXu dh njLFk f"kk ifj"kn n" e eDr ,o njLFk f"kk i.kkyh d fu;e ,o ic/ku e Hkfedk fuHkkrh gA 2004 e ,MIV ;f"kk d Áfr l efir mixg½ d i{ki.k vkj bVj&;fuoflVh d l kV;e dh LFkkiuk d l kFk gh fo"fo|ky; n" e ik|kfxdh l eFk f"kk d u, ;x e io" d j x;kA ikjifjd f"kk d Øh njLFk f"kk dh enn l eY;of/kr fd;k tk jgk gA fØ;kRed eYVhehfM;k vkj vkuykbu yfux d fodkl gr tkj fn;k tk jgk gA

eDr fo"fo|ky; dk mnn" k; cnyr g, Ø;fDrxr vkj l ektfd vko";drkvk d l kFk l Hkh oxk dk mPp f"kk d volj miyC/k djuk gA fd l h Hkh eDr fo"fo|ky; dk vkn" k okD; g& l Hkh d fy, f"kkA bl h QyklQ ij vk/kkfjr g bXu dk ey e=& ^tu&tu dk fo"fo|ky;^ ;hihYl ;uhoflVh½A

bXu e i<kb dk rjhdv vU; ikjifjd fo"fo|ky;k l fHkUu gA fo"fo|ky; u i<kb dk ,d eYVhehfM;k nf"Vdk.k viuk;k gA ikB;Øe i.kkyh e vfHkUu l ?kVd g Lo&v/; ;u l kfx;k] i jk" l =] :&c&: ,o VfydkUÝflx i.kkyh] bVj,fDVok jfM;," dkmLkfyx rFkk oc dUÝflx vkfnA bl d vykok iR;d dkl d l kFk vkfM;k fofM;k l kexh y l gkrh gA f"kk d b&ey] , l ,e , l rFkk uVofdx l kbVl dk bLreky djd viu rFkk fo|kFk;k d chp dh njh de dju dk Hkjij i;k l djr gA 24 ?kV l ok okyk "k{kf.kd Vhñ ohñ] puy Kku n"ku ,o Kku ok.kh }kj k l pkfyr jfM;k l gdkfjrk rFkk :&c&: bVj,fDVok jfM;," dkmLkfyx miyC/k gA

bXu eDr f"kk dh ijijk dk ikyu djr g, fo|kFk;k dk io" k ik=rk] LFkkU v/; ;u dh jf]rkj vkj ml dh vof/k d ekey e lk;klr mnkjrk cjr rk

ga mnkgj.k d fy,] vxj fo|kFkh pkg rk rhu o"kk
oky Lukrd mikf/k dk; Øe dk Ng o"kk e ijk dj
l drk ga bxu v/; ;u] dk; vkj dk; Øe dnk d
foLrr uVod l yl ga n"kk Hkj e 67 {k=h; dUn
vkj 67 fon"kh dnk dh enn l Hkkjr ,o 36 vU;
n"kk e 40 yk[k l vf/kd fo|kFkh viuh "kf{k d
vkdk{kkvk dh ifr dj jg ga

gkykfd Hkkjr e loiFke gnjkcn fLFkr ch
vkj vEcMdj eDr fo"fo|ky; u HkfoKku dk
foKku d Lukrd mikf/k dk; Øe e lEefyr
fd;ka iUr ;g flQ gnjkcn rFkk mld vk l
ikl d {k=k rd l hfer Fkka Ekkuo fodkl d
l kFk&l kFk gekjh iFoh d eY;oku ikÑfrd
l l k/ku cgr r th l foylr gk jg ga , l e ;g
cgr egroi.k g fd l Hkh 0;fDr;k rFkk ij ekuo
l ek t dk iFoh d ÄVr g, çkÑfrd l l k/kuk rFkk
mud lrr : i l ç;kx dh f"kk çnku dh tk;A
, l e bl ckr dh vko";dRkk egll gb fd
jk"Vh; Lrj ij njLFk f"kk i.kk y e HkfoKku d
fo"kk; dh le> dk tu tu Rkd igpk;k tk; RkFk
Ykddf; fd;k tk;A HkfoKku fo"kk; ge gekjh iFoh
vkj mld l l k/kuk dh cfu;knh le> rFkk mudk
lrr : l k l mi;kx dju dh l kp inku djrk ga
t l k fd vki tkur g fd Hkkjr ljdkj u bl d
fy, iFoh foKku e=ky; dh vyx LFkkiuk dhA
l kFk gh ekuo l l k/ku fodkl e=ky; u HkfoKku l
t Mh f"kk dk jk"Vh; Lrj ij tu tu rd igpku
d fy, bfnjk xk/kh jk"Vh; eDr fo"fo|ky;
¼bxu½ dk pukA vxLr 2010 e bxu d foKku
fo|kihB e HkfoKku fo"kk; dk "kkfey fd;k x;ka
bl h le; l hch, l l h CkkM Lk EkkU; rk iklr f0k|kyk;k

dh iLrdk d ikB; Øe e cgr r th l cnyko vk
jgk Fkka ft;kLi f"kk;y rduhdh l l EcFu/kr dN
v/;k; 11oh rFkk 12oh d{kk d ikB; Øe e
lEefyr fd; x; A n"kk Hkj e djhc 6000 Ldy g
tk l hch, l l h CkkM l eku; rk çklr ga vki vnkt k
yxk l dr g fd fdru Ldyh f"kk{k dk dk çf"kkfkr
djuk vfuok; gk x;k Fkka bxu dh LFkkiUkk dk
mnn"; g fd le;≤ ij n"kk e fodkl kUe[kh
XkFRkf0fèkvk Lk LkEcFu/kr mudh vko";drkUkLkkj
cfu;knh f"kk{kk çnku djuka blkh dkj.k loçFke
bxu d foKku fo|kihB e HkfoKku foHkx u Ng
ekg dk BklV xt,V lVhfQdV buk
ftvkbuQkefVDLkß Ukked çkxke r;kj fd;ka bl d
fy, n"kk Hkj l bl k fo"kk; d fo"kkKk dh enn y h
x;ha çVM l kexh d l kFk&l kFk bl l l cf/kr
fofM;k Hkh r;kj fd; x; ga le;≤ lkj
HkfoKku foHkx d l dk; l nL; bl f0k"kk; ij Vhoh
puy Kku n"ku lkj :&c&: VfydkUÝflx RkFkk
Kku ok.kh }kjk l pkfyr :&c&: jfM;k
bVj,fDVok dkmLkfyx miyC/k djokkr jgRk ga

;g çkxke tykb] 2014 l "k: fd;k tk jgk
ga l kFk gh HkfoKku fo"kk; e ih,pMh çkxke Hkh "k:
fd;k Tk pdk ga ;g mu 0;fDr;k d fy, g
ftud ikl ikp o"kk dk v/; ;u ;k "kk/k dk vuHko
ga tk dk;jr g vkj ih,pMh fMxh iku d bPNd
g] bl dk ykHk mBk l dr ga l kFk gh foKku
fo|kihB e HkfoKku foHkx d l dk; l nL; vHkh
HkfoKku d Ckf;knh dLk cuku e ç;Ru"kh y ga
bxu e HkfoKku fo"kk; d c<r g, dnekd l leu
vHkh cgr l kjh pukfr;k ga

XXXXXXXX

संगठनात्मक प्रभावशीलता एवं प्रबंधन में भागीदारी

,uE dE frokjh

Hkkjrh; lo{k.k foHkkx] ngjknu

oreku le; e ge vuHko dj jg g fd Hkkjr dh vkfFkd fLFkr dkQh detkj gA foUk o"k 2012&2013 e Hkkjr dh ldy ?kjj mRikn e of) nj egt 5% jg x;h gA nljh vkj fo'o cd dh ,d fjikV d vueku ldy ?kjj mRikn ¼thCEMhEihE½ of) egt 4-7% jgu dk vueku trk;k gA ge nfu;k dh vFk 0;oLFkk pyku d fy, n'k dk lkuk Hkh fxjoh j[kuk iM ldrk gA ;fn ge nfu;k d vU; n'kk l Hkkjr dh vkfFkd ,o lkekftd fLFkr dh ryuk dj rk Hkkjr dk LFkku o"k 2009 e 30ok Fkk rFkk o"k 2013 e ;g fxjdj 35ok gk x;k rFkk o"k 2013 e vkj fxjdj 40ok gk x;k gA vr% ,l oDr e n'k d lHkh cf) thfo;k dk dr0; g fd n'k dh vkfFkd fLFkr dk etcr djue viuk lg;kx dJA

tlk fd ge tkur g fd fdlh Hkh n'k dh vkfFkd fLFkr ml n'k d Ñf"m mRiknu ,o vk|kfxd mRiknu dh nj ij fuHkj djrh gA nlj 'kCnk e ;fn bu nkuk {k=k e mRiknu vf/kd gkxk rk lHkor% n'k dh vkfFkd fLFkr etcr gkxhA vkfFkd fLFkr dk iHkkfor dju oky cgr lkj dkj.k g t l Åtk dh miyC/krk] ljdkj nokjk vkfFkd idt dh lgk;rk] m|kxk dk LFkkfir dju gr ljdkj dh uhfr;k rFkk mRiknu c<ku gr fofHkUu idkj d VDI k e NV] vk;kr&fu;kr uhfr] fon'k uhfr] Ñf"m mRikn dk fu/kkj.k rFkk bldk mfpr oKkfud rduhdh rjhd l Hk.Mkj.k 0;oLFkk A bld vfrfjDr lxBu e vk; fnu gku oky gMrky] rkykUnh] ?kjk vkfn Hkh vkfFkd fLFkr dk iHkkfor djr gA

mijkDr dkj.kk d vfrfjDr dN eukoKkfud dkj.k Hkh gkr g tk fd lxBukRed iHkko'khyrk

dk iHkkfor djr gA t l fdlh lxBu e depkjh ,o vf/kdkfj;k e tkc lfvLQD'ku] dBk] vi;klr oru] de cu l dh nj] lijokbtjh LVkQ dk viu v/khuLFk depkfj;k d ifr xyr vfhkofr] lokn&ghurk] ufrd voLFkk e deh] ic/ku e Hkkxhknkj dh deh] vu'kk lukRed dk;okgh] lLi'ku] le; l inkUufr u feyuk] ofj"Brk vkfnA

ilrr y[k e lxBukRed iHkko'khyrk dk ic/ku e depkfj;k@vf/kdkfj;k dh Hkkxhknkj d l iHkkfor djrh g] dk mYy[k dju dk i;k l fd;k gA lxBukRed iHkko'khyrk dk lc/k n'k dh ixfr l g] vFkkr vk|kfxd lLFkkuk dh mRikndrk l gA ;fn fdlh lxBu dh iHkko'khyrk vf/kd g rk bldk ;g rkRi; ;g g fd ml lxBu dh mRikndrk vf/kd g rFkk bll n'k dh vkfFkd fLFkr etcr gkxhA

fo'o Lrj ij vUrjk"Vh; Je lxBu u Hkh ;g rF; Lohdkj dj fy;k g fd depkfj;k@Jfedk dh ic/ku e Hkkxhknkj fdlh Hkh lxBu e mPp mRikndrk d fy, ije vko';d gA bl d vHkko e depkjh@Jfed ;g lkprk g fd ic/ku ml dk 'kk"k.k dj jgk gA okbVYl d vulkj depkfj;k dh ic/ku e Hkkxhknkj d dkj.k lxBu e vUrfjd ij.kk c<rh g ftld ifj.kke Lo#i lxBu dh mRikndrk c<rh g rFkk lxBu dh iHkko'khyrk Hkh c<rh gA vkb lR; lnje d vulkj depkfj;k d ic/ku e Hkkxhknkj d dkj.k mudh cgr lkjh leL;k;] f'kdk;rk Lor% gh nj gk tkrh g vkj lxBu dk okrkj.k mRiknuUe[k gk tkrk gA lkfo;r l?k e depkfj;k dk ic/ku e lfefyr dju gr ,d i.kkxh dk i;kx e ykr g ftldk

fcxM fILVe dgr gA bl fILVe e 20&30
depkfj;k dk ,d , l k leg cuk;k tkrk gftudk
e[; dk; mRiknu dk fu/kkfjr y{; d vulkj
iklr djuk gkrk gA

okLro e depkfj;k@Jfedk dh ic/ku e
Hkkxhknkj dh rRi; ; g g fd ble depkfj;k rFkk
ic/ku dh vkj l nk ; k nk l vf/kd 0;fDr ,d
nlj l feyr g vkj mRiknu c<ku gr uhfr;k
cukr g rFkk lcf/kr vU; fu.k; viu Lrj ij yr
gA dkmp ,o Ýp u lxBu e depkfj;k d ic/ku
e Hkkxhknkj d ckj e ,d eukoKkfud v/;;u
fd;k Fkkj ftld ifj.kke e mUgku ik;k fd
mRiknu c<u dh nj dk lh/kk lcf/k
Jfedk@depkfj;k dh ic/ku e Hkkxhknkj l FkkA
Jfedk dh ic/ku e Hkkxhknkj c<ku gr fd lh Hkh
lxBu e itkrkf=d okrkj.k dk gkuk furkUr
vko'; d gA ic/ku e depkfj;k dh Hkkxhknkj rhu
idkj l dh tk ldrh g &lykg@ijke'k nokjkj
lgfu/kk.k }kj k rFkk l;Dr : i l 'k;j gkfYMX
nokjA MkE ohEt hE egrk d vulkj ic/ku e
depkfj;k dh Hkkxhknkj fuEufyf[kr ikp Lrj ij
dh tk ldrh g %&

- (i) l pukRed
- (ii) l ykgkRed
- (iii) lg;kxRed
- (iv) i'kk lfud
- (v) fu.k;kRed

depkfj;k@Jfedk d ic/ku e lfØ; fuEu
Hkkxhknkj l lxBu dk fuEufyf[kr ykHk iklr gkr
g %&

¼1½ lxBu e ub uhfr;k rFkk u; midj.kk dk
yxx dju d dkj.k depkfj;k e mRiUu gb
ifrjk/kdrk dk leklr djrk gA

¼2½ ic/ku e depkfj;k dh Hkkxhknkj lxBu nokjk
fu/kkfjr y{;k dk iklr dju gr
depkfj;k@Jfedk dk ifjr djrk gA

¼3½ depkfj;k e ic/ku dh d'kyrk c<rh g
rFkk lxBu d gj Lrj ij li" k.k dk c<kok
feyrk gA

¼4½ bl d nokjk depkfj;k@Jfedk dh lEi.k
Åtk ekufld ,o 'kkjhfd Åtk dk bLreky
mRiknu c<ku e yxrk g vkj
depkfj;k@dkexkj e lg;kx dh Hkkouk
icy gkrh gA

¼5½ ukdj&ekfyd dk Hkn&Hkko de gkrk gA

¼6½ lxBu e vPN&vPN mi;Dr l>kok dh ikflr
gkrh g ftldk viuk dj lxBu dh
mRikndrk c<k;h tk ldrh gA

¼7½ fd lh Hkh lxBu e depkfj;k dh ic/ku e
Hkkxhknkj l ;fu;u ,o ic/ku d chp gkfn
lcf/k etcr gkr gA

