

# बायोटेक

समाचार

जैव प्रौद्योगिकी विभाग, भारत सरकार की समाचार पत्रिका

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## इस अंक में

lkBdla ds i =

2

Ykfx

Hkkjr eaVh ys'kuq dk; yk'kch  
Lsyh i'koi T sLve dfr'kak rd  
Mh- ckyk T pef.k; e

3

tò i kS] kfxdh foHkkx]  
foKku vSj i kS] kfxdh ea-ky; ]  
Hkkjr T jdkj

lkohure

LoLFk gn;  
dfr'kch k'kch ea tò i kS] kfxdh  
T k'kch, j  
T ouh dSj vSj T h h dfr'kz

6

: lkjck

dfr'kch; [kk] i kS] kfxdh  
vud'kku T k'kch

9

dy'kbMk.dkS

d ubZmMku dk T j k  
frfry; h dk i kdZ  
pnr "k'kch N".kS k

11

Lketpkj

14

I puk i Vy

16





# i kBoka ds i =

lkrfø; k

ck; kv/d l ekpj dsnit jsvkš rhl jsvadkadksi <usdk vutko jkpd jgkA ; g , d , d h l ekpj if=dk ds: lk eal keusvk; k gš tsek= , d l ekpj if=dk ughagA ck; kv/d l ekpj if=dk dsckjsea; g dkr mYyqkuh; gšfd ; g tš i kš kšxdh tš stfVy fo'k; dksbl izdkj i Lrnf djrk gšfd , d l kekl; i kBd Hkh bl sl gtrki mzd l e> l drk gš fo"kskdj Ldnyh cPpš ftUgkausvHkh fo'k; dksl e>kuk "kq ughafd; k gš ep-s vk"kk gšfd ; g vf/kd l svf/kd LdnykadksHksth tk jgh gksxA

ejk l pko gšfd ck; kv/d l ekpj eal kekl; i kBokads, d cMsoxZdks, d 0; ki d utfj; k inku djusdsfy, tš i kš kšxdh ds0; ki d {ks= ea foHku uohure fo'k; kai j yš kach, d Jškyk "kq djuh pkfg, l fo"kskdj cPpkadsfy, l tskHkoh oKkfud cuakA

ck; kv/d l ekpj tš i kš kšxdh dsrstH l smHjrs(ks= dksgrj : i l si Lrnf djusdk vR; Ur mi ; ksh ek/; e fl ) gsl drk gš ft l eai R; {k ; k vi R; {k : i l stšš0; fDr; kach l š; k vš vkfkd i {k dsl anHkeal ipuk i kš kšxdh l svkxsc<usdh l Hkkouk fufgr gA

MkW kf'kdllr] , l kf l , V i kQd j] QšdYVh vKWd OkjLVh] ; fuofl Zh vKWd Vkj š/kj vkašfj ; kj dukMk

tš i kš kšxdh foKku dh og "kk [kk gšft l ij oš"od rFk ?kjsymlrj ij /; ku nuseanj gšZgA tš i kš kšxdh {ks= vi uh fHkurk vš i kšfrd : i l smiyC/k l d k/kukadsfujarj fodkl vš mfor mi ; kx grqi Hkkoh rjhdkadsdkj .k rstH l svkxsc<jgk gA tcfcl tš i kš kšxdh , d , d k fo'k; gš tks i ; kš vš l fuf"pr fuf/kdj .k dsfcuk vksughac<+l drkA Hkjrh; okfudh ea tš i kš kšxdh dh Hkfedk [kk] l j {k vš l rr xkeh.k vktfodk eavR; Ur egRoikWz gA okfudh tš i kš kšxdh ds {ks= eac<rh oKkfud i frHk l sfuf"pr : i l sjk"V dks ykHk gksxA tš i kš kšxdh l smRi kndrk c<+l drh gšvš ouki t l stššokf.kT; d ek; kael dkkj gsl drk gš tcfcl bl dsl kfk dš [kršHk tššgq gA cškd] tš i kš kšxdh eagekjh fujarj c<Hh tul š; k dh c<rh t+ jrai jh djusth vi škr l Hk0; rk fufgr gA

ck; kv/d l ekpj , d , d sl e; ea"q gvk gštc foKku fo'k; dksvi usdšj ; j dsfy, pšusokysNk=kach l š; k ?kV jgh gA ešMhctVh dh bl igy dh iz'kd k djrk gšvš bl u, : i eal ekpj if=dk dksykusdsfy, c/kkznrk gA

MkW vkj- ,y- JhokLroj vkbZ, Q, l funskd , fjM OkjLV fj l pl bšVhV; W] tks'ki j & 342005 jktLFkku ■

# I Eiknd dh vskj l s

tš i kš kšxdh foHkx usvi uh vkf/kd kfjd l ekpj if=dk ck; kv/d l ekpj dks i q0; šfLFkr fo'k; oLr] u, : i vš c<h gšZvkofYk dsl kfk nkckjk "kq fd; k gA vki dks; kn gšok fd bl dsfi Nysl šdj .k 6 ekg dsvarjky ij o'kZeanksckj izdkf"kr gvk djrsFkA geusvutko fd; k fd oržku izfr l svoxr jgusvš tš i kš kšxdh foHkx }kj nntšfd, x, tš i kš kšxdh dsfoHku fodkl kach tkudkjH i kBokard i gpkusds fy, l ekpj if=dk igysl svf/kd l š; k earFk fu; fer varjky ij izdkf"kr dh tkuh pkfg, A i kBokadsiki bl dsrhu vad i gš pšsgš ; g nksek g dsvarjky ij i šrdckj vš byšVNLud : i l szdkf"kr dh tk, xhA

tš k fd igysmYyqk fd; k x; k gš geusbl svf/kd tkudkjH všvš i kBokadsfy, mi ; ksh cukusdsfy, l kexh dks i q0; šfLFkr fd; k gA i R; d vad eal frf"Br tš foKku fo"kskKs }kj fy [ksx, fo"ksk yš k gkaxA "uohure LrHk" thofokku@tš i kš kšxdh ds vxz kh {ks=kacs škfrd fo"ysk .k ij dšnr gskxA "uohure i kš kšxdh" eal šFkkukavš m | kx dsuohure fodkl ij izdkf"kr Mkyk tk, xkA "MhctVh l ekpj" dsvarxš vki dksfoHku oKkfudk cBdkš fopkj & ešku l =kš varjjk"Vh; l g; kx vkfn dh tkudkjH feyxhA "i kš kšxdh varj .k" eavki i k, ps m | kx eagq uohure i kš kšxdh varj .k vš tš i kš kšxdh mRi knkš i šekarFk budscktkj eamrjusdh tkudkjH " : i jškk" uked LrHk ea vki dks tš i kš kšxdh ds {ks= eal f0; fdl h l šFkku l si fjfpr dj; k tk, xkA var eš "Y ipuk i Vy" ij vki dks tš i kš kšxdh foHkx dh vš l si Lrkoka dk vka= .k Hkfo"; eagkusokyh cBdkš tš i kš kšxdh foHkx rFk bl dsLok; Yk l šFkkuka eafjDr LFkku] u, izdkf"kuka vkfn dh tkudkjH feyxhA

gekjh bl igy dh iz'kd k djrs gq geadbzi = feysgA ep-svk"kk gš i kBd geafy [krsjgksfd osck; kv/d l ekpj eadkš l si fjorZu pkgrsgA

bu l Hkh cnykoka dsl kfk gekjk y{; l ekt ds, d cMsoxZrd igpuk gš fo"ksk : i l sfo | ky; kš egkfo | ky; ka vš m | kx rFk thofokku vš tš i kš kšxdh ea#fp j [kusokysLo; d dh l xBular dA ■