¼8½ ic/ku e depkfj;k dh Hkkxhknkj l mue
l ;Dr mUkjnkf;Ro dh Hkkouk lfuf'pr gkrh g
tk fd fd lh Hkh lxBu e mRiknu d fu/kkfjr
y{; dk Áklr dju gr vR;Ur vko'; d gA

¼9½ ic/ku e Hkkxhknkj d dkj.k depkfj;k dh
vfHkofr dk mRiknkUe[k cuk;k tkrk gA

¼10½ lxBu e vkrfjd urRo dk c<k;k tk
l drk gA

¼11½ depkfj;k e] lg;kx@lk>nkjh dh Hkkouk dk
c<kok feyrk g rFkk lxBu d ifr lei.k dh
Hkkouk fodflr gkrh g vkj depkfj;k e
bekunkjh@fu"Bk dk Hkko icy gkrk gA

ic/ku e Jfedk@depkfj;k dh Hkkxhknkj gr
lxBu e fuEufyf[kr mik; viuk; tk ldr g %&

¼1½ lxBu e li" k.k d iR;d Lrj ij nk rjhd
viuk dj@LFkkfir djda

¼2½ lxBu e mRiknu c<ku lEcfu/kr fu.k; yu
gr depkfj;k rFkk ic/ku d e/; l;Dr
lykg lfevr;k cukdjA

¼3½ le;≤ ij lfeukj lkefgd&ppkj
ehfVXl i=kpkj vkfn d ek/;e l depkfj;k

,o vf/kdkfj;k e li" k.k dk etcr fd;k tk
l drk gA

lxBu e iHkko'khyrk ,o ic/ku e Hkkxhknkj h d
lnHk e y[kd u lu 1990 e Hkkjr goh
byfDVdYl fyfeVM] gfj}kj e 320 depkfj;k ij
,d eukoKkfud v/;;u fd;k Fkk ft le ;g ik;k
x;k fd vf/kdkjh ox e 23 vf/kdkjh blfy;
vlr"V ik; x; Fk D;kfd mudk ic/ku Hkkxhknkj h
ugh nh x;h FkhA 26 fyfid ox e ic/ku e
Hkkxhknkj h d vHkko d dkj.k vlr"Vrk ik;h x;h]
bld vfrfjDr vkfVtul e 10 vlr"Vrk ic/ku
e Hkkxhknkj h u gku d dkj.k ik;h x;hA

bl idkj ge n[kr g fd depkfj;k d ic/ku
e Hkkxhknkj h] lxBu dh iHkko'khyrk] rFkk
mRikndrk dk c<ku e ,d vge jky vnk djrh g
rFkk depkfj;k dk ic/ku e vf/kdre Hkkxhknkj h
mijkDr crk; x; mik;k dk viuk dj rFkk
mRikndrk dk iHkkfor dju oky vU; dkj.kk
dk fu;f=r djr g, ge fd l h Hkh lxBu e
mRikndrk dk c<k l dr g rFkk ifj.kke Lo: i
lxBu dh iHkko'khyrk dk c<k l dr g rFkk n'k
dh vkfFkd fLFkr dk etcr dju e lg;kx dj
l dr gA

xxxxxx

अण्डमान : काले पानी का काला सच

I t h o M c j k y
o k E f g E H k f o E I E j n g j k n u

v.Meku Hkkjr d nf{k.k io e fLFkr vudk }hi
legk e ,d ie[k }hi g t g k t k u d f y ; f d l h
vuefr dh vko' ; drk ugh gA ijUr fudkckj e
tutkfr cgY ; gku d dkj.k vuefr vko' ; d gA
v.Meku dk uke vkr gh Lefr iVY ij dkykikuh
dk uke vkrk gA ; gk len dh xgjk b vf/kd gku
d dkj.k ikuh dk jx dkyk irhr gkrk gA bl
dkj.k bl dkykikuh Hkh dgk tkrk g n l j 'kCnk e
tk Lor=rk lukuh ; gk dky ikuh dh l tk dk
tkr Fk o fQj dHkh ykV dj ugh vkr Fk vFkr
dky e py tkr Fk blfy ; Hkh bl dkyk ikuh dgk
tkrk gA ; gk fLFkr IY;yj ty e Lor=rk
lukfu ; k dk j [kk tkrk Fkka

IY;yj ty Hkkjr ok f l ; k d f y ; f d l h r h Fk
LFkku l de ugh gA t g k v l [; v k t k n h d
nhokuk u dBkj ; kruk , l g d j v k j v i u i k . k
vfir dj ge v k t k n h f n y k b A f c f v ' k d k y e
d i V u v k p h C n C y ; j u l u 1789 e ; gk i F k e
fuokl fd ; k f t l d u k e l b l d k u k e i k V C y ; j
j [k k x ; k A m U g k u ; gk l f u d N k o u h c u k u d k
i L r k o j [k k f t l 1796 e v e y h t k e k i g u k ; k
x ; k A c k n e L o r = r k v k n k y u r t g k u i j I Y ; y j
t y d k f u e k . k f d ; k x ; k t k 18 o " k k e j 1906 d k
i j h g b A b l e l k b f d y d i f g ; d h f r f Y y ; k d h
r j g l k r c j d F k h g j c j d r h u e f t y k Å p h F k h
r F k k g j c j d d k , d d k u k o r k d k j c k g j h d { k l
t M k F k k f t l e i d k ' k d h 0 ; o L F k k F k h r F k k , d c M k
? k . V k y x k F k k j t k d k b H k h [k r j k g k u i j c t k ; k t k
l d r k F k k A i g j h d { k e [k M k v d y k i g j h 689 l y
d n j o k t k i j f u x k g j [k l d r k F k k A b r u h v f / k d
l y g k u d d k j . k g h b l I Y ; y j t y d g k t k r k
g A t k v k f d V D V d k , d m E n k u e u k H k h g A

v k t b l d h l k r c j d k e l n k g h c p h g A r h u
l e n h r Q k u d h H k V p < x ; h A n k c j d k d k r k M d j
m l e i E x k o U n c Y y H k i r f p f d R l k y ; d k f u e k . k
f d ; k x ; k g A L o r = r k l u k f u ; k d c f y n k u l t M h
; k n k d k u " V d j u k l e > l i j g A f p f d R l k y ;
f d l h n l j L F k k u i j H k h c u k ; k t k l d r k F k k A i E
i r L o r = r k l u k u h j g F k j i j U r u o k d H k h I Y ; y j
t y e j g v k j u g h d H k h m U g k u d B k j ; k r u k ;
l g h A ; g I Y ; y j t y e c f y n k u v u d k l u k f u ; k
d l k F k ? k k j v U ; k ; g A f t u d k u b f r g k l e o . k u
g u g h y k x t k u r g A c k n e e k j k j t h n l k b u b l
j k " V h ; L e k j d ? k k f " k r f d ; k A

t y e i o ' k d j r g h l k e u , d i M u t j v k r k
g f t l i j d b ; k d k Q k l h i j y V d k ; k x ; k A t k
b u l d M k l k y k d c k n H k h f t U n k g e k u k
c f y n k u k d h x o k g h n j g k g A v U n j i o ' k d j r
g h o k r k o j . k e , d v t h c l h [k k e k ' k h e g l l
g k r h g A y x r k g l d M k L o r = r k l u k f u ; k d h
: g l e n l v k r h g o k d l k F k g e k j c n u d k N
j g h g A j D r r t h l n k M u y x r k g j ' k j h j e , d
v t h c l h l j l j k g V g k u y x r h g A o g k d h g j
p h t d N d g u d k c p u g A l k e u , d f o L r r
e n k u g f t l d , d v k j ; k r u k ? k j g t g k ; k r u k
n u d v k t k j v k j r j h d v k t H k h n [k t k l d r g A
d k Y g d k n [k d j d i d i k g V g k u y x r h g f t l e
c y d h t x g v k n e h d k t k r d j r y f u d k y k t k r k
F k k A b l d c x y e g h Q k l h n h t k r h F k h A o g h i j
, d H k f e x r u g j g j f t l e ' k o k d k M k y k t k r k F k k
t k l e n e i g p t k r F k v k j e N f y ; k v k j
e x j e P N m U g v i u k f u o k y k c u k y r F k A ; k r u k
n u d f ? k u k u v k j H k ; d j r j h d k d k n [k e u d k i
m B r k g A

ty dh gj dBjh ,lh Fkh ft le gok vkj
idk'k dh dkb 0; oLFkk ugh Fkh] dkb f[kMdh ugh]
NkVh l k njok t k] l hyu] eD[kh] ePNj vkj fo"ky
dhMk dh HkjekjA ble Bl&Bl dj yxk dk j[kk
tkrk FkkA mud diMk ij [krjukd dnh fy[kk
gkrk FkkA ty dh gj dBjh Qk l h ?kj d Bh d
l leu Fkh rkfd Qk l h ij yVdr n[k dfn;k dk
eukcy VV tk, vkj ph[k lu&lu dj ok Mj
tk,A

lY;yj ty dk ftØ vk; vkj ohj lkoj dj
dk ftØ u gk rk ckr v/kjh jgxhA ohj lkoj dj dk
tc lY;yj ty yk;k x;k vkj tyj duy cjh d
l leu i'k fd;k x;k rk glr g, tyj ckyk e
rEg vkthou l tk ijh gku ij NkM nxkA bl ij
lkoj dj cky rEg fo'ok l g fd vxt vxy 30
lkyk rd Hkkjr e jgxA bl ij vxt ukjt gk
x;k vkj mu ij dBkj ;kruvk dk flyflyk
pyu yxkA mUg dkYg e tkrk tkrk] 30 ikM ry
jkt fudkyuk iMrk vkj Åij l dkM cjl k;
tkrA [kku e dPpk ukfj;y vkj FkkMk l k xnk
ikuA ;g Øe fujrj 10 lky rd pyrk jgkA
ohj lkoj dj 13 ekp 1910 l 10 eb 1937 rd
lY;yj ty e u0 234 e jgA mUg gFkdMh vkj
cfM;k e tDM dj rugkb e vdyk j[kk x;k
FkkA o fo'o d ,d ek= Lor=rk l ukuh Fk ft Ug
,d l kFk nk&nk vkthou dkjok l dh l tk feyh
vkj mUgku ijh dhA ohj lkoj dj d thou d
vud igy ,l g ftUg vkerkj ij ykx ugh
tkurA o fo'o d ,dek= ,l 0;fDr g, ftu
l k u igy dHkh gvk vkj u Hkfo"; e dHkh gkxkA
e Qk l h d LFkku rFkk ohj lkoj dj dh dBjh l
FkkMh l h feíh viu l kFk yk;k vkj i tk ?kj e
j[k nhA ; feíh ej fy; Hkxoku l de i tuh;
ugh gA 'kke dk lY;yj ty e /ofu ,o idk'k
dk; Øe gkrk gA ft l n[k eu nfor gk mBrk
gA

ohj lkoj dj iFke Økfrdkjh Fk ftUgku fcVu
dh jkuh dh 'kkd l Hkk dk ;g dg dj fojk/k fd;k
fd fd l h fo[;kr Hkkjr h; dh ekr ij dHkh fcVu e
'kkd l Hkk ugh gbA mUgku fon'kh oL=k dh iFke
gkyh tykb ft l rjg egkRek xk/kh u fon'kh oL=k
dk fojk/k fd;kA o igy n'kHkDr Fk ftUgku fcVu
d jktk d ifr oQknkj gku dh 'kiFk ugh yh
ifj.kke Lo: i vkt hou cfjLVj mikf/k ugh feyhA
ohj lkoj dj igy Økfrdkjh y[kd Fk ftudh
^1857 dk Lor=rk lej** iLrd Niu l igy
ifrc/k yxkA ckn e Hkxr flg u ml Hkkjr e
Niok;k tk Økfrdkfj;k d fy; xhrk d leku
fl) gbA o fo'o d ,d ek= n'kHkDr Fk ftUgku
nk&nk vkthou dkjok l dh l tk dk ijk fd;kA
dkykikuh dh l tk d nkjku dBjh dh nhokjk ij
dfork fy[k dj feVh nr FkA mUg 6000 ifDr;k
;kn FkhA jk"Vh; /ot d e/; /ke pØ dk LFkfkir
dju dk fopkj ohj lkoj dj u gh j[kk FkkA ohj
lkoj dj u fgUnh 'kCndk" k dh jpuk dh rFkk
,dRo egkikj] grkRek] miefnr vkfn vudk 'kCn
ohj lkoj dj dh gh nu gA foHkk tu d ckn vkt
ver l j vkj dkydkrk Hkkjr e g ;g ohj lkoj dj
dh igy dk gh ifj.kke gA egkRek xk/kh dh gR;k d
vfHk;kx e ohj lkoj dj dk ty tkuk iMkA ohj
lkoj dj d uke l vkt flQ ,d ,;j ikV ^ohj
lkoj dj ,;j ikV] ikV Cy;j gA lY;yj ty d
dhfr LrEHk l ohj lkoj dj dk uke gVh dk ogk
egkRek xk/kh dk f'kyky[k yxk;k x;k tk ,d Hkh
fnu lY;yj ty ugh jgA dkb lUng ugh egkRek
xk/kh ,d egki : "k Fk vkj mud uke l io e gh
Ldy] dkyt] uxj vkj ;ktuk, py jgh FkhA ohj
lkoj dj ,d ;kxh i : "k Fk l ekf/k e cB dj mUgku
LoPNk l ik.kkr fd;kA mudh eR; d i'pkr l l n
e 'kkd iLrko dk ;g dg dj fojk/k gvk fd o
l l n l nL; jg gh ugh vr% mudh 'kkd l Hkk ugh
gk ikbA l l n d dUnh; d{k e ohj lkoj dj dk

fp= Hkh ugh yxu fn;k x;k ckn e jk"Vifr
,0ih0t0 dyke u viu gkFkk l mud fp= dk
vukoj.k fd;kA

vk t knh l igy ohj lkoj dj l vxt Mjr Fk
D;kfd o mud 'kk l u e [kyy Mkyr FkA vk t knh
d ckn dN pfunk jkturkvk u ohj lkoj dj d
;kx nku vkj R;kx dk ut j vnkt dj fn;k D;kfd
mUg Mj Fkk fd ohj lkoj dj d R;kx vkj
ykdfi;rk d dkj.k mudh xnnh u pyh tk, ;k
ok mul de ykdfi; u gk tk,A Lor=rk d
i'pkr Hkh ohj lkoj dj dk dkb lEeku ugh fn;k
x;kA n l jh vkj dN 0;fDr;k dk l j vk[kk ij cBk
i tk x;k vkj db info;k l foHkf"kr fd;k x;k tk
ty x; gh ugh] x; Hkh rk mUg ty e l kjh
l fo/kk, feyh Fkh D;kfd o vxt k d fgr"kh jg FkA

vk t vudk , l 0;fDr g ftudk dkb Hkh
;kx nku o R;kx u gku ij Hkh flQ ifjokjokn
ih<hokn d dkj.k i t tkr g ftud uke ij

db vLirky] xko] uxj] lMd ;k tuk, vkj u
t ku D;k D;k py jgk g n l jh vkj ohj lkoj dj]
l Hkk" k pUn ck l vkfn vudk n'kHkDr g ftud
uke dh dgh dkb ppk rd ugh gA ijUr , l
n'kHkDr egki : "k vkt Hkh dj kMk Hkkjr okfl ;k
d fnyk e cl r gA mUg mfpr lEeku Hky gh u
feyk gk ijUr fnyk e o lEekuh; Fk] g vkj
Hkfo"; e Hkh jgxA ge lc feydj mUg ueu
djr g] i.kke djr gA