, l - uVsk  
Okj' B l ykdj  
bšey %natesh@dbt.nic.in





# Lekty i kDl I sLVe dks"dkd rd

Yk [k

ea bat'fu; jh vks i ks| kfxcdh ds cM ds : i ea LFkfi r gks x, ( I h, el h) o'lyky enkl vks LVuysefMdy dKlyst] dbz e rFkk fdax t'kiz vLirky us'kuy b'LVH; W duuj] gKOfdu I LFkku vkfn us Hkh viuh txg cukbz tks 1970 ea Fk; vkbz h, evkj dks u; k : i fn; k x; k vks vf[ky Hkjr; vk; foKku I LFkku] tksvkj'kk fd; k FkA

bu I cust'eb fpdfRI k vuq' akku vks tu LokLF; ds i'kkj ij /; ku d'fjnr djrsgq , d egROI w'z vks I g; kxLRed Hkfredk fuHk'kbz gA bu iz kl kadsQy ijsn'sk eal Ykj dsn"kd eafeyus vkj'kk gksx, A ; g V'ka ys'kuy i ksk.k dk n"kd FkA t'b j l k; u vks ek; fed p; ki p; ds i fj .kke ; g i fj Hk'kr'kr djuseami ; kx fd, x, fd i k'hu& ds'kyjh d'ij ksk.k D; k gA Hkjr ds foHkku Hk'f; i nkFk'ad h i kskf.kd ek=k vks eV; dks igyh ckj oxh'Vr fd; k x; ka xyx'f'k dk dkj .k vk; k'hu dh deh g' ; g Kkr g'p'k vks vk; k'hu; p'r ued ds forj .k vks mi ; kx dk , d I Qy jk'Vh; v'f'k; ku vkj'kk g'p'kA v'PNh n'V dsfy, foV'kfeu \*, ^ dh Hkfredk dk i rk pyk rksLd'nyh c'PpkaeafV'kfeu \*, ^ dh cMh [kjkdanh tkusy'x'h' r'kd jrk'kh vks n'V dh deh I s t'p'le vl; igy'p'kal sfui V'k t'k l dA

o'kz 1970 ea Hkjr; i s'v' vf'kfu; e ds ykxw gksus I s I ko'z'fud vks futh {ks=k' nksukaeamRI knkadsLFkku ij Hkjr ea cMh I ; k eavks'f/k dEi fu; kads i d'j .k dh of) g'p'A p'fd nokvka dh dhera vpkud ?V x'b' fpdfRI k n'f'k'ky vks I ko'z'fud LokLF; ij bl dk i Hkko Li 'V gA Hkjr o'kz 2005 I s M'CY; W'hvks i s'v' I e>k'sea "k'fey g'p'k] gead'oy i 'e i s'v' dks eku; rk nusdk fo'k'k y'kk I elr gksx; ka I jdkj ds ikl vc Hkh vuq' nokvka vks fpdfRI k m'ri knkads jk'Vh; LokLF; dsfgr ea bl i f'rcak I s vyx j [kus dh i; k'r Lor'a'rk gA bu ds c'lot'm] vuq' 0; fDr; kads'p'ark Fkh fd nokvka dh dhera

vkI eku Nus yx'achA Hkjr; o'k'fudka dks cMh Oke'z dEi fu; kads I k'f i f'rLi) k'z dh r'f'k u, v. k'p'k' u'bn'fudh vks fpdfRI k I a'akh m'ri knkadh [k'k' d'jusdh p'p'k's'h feyhA osbl p'p'k's'h I s ds' sfui V'rs g'afotr'k dh r'jg I keus vkrs g' bl s n'f'u; k n'f'k jgh gA ep's; g vk"kk g'sfd vuq' fotr'k I keus vk, a'kA

bl vk"kk dk dkj .k ; g gSI u vLI h dsn"kd eavkj'kk fd, x, d'f' egROI w'z vks j'kpd fodkl A vk'k'ud thofokku dks I efi'r vuq' vuq' akku I LFkku v'f'rRo ea vk, A vuq' fo"fo' |ky; kads thofokku foHk'x'kausvi uk \* : i k'rj .k' fd; kA vuq' Hkjr; kaus d'k'k vks vkf .od thofokku] vku'p'k'k'kdh vks i p; k'k't rdud'h' i f'rj {kk foKku] I j'p'utRed thofokku vks t'b I p'okfoKku dsu, m'k'j'rsfo'k; ka eafons'k ea i f'k'k .k i k'r fd; k vks viusn'sk oki I vk, A u, fpdfRI k I LFkku] ftuea f'dy'fudy vks e'v'f'nr vuq' akku "k'fey Fk; I ko'z'fud x's & y'kk'kdj'h vks d'k'w'k'v' {ks=k'eamHk] dj vk, A t'b i ks| kfxcdh foHk'x dk t'le g'p'kA t'b i ks| kfxcdh foHk'x vks vkbz h, evkj v'v'k' Mh, I Vh] I h, I vkbz'k'j] vkbz h, vkj] M'hvkj M'hvks vks Mh, b'z }k'jk vkj'kk fd, x, ck'g; vupku vks i fj; kst uk; i e'j'h vk"kk dksvk'kkj n'sh gA

t'cfd I u I k'b dk n"kd g'f'r O'k'ar dk n"kd Fk; I u 1980 ea "or O'k'ar vkj'kk g'p'A bl dsckj seamY'q'kuh; ckr ; g g's fd bl dsfy, \*m'p'p foKku^ dh t+ jr ugha Fk'A t+ jr Fkh rks I epk; ds I g; kx dh] I Hkh x'f'rof'k; ka ea Lok'f'ero r'f'k i k'j'n'f'k'k dhA bl h n"kd ds n'f'g'ku] i 'k'p'ka ds i hNs pyrs g'g v'k'okbu O'k'ar ea c'g'p'f'kr Lrj ij n'sk ea i k'v'h vks v. Mk m'ri knu dk Qh c<+x; ka c's'kd bl I s t'p'le d'kbz V'ka ys'kuy thofokku ugha gA osft l i n'f'k'ar d'j'rs g'og g's I kep'k'f; d Hk'x'h'k'j'h dh "k'f'r] I "k'r'h'dj .k vks m | eA bu I c I sfuf"pr

" Tk'cfd I u I k'b dk n'kd g'f'r O'k'ar dk n'kd Fk; I u 1980 ea 'or O'k'ar vkj'kk g'p'A bl dsckj's ea m'Y'q'kuh; ckr ; g g's fd bl dsfy, \*m'p'p foKku^ dh t+ jr ugha Fk'A t+ jr Fkh rks I epk; ds I g; kx dh] I Hkh x'f'rof'k; ka ea Lok'f'ero r'f'k i k'j'n'f'k'k dhA "



# Lekn i kdl I sLVe dks"kdk rd



vc ge o'kz1990 dh vlsj pyrsga bl h n"kd eack; kv/d dEi fu; k; vkbA buds }kjk foi f.kr i gyk mRi kn fgi v/bfVI ch ds fo: ) i q; kkt VhdK FkA ; g Vka yskuy ck; ykth dk mnkgj.k FkA tks "cp Vq cMI kbM u gkdj cp&Vq vokbM cMI kbM FkA ge f"kk txr&m|sx ds chip ftI idkj ds I adk dh irh(ck dj jgsFkA og I keusvk x; kA ; g okLrfodrK fd Lon'skh mRi knu I s dherka ea 100 i fr"kr dh deh vkbZrc VhdKdj.k vf/kd i pfyr gqk vlsj cMh I d; k ea yskae rd i gpkA ; g id Uurk dh

ckr gSfd ekuo jskkads f[kyko nfu; k Hkj ds Vhdka dk yxHkx 45 i fr"kr Hkx Hkjr ea cuk; k tkrk gA jkT; I jdkjkausl fO; mik; fd, ga vlsj "ck; kv/d i kdk dh LFkku dh ga f"kk vlsj vuq akku {ks=ka I s tB i kS} kSxdh dh fr"kk ea yxkrkj} fdUr /kheh xfr I s m|fe; ka dh I d; k c<+ jgh ga f"kk txr] vuq akku iz, ks"kk ykvka vlsj m|sx dks, d I kfk ykdj "Lo.kz f=Hkqt" cukus I s bl s Lokx ; k; I eFku feyska

Hkjr eabl n"kd eaLVe dks"kdk thofokku vlsj iqtzu fpdfRI k ds tle] i sk.k vlsj of) ea : fp cuh ga LVe dks"kdkvka ds nks egROIWZ vlsj mi; ksx xqk g% buea Lo&uohdj.k vlsj gtikja idkj dh dks"kdkvka eafkflur gkus dh {kerk gsrh gS tksfofHku idkj ds Ard] vx} gkF&isj vlsj vnr%Lo; a thocusdsfy, vko"; d gsrh ga ge I Hkh, d h gh , d LVe dks"kdk dsmRi kn gS tksGsgkjeh ek; ds "kj hj dh , d fu'kspr v.M dks"kdka Lo&uohdj.k dk vfkz gSey dks"kdk ds xqka dks [kks ; k cnysfcuk ml ds I eku vuq i fr; k; rS kj djuka fu'kspr v.Mk ckj&ckj fohkfrtr gkdj igys CykLVkfe; j] fQj CykLVkfe LV] fQj Hkxkj xHkZFK f"kk"qvlsj vnr% f"kk"qacukrk ga CykLVkfe; j ; k CykLVkfe LV dsvn: uh dks"kdk I egi I sCykLVkfe; j I sgeaHkxh; LVe dks"kdk ; k bz I I h i ktr gsrh ga pfid bu bz I I h eafdl h Hkh dks"kdk idkj eafokfrtr gkus dh {kerk gksxh} blga Vks/hi kS/v dgrsga gekjh vk"kk bl h I Hkkouk i j fvdh gSfd vuq akkudrZ tYnh gh bz I I h i ktr dj

I dks vlsj blga bfpNr vx ds : i eafodfl r dj I dks vlsj bl rjg bykt I Hko gkskA ; g {ks= vHkh vi uh "kskokoLFk eaga vaka dsmRi knu dk I i uk I kdj gkus ds i gyscgr I kjk ey/Hkr thofokku I e>uk cdh g% bz I I h eafufgr I Ei wZ thuke eafdu thukadksl fO; vlsj fdlgafufO'; cukuk gS dks I sugh( fdrus idkj dh dks"kdk, i mRi uu dh tk, i vlsj blga fdl idkj tkMej cgq dks"kdh; vx cuk, tk, i vkfna fuLl ng] dks"kdk tho okk fudkads i kl bl I e; bu I Hkh vlsj



vlu; i t'uka dks i kus dh pupksh gS ctk; fd os vx cuk, A blga {ks=ka ea I Hko gSfd vxyk ukcy i jLdkj feyA

LVe dks"kdk, i "kj hj ds dN Ardka vlsj vaka ea Hkh i kbZ tkrh ga pfid ; smu Ardka ea i kbZ tkrh ga tks fHkuu dk mRi kn gS vlsj Hkx dk fodkl cgpkf"kdh; dks"kdk I egi I s gqk gS blga o; Ld LVe dks"kdk ; k , I I h dgrsga buea vlu; vuq dks"kdk idkj ea fHkflur gkus dh {kerk

gsrh gS tcd ; sbz I I h ftruh fHkuurk dh {kerk ughaj [krA , , I I h Iyji hi kS/v ga , , I I h dk i Fkdj.k vLFk eTtk] ekj i f"k; kavlsj us= ds, d fgLI sl scuk; k tkrk ga nkosfd, x, gSfd ; s; Nr] fdMuh vlsj dN vlu; vaka eakst m gsrsgS i jUrq; g Li'V ugha gSfd ; s i kst fuVj dks"kdk, i %doy i kskh Ard eafodfl r% gS VksI , v/ y i of/kr dks"kdk, i % kskh Ard {kr dh ejEer eaenn d jusdsfy, % okLrfod LVe dks"kdk, i ga bl fookn dks vuq akku ds tfj, tYnh gh I y>k fy; k tk, xk( vlsj ; g Hkh vk"kk gSfd bu , , I I h dks tYnh gh "kj hj ds vlu; Hkxkaeai k; k tk, xka

, , I I h dh Iyji ki kS/v h dN fpdfRI h; vuqz kskaeami ; ks dsfy, vkd'kd ga bu iz kstuka dk I cl svPNk I kr gS vLFk eTtkA ; g fgeVki ks fvd LVe dks"kdk, i vlsj ehl udk; ey LVe dks"kdk, i % e, I I h i nku djrh gS tksvlu; nks idkj dh dks"kdk, i mRi uu dj I drh ga c'skd] I Qy fpdfRI h; mi ; ks I svc rd , , I I h dsmi ; ks I s fo"kskdj vLFk eTtk I A

*"Hkjr eabl n'kd eaLVe dks"kdk thofokku vlsj iqtzu fpdfRI k ds tle] i sk.k vlsj of) ea #fp cuh ga "*



LoLfk gn;

# dkfMz ksykllt h ea tδ i kSj kfxdh dh l Hkkouk, j

I ouhr dksj vlsj l h l h d k f k k z d k s "k d h ; v l s j v k f . o d g n ; j k s f o k k u i h k k x J h f p = k f r : u y b h v h v ; w o k y e s m d y i k b l . , M V D u k s y k l l t h j f r : o u l r i g e & 6 9 5 0 0 1 b h e s y % c c k a r t h a @ S c t i m s t . a c . i n

Ukohure

Lopkyu vlsj l ekuklrj i k S j k f x d h e a m l u f r d s l k f k t m l e e k u o t h u k e d h l h d o l i a x l s j k s k a v l s j m i p k j e x k l d h i g p k u e a f u f g r i f o ; k d s l e > u s d k l " k d r e p f e y k g s f t l l s v k / k f u d f p f d r l k d s v u d i e k s = k a e a i z e k m l u f r ; k j g k r h g a d k f m z k s y k l l t h h k h b l d k v i o k n u g h a g a b l y d k e a d k f m z k s y k l l t h d s { k s = e a v k / k f u d t δ i k S j k f x d h d h i x f r v l s j v u k s [ k h l h k k o ; r k d k f l g k o y k s d u i l r q f d ; k x ; k g a

### thukfeDI

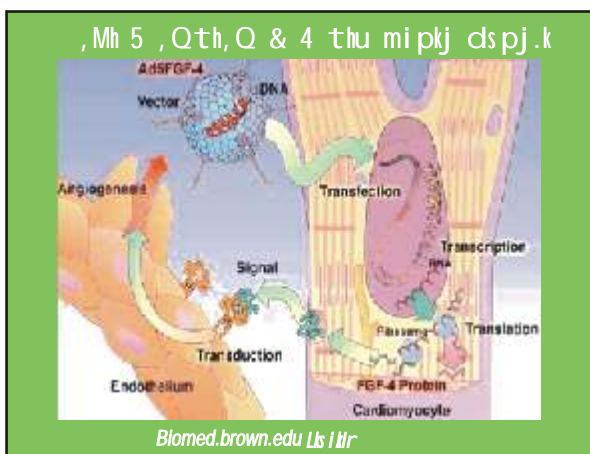
\*vkf.od thukfeDI\* ds {ks= ea thukfed uokpkj vkjHk gpyk gA , d mHkrs fo'k; ds : l k e a v k f . o d d k f m z k s y k l l t h u s d k f m z k s o k d y j f o d k l j i f k s o f t + k s y k l l t h j j k s d s d k j . k v l s j j k s d s j k s k . k q t u u d h l a d y i u k r e d l k p d k s c n y f n ; k g a l h m h , u , y k ; c j h l s v f h k o ; D r l h d o l i v s k i b z l v h i z d h c m s l r j d h v k a " k d l h d o l i a x v l s j f o " y s k . k l s f o h k u A r d k a e a v u k s [ k s v u y d k u i s v u z d s y k { k . k h d j . k v l s j u k o s y t h u d h [ k k s t d h t k j g h g a m n k g j . k d s f y , ] g e k a v k n 1 / 4 d i y s ' k u 1 9 9 7 % j k j f d , x , v / ; ; u s 8 4 9 0 4 b z l v h d k f o " y s k . k d k f m z k o k d y j t h u v f h k o ; f d r l p u k d k , d f o " k k y l a d y u i l r q d j r k g a v / ; ; u e a f o h k u A r d k a e t h u v f h k o ; f d r e a l k e u ; v a r j v l s j d k f m z k o k d y j i z k k y h d h f o d k l l a d k h f l f k f r ; k a i j h k i z d k " k m l y k x ; k g a h k a w g n ; v l s j o ; l d g n ; l h m h , u , y k ; c j h d s c h p r a y u k l s h k a w g n ; e a v k j , u , @ i k s v h u v f h k o ; f d r v k s j d k s " k d k l j p u k @ x f r " k h y r k d s c h p l a d k i j t k u d k j h f e y r h g a g n ; j k s k a e a d k f m z d j h e k n w f y a e a " k k f e y t h u k a d h [ k k s t d s f y , t h u k e o ; k i h v u d a k k u d h v i k j l h k k o u k , j g s t k s d k f m z d g k b i j v r n d h e a [ k k s t k a d h i k f r ; k a l s l i ' v g a , d d k f m z d g k b i j v r n d h y k ; c j h e a 3 4 t h u k a d k s e k b v k s k l s o u m p e , y t h u k e v r d f o i v e k ; k s l u y k b v p a u & 2 ] c a u u s v h ; i j k s v d i s v k b m ] m s l e u ] , p , l i h 7 0 ] l i j v k o l k b m f m l e ; w s t j , , u , Q ] v y o k v r i k e k k ; f l u v l s j v y o k , f d v u l f g r l h k k f o r : i l s v f r v f h k o ; D r f d ; k i k ; k x ; k g a g k b i j v r n w h e a i k s v k x y a m u m h f l f k s / s v l s j e v s y k i s v h u d & 4 t s s v u d v i r ; k f " k r t h u k a d h v f r v f h k o ; f d r d h i g p k u l s l " k d r : i l s i r k p y r k g s f d b u f o f / k ; k a e a v i k j l h k k o u k f u f g r g a