^e>l tMu oky gj 0;fDr dk crk n fd
e fd l h Hkh jktufrd ikVh l l jkdj ugh
j[krk---f[kykQr dj l drk g] leFku ugh
djrk--- ej thou dk ,d ek= mnn'; ek
Hkkjr h dh lok djuk g--- ykxk dk tkxr
djd] cjkb dk fojk/k dj d--- e mu l Hkh
fopkj] uhfr;k vkj ykxk dk fojk/k djrk g]
ftu ij vkn'kokn vkj ufrdrk f/kDdkjr g---
ejk /; ; g& ^jk"V loiFke lokifj**A

XXXXXXXX

डायरी के पन्ने

etl iir

okE fgE HkfoE lE] ngjknu

e vkj ejh y[kuh ftUnxh d gkbo ij pyr&pyr
fQj vk igp g vki l feyu FkkMh l h mnkfl ;k]
dN vki] <j l kjh eLdku] [kf" k; k vkj
f[kyf[kykgV ydjA vki lcdk Hkh viub l lQj
e viu l kFk "kkfey dju vk, g geA njv l y ge
Hkh rk vkid fcuk v/kj g ukA nf[k, ejh y[kuh
ejk ijk l eFku dj jgh gA vkidh ifrfØ; k gh rk
gekjk fy[ku dk lcy gA rk pyx u vki gekj
l kFk] ftUnxh dh my>uk dk dN iy nj j[kdj
gekj l kFk glu eLdjku f[kyf[kyku d fy, A rk
fQj pfy, lQj "k: djr gA

e vkj ejh y[kuh cB Fk ml fnu viu cjen
d l kQ eA ol gekjk cjenk g cM dke dkA ogk
l gekjk ijk cxhpk] cxhp d iM] vMk l h iMkfl ;k
d cxhp d iM Hkh fn[k tkr gA FkkMh cgr lMd]
lMd e vkrh tkrh NkVh cMh xkfM; k] vkr&tkr
yxx Hkh fn[kk; h nr g vkj fn[kk; h nrk g ok , d
uUgk l k uhyk VdMk vk leku dk] t k ge nkuk dk
gh viuk viuk l k yxrk gA ft le ge dHkh l j t
fn[kk; h nrk g] ft l dh xuxuh /ki d fy, ge
l fn; k e m l dh fdj. kk d l kFk f[k l dr jgr g rk
xfe; k e m l dh ipM fdj. kk l cpu d fy, iMk
dh Nk; k <<r gA m l h uUg vk leku d VdM e ge
pnk ekek Hkh fn[kr g viuh "khry pknuh fc[kjr
g, viu l kFkh f>yfey rkjk d l kFkA m l h
vk leku e ge nkuk dk ckny d VdM fHkUu fHkUu
vkÑfr ; k e Hkh fn[kr gA m l h vk leku d VdM d
uhp ge i{kh Hkh mMr fn[kk; h n tkr gA bn/ku" k
Hkh rk fn[krk g ge ogk l viuh l rjxh vkHkk d
l kFkA vkj gk bl h cjen e cBdj ge viuh m l
l; kjh dk; y dh ok. kh Hkh l ur g vkj viu uUg
l kFk; k fxygjh] /k/krh] dkyh Hkjh fpfM; k]

fr rfy; k] cycy vkfn l Hkh rk feyr gA ol vki
Hkh rk fey pd g bu lcl fiNy o" kA , l k gh g
gekjk ok l; kjk cjenk tk gekjh ft nxh dk vge
fgL l k cu x; k gA t gk e vkj ejh y[kuh cBdj
bu l c utkj k dk vkun yr jgr gA vkj ft l l
ge cgr egCcr djr g bu NkVh NkVh [kf" k; k vkj
cgr l kj l du d iy ge nu d fy, A vkidk Hkh
viuk cjenk ; kn vk jgk g\ t gk cBdj vki
vnjd] dkyh fep okyh pk; dk vkun yr g]
viuk fi; v[kckj i<r g vkj dHkh dHkh ; gh
pipki Hkh cB jgr gA g fd ughA

gk rk ml fnu lcg dh xuxuh /ki e viu
m l h cjen e cBdj e vkj ejh y[kuh v[kckj i<
jg FkA i<r i<r v[kckj d viu fi; dkye
l kbcj l l kj rd igp rk "kh" kd *Mk; jh d iUu*]
n[kdj y[kuh dh vk[k eVdu yxhA ok >d&>d
dj mpd&mpd dj n[ku yxhA eu iNk ; D; k
dj jgh gk m lu "kh" kd ij mxyh fVdk nhA eu
xkj fd; k rk e Hkh [k" kh l mNy iMhA vc le>
vk; k e D; k dg jgh gA gk Hkb gk re rk cMh
l ; kuh gkA eryc bl o" k d fy, gekjh pvf" edkp
d fy, gekj y[k dk "kh" k dA ; kfu ikBdk dk dN
mnk l h] dN vki l l fHkxku dk] dN gl h l
xnxnku dk rk dN eLdjkgV , o dN [kVh ehBh
; knk l l jkckj dju dk dk; Øe r; dj fy; k
x; k ej vkj ejh y[kuh } kjkA ge nkuk u vki l e
gkFkk l rkyh ct kb ekuk nfu; k Qrg dj yh gkA
ge y[k rk fy[k gh yr g D; kfd l c vke ft nxh
l l Ecfu/kr gh gkrk gA ol l p crk, ge nkuk dk
gh viu y[ku d ckj e "kk; n [k" kQgeh g dNA
ij D; k dj vknr l etcj g ge Hkh rkA [kj lcl
dfBu dke ge gfmX <<uk gh yxrk gA bl ckj

b l l ge cp x, vkj fuf"pUr gk x, A pyk t h
 , d V"ku rk [kRe gk xb fd vc "kh"kd ugh <<uk
 iMxkA

gk rk ge nkuk dk "kh"kd rk fey x; k *Mk; jh
 d iUu*A ; "kh"kd n[kdj m l Hkyh fcl jh Mk; jh d
 iUu gekjh vk[kk d vx QMQMku yx] ft l geu
 u tku dgk j[kk gvk FkA vly e vkidk lp
 crk, m l Mk; jh dk geu lcl Nikdj j[kk FkA
 ge nkuk ij tk" k d l kFk m l <<u yxA db o"kk
 l geu m l Mk; jh dk n[kk gh ugh Fk vkj ge ; kn
 gh ugh vk jgk Fk fd geu m l j[kk dgk FkA l kj
 ?kj e geu mFky&iFky dj MkyhA dkQh e"kdDr
 d ckn ge ok Mk; jh fey gh xBA vkf[kj geu
 Mk; jh dk fudkyk FkMk l kQ fd; kA ok Mk; jh
 ft le cgr dN FkA Mk; jh dh fy[kkoV , l h fd
 ekuk fd l h jkfxuh e cgh tk jgh gkA l kj j l mu
 "kCnk e t l fleV x, FkA m l Mk; jh e d : .k j l]
 Jxkj j l] gkL; j l vkfn l Hkh fojkteku FkA ok
 Mk; jh tc fd l h d gkFk yx xb rk m l u m l
 i<dj Mk; jh fy[ku oky d xy e ckg Mkydj
 Hkkodrk l m l d xkyk dk pedj vk[kk dk Ndj
 dgk Fk vk t eu vkidh Mk; jh i< yh vkj m l
 i<dj e> ekye gvk fd vki fd l gn l xtj
 gkA fd l mnk l h l fdru vk l vkiu ckg; gA
 vHkh rd doy luk FkA vc Mk; jh i<dj egl l
 gvk fd mnk l h D; k gkrh gA Mk; jh fy[ku okyk
 pkd x; kA ok Mk; jh tk lcl Nikdj j[kh tkrh
 Fkh] fd l h u m l i<dj bruh xgj h ifrfØ; k n
 Mkyh rk LokHkkfod : i l gh Mk; jh fy[ku oky dk
 pkduk gh FkA vpkud gh ok l kjh mnk f l ; k] vk l]
 gl h] "kjkjr] dN jkt l keu vku l ok le> gh
 ugh ik jgk Fk fd ok D; k dg] D; k dj] D; k
 ifrfØ; k nA ij gk m l ek l fe; r dk] xy e iMh
 mu ckg dk] xkyk ij vldr m l Lug fpUg dk
 egl l dj d m l vPNk Hkh yxk FkA "kk; n cgr
 vPNkA dN vk l m l d xkyk ij <y d iM Fk vkj
 i<u oky d HkhA fd l h u m l d h Hkkoukvk dk

le> k FkA vu t ku e gh l gh ok nkuk vkj djhc vk
 x, Fk] vkj tM x, FkA vki lkp jg gkx ge ; l c
 d l irk gA vly e ge nkuk mu nkuk dk cgr
 djhc l tkur g vkj jkt nkj Hkh g mudA vkj
 fQj D; k crk, t gk l ge vf"edk d fy, dN
 pkfg, gkrk g ogk ge igp gh tkr gA Hky gh ok
 bl ku gk ; k dkb Mk; jhA gk rk , l h gh gkrh g
 Mk; jhA dHkh dN jkt [ky tk; rk coMj ep
 tk; A fdru gh fj"r VVu dh dxkj ij vk tk, A
 vkj dHkh fdruh gh nfj; k utnhfd; k e cny
 tk, A fdruh gh xkB [ky tk, A vkt ge bl
 Mk; jh dk n l jh ckj i< jg FkA igyh ckj tc geu
 Mk; jh i< h Fkh rk geu egl l fd; k Fk vkj vkt
 Hkh egl l dj jg g fd fd l h dh Mk; jh i< uk dN
 vPNh ckr rk ughA ij m l Mk; jh dk i< u l ge
 rc Hkh vkj vkt Hkh [kn dk jkd ugh l dA ge nkuk
 fxYVh egl l djr g, Hkh m l le; cbekuh dju
 l [kn dk jkd ugh l dA gkykfd gekjk bjknk dkb
 cjk ugh FkA

gk rk ge m l Mk; jh dk i< u yxA i< r&i< r
 dHkh gekjh vk[kk e vk l vk tkr rk dHkh gkBk ij
 eLdku vk tkrhA dHkh Øk/k rk dHkh v l he "kkfr
 Nk tkrhA e vkj ejh y[kuh n[k jg Fk m l Mk; jh
 e cpiu dh dN "kjkjr Fkh rk dN ek l fe; r FkhA
 mle dN jkl jx Fk rk ek ckck dk Lug Hkjk iMk
 FkA mle bn/ku" k d jx Fk rk frrfy; k dh
 vB[kfy; k Hkh FkhA mle unh vkj len dh
 xgjkb; k Fkh rk cQ l ydnd igkfM; k Hkh FkhA
 mle el jh] uuh rky dh okfn; k Fkh rk jkt Lfku d
 jfxLrku dh jr Hkh FkhA ec b dk len] fnYyh dk
 ykyfdyk] ijh dk txUukFk ef nj Hkh FkA m l
 Mk; jh e dN fiDpj vkj mud ghjk&ghjkbu rFk
 dgkfu; k Hkh Fkh rk dN VhOoh0 d l hfj; y Hkh FkA
 mle ge yx] cfu; kn] jkekun l xj dh jkek; .k
 Fkh rk egkHkkjr] Hkkjr , d [kk t] 0; ked" k c["kh]
 l jfHk Hkh FkA mle l yek l Yrku] et jh l gk;]
 foukn nvk Hkh FkA mle , d&nk VhOoh0 l hfj; y

dh dgkfu; k Hkh Fkh l {ki eA ft Ugku "kk; n dkQh
iHkkfor] ifjr fd; k Fkk ml ; k fny dk N fy; k Fkk
ml dA ml Mk; jh e dk; y dh dd Fkh rk dko dh
dko&dko Hkh FkhA mle xkj; k dh ph&ph Fkh rk
fxygjh dh fdV&fdV Hkh FkhA ml Mk; jh e dkQh
lkj vk l vkj mnkf l ; k FkhA mle db lkj liu Fk
rk mu liuk d VVu d nn Hkh FkA bu mnkf l ; k
vkj VV liuk d ckt n mul gkj u ekuu dk
xtc dk tTck Fkk mleA bl fy, <j lkjh
eLdkuk vkj cgr lh glh dk << fy; k x; k Fkk] bu
lcdk edkcyk dju d fy, A blfy, cn
f[kMfd; k dh f>fj; k l >kd rh <j lkjh [k" k; k
vkj eLdjkgV Hkh Fkh ml Mk; jh eA tk okdb mu
VV liuk e jx Hkju d fy, mu cn f[kMfd; k dh
f>fj; k l vnj vku dk vkrj FkhA cl vko"; drk
Fkh rk mu f[kMfd; k dk FkkMk lk [kkyu dhA mu
glh [k" kh dk FkkMk lk gkFk c<kdj viuku dhA

ml Mk; jh e , d cgr [kk l ckr mld fy,
jku dh [k" kh] [kn l igy mld fy, thu dh
[k" kh vkj lcl igy ml yEg dh [k" kh Fkh tc
mul dgk Fkk ; vkj n oYM cLV ----- , lh gh
Fkh ok Mk; jhA ekuk dkb cgr gh viuk dkuk gk]
tgk th Hkj dj jk y] [kc f[kyf[kykdj gl y]
gkFk iko iVd&iVd dj xL l k mrkj y] fd lh dk
migkl dj y] fd lh l egCcr dj y] viu fny
dh ijh Hkkouk, 0; Dr dj y] dN Hkh dj y rk Hkh
fd lh dk dkuk dku [kcj u gkA ok Mk; jh vl he
ihMk l xtjr g, Hkh vnE; ft thfo'kk l Hkjh gb
FkhA mnk l h rk cgr Fkh ij ml l Hkh vf/kd thorrk
Fkh mleA fy [ku oky u dgh Hkh [kn dk gkju ugh
fn; k Fkk ml Mk; jh eA

ckck dk Lug ek dk Fkk vkpy]
Hkkb cguk dk l; kj nkLrk dk lcyA

cpiu dh lki lh<h vkj yMk]
yMdiu d fi l vkj [kk [kk
dN cpiu dh ; knk l Hkjij
dN ; kou dh ckrk e fleVh&fleVh
dN mnk l & mnk l dN f[kyh&f[kyh
dN vk l cj l krh dN eflr; k l yn h Qnh
dN VI d Qyk lh ngdrh
dN cl r dh ekndrk l egdrh
dN Hkfo"; dh fprk e my>h my>h
dN lkou dh Qgkj k lh cj l rh
dN Qkxu e vy l krh lh
fQj Hkh thou d ifr vk"kk l Hkjh&Hkjh
bu lcl Hkjij Fkh ok Mk; jh
ekuk fd lh "kk; j dh xty
vkj "kk; jh Fkh ok Mk; jh
dN mnkf l ; k dN vk l dk viue
leV Fkh ok Mk; jh
fdr fQj Hkh [k" k; k] f[kyf[kykgV
vkj thou l ifji. k Fkh ok Mk; jh

ge nkuk lkpu yx Mk; jh rk ge Hkh fy [kr Fk
e vkj ejh y[kuh mRld gkdj , d nlj d
xycfg; k Mkydj fclrj e ?kl dj viuh ml
Mk; jh dk Hkh i<u cB x, ft l ge nkuk u fey dj
fy [kk FkA i<r&i<r ge nkuk lkpu yxh vj ;
lc geu d l fy [kk gkxA , l Hkko] , l "kCn] , lk
jl ml le; dgk l vk; k gkxk gekj y [ku eA
i<r&i<r le; dk irk gh ugh yxkA vc rk
dkQh o"kk l fy [kuk gh NkM fn; k FkA

vki e l cgr l ykx Hkh Mk; jh fy [kr gkxA
, d ckj viuh Mk; jh dk ihN iyVdj nf[k, A cgr
vkun vk, xk vkidk Hkh viuh thou ; k=k e lQj
dj dA vc pyr gA vxy o"k Mk; jh d dN u,
iUuk d lkFk vki l fQj feyxA