bz l v h d s v y k o j v l ; r d u h d a t s s v o d y t h u v f h k o ; f d r ] t h u v f h k o ; f d r d k j a k y k f o " y s k . k 1 / 4 l , t h o z e m h , u , e k b o k s j s d s l k f k t m l e t δ l p u k f o k k u r d u h d f o " y s k . k d k s d k f m z k s o k d y j f o d k l v l s j j k s j k s k . k q t u u e a " k k f e y t h u k a v k s j e x k l d h i g p k u v l s j y k { k . k h d j . k d s

vfuok; Zl k/ku ekusx, gA ; svkskf/k ; k thu mipkj ea u, y{; kadh [kkst eami ; ksxh gA

ekbØks jsi kSj kfxdh ds l kFk d k f m z k s o k d y j o k k f u d k a l s v i s { k r g s f d f o " y s k . k d s v x y s l r j r d i g p a & t k s g s v r d f o i v k a e d k v & n k v d j c u k , x , d k f m z d f o f " k v ^ d k f m z k f p i \* e k b o k s j s d k f m z d l h m h , u , y k ; c j h l s m r i u u 1 0 j 0 0 0 l s v f / k d f o f " k v v r d f o i v i j h k f o " ; e a m k ; y s / m v l s j g k b i j v r n o d d k f m z k e k ; k i s k h d s i w k z t h u v f h k o ; f d r i k o k b y d k f u d v h k f o " ; e a f u d ' k z k f d ; k t k l d r k g a c m l a

" , d m h k j r s f o ' k ; d s : l k e a v k f . o d d k f m z k s y k l l t h u s d k f m z k s o k d y j f o d k l j i f k s o f t + k s y k l l t h j j k s d s d k j . k v l s j j k s d s j k s k . k q t u u d h l a d y i u k r e d l k p d k s c n y f n ; k g a , "



popks h ; g s f d t h u v f h k o ; f d r d s c m s l r j i j f d , x , f o " y s k . k l s i k r y k [ k k a v k p d m k a d h o ; k ; k f d l i z d k j d h t k , a

v k j , u , b a j o g d v l s j i k j t h u h j k d ; w t u r q e k m y t s h i k S j k f x d f ; k a d s m i ; k s x l s t h u v l s j d k ; Z d s c h p l a d k d k f o " y s k . k d j u s e a l g k ; r k f e y s x a e k m y t u r q e a v / ; ; u d s l k f k l e f d r t h u v f h k o ; f d r , j s l s v i s { k r g s f d f o h k u t h u k a d s v k i l h v l s j i f j o s k d s l k f k v a r % f o ; k d k i g p k u k t k l d a m n k g j . k d s f y , , d r k t k f j i k v / e a l d o a t j f l i v j c h 1 1 / 2 p u s g q m P p ? k u r o y k b i s i s v h u 1 / 4 p m h , y / 2 d i s y k v j k w y d s f y , , d d k s " k d k l r g f l i v j g s t k s f y o j v l s j v l ; A r d k a e a f y ; k t r k g r f e k , p m h , y p ; k i p ; d k f u ; e u d j r k g s v l s j t u r q e k m y k a e a , f k h j k e d y g k s l l l s l j { k i n k u d j r k g a D ; k ; s i f j . k k e e k u o k a i j h k h y k x w g k r s g s ; g i z e k h k o h y k h k a d s l k f k h k f o " ; e a v k s k f / k f o d k l d s f y , , d v l ; u ; k y { ; c u s k A

### i k s V ; k f e D I

, d u o h u r e i z e k i g y i k s V ; k f e d f o " y s k . k d s m i ; k s x l s d k f m z k s o k d y j j k s d s u , e k d j f o d l r d j u s d h g s t k s



i kSj/hu dk of od v/ ; ; u gA l keku; r% MkVkc d ea Mh, u, Øe dh cMh ek= l fipr gkaus l s vu d akkudrik/ka dks ; g tkudkjh gksxbz gsf d , d l kfk g t k j ka thu ds thuke Øeka v l S v u y S ku i f j o r Z u ka dh tkudkjh gks tkuk vkf.od l anHZ eadkfMz, ksoLdgyj jkskadh bfv; ksykNEh v l S i f k S Q f t + ksykNEh dks l e>usdsfy, dkQh ughagkcka vu d i k ; kSxd rdu dch dsmi ; kx l s i kSv; kSed fo "ysk.k }kjk fofHku jks m h f i r i kSj/hu i f j o r Z u ka dh i g p k u v l S y k { k . k h d j . k f d , t k j g s g S t S k i g k u s g n ; j k s 1 / 2 S g n ; x f r : d t k u k 2 / 3 dh "kq v k r v l S f o d k l d s n S k u k g r k g A b l i z k l d k l e x y S ; d k f M z , k s o L d y j j k s k a d s f u n k u j p f d R L k h ; f u x j k u h v l S

I e> l s bu jkskads c g p k j d L o H k k o i j j k S k u h M k y h x b z g S v l S b u f H k u r k v k a d s v k / k j i j f o f " k ' V v k f . o d y S ; k a i j Ø k d l d j u s e a H k h l g k ; r k f e y r h g S t k s Ø k e k 2 l k s t h u k f e D I d s O S y r s { k s = d k l k j g A H k f o ' ; e a v k c k n h d s f o f H k u u o x k a l s d k f M z , k s o L d y j i R ; k " k h t h u k a d k , d O ; k i d M k V k c d m i y C / k g k s k A l H k o g S f d o s b u j k s k a d s v k f . o d ; k s x n k u d h c g r j l e > v l S u b z n o k v k a v l S f o f H k u u i " B H k f e o k y s v y x & v y x O ; f D r ; k a d s f y , o S f D r d m i p k j k a d h : i j S k k i n k u d j l d A

i k s k . k v k u p k f " k d h v l S i k s k . k t h u k f e D I v l U ; c g f o ' k ; d { k s = g A t k s i k S k f . k d d k j d k j v k u p k f " k d d k j d k a v l S L o k L F ; i j j . k k e a d s c h p v a r % Ø ; k d s v / ; ; u i j / ; k u d S U n r d j r k g A b u n k u k a { k s = k a e a H k k s t u l e a d k h e k x h " k h z f l ) k a r k a v l S O ; f D r d s v k u p k f " k d x B u d s v k / k j i j O ; f D r x r f l Ø k f j " k a d k s H k f o ' ; e a c n y M k y u s d h v i k j l H k k o u k g A

**i k j t h u h i k S j k S x d h**

i k j t h u h i k S j k S x d h l s e k u o j k s k a d h i f Ø ; k d k v / ; ; u d j u s v l S g n ; j k s k a d s m i p k j g r q f p d R L k h ; i k S j h u k a d k s m R i l l u d j u s d s o S d f y i d r j h d s d k s l e > u s d s f y , v l o s d k a d k s v l S ; v o l j f e y r s g A ; g i k S j k S x d h d k f M z , k s o L d y j i z k k y h d s f o f " k ' V H k k x d h t h u v f H k O ; f D r i j y f { k r d j , d t h u d h v f r v f H k O ; f D r ; k l n e u d j r h g A f i N y s n " k d d s n S k u i k j t h u h v l S t h u y f { k r e k i k S j k S x f d ; k a l s d k f M z , k s o L d y j j k s k a d k v k f . o d v k / k j l e > u s i j v e W ; t k u d k j h f e y h g A i f j o f r z Ø h u k S / k b i o k y s f o f H k u u i k j t h u h e k M y t S s d k f M z , d g k b i j V R M Q h d k f M z , d O S ; k j e k ; k a d k f M z y f M l Q D " k u v l S g k b i j V a k u b l l e ; p r q k j e k d k a v l S [ k j x k S k k a e a m i y C / k g A ; s e k M y v y x & v y x e k M Y M e k u o d k f M z , k s o L d y j j k s k a e a f n [ k k b z n u s o k y h c g i { k h ; t f v y r k v k a d k s O ; o f L F k r : l k l s l e > u s e a H k h m i ; k s x g A e k u o d k f M z , k s o L d y j j k s d h v u d f o " k s k r k v k a d k s , d l k f k y d j l e > u s l s b u i k j t h u h t u r q e k M y k a l s e k u o d k f M z , k s o L d y j i f k S Q f t + k s y k N E h d k s l e > u s e a e g r o i w k z ; k s x n k u f e y l d r k g A

**t S b a t h f u f ; j h**

dkfMz, ksoLdgyj jkskads {ks= ea mi pkj ds vlU; izlkjka dh rgyuk eae/; LfkRed dkfMz, ksykNEh dk fodkl rstH l sgq/k gA Mx bY; iVax LVh/4] d f S / j v k / k f j r c k b i k l x k f V f p d R I h ; , f t ; k s t u S l I v l S e k ; k s t u S l I r F k k l y k d l o n u " k h y r k r F k l 2 k V u 1 / 2 y f i M ; Ø r , F k h k e s l I d k j ] i r y s j s k n k j d S v l S e g a s o d y j h e k M f y a k 2 / 3 d k i r k y x k u s d s f y , d f S / j v k / k f j r ; Ø D r ; k a d s m i ; k s x i j o r Ø k u v u d a k k u l s d k j k s u j h / k e u h j k s x o k y s j k S x ; k a d s f y , v r f j D r u S h f u d v l S f p d R I h ; f o d Y i f e y l d a x A v l U ; d k f M z , d e / ; L f k r k ; j t S s



t k S [ k e f u / k k j . k d s f y , l h j e c k ; k e d j k a d h i g p k u d j u k g A g k y d s v / ; ; u k a l s , F k h j k L D y j k f l I d s i k S v ; k f e D I d s i ; k l r v l p d M s f e y s g S t k s j k x d s u , t S o d e k d j d s , d i f j . k k e h l k r d s l e k u d k ; Z d j r s g A i k S v ; k f e D I l s g n ; j k s d h " k q v k r l s t M s f o f H k u f o " y s k . k i k S j h u v k Y V j s k u d k s v l S v k x s c < u S i f j . k k e v l S m i p k j d h i f r f Ø ; k i g p k u k t k l d r k g A

**v k u p k f " k d h**

t h u k S / k b f i a i k S j k S x d h e a g k y e a d h x b z i x f r v l S t h u r F k k i k S j h u d k ; Z d h t k p d s u , e k x k a l s l h o h M h d s v k u p k f " k d v k / k j d k s l e > u s d s l k / k u f e y s g A e k u o e j t h u k e O ; k i h L d S l s v u d x q k l = L F k y d h i g p k u d h x b z g S t k s f o f H k u u g n ; j k s k a l s t M s g A m P p F l a & i v t h u k s V k b f i a f o f / k ; k a l s b u t h u k a d s v a n j , d y l U ; f D y ; k S / k b M c g q i r k d k i r k y x k u r F k k f o " y s k . k d h l f o / k k f e y h g A f i N y s d j n o " k a e a v u d v k u p k f " k d : i l s l p k f j r g k a u s o k y s x S & , F k h j k L D y j k f l I l h o h M h t S s g k b i j V R M Q d v l S M k ; y S / M d k f M z , k e k ; k i f k t + y k W x D ; W h l a y { k . k v l S v f u o k ; Z g k b i j V a k u d s v k f . o d v k / k j d k s i f j H k k f " k r d j u s e a i ; k l r i x f r d h x b z g A d k f M z , k s o L d y j v k u p k f " k d h d h

"gky ds v/ ; ; uta l s , Fkhj kL D y j k f l I ds i kSv; k f e D I ds i ; k l r v l p d M s f e y s g S t k s j k x d s u , t S o d e k d j d s , d i f j . k k e h l k r d s l e k u d k ; Z d j r s g A "



“dkfMz, ksoŁdyj iz kkyh ds dks“kdh; vkf vkf.od thofokku ea mlufR gkus I s ukfHkdh; dkmz, ksykMth ea ubz: i kRedrk cukus ea I gk; rk feyxh Tks s vkf.od i frfcEcuA”

bLpfeđ ih dāM“kfuak] ftI ea jhi jŋ; wēu ds I kfk I ŋkfr dksj ksjh vkDymēu vks jhi jŋ; wēu Øeka dks Hkh vk/kkj fey jgk gS vks ; g rhoz ek; kdkfMz, y bQkdZ'ku ds fy, ih D; w/su; I dksj ksjh e/; LFkrk okys jkfx; ka ds fy, , d fDyfudy vuq; z kx ds: i ea0; kogkfjd gkskA

ukfHkdh; dkmz, ksykMth

dkfMz, ksoŁdyj iz kkyh ds dks“kdh; vks vkf.od thofokku ea mlufR gkus I s ukfHkdh; dkmz, ksykMth ea ubz: i kRedrk cukus ea I gk; rk feyxh tS s vkf.od i frfcEcuA vkf.od i frfcEcu dks tšod i f0; kvkads thosyk{k.khdj.k vks eki u ¼ i kMVKM I ] ek; kdkfMzVI ] bLpfe; k vkfn½ graq dks“kdh; Lrj ij i fjHkkf'kr djus vks vkf.od Lrj ij ; g fi Nysns n“kdkadsnks ku yf{kr ukfHkdh; i frfcEcu ds I kfk mri lu gplz gA vkf.od i frfcEcu , d vr; r I “kDr rduhd gS ftI ea xS & Hksh dk; kRed vks “kjhj f0; kfoKkuh i Hkkokadk eW; kadu djus ds fy, vikj I Hkkouk fufgr gS tksckj & kj vks , d v[kf.Mr I Ei wZ “kjhj d iz kkyh ea ek=kRed : Ik I sgkrs gA ubz tšod i f0; kvka vks ekxkadh i fjHkk'kk ds fy, xS & Hksh vkf.od i frfcEcu rduhdka ds I Hkkfor vuq; z kxka dh i jkl uohu mi dj.k vks uohu yf{kr jSM; ksy; y i kskadh [kks I s dkQh c<+xbz gA bl dk Hko'; “kjhj f0; kfoKku i f0; kvka ¼ vfkZ ohbzth, Q fjl sVj] bZ/sxu vkfn½ ds yf{kr tšod ekdja ka ds fodkl vks dkmz, d thu mi pkj dk eW; kadu djus dh fji ksj/ thu rduhdka i j fuHkj djrk gA

vikj yHk nus okys fof“kV vuq akku {ks=ka ea “kkfey gS , D; w ; k ØMud buŋy esVjh i f0; k, j tletkr dkmz, ksoŁdyj ekyQkks'ku dh vkuokā“kd vfk0; fDr vks , Fkhj kDyjskVd lykd fuekz k I s tMth vkf.od rFkk vkuokā“kd i f0; k, A

thu mi pkj

fi Nyk n“kd dkmz, ksoŁdyj thu varj.k ds fy, mPp vi s kkvka dk n“kd Fkka thu mi pkj ea i xfr fofHku dkmz, ksoŁdyj jkska ds vkf.od vk/kkj dks I e>us vks fpdfRI h; ukfHkdh; vEy dh vki ŋrZ djus okys I {ke I k/kuka ds fodkl ij fuHkj djrh gA ekuo dkmz, ksoŁdyj jkskadsfy, tUrq ekMly dk fodkl thu mi pkj ekxkadh tšod I {kerk dks i fjHkkf'kr djusea I gk; d vks mi ; kxh fl ) gupk gA vuđ thuka ea I hohMh ij fpdfRI h; i Hkkokadh i ŋV dh xbz gA buea , pvk&1] okbzth, Q] bz, uvks I vks vkbz, uvks I egROI wZ fpdfRI h; v.kp/ka ds : i ea mHkjs gA oŁdyj , Mkskfy; y xkfk dkjd ¼ohbzth, Q½ ds vkj Hkd fDyfudy iz kxka I s f0fVdy yx bLpfe; k okys jkfx; ka ea, EI; w/s'ku dh t+ jr oŁdyj kb t'ku dk i rk pyk gA rFkfi] dkmz, ksoŁdyj thu