XXXXXXXX

संस्मरण

dk'ky fd'kkj 'kDy

jk"Vh; Hk&LFkfdud vkDMk dUn]

Hkkjrh; lo{k.k foHkkx] ngjknu

e> vkt gkfnd ilUurk gk jgh g tc lo{k.k
dk; d nkju >kj[k.M jkT; d vUrr ,d
uDIy iHkkfor {k= e lo Vhe viu vkidk fd l
idkj fgEer] prjkb ,o l>&c> d lFk viu
dk; dk djr g, uDIy;k d pxy l cpkdj
okil vk;hA

;g ?kVuk fnIEcj ekg o" 2002 dh g tc e
T;kMh; ,o vul/kku 'kk[kk %Hkkjrh; lo{k.k
foHkkx½ d {k=h; dk; gr VdMh vf/kdkjh d
gfl;r l ioh mUkj in'k fcgkj >kj[k.M ,o
if'pe cxky jkT; e dVky lo gr x;k FkA
ngjknu l iLFku djr le; ej eu e fopkj vku
yxk Fk fd >kj[k.M ,o if'pe cxky t l jkT;k
tgk uDIy h gey vDIj gvk djr g] e xkeh.k
bykd ou {k= ,o Åp iork ij tkdj D;k okdb
viu foHkkxh; dk; dk dj iku e lQy gk l dxk
vkj ;gh fopkj leL; kvk dk ly>ku e l gk; d Hkh
gvk bl dk ftØ e vc ;gk dju t k jgk gA

gekjh Vhe u] ,d ,y ,e oh ej ft le VUV
midj.k] jk'ku l kexh] tujVj] foHkkxh; nLrkot
d lFk&lFk 6&8 l gk; d depkj lokj Fk] mUkj
in'k dh l jgn ikj dju d i'pkr >kj[k.M dh
lhek e io'k fd; kA ^cjgh* d lehi ,d cM iy
dk ikj dju d i'pkr tc geu ekufp= dk
[kkydj vlikl d {k= dk igpkuu dh dok;n
'k: dh rHkh vpkud pkj xkeh.k ogk vk x; vkj
gekjh Vhe d ckj e iNrKN 'k: dj nhA eu mUg
l k/kkj.k xkeh.k le>dj gYd e fy;k vkj dgk fd
Hkb;k ge bl dPp jkLr ij pydj ml Åph
igkMh ij tkuk gA le>x; u vkiA mue l ,d

0;fDr rt pky l pyrk gvk dN nj tkdj
vk>y gk x;kA rhu xkeh.kk u ge ckrk e
my>kdj j[kk fd vkf[kj vki gekj bykd e D;k
vk; gk\ ;gk rk rEc oky l kgc dHkh ugh vkr g
bru e /khj&/khj 15&20 xkeh.kk u vkdj gekj
okgu dk ?kj fy;k vkj fQj mUgku lo Vhe dk
viu dCt e y fy;kA

ruko vkj ekufld my>u d dkj.k ge dN
le> e ugh vk jgk FkA fQj Hkh eLdjkr g, eu
dgk fd vki ykxk d fy, e rk egeku g] n l j
jkT; l vk;k g vki ge l jdkjh dke dju n vkj
Ñlk;k l g;kx djA bru e ,d uk toku u dgk fd
'e pkg rk vHkh rEgjk dke reke dj n vkj bl h
LFku ij geu gt kjhckx d dyDVj l kgc dh
iRuh dk xyk dkVdj mud 'kjhh dk jr e nQuk
fn;k FkA* ;g ckr l udj ej 'kjhh e jkxV [kM gk
x; vkj vkokt /kheh iM x;hA

djhC ,d ?k.Vk dPp jkLr ij pyu d
i'pkr mUgku ge ,d igkMh dh rygVh]
tgk ij dN [kijy d dPp edku Fk d ikl : d
tku dk dgkA

eu Mkboj l dgk ^v'kkd xkMh jkd nk vkj
viu ,d fo'okl ik= l gk; d dk b'kkj l cyk;k
vkj dgk fd vki flQ ,d NkVl l k VUV yxk nk
ckdh leku er [kkyukA mu ykxk u dPph 'kjc
ih vkj chp&chp e n'kh fiLVy l gokb Qk;fjx
dju yxA dN ykxk u e>l ml bykd dk uD'kk
fn[kku dk dgk] bl ij e>yxk fd pyk 'kk;n ;
yxk lo{k.k dk; dk le> tk;x vkj ge ij'kku
djuk NkM nxA

yfdu ;g rk foijhr gvka mue l ,d yMdk tkj&tkj l fpYykr g, dgu yxk fd ; ykx gekjh tkl lh dju vk; g rkfd ifyl dk gekj l Hkh fBdkuk dk irk py tk;A^m fQj rk ekgky T;knk gh Mjkouk cu x;ka o 20&25 dh l [;k e Fk vkj tehu ij cB dj ge yVu&ekju dh ;ktuk cuk jg FkA gekjk Mkboj tk dkQh fgEerh Fkk vkj mlu mud l kFk cBdj FkkMh 'kjk Hkh ih Fkh] ej ikl vk;k vkj dgu yxk fd ^mlkgc vki er ?kcjkvk eu ,d ckr l kph g fd e Vd e yn l keku dk ydj vHkh 'kjk yu d cgku Hkx tkÅxka o ykx e> ij 'kd ugh dj jg yfdu o vkidk c/kd cukdj j[k yxA og ,d ctx dk viu l kFk yk;k Fkka og ckyk fd ckct h ;gk vki 4&5 ?k.V ckn l Hkh ekj fn; tkvx eu vHkh luk gA yfdu e pid l budh pxy l cpdj Hkxk l drk gA eu iNk ; d l \ rk mlu dgk fd e n^mkk/k ^¼lvj ikyu oky^½ g vkidk ej t l ey diM oL= vk<dj cdjh vkj lvj d >.M ^¼ck<^½ dh rjQ pyuk gkxk vkj , l e e vkidk txy d jkLr ikj djkdj l jf{kr LFkku ij igpk nxA ge ykx fcuk le; xok, ,d gkFk e NMh ,o n l j gkFk e enku tku d fy, ikuh dh ckry fy, m l ctx d l kFk Hk^mk cnydj pyu yxA ?kcjkgV d dkj.k gekjh lkl c<rh tk jgh Fkh vkj ux iko 2&3 fdeh tc py pd rc vpkud , l k yxk fd uDlyh ge [kk tu fudy pd g vc vxj idM x; rk tku l ekj nxA bl h Mj l vc gekjh Vhe l j iV Hkxku yxh yfdu txy d vn:uh jkLr] og Hkh jkr d v/kj e] py ikuk l j y ugh Fkka , l e m l h ctx dk lgjk fy;ka djhc 4&5 ?k.V pyu d ckn ge ,d igkMh dk ikj djd m l xko l dkQh nj tk pd FkA gekjh Vxk Fkd pdh Fkh vkj /kMdu c<u d dkj.k l hu e nn eg l l gk jgk Fkka eu dgk ^mnknk D;k vc ge l jf{kr LFkku rd igp pd g\ mlu dgk gk ckct h vc mul dkb [krjk ugh g yfdu o <<u t : j vk;xA^m

blfy, ftruk nj py ldk vPNk gkxka FkkMh fgEer dju d ckn fQj pyuk 'k: fd;k] yfdu vc txy d vUnj l ck?k d ngkMu dh vkokt luk;h nu yxhA jkr d djhc 3-30 ct jg FkA geu dgkA ^mg Hkxoku] vc rk ; ck?k ge ij geyk dj d ekj nxk ^mMkboj u dgk ^m?kcjkvk er ; rk tkuoj g ge n[kdj Hkx Hkh l drk gA fQj ge ykx ,d LFkku ij tk iRFkj l f?kjk Fkk ogh cB x; vkj fQj ,d n l j dh vkj ihB dj d xky ?kjk cuk fy;k] chp e vxk tykb vkj djhc 30 feuV rd ,d gh LFkku ij cB jgA djhc pkj ct ikr% dky ge ykx pyr&pyr ,d , l LFkku dh vkj c< jg Fk tgg l ekVj xkMh vkj Vdk d pyu dh vkokt lukb n jgh FkhA ge m l h vkokt dh rjQ [krk&l [k ukyk d jkLr pydj 5%00 ct e[; l Md ij igpA vc ge l Hkh dk yxk fd tku cp x;h fdUr ge m l {k= d ckj e dN Hkh tkudkjh ugh Fkh u rk i l Fk] u gh ekufp=A gkykr fcYdy n;uh; FkA eu vc viuk fnekx nkMk;k vkj l kpk fd 'kk;n 2&4 fdeh e dgh <ck rk gkxk gh] D;k u mul Hkktu&ikuh d fy, vujk/k fd;k tk,\ Hkxoku u 'kk;n gekjh lu yh vkj ge ,d <ckk fey x;ka tc eu <kc d l pkyd l ckr dh rk og ckyk lkgc vki ftru fnu pkgk ;gh jgk vkj [kkuk [kkvka^m e> cgr fgpd yxh fdUr vkj dkb fodYi ugh Fkka n l jh etcjh ;g fd ft l vkneh u gekjh tku cpk;h m l ge dN Hkh ugh n ik jg FkA

bl h chp gekj Mkboj u tk 'kjk [kjnu d cgku ,d xkeh.k dk ydj fudyk Fkk jkLr e mlu m l xkeh.k dk mrjk vkj gkb&o dh rjQ Hkxka m l ;g yxk fd 'kk;n ge ykx Hkh Hkxkdj ogh fudy gkxA

bl h m/kMc u e ge <kc e cB Fk fd vc vxk D;k gkxk\ rHkh v'kkd ^¼Mkboj ^½ <kc dh rjQ vkr g, fn[kk] geu l Md ij [kM gkdj gkFk fgyk;ka

m l l e > r n j u g h y x h f d ; r k g e k j l k g c g h
 g A v k r g h v ' k k d g e i d M d j j k ; k A g e k j H k h
 v k l f u d y j g F k A v c g e u m l c t x d h r j Q
 n [k r g , d g k A ^ v ' k k d n [k k b U g k u g e k j h t k u
 c p k b b U g g e d N n u k p k g r g A ^ m l u Q k j u t c
 l 500 @ & # i ; f u d k y v k j m l c t x d k n f n ; A

l H k h u m l d k g k F k t k M d j f o u e r k i o d
 u e L d k j f d ; k v k j i u % g t k j h c k x t u i n e [; k y ;
 t k d j f t y k f / k d k j h d E i k m . M e , d j k r f ' k f o j
 f d ; k v k j v x y f n u f t y k d y D V j d k v k i c h r h
 l u k b A v c v k x d k l o d k ; ' k : d j u l i g y g e
 e [; l M d e k x i j g h L F k k u h ; F k k u l l p u k , d =

d j d g h t k ; k d j r F k A b l ? k V u k d k ? k f V r g ,
 d j h c 14 o " k g k x ; g y f d u t c H k h b l ; k n d j r k
 g r k j k x V [k M g k t k r g A l o k y ; g g f d g e k j
 d k ; i H k k j e o l H k h { k = v k r g t k l o n u ' k h y]
 u D l y i H k k o h { k = g v k j f g l d t k u o j k d c h p
 f c u k f d l h g f F k ; k j v F k o k i f y l l j { k k f y , c x j
 [k r j u k d L F k k u k i j t k d j d V k y @ f o L r k j l o { k . k
 d k ; d j u k g k r k g A , l e v k R e c y] o k d i V r k]
 l g u ' k h y r k , o f u . k ; y u d h { k e r k d l k F k & L k k F k
 b ' o j d h v l h e Ñ i k d k l g k j k g k r k g A b u l c d
 c k o t n H k h d H k h , l H k h g k n l v k r g f t U g u p k g r
 g , ; k n d j u k i M t k r k g A

XXXXXXXX

भू-वैज्ञानिक और साहित्यकार

et f}onh

Hkkfedh foHkkx]

dk'kh fgUn fo'of o| ky ;] cukj l

e tc Hkh lkuHkn dh fouE; igkfM;k l xtjrh g
nkuk rjQ ohjku txy ,o NkV&NkV VdMk e cVh
igkfM;k oky ?kekonkj jkLr dk eukje n"; eu
ekg yrk gA m l h chp e vpkud ,d cM l vkne
dn iRFkj ij ohj ykfjd fy[kk n[kdj eu e
db&db i"u mHkju yxr gA D;kfd eu cpiu e
gh ,d , l h dgkuh luh FkhA t l vYgk&mny dh
dgkuh ifl) g ol gh ohj ykfjd iRFkj dh dgkuh
ifl) gA db l k o" k ioj lkuHkn fty e fot ;x<
jkt ?kjku dh jktdekjh dk xkeh.k l ekt d fu/ku
ifjokj e ink ykfjd uke d pjokg l ie gk x; kA
ie fn0;rk dh ijkd" Bk ij tc viuh ie xkFkk
dgu dk r; kj gvk rk jktk egkjktvk d
vku&cku&"kku dk Bl igph vkj mUgku rjUr
jktdekjh dk jktegy e dn dj pjokg dk l jx
d nhokj e puoku dk vkn" k n fn; kA ijUr tc
ie fu" Ny gk rk m l e R; kx dh Hkkouk icy gkrh
gA Qyr% ykfjd viuh i; l h dh ik.k j{kk ,o
LokfHkeku dh j{kk dh [kkfrj iyk; u dj tkrk g
vkj ,d fnu Fkd&gkj dj iRFkj ij ngkM
ekj&ekjdj] ph[kr&fpYykr thou yhyk lekr
dj nrk gA viuh ckr iRFkj l dgr g, ykfjd
jktdekjh dk l n" k nrk g fd re thfor jguk] e
; LFkku NkM dj tk jgk g ijUr e: xk ugh tc
rd ;g iFoh] igkM] txy thfor jgxk e bu
iRFkj e thfor jgxkA ;g ogh LFkku g tgk vkne
dn "k[l d : i e ;g iRFkj chp l QV x; k ekuk
ykfjd u Lo; ryokj pykdj viuk l huk phj
fy; k gkA foKku Hkh dgrk g fd rki&Åtk tc
vR; f/kd l ?ku cu tkrh g rk m l dk nohdj. k gk
tkrk gA egku oKkfud vkbLVhu dgr g fd

inkFk tc vR; Ur vkofxr gk tkrk g rk Åtk cu
tkrk g "kk; n m l h fn0; idk" k Åtk dk n0; eku
;g ykfjd iRFkj gA "kk; n vkbLVhu n[kr rk m l
l ij ikoj dgrA l ;kx l mudh txg ej l kFk
,d Hk&oKkfudk dh Vhe Fkh] ft l eu m l LFkku
vkj iRFkj dh dgkuh crk; h ijUr Hk&oKkfud
iRFkj dk foKku d d l kVh l d l rk gA

Hk&oKkfud gh tkrk g fd bu fouE; igkfM;k
l ikr gku oky ;g ,d dej leg dk
DokVtkbV "ky gA tk Hkouk rFkk jktekx d
fuek.k e i; Dr gkrk gA Hk&oKkfudk dh tku
iRFkj e gh clrh g] ogh mudk thou gA ;g
ik"kk.k "kCn lLÑr fu" B gA bl le>uk vku
ugh gA eu mu Hk&oKkfudk l dgk D; k vki u
bu iRFkj dh pVVkuk d chp gj&Hkj ik/kk dk
mxr n[kk gA T; knkrj ckfj" k d ek l e e [k" kuek
gjh&Hkj igkMh n[kdj ftUnxh e cgkj vkrh g
vkj eu ckx&ckx gk tkrk gA bl h fouE; igkMh e
dej leg dk ;g DokVtkbV iRFkj ft l dh
vkot bl ohjku txy e Hkh luk; h nrh g og
g ykfjd iRFkj ft l ij fot; irkd Qgjk jgh
g vkj tk ,d ie dh l ?k" k xkFkk gA dchj u
vui< gkr g, Hkh <kb vk[kj ie dh ckr dgdj
bl dh l kFkdrk fl) dh gA ijUr ekuo lekt
dk bl l l rk" k ugh gkrk og m l ij viu "kCnk
d Nuh&gFkkMh pyrk g vkj ykg l Hkh etcr
ie d iRFkj ij geyk djrk g] yfdu bl iRFkj
u fnu&jkr vk/kh] ikuh] xeh >yr g, vofpyr
voLFkk e Hkh viuh gfMM; k dk xykdj egCcr
dh ?kkVh e ie dh ifrek LFkkfir dh gA ft l
vkt Hkh og lH; lekt itrk gA bld lkeu

ureLrd gkuk viuk ufrd dr0; le>rk gA
 ,d Hk&oKkfud u dgk fd vki Hkkoukvk vkj
 dYiukvk e t>rh jgrh gft l l vkidh Åtk dk
 {kj.k gkrk gA ol Hk&oKkfud iRFkj d [kfut
 inkFk d vk/kkj ij mldk oxhdj.k djr g t l
 : iKurfjr “ky] volknh ;k ryNVh; “ky] vkXu;
 “ky vkfn vkj vul/kku d }kjk ;g fl) fd;k
 tkrk g fd fdu&fdu iRFkj e dku lh /kkrg vkj
 fdruh ek=k e gA iFoh d Hkhrj D;k g] igkMk]
 txyk vkj fgeky; rd fc[kj cgeY; ikÑfrd
 l l k/kuk dh [kkt ,d Hk&oKkfud gh dj l drk
 gA ft l iRFkj e bruh lonu”khyrk l ,d 0;fDr
 dk ân; VVg gvk ;k phjk gvk ik;k g vkj mld
 vk/kh rQku >yu d nn dk c[kku fd;k gA mldk
 ,d Hk&oKkfud ; l kprk g fd ;g ikuh] xeh vkj
 /ki d iHkko l QV x;k g D;kfd iRFkj tgk l
 detkj gkrk g ogh l QVrk g vkj viuk ,d
 LFkku lfuf”pr dj yrk gA ml ge rjk'kr g] ,d
 if0;k e Mkydj ;g irk yxkr g iRFkj dgk l
 vkj dc vk;k yxHkx bldh vk; D;k gkxh
 vkfn&vkfnA iJur foKku vkj lkfgR; ,d nlj d
 ijd g] tc foKku viu pje ij gkrk g rk mld
 Loj l lkfgR; QVrk gA rc lkfgR; vkj foKku
 dh reke nfj;k ,d lkFk feV tkrh g vkj lkr
 leUnj ikj dk ioklh ân; ,d nlj dh fudVrk
 egll dju yxrk gA ,d dk l [k&n[k nlj dh
 vuHkfr cu tkrk gA lkfgR; gh ge lcdk vkj
 lcdk viuk ekurk gA thou thu dh yyd
 lkfgR; l ink gkrh g] ml lgtu<ku dk dke
 foKku }kjk lHko gA pkn ij y tku dk dke
 foKku u fd;k g] ij lkpu dk dke lkfgR; dkj
 dk eu gh dj l drk gA blfy, fur uohu fopkjk
 dh J[kyk e thu dk viuk egRo gA ohj ykfjd
 iRFkj dh ie dgkuh bl ckr dk iek.k g fd 0;fDr

vnj l ftruk l jy gkrk g] Åij l mruk dBkj
 fn[krk gA bu nkuk d chip dh voLFkk ,d vFkk
 nn l xtjh dgkuh gkrh g] “kk;n eu tc ie
 lei.k dk Lohdkj dj yrk g rk og er iRFkj d
 Lo: i e fn[krk g] ;g Hkh foKku gA bl lkUn; dk
 Lohdkj dju e l dkp D;k nf[k, igkM dh Åijh
 lrg bl Nkj l ml Nkj rd dlh fn[k jgh g\
 mUgku dgk vfr lUnjA ljt dk vkxeu ekuk
 l lrxh bUn /ku”k pyk jgk gk] fdj.kk dk tky
 ikÑfrd lEink d : i e vofLFkr gA ykfjd
 iRFkj l lkuk?kkVh dk eukje n”; fn[kkb iM jgk
 gA nfu;k fdruh [kljr g ble igkMk dh [k”kh
 ekuk ijh ”kckc ij gA bl [k”kh e Mcuk ;k pgjk
 foghu iRFkj e fdlh dh vkÑfr ryk”kuk ejh
 pgr gA rk D;k vki dk vkfne ;x l txyk]
 igkMk] ufn;k ,o l jkojk e fdlh Lolu lUnjh dh
 ejr bu iRFkj e ugh feyh! nf[k, ge lkfgR; dkj
 lkUn; d bn&fxn gh HkVdr jgr gA vkt vkid
 lkeu ,d lp dk mdj dj cMk l [k fey jgk
 gA vkRek e /klh ejh rhljh vk[k vkne dn ml
 cM “k[l dk n[kdj fdlh vej ie dh dgkuh
 ;kn fnyk nrh g! ftld vx rktegy dh
 ped Qhdh iM tkrh g] D;k fd gekjh vk[k
 lkUn; n[krh g t l bl igkM dh tk vkÑfr
 fn[k jgh g og lkb gb L=h dh lUnjrk g vkj
 ,d L=h tc lk tkrh g rk og lkUn; dh
 ifrefr yxrh g mld lkUn; dh e[kjrk ;k
 ed ik”kk.kk dh Hkk”kk dk ,d lkfgR; dkj gh
 le> l drk gA Hk&oKkfud rk mle [kfut
 lEink [kkt ldr g tk vkfFd nf”V l
 egRoi.k gkrk gA Hk&oKkfud vkj lkfgR; dkj
 nkuk dk nf”Vdk.k viuh&viuh txg egRoi.k
 gA iJur ekufld vkj vkfRed “kkfUr d fy,
 lkfgR; n”ku thouki ;kxh gA

XXXXXXXX

याददाशत (मेमोरी)

,uEdE frokjh

Hkkjrh; lo{k.k foHkx] ngjknu

vdIj ge ppk djr g fd ved 0;fDr dh
;knnk'r ¼eekjh½ dkQh vPNh g D;kfd og
fiNyh chrh gb ckrk dk rjr crk nrk gA
okLro e vPNh ;knnk'r dk rRi; 0;fDr dh
lQyrk l lEcFu/kr gA ,d 0;fDr ftldh
;knnk'r vPNh g og ,d lQy odhy]
bthfu;j] oKkfud] ioDrk ;k dydkj gk ldrk
gA iLrr y[k e ;knnk'r ij gh ppk dk dfnr
dju dk i;k l fd;k x;k gA fd l h Hkh ckr dk ;kn
dju dk dk; gekj vxefLr"d d iefLr"d e
fLFkr ljhce d dkj.k gA tk fd v[kjkV d
vkdj d efLr"d e fLFkr gkrk gA ljhce ;kn
dh gb oLrvk dk ;kn j[ku d vfrfjDr vuHko]
foopuk] igpkuu vkfn dk Hkh dk; djr gA
eu"; e ;g vU; thok dh ryuk e vR;f/kd
fodflr gkrk gA ;g NkV&NkV U;jkU l l
feydj curk g] ,d v/; ;u d vulkj ,d
efLr"d e U;jkU l dh l [;k yxHkx 9]200]000]000
rd gkrh gA

;knnk'r dk le;≤ ij fofHkUu
eukoKkfudk u viu&viu rjhd l ifjHkkf"kr
dju dk i;k l fd;k gA oMoFk d vulkj
^;knnk'r* fy[kh gb oLr dk iR;{k i;kx gA
tcfd vkLdj okbYM d vulkj ;knnk'r ,d
idkj dh Mk;jh g] tkfd l nk gekj l kFk jgrh gA
nIj 'kCnk e ;knnk'r eukoKkfud ifØ;k g
ftld }kjk lpuk, ,df=r dh tkrh g rkfd
le;kul kj mudk i;kx fd;k tk l dA ;knnk'r
d ckj e foLrr v/; ;u geu ,fcu ?kk l ¼1885½ u
viuh iLrd ^vku eekjh* e fd;k g mUgku
;knnk'r dh fofHkUu voLFkkr rFkk ;knnk'r dh
iNfr ij fofHkUu idkj dh ik;kfxd fof/k;k }kjk

fofHkUu rF;k dk mt kxkj fd;k gA ;kn dju dh
ifØ;k e e[;r pkj voLFkk, gkrh g t l %&

- (i) Nki
- (ii) /kkj.k&'kfDr
- (iii) Lej.k djuk ,o
- (iv) iul fuek.k

;knnk'r dk i:Hkkfor dju oky fofHkUu dkj d

okLro e ;knnk'r ,d lonu'khy ifØ;k g tk fd
fofHkUu idkj d dkj d l iHkkfor gkrh g rFkk
ifj.kkeLo: i 0;fDr dN le; i'pkr ;kn dh x;h
oLrvk dk Hky tkrk gA l {k i e ; dkj.k fuEu
idkj l g %&

- ¼i½ le;
- ¼ii½ fd l h ph t dk de ;kn gkuk
- ¼iii½ fd l h ph t dk T;knnk ;kn gkuk
- ¼iv½ l k'ky ehfM;k dk vf/kdre i;kx
- ¼v½ ioy{kh ikojk/k dk fl)kr
- ¼vi½ x"VkYV dk fl)kr
- ¼vii½ eukfo'y"kd fl)kr

dkb Hkh ;kn dh x;h oLr dN le; i'pkr
eu"; Hky tkrk g ;fn mldk iR;{k i;kx
le;≤ ij u fd;k tk;A Hkyu dh ifØ;k e
ioy{kh ikojk/k dk vge jky gkrk gA bld
vulkj ;fn dkb nk leku dk; A ,o B ;fn dj
jg g rk A okyk dk; B dk dju dh ifØ;k e
voj/k mRiUu djxk] ifj.kkeLo: i 0;fDr ;kn dh
x;h oLr dk Hky tkrk gA ;kn dju okyh oLr
efLr"d e rHkh ;kn jgxh tcfd mldk gekjh
ftnxh l l h/kk l EcU/k g vFkk ;kn dh x;h oLr
l kFkd g vU;Fkk efLr"d cdkj dh oLr dk ;kn
ugh j[krkA bld vfrfjDr dkb oLr de ;kn dh

x;h gk rk og Hkh tYnh&tYnh Hky tkrk gA 'kh?k o
vR;f/kd ;kn dh x;h oLr Hkh O;fDr tYnh Hky
tkrk gA vkt dy l'ky ehfM;k dk vR;f/kd
bLrekY Hkh fnekx dk vkojyKM dj nrk g
ifj.kke&Lo:i ^'kkV&Ve eekjh ykl* uke dh
chekjh dk [krjk lekt e c<rk tk jgk gA ;kn
dju dh ifØ;k e O;fDr x"VkyV fl)kr d
vul kj dk; djrk g bld vul kj ;kn dju oky
O;fDr fd l h Hkh oLr dk lex : i e n[krk g
rFkk ml gh Lohdkj djrk g rFkk bld
vfrfjDr vo;ok dk NkM nrk gA vr% vPNh
;knnk'r d fy, ;kn dju okyh oLr dk
fd l h tkudkj oLr l lEcU/k dj d ;kn
djuk pkfg;A eukfo'y"kd fl)kUr d
vul kj O;fDr ogh oLr ;kn j[krk g ft l dk
og ân; l pkgrk gA ;g fl)kUr flxeM
Yk;M] e lej o 'kkjdkV vkfn }kjk ifrikfnr
fd;k x;k FkkA ,d vkj v/;;u e dV yfou
}kjk ;g rF; mt xj fd;k x;k fd i.k fd;
x; dk;k dh ryuk e v/kj jg dk; vf/kd ;kn
jgr gA

;knnk'r dk c<ku d mik;

fofHkUu vul/kkuk l ;g Li"V gk pdk g fd BMk
ikuh fu;fer : i l i hu l ;knnk'r dk c<k;k tk
l drk gA i<kb d fy, lcg dk le; vf/kd
mi;Dr ekuk x;k g] dN v/;;uk d vul kj jkf=
d le; dk Hkh mfpr ekuk x;k g] tcfd oKkfud
rF; ;g g fd nkuk gh le; l igy ;g vko';d
g fd efLr"d Fkd gvk ugh gkuk pkfg;] vFkk
i;klr uhn yu d ckn efLr"d vkj vx ;kn dju

d fy, r;kj gk tkrk gA vPNh ;knnk'r d fy,
fdUgh nk ;kn dju oky ikB;Øek d e/; dN
le; dk vUrjky gkuk pkfg;A t l k fd lofofnr
g fd LoLF; 'kjhj e LoLF; efLr"d jgrk g vr%
LoLF; Bhd gkuk vR;r vko';d g bld fy,
ikf"Vd vkgkj yuk pkfg;A ft le vk;ju dh ipj
ek=k gkuh pkfg; D;kfd vk;ju dh deh l
;knnk'r detkj gk tkrh gA bld vfrfjDr
vPNh ;knnk'r d fy, mijkDr crk; x; Hkyu d
dkj.kk dk O;ogkj e Vkyuk pkfg,A