mi pkj ds fDyfudy : i kUrj.k dh egROI wZ rduhdh ck/kk, j cuh gplz gA Dyksuak i f0; k] i k j thuh i ksj kfxdh vks I {ke VRa QD“ku i k/kkly ds rst:fodkl I svud I hohMh dk , d LFkk; h tšod I lek/kku fey I drk gA thu mi pkj , ft; ksykLVh] oŁdyj ckb i kI xkŋV vkDymēu] fof“kV izdkj ds dkmz, d vfkze; kI vks VRa lyka/ dksj ksjh oŁdyki ŋh ds ckn jkVsuks I I ds mi pkj dh mHkjh dk; Z ulfr gA dMchus/kj; y thu mi pkj dk mlk; kx I hohMh dk , d rdI xr rjhdck gks I drk gS ftI dh bfV; ksykMth tFVy vks cgplkd jksx tuu gA

dkf' kdk mi pkj

dkfMz, d ejEer ds fy, dks“kdk mi pkj] tks dkmz, ksoŁdyj fpdfRI k ea I okZ/kd jkpd vks vk“kk tud fodkl gS ftI ij dkmz, d QY; kS okys jkfx; ka ds i kksuks I ds I Hkj dsu, I Hkkfor I k/ku ds: Ik ea #fp c<+jgh gA eny fopkj/kkj ; g gS fd ck, a oŁVdyj fMI QD“ku dk dkj.k dkmz, kxk; fi Vht+dh egROI wZ I ŋ; k dh {kr ds dkj.k gS vks ; g fd bl si kV bZ'Q“ku Ldki Z ea ubz I dpu ; kx; dks“kdkvka ds bElyka/s'ku dks vkf“kd : i I si yV tk I drk gA Hksh; ek; kd kbV+ ] vLFk eTtk dks“kdkvka vks LdsyVu dh ek; kd kbV+ dks tUrqekMlyka ds gŋ; ea i R; kjsi r fd; k x; k gA i kfkfed : i I s 0; kogkfjd dkj.k ka I s vMksyk I LdsyVy ek; ksykLV dks i gys fDyfudy VR; y I s xqtkj k tkrk gS i jUrq buds i fj.kke mri kgo/kZd ugha jgs gA , Mkskfy; y i kst suVj dks“kdkvka tS h vLFk eTtk LVE dks“kdk, i Hkh dkQh #fp i ŋh dj jgh gS fo“kskdj , D; w ek; kdkfMz, y buQkZ'ku okys jkfx; ka evks bl I e; budk xgu ij h{k.k fd; k tk jgk gA ; [fi] egROI wZ eqs tS s dks“kdk izdkj] dks“kdkvka dh vkn“kZ I ŋ; k] vki ŋrZ dk ekxZ vki ŋrZ dk I e; vks y{;} vkh Hkh thos dks“kdk mi pkj ds yHk vf/kdre djus ds fy, vuphyre fd; k tkuk gA

tS k i gyscrk; k x; k gS vkf.od i frfcEcu rduhdka ds uohure fodkl I s i frjksi r dks“kdkvka ds Hko'; dh xS & Hksh vfdax jkjk bu ea I s dŋ eqkads I gy>k; k tk I drk gA dks“kdk i frfcEcu dks dkmz, d dks“kdk mi pkj ds I kfk I esdr djus I s , d 0; ki d fDyfudy : i I s mi ; kxh vuq; z kx dh fn“kk ea dkmz, d dks“kdk mi pkj dh I ŋo/kk feyusdh vkjh gA bu uokpkj ka dh I ŋo/kk feyusdh vk“kk gA bu uokpkj ka ea vŋre voLFk ea vŋd fuf'0; gks tkus ds mi pkj ; k bl dh jksdFkke dh I Hkkouk gA 0; ogk; Z xkŋV I fgr dks“kdk mi pkj vks Ård bat'hu; jh ds I kfk of) vks jhekMly dh I Hkkouk I svanku dh deh dh xkHj I eL; k I s fui Vk tk I drk gA

# dñnh; [kk | i ks] kfxdh; vuđ akku I LFkku

pspEck eřku] eř ij&570020] <http://www.cftri.com>



: i j[kk

ořod Lrj ij vi uk LFkku cukusdsbPNđ jk'V<sup>2</sup> dsfy, [kk | I j{kk vR; r egRoI wkgđ vktlenh dsl e; I sgh [kk | mRi knu dksHkkjr }kj k mPpre i kFkfedrk nh xbzgđ tYnh gh; g Li 'V glsx; k fd [kk | mRi knu c<kusdsI kFk Hkđ kejh [kRe djusvksj gekjsI Hkh ukxfj dkađ i ksk.k I ĩuf"pr djusdsfy, mRi knu c<kusdk dk; ZHkh egRoI wkgđ bl fy, vktlenh dsdoy 3 o'kz ckn] 1950 ea dñnh; [kk | i ks] kfxdh vuđ akku I LFkku- ¼ h, QVhvkj vkbz dh LFkku uk dh xba

I h, QVhvkj vkbz dh I dYi uk rhu i eđk ?kVdkaI sfeydj cuh gř tks I LFkku- dks i řjr djr h gř % d½ oKkfud , oa vks] kfxd vuđ akku dk , d vkn"lz I xBu cuuk vksj Lo&foYki křkr vuđ akku vksj fodkl ds ifreku foLFkfi r djuseaekxh"kd cuuk( [kz i řLi) hz vuđ akku vksj fodkl inku djusdsfy, ořod vuđ akku , oa fodkl ep cuuk vksj [kk | foKku vksj i ks] kfxdh ds {ks= eamRiN'V xqkoYkk foKku vkkřjr rdudh I ok, ; inku djuk rFkk x½ i ks] kfxdh ds I kFk ekuoh; i {k tkMue dsfy, jk'Vh; I kelftd vřhk; kukads fy, foKku vksj i ks] kfxdh dk , d thou I kr cuukA

fi Nys i kp n"kdka I } I h, QVhvkj vkbz usLo; a dks nřk ea [kk | foKku vksj i ks] kfxdh dksI efi ř I cl scMsvuđ akku , oa fodkl I LFkku- ds : i ea LFkfi r fd; k gđ oKkfud , oa vks] kfxd vuđ akku i fj 'kn-¼ h, I vkbz kj ¼ Hkkjr I jdkj ds rRok/ku ea , d Lok; Yk I LFkku- gř tks ; qkbVM us'kuI ; řuofl Mh] VKđ; ksdsI kFk I e) gđ bl I LFkku-dks jkl k; fud vksj thooKkfud ij h{k.k ds fy, , u, ch, y] foKku vksj i ks] kfxdh foHkkx dsrgr vkbz I vks 9001%2000 vksj vkbz, I vks 14001%2004 i ek.ku Hkh řn; k x; k gđ



řp= % I h, QVhvkj vkbz ds Qy , oa I Cth vMřjr mRi kn

nřk ds vxz.kh I LFkku kads : i ea LFkfi r I h, QVhvkj vkbz ds iz kl [kk | i ks] kfxdh] i ks/hu j I k; u] U; W/RL; qVdy] i kjEi fj d [kk | ] [kk | I j{kk [kk | I e]thofoKku] ck; kd d j]

[kk | batřfu; jh] [kk | ij h{k.k , oa fo"ysk.k ds vkl i kl dsUnr jrgsgđ I LFkku ea [kk | ekud] vukt i d dđj.k] fl ađs gq mRi kn] I fct; ksvksj Qy kack i d dđj.k] [kk | i sđak] [kk | I j{kk.k] i ksk.k] tđ I fđ; v.kj] [kk | I a ksth ds I kFk el ysv vksj [křkcvkfřn eaHkh i; křr dk; Zfd; k tkrk gđ; g I ĩuf"pr djusdsfy, bl ds iz kl Bkl xřřřf/k; kaeai řjofřř gksI dđ bl vkkřj ij I h, QVhvkj vkbz eam | ks&I LFkku var%đ; k dh