;kx&'kkL= e Hkh ,d ;kfxd fØ;k dk o.ku g
ft l d vul kj l k/kd dk ij&ijLij feyku gkr g
rFkk ijk l LdU/k rd dk Hkx l jyrk l l h/kk
j[kdj ijk l M<x t dh njh ij iFoh ij uhp dh
vkj nf"V tek dj [kM jguk gkrk g rFkk cãjU/k
¼n'ke }kj½ lgl=kjfoUn e /;ku j[kr g,]
vkrfjd cyox inku djrk g, 'okl&i'okl
djuk gkrk gA ;g Øe vkjEHk e 25 ckj djuk
pkfg; rFkk /khj&/khj fØ;k dk le;&c<kuk pkfg,
bl fØ;k d vH;k l l l k/ku dh Lej.k 'kfDr dk
fodkl gkrk g rFkk vU; ekufl d jkxk t l
ikxyiu] HkkfUr] foÑfr rFkk mUekn vkfn dk nj
dju e l gk;d gkrk gA bl ;kfxd fØ;k dk
Lej.k&'kfDr fodkl d dgr gA bld vfrfjDr
=kVd fØ;k@'kh"kk l u d vH;k l l Hkh Lej.k
'kfDr dk c<k;k tk l drk gA

Lej.k&'kfDr c<ku d fy, cktkj e cgr l h
vk;ofnd] ,ykifkd vk"kf/k;k miyC/k g ftudk
bLrekY ,d d'ky fpdR l d dh fuxjkuh e djuk
gh J"Bdj gA

XXXXXXXX

संगीत का विज्ञान

uhj t frokjh

Hkkfrdh foHkkx]

yktir jk; dky t] lfgckckn

/ofu d ey e plih vFkk 'kkfr g] vk?kk d
QyLo: i ; plih VVrh g& 'kkfr fo[kfMr gkrh g
vkj /ofu dh mRifUk gkrh gA /ofu dk ik; % l xhr
vkj dkykgy e ckV l dr gA ckrphr dh /ofu dk
Hkh bu nk Nkjk d e/; , d idkj ekuk tk l drk
gA fu;fer vkj vkor&dEiuk l fey dj mRiUu
/ofu lkekU; r; k l xhr dgykrh g tk dukuk dk
e/kj yxrh g rFkk fpUk dk i lUu j [krh gA tcf
vf;fer rFkk iphn dEiUu d fefJr gku l tk
/ofu mRiUu gkrh gA og dkykgy dgykrh gA vr %
ckypky dh Hkk"kk Loj rFkk dkykgy d chp dh
/ofu gA

;fn xgjk b e tk, rk bl pi ; k 'kkfr e
vugn ¼vukgr½ ukn Hkh lekfr g tk ey
¼fiekfnvy½ /ofu d : i e Hkh Kkfu; k d }kjk
of.kr fd; k tkrk jgk gA ; g /ofu ft l ukn
càe Hkh dgk tkrk g cgnk Å] ,feu ; k vkehu
d : i e Hkh lnfHkr dh tkrh jgh g vkj mRifUk
d dkjd d : i e HkhA ; jki d ikphu nk'kfudk
u Hkh bl fo'o dk e/kj l xhr ^E; ft d vkQ fn
fLQ; j** dgk gA ckbfcy e Hkh dgk x; k g %
ikjEHk e 'kCn Fkk vkj 'kCn gh b'oj Fkk rFkk
b'oj gh 'kCn Fkka vFkk og 'kCn cã ctk
0; kid ukn d : i e lkj cãkM e 0; klr g vkj
ft l dh /ofu e/kj l xhr t l h gA ; gk ij eyr %
gekjk fo" k; vkgr ukn l mRiUu l xhr g ijUr
l {k i e vukgr ukn ij fopkj djuk vko'; d
i rhr gvk D; kfd Kkfu; k }kjk ; ger fn; k tkrk g
fd vukgr l gh vkgr ukn dh mRifUk gkrh g] t l

fuokr e i [kk ok; dk l p j .k ugh dj l drk o l
gh vukgr ukn u gk rk vkgr ukn /ofur ugh gk
l drkA

vkgr ukn og g tk dukuk dk l ukb nrk g vkj
tk nk oLrvk d jxM ; k l ?"k l ink gkrk g ; k
, d ij nljh oLr d igkj e ink gkrk gA vkgr
ukn ge rd diu d ek/; e l igprk gA vkgr
ukn l gh l xhr dk Hkh tUe gkrk g& tk /ofu; k
fuf'pr rky vkj y; e gkrh g ogh l xhr ink
djr h gA l xhr e fu;fer vkj fLFkr dEiu }kjk
vknkyu /ofu mRiUu dk Hkh ukn gh dgk tkrk gA

l xhr /ofu d i x. k l xhr /ofu dk eyr % rhu
x. kk l le> k tk l drk gA okLro e bu x. kk dk
fefJr iHkko gh l xhr gA

rkjRo ¼fip½ ; g /ofu dh vkofr ij fuHkj g] mPp
rkjRo ¼mPp vkofr½ dh /ofu rh {k rFkk de rkjRo
dh /ofu ekVh i rhr gkrh gA mnkgj. k gr
lkekU; r; k i#"k xk; d dh vkokt dk rkjRo
efgyk xk; d l de i rhr gkrk gA 'k) vkofr dh
/ofu; k dk rkjRo vkofUk , d gh i rhr gkrh g ij
fefJr vkofr dh /ofu d lc/ k e ; g fu; e i. kr; k
mi; Dr ugh ik; k tkrk gA mnkgj. k d fy,
icyrk c<u ij mPp vkofr dh /ofu dk rkjRo
lki {k : i l vf/kd c< tkrk gA yxHkx , d l h
db vkofr; k tc l kFk luh tkrh g rk rkjRo
vk l r vkofr d l eku i rhr gkrk gA ; fn vrj
vf/kd g rk rkjRo bl vrj d l eku Hkh i rhr
gk l drk g] bld vulkj lu tk jg Loj ¼tk
ey Loj rFkk lokfn; k dk feJ. k g½ e l ; fn

ey Loj gV_k Hkh fn;k tk; rk Hkh rkjRo ogh irhr gkrk gA

icyrk % ;g /ofu dk vk; ru gA ;fn ogh Loj Øe'k% ,d gkjekfu;e] nk gkjekfu;e] pkj gkjekfu;ek l ctk;k tk; rk icyrk c<rh tk,xh gkykfd rkjRo leku jgxA ckIjh e ft ruh tkj l Qd ekjh tk,xh rk vkokt dh icyrk mruh vf/kd gkxhA

Lo : i %DokfyVh% gkjekfu;e] fxVkj rFkk fl rkj e ,d gh Loj yxk;k tk; %vkj leku rkjRo gk% vkj ;fn icyrk Hkh fu;f=r dj ,d leku j[kh tk;] vkj vc bu okn; ;=k l mRiUu /ofu;k dk lu rk Hkh ; fHkUu&fHkUu irhr gkrh gA okLro e okn; ;= l mRiUu Loj ,d 'k) vkofr dk u gkdj ey Lojd %QMkeVy% rFkk vU; loknh %gkekfud% vf/kLoj %vkojVku% d ey l curk gA bl idkj duk rd igpu okyh /ofu dk Lo: i bu Lojdk dh l[;k] vk;ke rFkk dyk %QI% ij fuHkj djrk g tk fd iR;d ;U= e fHkUu gkrh g vr% bu okn; ;=k l mRiUu /ofu e vrj iR;d Loj d Lo: i dh fHkUurk d dkj.k gkrk g ft l ge viu duk d }kj vk l kuh l igpku yr gA ;g ik;k x;k g fd ikjHk d loknh Lojd e[;r;k icyrk c<kr g vkj ckn d loknh Lojd /ofu dh e/kjrk c<kr gA d.k fi; l xhr d fy, ey Lojd dh icyrk rFkk lokfn;k dh lrfyr mifLFkr vko'; d gA

luknh@v luknh Loj% tk Loj ,d l kFk mRiUu gku ;k dju ij e/kj iHkko ink djrk luknh Loj dgykr g bl d foihr v luknh Loj l kFk mRiUu gku ;k dju ij v:fpdj lukb nr gA gYekYR t rFkk e;j vkfn oKkfudk u ik;k dh ;g Lojk d v/kjki.k d QyLo: i mRiUu gku oky l dj k %chVI% ij fuHkj djrk gA t l cgr vf/kd vkj

cgr de vkofr l fvefvekrk rkjk vk[kk dk fopfyrg ugh djrk ol gh lkekU; r;k l dj k dh l[;k Hkh yxHkx pkj ifr l dM l de rFkk vkofr ij fuHkj ,d mPpeku l vf/kd gku ij %mnkgj.k d fy, 256hz vkofr d fy, 47hz% loknh ikr gkr gA bl le>ku d fy, Vcy 1 n[k% 256hz dk leku ^u* ij ^xk* ij vkofr g 307hz vFkk l dj k dh l[;k g 51hz vr% *l k* d l kFk ^xk* vkj bl l mPp vkofr d Loj yxku ij loknh /ofu mRiUu gkxhA

Loj xke@lxhr dh o.kekyk% fu;fer vkUnkyu okyh /ofu dk Loj dgr gA ;gh /ofu lxhrki;kxh gA lxhr dh Hkk"kk e bl /ofu dk ukn dgr gA bl vk/kkj ij lxhrki;kxh ukn ^Loj** dgykrk gA Hkkjrh; lxhr dh o.kekyk e lkr ey v[kj g ft Ug Loj dgr g Hkkjrh; lxhr e budk l k j x e i /k fu d irhd fpUgk l tkuk tkrk gA ; Loj lki{k g rFkk Lojrjky ij vk/kkfjr gA ikbFkkxkj l u oKkfud : i e ;g le>k fd luu e eukgj yxu oky Lojk dk vuikr l j y ;k NkVh l[;kvk l ikr gkrk gA bl fuEu rkfydk l le>k tk l drk gA

Ø- l-	Loj	NkV uke	vix:t h uke	vix:t h fpUg	vkofr vuikr*	Jfr l[;k
1	"kM t	l k	do	c	1:1	1
2	_"khk	j	re	d	10:9	5
3	xk/kkj	xk	me	E	5:4	8
4	e;/e	e	Fa F	F	4:3	10
5	ipe	ik	Sol	G	3:2	14
6	/kor	/k	le	A	5:3	18
7	fu"kk/k	fu	Si	B	15:8	21

* vk/kfud dky e Hkkjrh; lxhr dh i)fr;k d vu l kj dN Lojk %vuikr% e l fe vrj gA

“kM t] ek/kkj] e/; e] ipe] /kor o fu"kn vFkk r
 l k] j] x] e] i] /k vkj fu ; l c 'k) Loj gA bue
 ^l k* vkj ^i* vpy eku x; g D; kfd ; viuh fu; r
 LFkku ij gh xk; & c t k; tkr gA dkb Loj viu
 fu; r LFkku l FkkMk uhp f[k l drk g rk og dkey
 Loj dgykrk gA vkj Åij f[k l drk g rk rho Loj gk
 tkrk gA j] x] /k] fu tc uhp ¼de vkofr dh vkj ½
 f[k l dr g rc o dkey cu tkr g vkj ^e* Åij
 igpdj rho cu tkrk gA bl rjg lkr 'k) Loj] pkj
 dkey vkj ,d rho feydj ckjg Loj fgUnLrkuh
 xk; u oknu d ey e gA 12 Lojk d ey l gh jkx
 cuk, x; gA okLro e Hkkj rh; l xhr d euhf" k; k u
 l {e vrj d fy, ,d Lo ¼vkofr ½ l m l l nxuh
 vkofr rd d ijk l e ckb l l xhr ki; kxh ukn eku gj
 blg Jfr; k dgk tkrk gA blgh d vk/kkj ij fgUnLrkuh
 l xhr d euhf" k; k u xke dh jpuk dh gA

mPpkofr ¼/ ofu dh Åpkb ½ fuEukofr ¼vkj
 uhpkb ½ d vk/kkj ij Hkh fgUnLrkuh l xhr e rhu
 rjg d l lrd eku x; gA l k/kkj. k /ofu dk ^e/;]
 e/; l Åij dh /ofu dk ^rkj* vkj e/; l uhp dh
 /ofu dk ^eUn* l lrd dgk tkrk gA ek; u dk
 mnkgj. k y rk] e/; l lrd e xy] rkj l lrd e
 rkj vkj eUn l lrd e ân; ij tkj iMrk gA
 Lojk dk l xhr dk : i yu d fy, y; e fuc)
 gkuk Hkh vko'; d gA l ki {k : i e l keku; y;
 ^e/; y; *] l keku; l r t y; nr y; rFkk l keku;
 l de y; fofyfEcr y; dgykrh gA ; gh ugh
 jkxk d xk; u d le; vkj ifjLFkr i/ku gku e
 Hkh oKkfudrk g tk fd Lojk d vuB i; kx ij
 vk/kkfjr gA

XXXXXXXX

मातृभाषा के प्रति हमारी अभिरुचि

Ihek iky ,o vt; iky
okE fgE HkfoE lE ngjknu

Hkkjrn gfj"pUn d bl dFku e fdruh lPpkb g
bl dk vnktk lgt gh yxrk gA

fut Hkk"kk mUufr vg l c mUufr dk eyA
fcu fut Hkk"kk Kku d feV u fg; dk l yA
vxth i< d tnfi l c x.k gkr ioh.k
ij fut Hkk"kk Kku d jgr ghu d ghuA