řp= % bñjuskuy Lch vMđ feřyx vđuy/řh ea i P k k I =

I řo/kk nusdsfy, i wkl I đ FT tr i ks] kfxdh varj .k vksj cks) d I Ei nk i cak foHkkx gđ

I h, QVhvkj vkbz dh i ¼ h] dh I đ; k 1000 I svf/kd glsxbz gř tks Hkkjr vksj fons'kka eafd, x, gđ nřk ea 400 I svf/kd i đe vksj 2000 I svf/kd ykbl d /kkřj; kack gksuk bl dh {kerk vksj cktkj eami LFkfi r dk I đs gđ

I h, QVhvkj vkbz ds oKkfudka ds I efi ř ny us i eđk jk'Vh; vksj varj k'Vh; i f=dkvkaeokř'kd : i I s 100 I svf/kd "kksk i = i dkr"kr fd, gđ Kku ds bl I k/ku ds t řj, i jke"řj i k; křtr vksj I gk; rk vupku i křr i řj; kstuk, ; vkfřn m | ks rFkk I jdkjh vřHkdj .kkaI syh tkrh gđ

I h, QVhvkj vkbz ds dkfeđka dks vnHkr rdudh I jpk miyC/k gkřh gř ftI ea ukMly dksMđI [kk | fo"ysk.k iz ks"kkyk] i řj'Nř dñnh; mi dj.k I řo/kk] vkuokř'kd : i I s : i křřřj [kk | I nHkzI řo/kk vksj jk'Vh; [kk | foKku I puk dñnh"kkfey gđ

[kk | i d dđj.k {ks= ea I "kDr i Hko Mkyus ds iz kl kae "kkfey gř feuh nky fey] Lopkřyr nkl kj bMlyh vksj pikř edj e"řhu] Mř; est ř feřyx I a e] xluuk Nhyusdh e"řhu vksj i hMeluk"kh dk i rk yxkusokysck; ksl d j t ř s [kk | i d dđj.k {ks=A Āij crk, x, [kk | i d dđj.k gkMđs j ds vřřřj Dr] I h, QVhvkj vkbz us cktkj ea r ř kj mRi knka ds fodkl ea Hkh

" I h, QVhvkj vkbz dh i ¼ h] dh I đ; k 1000 I svf/kd glsxbz gř tks Hkkjr vksj fons'kka eafd, x, gđ nřk ea 400 I svf/kd i đe vksj 2000 I svf/kd ykbl d /kkřj; kack gksuk bl dh {kerk vksj cktkj eami LFkfi r dk I đs gđ,,





# dōnb; [kk | i ts] kfxdh; vuđ akku l ðFku

: i j [kk

i; klr ixfr dh gā buea "krfey gāvevy" dsnrk l s  
cuk f" k" kqnrk Qkkyk/ k/ Li: yhuik i kNfrd jax] mPp i ts/ hu  
fcfLdV] el kysokysrsy] mPp i ts/ hu gkbMksykb l 3] ukfj; y  
dsnrk dk l [kk i kmMj] ekYVM ohfuak [kk | i j d vkfnA

I h, QVhvkjvkbz ea  
{kerk fuekz k dks vius  
iz kl ka dh xqkoYkk vksj  
l Qyrk ds fy,  
egroi wlkz dkjd ekuk  
x; k gā l ðFku dh vksj  
l s o'kz 1965 l s eš ij  
fo"ofo | ky; l s l æ)  
[kk | foKku vksj  
i ts] kfxdh eaekLVj fMxh  
dk ikB; Øe pyk; k  
tkrk gā jksy] Qykyj  
fefyak m | ks dsykhk ds  
fy, , d i æk. ki =  
i k B-; Øe m | ksx  
ik; kstr dk; Øe gS tks



Lh, QVhvkjvkbz ea fodfl r nld k culus dh e'ltu

dkOh gn rd fefyak m | ks dsfy, ykHkdj h gā bu fu; fer  
dk; Øeka ds vykok] m | ks] vuđ akku vksj fodkl foHkxkavksj  
l jdkjh fudk; ka ds dkefkd ka dsfy, vYi kof/ k ikB; Øe Hkh i js  
o'kz pyk, tkrsgā l h, QVhvkjvkbz MkVjy vksj i k l V  
MkVjy v/; ; ukā ds fy, mRñ'Vrk dōnbz vYi kof/ k vksj  
nh?kzdf/ k dk; Øeka dsfy, l kdž vkf l ; ku vksj vY'ich n'skka l s  
Hkh "kkskdrkzvkrs gā

vksj pkfjd i k B; Øeka ds vfrfjDr l h, QVhvkjvkbz ea  
Nf'k& [kk | i d l dj. k vksj xkeh. k rFkk tutkrh; {ks= ka rd  
i gpkus dsfy, Nks/ s, oa e/ ; e m | fe; ka ds l kFk us'ofadk dks  
?kjsy w fu; kž vfhkedf k m | kska ds ykhk grq i ksk. k vksj [kk |  
l j [kk ds {ks= ea {kerk fuekz k i j Li' V : i l s/ ; ku fn; k tkrk  
gā

I h, QVhvkjvkbz l jdkjh vksj Lo; d oh vfhkdj .kka dh  
Hkxhnkj h ds ek/ ; e l s foHkku l kelftd ij; kstukvka ds  
dk; k l o; u ea , d l fØ; Hkxhnkj jgk gā bl l mHkZ ea  
mYy[ kuh; Qy i d l dj. k ik; kfxd l a æ gā bEQky] ef. ki j  
vksj dkuig ea [kk | i d l dj. k ik; kfxd l a æ a o'k'kfud , oa  
vksj kfxd vuđ akku foHkx] foKku vksj i ts] kfxdh foHkx]  
Hkjr l jdkj ds l g; ks l s LFkfir ; sin" k l bdkb; k; [kk |  
i d l dj. k 0; ol k; ea fuos'k ds bPNp l Hkfor m | fe; ka ds  
fy, YkHknk; h fl ) gpbZgā

I h, QVhvkjvkbz ea Hkjr vksj fons'k ds vl; vfhkdj .kka  
rFkk l ðFkukadsl kFk l fØ; l æk fodfl r d j usd k , d l pr

i z kl fd; k x; k gS tks [kk | i d l dj. k {ks= ea n [ky j [krs  
gā dōnb; rFkk j k T; l jdkj ka ds rgr foHkku ea-ky; , oa  
vki l h fgr ds fo'k; ka ea l fØ; vl; j k'Vh; i z ks" kkykvka ds  
vfrfjDr] l h, QVhvkjvkbz us vl; n'skka ds vk/kfudre

l ðFkuka l s Hkh l Ei d Z  
fd; k gS vksj  
b a m k s & f l o l ]  
b m k s u k b s v k b z b z,  
¼ f o , u k ½ r F k k  
¼ l h v k b z , v k j  
¼ v k l v s y ; k ½ d s l k F k  
[kk | t b i k s] k f x d h  
d s v x z . k h {ks= ka ea l ? ku  
us'ofadk dsek/ ; e l s  
viuh mi f L F k r  
o s " o d L r j i j n t z  
d h g ā

i pkl o'kz l s  
v f / k d i g k u k l ð F k u  
g k s u s i j H k h

I h, QVhvkjvkbz ds l keus yEch ; k=k "kks gS n'sk ds rsth l s  
cnyrs l kelftd & vkf k d i f j n"; l s t q / h c < f h t u l æ ; k  
dk i Hkko i R; {k : i l s Hkstu dh vknrkavksj [kk | i d l dj. k  
t+ jrka i j n'k k t k l drk gā