Hkkjr vku oky fon"kh vDl j ;gk d yxk l
ik; % fgUnh Hkk"kk e ckr dju dh dkf"kk fd; k djr
gA yfdu ;gk d yxk l fofp= yxu okyh]
VVh&QVh vxth e mRrj ludy o yx LoHkkor%
pfdr gkdj db ckj i"u dj mBr g fd D; k vki
d l c l ikphu vkj fo"kk y] m l i tkr=h n"k dh
dkb viuh Hkk"kk&jk"VHkk"kk ugh g D; k\ mudk
vk"p; ,o i"u furkUr LokHkkfod gkrk g D; kfd o
yx tkr g] fQj ;g ,d LokHkkfod fu; e Hkh g
fd gj Lor= n"k dh viuh ,d jk"VHkk"kk gvk
djr g vkj gkuh Hkh pkfg, A D; kfd m l h l m l
jk"V ,o m l dh vyx igpku rk curh gh g] fo"o
d ekufp= ij m l dk eku&lEeku Hkh cuk ,o c<k
djrk gA yfdu cM [kn d l kFk Lohdkj dj
yfTtr gkuk iMrk g fd Lor=rk d i l B o"k
mR l o d : i e euku ij Hkh gekj n"k dh jk"VHkk"kk
dk vHkh rd lfo/kku&lfrk e ek= mYy[k gh
fey ikrk g] 0; ogkj e ljdkjh ;k xj ljdkjh
Lrj ij m l dk i ;kx dgh ugh gk jgkA

n"k dk fodkl vkj jk"Vh; pfj= ekrHkk"kk e
l jf{kr gA bl lEcu/k e egki#"kk u ekrHkk"kk d
egRo dk Lohdkj fd; k gA Lokeh n; kuUn]
foodkuUn] fryd] ekyoh; th u gh ugh fon"kh
fo}ku eDl eyj u fgUnh dh rkjhQ d iy ck/kA
tkiku] phu] : l t l ixfreku n"kk u viuh

ekrHkk"kk dk egRo fn; k g vkj fujUrj ixfreku g
u tku D; k] Hkkjr gh ,d , l k n"k g ft l viuk
dN vPNk ugh yxrk vfir gj {k= e fon"kh
oLrvk dh ckr rk vyx g] mudh lLñfr vkdf"kr
djr gA bruk gh ugh] fon"kh oLrvk d uke ij
Hkkjr; yx viuk xkjo le>u yx gA viuh
lgt l j y Hkk"kk d ifr ?kVrh : fp mud bl l kp
dk gh dkj.k gA

n"k Lor= gvkA Lor=rk d ckn yxk e
Hkkouk Fkh fd fgUnh d fodkl d fy, jk"Vh; Lrj
ij i; k l fd, tk; xA ekrHkk"kk l/kkj d fy,
uhfr; k cukb xb fd f"kk dk ek/; e ekrHkk"kk
gkxhA vxth Kku d fcuk ij"kk ugh gkxhA
lfoKtuk u fgUnh d l kFk ekrHkk"kk dk fo"kk
/; ku j[kkA mUgku fopkj fn, Fk fd ikjFEkd
f"kk ekrHkk"kk gkuh pkfg, vkj jk"Vh; Lrj ij
fgUnh d egRo dk cuk, j[ku d fy, fgUnh dk
Kku nuk vfuok; gkuk pkfg, A ikFked
fo|ky; d ckn vxth Hkk"kk d v/; ;u dk
iko/kku gk] bld i; k l g,] fdUr lefpr i; k l
u gku d dkj.k vxth viuk opLo LFkfkf
djr xba lfoKk u tk ;ktuk, cukb Fkh
mld ifr ltxrk vkj bekunkjh l dk; fd; k
tkrk rk fgUnh ;k vU; ekrHkk"kk vk dh , l h nn"kk
u gkrhA

vxth dk Kku u j[ku oky f"kf{kr yx Lo;
dk g; le>u yx yxk d eu e ;g Hkko iuiu
yxk fd o"ohdj.k d dkj.k vxth dk Kku gh
mudh ixfr e lgk; d gk ldrk gA bruk
ne&[ke vU; Hkk"kk vk e ugh gA bl h fopkj /kkjk u
ifcyd Ldyk dk gok nhA ifcyd Ldyk dh l ;k

db xuh gk xBA ifcyd Ldyk d ifr vkd"kk dk n[k njnjkt d {k=k e Hkh ifcyd Ldy [ky x,A ftue fgUnh Hkk"kk dk dkb egRo ugh fn;k x;kA bl rjg fgUnh dh nn"kk gkrh xBA

vc vkt dk Nk= viuh ixfr viuk mTtoy Hkfo"; vxth e gh n[krk gA og fopkj lekrl gk x;k fd viuh ekrHkk"kk d }kjk cPp dk fodkl lEHko gA mld fy, Hky gh jVV rkr dh rjg vxth d okD; jVu iMA Hky gh viu n"e ge fon"kh dg tku yxA bl rjg viuh ekrHkk"kk dk iFk geu Lo; iFkjhyk dj fn;kA ,lk dju ij ljdkjk u [kc lg;kx fn;k] Hky gh ble mudh foo"krk jgh gkA

fgUnh Hkkjr d lokf/kd yxk dh Hkk"kk gA vU; lHkh i knf"kd Hkk"kk, ykdfi;rk d vk/kkj ij dkQh ihN gA fgUnh le>u e ljj gA ;g rdi.k oKkfud Hkk"kk gA bldh fyfi noukxjh lck/k] oKkfud ,o ljj gA jk"VHkk"kk lep jk"V dk ,drk d l= e ck/k ldxhA fgUnh d ifr gekj

ân; e mPp Hkko gkuk pkfg,A fgUnh dk i;kx dju e ge xkjo le>uk pkfg,A fon"kh Hkk"kk vkj fon"kh lldfr ge dHkh vknj ugh fnyk ldrhA ge bl lFkfr dk le>uk vkj Lohdkj djuk gA uo;odk dk vxth lh[kuh pkfg,] ij mld ekgik"e e ugh Qluk pkfg,A fgUnh dh mUufr l gekjk LokfHkeku tkxr gkxkA 0;ogkj e fgUnh dk i;kx ghurk dk irhd u gkdj vfir xkjo dk irhd gA Jh vVy fcgkjh ckt i;h igy Hkkjr; Fk ftUgku l;Dr jk"V l?k e igyh ckj fgUnh e Hkk"kk ndj ij fo"o dk vk"p;pfd r dj fn;k FkA

fgUnh d egRo ij idk"e Mkyr g, fd lh dfo u Bhd gh dgk g

onk dh ver ok.kh g] jkek; .k] egkHkkjr dh ble gh dFkk lgkuh gA uo;x dh ble /kMdu g] Hkkok dh ble vk"kk g fgUnh gh gekjh ekr vkj jk"VHkk"kk gA

XXXXXXXX

नामकरण

v'kkd nci

ekfgr uxj] ngjknu

e'kgj 'kk;j bdcky u fcYdy Bh d dgk g] ^lkj
 tgk l vPNk fgUnkLrk gekjk**! ejk Hkkjr
 LokHkkfod : i l egku g vkj D;k u gk ft l n'k e
 bru egki : "k g, g og egku D;k ugh gkxkA ;fn
 vkidk ejh ckr ij Hkjk l k u gk rk fon'k tkdj
 pd dj yhft ,A fonf'k;k u lmd cuk yh]
 ;fuoflVh cuk yh] LVfM;e cuk fy; exj ogk
 bru egki : "k ink ugh g, fd bu lcdk fd l h
 egki : "k dk uke fn;k tk l dA dgh yd 0; g]
 dgh ikd ,oU;] dgh gkbM ikd g] dgh xhu fop
 ikd] dgh U;;kd LVV ;fuoflVh g rk dgh
 tkft ;kVdA vkDIQkM vkj dftct ;fuoflVh dk
 vkt rd fd l h egki : "k dk uke ugh fey ik;kA
 gekjk n'k nf[k; egki : "kk dh Hkjkj gA lmd
 iDdh gk ;k dPph fd l h egki : "k d uke ij gkxhA
 ;fuoflVh Hky gh l lkj dh igyh ,d g tkj e u
 vkrh gk exj m l dk uke fd l h egki : "k d uke ij
 gkxkA ekgYyk dkuuh gk ;k xj dkuuh m l d l kFk
 fd l h cM vkneh dk uke tMk gkxkA db ckj rk
 dkb lLFkk flQ blfy; cukb tkrh g fd m l {k=
 d fd l h x.kh 0;fDr d uke ij dkb lLFkk ugh
 gA fonf'k;k dk 'kk;n ;g ugh irk fd fd l h
 dkykuh ;k lmd dk fd l h egki : "k dk uke
 fn;k tk, rk ogk d lHkh fuokfl;k dk m l
 egki : "k d leku cuu dh ij.kk tkxr gkrh
 gA 'kghn Hkxr flg dkykuh e jgk rk n'k ij
 i.k.k U;kNkoj dju dk eu djrk gA xk/kh
 xke e jgk rk lknxh l jgu dh ij.kk feyrh
 g ½xk/kh xke e ,l Hkh db ckj u ikuh gkrk
 g] u iDdh Nr vkj u gh 'kkpky;½ gk! db ckj
 dN leL;k, gk ldrh gA t l ,d 0;fDr xk/kh
 ekx dk edku Nkmdj urkth l Hkk"kk ekx ij

igp tk,A vc og cpkjk vlet l e iM tk,xk
 fd uje ny e jg ;k xje ny eA , l h gh flFkfr
 m l d l kFk Hkh gk ldrh g tk egkjk.kk irki uxj
 Nkmdj vdcj jkM ij edku y y] ;k f'kokth ekx
 Nkmdj vkjxtc jkM ij jgu yxA [kj! ifjoru
 iNfr dk fu;e g vkj m tyk i{k ;g g fd m l d
 l kFk ge'kk ,d egki : "k dk uke tMk gA vki Lo;
 fopkj dfj; fd y{eh ckb uxj e fd l h yMdh dk
 Nkmdj D;k dkb xMk l gh lyker dkykuh l ckjg
 fudy l drk gA

;g nfo/kk dh flFkfr fd l h dkyt d ukedj.k
 d l kFk Hkh gk ldrh gA vc eku yhft; fd l h
 l kbl dkyt dk ukedj.k fd l h jktufurd urk d
 uke ij dj fn;k tk,A ogk d Nk= rk nfo/kk e iM
 tk,x fd og fd l h oKkfud l ij.kk y ;k urkth
 lA bl i'kki'k d nkje tk Nk= urkth l ij.kk
 yr g mudk Hkfo"; T;kknk l jf{kr jgrk g vkj ;gh
 Nk= ukedj.k d vkfpr; dk iekf.kr Hkh djrk gA

ukedj.k dh bl if0;k e gekjk jk"Vh;
 pfj= Hkh nf"V xkpj gkrk gA gekj i tkrkf=d
 n'k e ,d Hkh fgVyj jkM ;k fgVyj dkykuh
 ugh feyxhA bl dk eryc ;g gvk fd fd l h
 'kgj ;k xko e iPhl&ipkl ykxk dk ,lk
 leg Hkh ugh Fkk tk bl ukedj.k dk i;k l dja
 ;fn i;k l gkrk rk m l lQyrk vo'; feyrh
 D;kfd gekjh i tk rkf=d ljdkj d db fu.k;
 bUgh iPhl&ipkl ykxk dh ekx ij fy; tkr
 gA fd l h fQYe dk in'ku jkduk gk] fd l h
 iLrd ij ifrc/k yxkuk gk] ;k dyk&in'kuh l
 fd l h dykNfr dk ckjg fudyokuk gk] bru
 ykx dkQh gA

ukedj.k dh bl ifø;k e ,d vkj dne vx
c<kr g, e ,d lykg nuk pkrk gA ft l rjg l
gekj n'k e u,&u, vkb0vkb0Vh0 [kky tk jg g
D;k u ml h rjg ge vkDIQKM ;k dFect uke dh
;fuoflVh [kky yA f'k{kk dk Lrj dku n[krk g]
cl uke gh dkQh gA ;fn lykg vkidk iln u

vk, rk ml dk ,d fodYi Hkh gk l drk gA ge
igy 'kgj d uke ij fo'ofokly; [kky vkj tc
og fo'o dh igyh nl] ipkl ;k lkoh ;fuoflVh
dk Lrj ikj dj y rc ml fdlh okLrfod
egki : "k dk uke fn;k tk,A igy xk/kh dh rjg
fu[kj tkvk fQj cki viu&vki cu tkvxA

XXXXXXXX

बदलते रिश्ते

I fpu dekj vkfnR;
okE fgE HkfoE lE] ngjknu

ge rk ojnk d k Hkh 'kki le> cB g
l keu i.; g vkj iki le> cB g
igy ek&cki dk nkyr gh le>r Fk ge
vkt nkyr dk gh ek&cki le> cB g

cnyr oDr e ; d lk nkj vk;k g
geh l nj gk jgk gekjk lk;k g
vkt ge mudh tck ij yxk jg cfn'k
ftu c txk u ge ckyuk fl [kk;k g

ydj gkFk dh tk viuh i< ugh l dr
gok f[kykQ gk rk ml l yM ugh l dr
tk viu ?kj d c txk dh dj vun[kh
ejk nok g fd ok vx c< ugh l dr

ftudk dgrk g r vHkx g
fny d t[ek dk <d ugh l dr
ok rk ek&cki dk g fny
gd ok viuk ex ugh l dr
,d ek pkj iky l drh g
pkj ,d ek iky ugh l drA

XXXXXXXX

भू-विज्ञानगीत

vej no cgxi.kk

Ekgk lo{k.k dk dk;ky;]
Hkkjrh; lo{k.k foHkkx] ngjknu

ge xo g ge Hkkjr e] tUe ge bl dh lUrku]
dkb {k= ugh , l k viuk] tk vu l/kkuk l jhrk]
/ke vkj foKku d cy ij] geu iÑfr dk thrk
ekuork fgr geu viuk] loLo rd fd;k cfynku
tUe fy;k ;gk egki : "kk u] Hkkjr ek dk fn;k lEeku]
rHkh xo l ge dgr g] ejk Hkkjr n'k egku]
t fgeky; HkfoKku lLFkku]

;gk vxu l mi th nin l rk vkj /kjr h l mi th l hrk]
ejh ekr Hkfe d d.k&d.k e] g cl rh jkek; .k xhrk]
ge m l h n'k d ok l h g] oKkfud ;gk dk n'ku g]
l R; U;k; dh j {kk fgr] ;gk mBrk l nk l n'ku g]
gjd tho e ge nh [krk] doy cl doy Hkxoku]
ejk Hkkjr n'k egku]
t fgeky; HkfoKku lLFkku]

xt 'kh'k dk dkVdj geu] ekuo /kM ij yxok;k]
gk x;k vej og vx pydj] vkj no iFke og dgyk;k]
'kY; fpfdR l k dh fe'kky] ugh feyrh g vU; = dgh]
ojkg : i /kj jRukdj l] geu <<h g vueky egh]
db [kk t djuh g ckdh tk foKku lEer gkxh]
nkr ry nck; mxyh] tx e ft ru Hkh <kxh]
fu"i {k Hkko l geu rk pkg g l cd k dY;k.k]
ejk Hkkjr n'k egku]
t fgeky; HkfoKku lLFkku]

, d l = e c/k fo'o ;g] gk , d Hkk"kk vkj , d ifj/kku]
l cd k gh cl , d /ke gk] ok /ke , d gk og gk foKku]
fo'o x: ge cu tk;x] ik;x tx e lEeku]
tx d tc tu&tu cky mBx] okg&okg Hkkjr n'k egku]
t fgeky; HkfoKku lLFkku]

l en dk eUFku fd ; k Fkk geu] HkxHk dk eUFku ckd h g]
iFke pj.k e l Ei .k /kj k] geu gh rk uk i h g]
jkr fno l cl yx bl h fgr] oKkfud d jr cf< ; k vu l U/kku]
n'k dk eku c<ku gr] yxk okfM ; k l LFkku]
l c l k/ku l jg l eUur] ejk Hkkjr n'k egku
t fgeky ; HkfoKku l LFkku

nok l j l xke Hkh t hr] vkj rkjd ;) geu t hr
/keLFk kiuk d [kkfr j] ge egkHkkjr Hkh t hr
g /kU ; ; gk dh ykd dFkk ,] vkj /kU ; ; gk dk n'ku g]
g /kU ; gekjh on _pk ,] ge ftu ij ge xokd "k.k g]
fgeky ; l h g e?kk 'kfDr] ft l d ge l c g /kuoku]
ejk Hkkjr n'k egku]
t fgeky ; HkfoKku l LFkku

gk vo l j ; fn l yHk l Hkh dk] ; gk ifr Hkkvk dh deh ugh]
, dy0 ; ; gk ij fey tk , x] fonj d .k l c fey ; gh]
; gh eUFku djuk vHkh ckd h] bl ij yuk g l Kku]
iu% ifr "Bk rHkh feyxh] l Pp vFkk e ifgpku]
rHkh feyxk ofpr tu dk] oHkork dk l [k l Eeku]
ekuork dk gk ik , xk] rc l Pp vFkk e dY ; k .k]
l c , d Loj e cky mBx] t & t Hkkjr n'k egku]

तरल समावेश

fnu'k dekj pkgku
Hkkjrh; HkoKkfud lo{k.k] y[kuÅ

e rjy dk uUgk l;kyk(Hk&'kk/k e g f'kokyA
l Hkh ;xk e ejh vkcknh(vkXu;) dk;krfjr ;k vol knh
e l nk gh nh?k&vk;] l ek;h gb e> e t k ok;A
dHkh drkj] dHkh ryk e] dHkh ejk LoPNn for j.k]
l nk jgk g ejk fBdkuk] fe= [kfu t k dk i x.kA

dHkh e curk ef.kHk l 'kkfHkr] dHkh yrk g xkykb]
dHkh e pkMh [kky l jpuk] dHkh c< ejh yEckbA
ejk l ?kVu no] x l dk feJ.k] ij t c fey Bk l dk l xe]
n[k ejk ; : i eukje] , d vR;Ur gh n' ; fogxeA
rki nkc e> djr rx] bu l yxrk e>dk Mj]
ejh dk;k fo : ifr djd] yr ej : i dk gjA

Bmd e te tkrk g vkj ued dk Lokn crkrk g]
ij t l fey rki dh /ki] cny yrk g e viuk : iA
ejh vfre : i gh g ej ikjHk dk Lo : iA
/kkrvk l xgjk ukrk] e> l mu rd igpk tkrk]
xgjb;k dk Kku djkd] ior dk mRFkku crkrkA

jRuk dh igpku djrk] Hk&rki h; bfrgk l jpkrk
n[kk e> e g fdru x.k] dHkh rk ejh 0; Fkk r l uA
t jk l k vuojr ?kj y e>dk] ejk tud ik t k; xkA
thou e /k; j [ku dk x.k] fnu'k r> e Hkh vk t k; xkA

XXXXXXXX

सोच

dYiuk pUniy

okE fgE HkfoE lE] ngjknu

lu xkj;k
e vkj r
nkuk dk gky , d l k g]
r Hkh b l nfu;k l xk;c gk jgh g
ejk Hkh ;gh gky g
vku oky o"kk e e Hkh /khj& /khj ylr gk t kÅxhA

ru iNk ugh e dku
vj rjh lgyh
t k r> j k t viu gkFkk l
nkuk nrh Fkh] dVkj e rj fy,
i kuh j [krh Fkh]

vc rj fy, ?kj d l kj
f[kMdh njok t cn gk x, g
r vk,xh Hkh rk d l \

vkj e b l ?kj dh pkgj nhokjh e cn
fu;e&dkuu
cu jg ej fy,]
l k l yu d fy, >jk[k Hkh ugh
dgh [k ki dk Mj
dgh ek&cki dh ukd dk Mj
l geh&l geh l h g ft Unxh]
dy iMk l l cPp d #nu
dh vkok t l ukb nh rk
eu mnk l gk x;k

vj ,d vkj i jh dn gku
b l /kjk i j vk xb \

lu xkj;k r cgr
HkkX;"kk yh g \
rj i k l rk i [k g
Qykdj mMu d fy,
viuk ,d vdk" k rk g
ej i k l rk viu
eu dh ckr dgu dk l kg l Hkh ugh
fd e t huk pkgrh g
e i <uk pkgrh g
vx c <uk pkgrh g]
;g l c c/ku rkMu dk eu gkrk g
ej fy, gh D; cuk, x, ; l kj fu;e&dkuu

e b"oj l dgxh
c"kd e> ,d NkV k l k
t hou nuk
i j cukuk ,d xkj;k
de l de viu fg l l dk
vdk" k rk yxh]
vkj Qykdj viu uUg i [k
,d ijok t Hk : xh
vkj nj vdk" k e
mUeDr mMxhA

XXXXXXXX

तलाश

eti iir

okE fgE HkfoE lE] ngjknu

fo"ok l dh ,d uk t d l h Mkj Fkke
 cgr nj py vk,
 ij ekye ugh Fkk
 fd eft y dgk gA

vk lek vkj teh d feyu dh j [kk dk
 le> cB eft y
 ij pyr&pyr n [kk
 ; rk f{fkr t gA

nh, dh fVefVeKvh yk dk
 ft nxh dh vk l eku cB
 ,d le; vk;k
 tc yk Hkh c>u yxhA

mu vk [kk e m l g l h e
 m l ek l fe; r] m l f [kykf [kykgV e
 yxk ft nxh ; gh rk g
 ij tc m l Fkkeu dh dkf" k" k dh rk
 l c gk Fkk l fNVdu l k yxkA

rHkh ,d vgl l l u tku dgk l pid l vkdj
 e> y pyk ejh mxyh dk Fkkedj
 e l kp ; dku e> pkn rkjk dh nfu; k e fy, t k jgk g
 ; dku g t k ejh jgk dk jk"ku dj jgk g
 g dku t k e> g l uk vkj f [kyf [kykuk fl [kk jgk g
 ; dku g t k xgjk b l ej fny dk N jgk g
 xkj l n [kk rk vj ; D; k
 ; rk ejk gh vD l g
 t k e> ft nxh l : &c&: dj k jgk gA

xxxxxx

सफोकेशन

jkt'k dekj oek
Hkkjrh; lo{k.k foHkkx] ngjknu

ckr ijkuh g] l; kj dh dgkuh gA lnh dh 'kke Fkh] gok toku FkhAA
ge fgUnh lEeyu e tkuk Fkk] LV'ku ik l Fkk] t gk l jy dk gkuk jokuk FkkAA
mu fnuk l kinkf; d nxk dk >eyk Fkk] jy d ij fMcc e c l e gh vdyk FkkAA
vuk; k l gekj nkr BM l fdV fdVku yx] rk ge j t kb xnn ; kn vku yxA
tYnck t h e iRuh dk d<kb okyk 'kky y vk; Fk] m l fnu ge l pep cgr 'kek, FkAA
ejrk D; k u djrk cnu dk l eV[k] m l h e viuk dk yiVKA
eN <du d ckn ?k?k] kky cky gh gok e ygjk jg Fk] ge m l l e; dkQh bByk jg FkAA
iBkuh lV ij] t ; ijh tfr ; k Fkh] gkFkk e pknh vkj l ku dh uxnkj vxkB ; k FkhAA
vpkud , d ghjk Nki yMdk fMcc e vk; k] e> vdyk n[kdj eLdj k; kAA
l keu dh l h v ij cB if=dk i <u yxk] duf[k; k l ge n[kdj viuh vk[k l du yxkAA
geu l e> fy; k fd gekj 'kky e HkVd x; k g] ygjkrh tYQk e yVd x; k gAA
geu Hkh 'kjkjr l vk[kk dk u'khyk cuk m l n[kk] 'kjhj dk vnk e l eVKA
m l d cnu e dEiu l k vk x; k] yxk t l m l T; knk gh e t k vk x; kA
eu 'kjhj dk FkkMk vkj l eV[k] m l u Qnk vkx yiVKA
ckyk ek l e l xhu g] cMk jxhu g vdyh t k jgh g vki \
gekjk fny ?kcku yxk] ok viuk i t k gekj i t dh vkj c<ku yxkAA
/khj&/khj m l dk i t k gekj i t d Åij vk x; k] gekjk dy t k eg rd vk x; kAA
ik l vkdj if=dk i <u dh ftn dju yxk] vkj ge l fpiVu yxkAA
[kkyh fMcc 'kke dk l UukV[k] cn f[kMdh cUn njok t kAA
l pk] ge pi jg rk vkt gekjk l c dN yV t k; xk] dkb dN t ku Hkh ugh ik; xkAA
rjUr pgj l 'kky gV[k; k] vkj eNk i gkFk fQjk; kA
dgk] ykvk ftn djr gk rk if=dk i < yrk g] vkidh bPNk ijh dj nrk gAA
ok rk vkleku l t ehu ij vk x; k] ; kfu dh ?kckj x; kAA
gkFk ij dkiu yx] lfn; k e Hkh i l hu vku yxA
; gk rk l Qkd'ku g] ?kVu g] dgdj ok Hkkxu yxk] rc gekjk l kg l t kxu yxkAA
eu m l dgk ; gk rk dkQh ykd'ku g] cV[k vHkh rk ekeyh l k l Qkd'ku gAA
t c fMfx; k l Hkj chQd l d l kFk HkVdkx] l Qkd'ku rk rc ut j vk; xkA
; vkf'kdiuk cdkjh vkj Hk[k e nc t k; xkAA
t c pi jk l h rd dh ukdj h d fy,) urkvk vkj nykyk d ik l t kvkxA
viu vUnj vFkk g l Qkd'ku rk rc re ikvkx
l e; cgr FkkMk g] viu vki dk Hkkoh l Qkd'ku l cpkvk
vkj ; yoLVkj h ; gh ij Hky t kvkA

XXXXXXXX

संस्थान समाचार

LFkkiuk fno l l ekjkg

29 tu 2013 dk lLFkku dk irkyh lok LFkkiuk fno l euk; k x; kA bl vol j ij ineJh ik d-, y- pkiMk e[; vfrfFk Fk vkj mUgku bujpfjx buko"ku ,M ,UVjl; ujf"kiB fo"K; ij 0; k[; ku fn; kA bl vol j ij Mk- th- fQfyi] , l-, l- Hkkduh vkj , u- l j" k d iij dk cLV iij vokM fn; k x; kA lLFkku d depkfj; k dk e[; vfrfFk }jkj fofHkUu ijLdkj inku fd, x, rFkk vf"edk vd 19 dk foekpu Hkh fd; k x; kA

fgUnh i [kokMk

lLFkku e fnukd 14 fl rEcj l 28 fl rEcj] 2013 rd] fgUnh i [kokMk euk; k x; kA 14 fl rEcj dk nhi iToyu vkj l jLorh oUnuk d l kFk fgUnh i [kokMk dk "kHkkjHk fd; k x; k] bld vUrxr Ldyh cPpk o lLFkku d depkfj; k d fy, fofHkUu ifr; kfxrk, vk; kft r dh xBA bl vol j dh e[; vfrfFk Fkh MkO lfpfLerk luxlrk ik.M;] mik; Dr flfoy llykb] mRrjk[k.M l jdkjA Mk- lfpfLerk luxlrk ik.M; }jkj , d 0; k[; ku fn; k x; k ft l dk "kh"kd Fkk pLokhe foodkuUn dk fgeky; ie ,o mudh dfr; k e oKkfud vo; oBA Ldyh cPpk d fy; , d fucU/k ifr; kfxrk dk vk; k tu fd; k x; k ft l dk "kh"kd d{kk 6 l 7 rd cPpk d fy; "Hk"Vkpj eDr Hkkjr d ifr ; okvk dh ftEenkjH Fkk** ft l d ijLdkj bl idkj jgA iFke% vHkhrh feJk] IV tkIQ vdkneh; f}rh; % vjfcuk pkgku] jke l; kjh vk; dU; k b.Vj dkyt; rrrh; % jhrk dUj] IV Fkke l dkytA d{kk IX l XII rd d cPpk d fy; "kh"kd Fkk "fo| kFkh thou e buVjuV dk i; kx; fdruk mi; kxh**A ft l d ijLdkj bl idkj jgA iFke vk: "kh of"K"B] dUnh; fo|ky; , Q-vkj-vkbA f}rh; % vkjrh lgjkor dUnh; fo|ky; vkb-Vh-ch-i-h-A rrrh; % veu frokjH] l-t-h- vkj-vkj- clr fogkj A bl vol j ij lLFkku d

depkfj; k d fy; ukjk ifr; kfxrk ^cfV; k cpkvk^ dk vk; k tu Hkh fd; k x; kA ft l d ijLdkj bl idkj jgA iFke% vpuk ckgjk(f}rh; % Hkku irki(rrrh; % jft rk "kDyk(l kURouk ijLdkj% dfork f=i kBh vkj gf"krk t k'khA

ijLdkj iklr ukj fuEufyf[kr Fk%

cVh ck> ugh] x.kk dh [kku g]
cVh vfHk"kk i ugh] b"oj dk ojnku gA
djuh gk vxj thou dh j{kA
rk dU; kvk dh dj k l j{kA

dgrh ekle cfV; k] e rjh /kj k dk cht g ek
e> ik/k cu] ?kj ifjokj pyku nk
ugh [kV dkb e>e , l h] e>dk nfu; k e vku nkA

dkj okn ugh pyx] oknk dk l kdkj cukvk
Hk.k gR; k] "kkjhfd "kk"K.k] cn dj k cfV; k cpkvkA

v"K dkVdj viuk re d l o"K c<kvkx]
cVh gkxh rHkh l Ldfr cpk ikvkx
tUe ndj dj k l Eeku vkj dgykvk bu l kuA

cfV; k thou dk ey vk/kkj] jkd k bu ij vR; kpkj
fey dj l c*cfV; k cpkvk^] rHkh cpkx; ; l l kA

lLFkku d depkfj; k d fy; , d fucU/k ifr; kfxrk dk Hkh vk; k tu fd; k x; k] ft l dk "kh"kd Fkk ^efgykvk d Aij c<rh fg l k jkdu e vke tu dh ftEenkjH^A ft l d ijLdkj bl idkj jgA iFke% i : "kkRre dekj xx; f}rh; % MkO l rk"K dekj jk; ; rrrh; % gf"krk t k'kh; l kURouk% MkO je"K dekj lgxy vkj geyrk iU; yhA bl i [kokM d vUrxr , d 0; k[; kuekyk dk vk; k tu Hkh fd; k x; k ft l e fuEufyf[kr 0; k[; ku iLrr fd; k x;

- mRrjk[kM dh ikdfrd vkink ,oe fgeky; fodkl uhfr ¼oh- l- frokjh½
- dnkjukFk vkink ¼ih-, l- uxh½
- ykd foKku ¼ fgeky; 0;k l cflu dh ykd okLr dyk dk ,d v/; ; u ¼“kHkk “kek½
- dEl; Vj ,oe l kbcj l j{kk ¼r t Un vkg t k½
- xxk fudk; dh unh; xfrdh ¼, l- d- jk; ½
- y[kk vuHkkx d dk; k dk fu; eku l kj fu"ikfnr djugr dN egRoi. k t kudkfj; k ¼gjh" k pUn½
- lgdkfjr k ¼v thr xlr k½
- fgeky; d uk t d {k= ¼inhi JhokLro½
- ikuh dh x. koRrk ¼, l- d- cjrj; k½

bl volj ij fofHkUu oKkfudk ,oe l kfgR; dkjk }kjk 0;k[; ku Hkh iLrr fd; x; A Mk- ,e- ih- t k"kh ¼io ikQl j rFkk ie[k] ijkrRo foHkkx] dekÅ fo"ofon; ky; ½ nokjk 0;k[; ku fn; k x; kA ft l dk "kh"kd Fkk be/; fgeky; e ekuo ,o ty% ijkrRo d ifji{; e pA bl volj ij jk"Vh; Lrj d dfo; k nokjk ,d dk0; xk"Bh dk Hkh lQy vk; ktu fd; k x; kA dfo l jUn "kek e[; vkd" k. k dk dUn jgA bl i[kokM d lekiu lejkge Mk0 efu jke l dykuh dk vkefU=r fd; k x; k ft Ugku pHkkjr ljdkj dh jkt Hkk"kk uhfr vkj mldk fØ; kUo; up ij 0;k[; ku fn; k vkj fofHkUu ifr; kfxrkvk d ifr Hkkfx; k dk ijLdkj forfjr fd; A

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