I h, QVhvkjvkbz ds oržku ea tkjh dk; Z vuđ  
U; w k l ; q v d y ds fodkl i j y f {kr g s t k s e l k y s v k s i k s k a l s  
i k r L o k L F ; d s f y , y k H k n k ; h t b l f Ø ; v k s Q k b V k l s e d y  
gā buea pk; ] e" k: e vksj vYi iz Ør vukt "kfev gā  
LokLF; r y k h r s y h ; c h t k a v k s M s j h l k r k a l s m R i U u i s V k b M k a  
ds "k d h d j . k ] y k { k . k h d j . k r F k k i k d f r d j a k a d s f y , i k s r F k k  
i h c k ; k s V d l m / k l u ] t b & : i k l r j . k d s {ks= e a i z k l t k j h g ā  
v l o s k . k d s v l u ; {ks= g ā i k s k d c d j h m R i k n ] r k i h ; : i l s  
i d l k f / k r i k j E i f j d H k s t u l w ] t k s [ k k u s d s f y , r s k j g k h  
L o p k f y r v k s i ; k b j . k v u p h y i d l d j . k & i k j E i f j d [ k k |  
i d l d j . k d s f y , A

l ðFku- dh Hkko ; kstuk Hkjr dh tul æ ; k dh [kk |  
l j [kk vksj [kk | f u j k i n r k l q u f " p r d j u s d h g s t k s v c l s  
d q n " n " k d k a c k n p h u d h t u l æ ; k l s v f / k d g k s t k u s d k  
v u p e k u g ā b l l m H k z e a l r r f o d k l d s f y , N f ' k t b  
l d k / k u k a e a e v ; o / k l u e g R o i w k z g ā b l e a i k j E i f j d H k s t u k a c k  
l f n ; k a i g k u h i j E i j k d k l j { k . k ] [ k k | f o f u e k z k { k s = e a  
L o p k y u ] m i & m R i k n m i ; k s r k ] i ; k b j . k v u p h y  
i k s] k f x f d ; k j t b i d l d j . k ] i k s k . k v k s L o L F k H k s t u " k k f e y  
g ā ■

" i pkl o'kz l s v f / k d  
i j k u k l ð F k u g l u s  
i j H k h  
l h , Q V h v k j v k b z d s  
l k e u s y E c h ; k = k  
' k s k g ā n s k d s r s t h  
l s c n y r s  
l k e l f t d & v k f k d  
i f j n " ; l s t q / h  
c < f h t u l æ ; k d k  
i H k k o i R ; { k : i l s  
H k s t u d h v k n r k a  
v k s [ k k | i d l d j . k  
t + j r k a i j n ' k k t k  
l d r k g ā , ,

# , d ubZ mMku dk l d kj frfy; ka dk i kdZ

Mkw pnr'kqkj N...ki k j , l k l , V i k Q d j ] dhVfoKku foHkkx] Nf'kfoKku fo"ofok | ky; ] c&kyj  
b&esy%kchandra58@gmail.com



## dsykbMkLdks

chl oha "krkCnh ds vr ea mlkjus okyh l okZ/kd i Hko"lkyh  
l dYiuk bl xg ij "tB fofok/rk" vFkok fofok izlkj ds  
tho tUrqkads l j{k.k dh vko"; drk jghA

l j{k.k xfrfof/k dh i j .kk ekuo dY; k.k dsi fr ; lscnku ds  
fy, tB fofok/rk dh l Hko; rk }jk l "kDr : i i Hkkfor FkA  
i kSka vls tUrqka l s vucl nokvka dh [kkt l s l j{k.k dh  
vo/kk .kk dlscy feyA  
; s g d i s l fOd ; w Vh l s  
V D l ky uked d d j k k h  
nok] vYidh ead l s  
"eSkkbfuu" uked , .Vh  
ck; kSvd] xgjs l enh  
Li at l s , d d d j k k h  
nok vls fuokjd nok]  
^ck; k s i k l i s D V a x \* ; k  
nokvka vls vl;  
eS/kcsykbv l dh [kkt A



bu [kkt ka l s tB  
fofo/rk dsegRo dsi fr  
gekjh de l e > dk i rk  
pyrk gS vls foMauk  
; g gsf d ge viuh bl  
mi {kk dks tc rd l e >  
i k , j tB fofok/rk dk , d cMk fgl l k u'V gkrk tk jgk gA

ns'k ea uohure tB l d k/ku mi ; kSxrk vls l j{k.k dk  
Okard eW; fu: i .k j k T; tB l d k/ku  
fodkl ckMz 1/4 uchMhch 1/2 }jk fd; k x; k  
ftl ea dhVka dks i kSka ds ckn vxyk l cl s  
egROI wkZ tB l d k/ku ekuk x; k gS ftl s  
eW; oku jat d] , at k be] i kS/hu] nnZ  
fuokjd nok vls ; gk rd fd nok vls  
Hkstu ds : i ea mi ; kSx fd; k tkrk gA  
bl l s dhV l d k/ku ka dh [kkt] l rr  
mi ; kSxrk vls l j{k.k dh dk; Z ; kst uk  
cukbZ x b] tks l Hk Kkr thoka dk yxHkx  
70 i fr "kr gA bl l e > rs gq dhVka dks  
tB l d k/ku ka ds : i ea y d j "kSf. kd  
xfrfof/k; ka dks bl ; kst uk dk i edf k cuk; k  
x; k vls turk dschp cgrj : i l sdhVka  
dh tkudjh nus ds fy, frryh ikdZ dh  
LFki uk dk fopkj mRilu gA KA duk d  
l jdkj dh vls l srRdky #fp fn [kksul sc&kyj  
eavkt ; g



Uk-inj > juk tgh Mele d e a frfy; k B. Ms i f jsk  
eavjle dj l d r h g h

i kdZ gS tgl; frfy; ka dh jax&fcjxh nfu; k dk vkulln  
mBkrsgq budsV; ; u vls l j{k.k dh l fo/kk gA

## l i ukadks l kdkj djuk

Nf'k foKku fo"ofok | ky; ] c&kyj 1/4 w , l &ch 1/2 }jk vk; kSfr  
, d 0; ogk; Zrk v/; ; u ds v k /k j ij t x g dh [kkt c&kyj ds  
fudV gpl ftl dh  
i ; kbj .k l Hko; rk] i j s  
o'kZ rd vkn" kZ  
i k f j f L F k f r d h ;  
i f j L F k f r ; ka ds l k F k  
j k' V h ; i k d Z dh  
fudVrk vls duk d  
tUrq i x f /k d j . k  
1/4 t s M , d s 1/2 d s  
; Q r l a r l e f k u d k s  
/ ; ku ea j [k x ; k A  
; w , l & c h r f k k  
t M , ds ds o k k f u d  
ny us L f y p i u s ds  
vykok] rduhdh  
i L r k o c u k ; k v l s  
v " k k c k V L V Q k j

frryh l agly; ds m | ku dk , d n' ;  
fj l p l bu b d k s y k l e h , . M n , uok; u e W 1/4 V h 1/2 us i L r k f o r  
frryh ikdZ ds f'k {kk vls i f'k {k . k ? k v d ka dh : i j s {kk cukusdk  
dk; Z l Hkkyka bl iz kl dsi f j . k k e r c feys tc , uchMhch us  
bl l ius dks l kdkj djus ds fy, 3-8  
djkm+ #- dk l e f k u nus dh opuc) rk  
n "k k B A i k d Z dk fuekZ k e k p Z 2004 eavkj Hk  
vls ebZ 2005 eai j k g A

; g i kdZ vc turk ds fy, [kay x; k gS  
vls bl ds mnas; bl izlkj gA d 1/2  
"jysxf"ki" dhV iztkfr ds : i ea  
frfy; ka l s t M s e d ; vucl dku eneka i j  
gekjh l e > c < k u k ( [ k 1/2 e y H k r f o K k u ea  
varn'V inku djuk] thou bfrgl vls  
Nk=ka rFk o k k f u d ka dks frfy; ka ds  
l j{k.k dh vko"; drk( x 1/2 frfy; ka dks  
i ; kbj .k l e a k h f " k {kk vls l j{k.k dh  
vkn" k Z i z kkyh ds : i ea mi ; kSx djuk ( ? k 1/2  
xkeh. k l e m k ; ka dh v k t h f o d k c < k u s ea  
l j{j.k.k xfrfof/k; ka dh Hk f e d k [kkt uk vls M-1/2 frfy; ka dh  
[krjseai M k d n i z t k f r ; ka d s l j{k.k e a e n n d j u k A

" Chl oha 'krkCnh ds  
vr ea mlkjus  
okyh l okZ/kd  
i Hko' lkyh  
l dYiuk bl xg  
ij "tB fofok/rk"  
vFkok fofok  
izlkj ds tho  
tUrqka ds l j{k.k  
dh vko'; drk  
jghA "



" foMauk ; g gS  
fd ge viuh bl  
mi {kk dks tc  
rd l e > i k , j  
tB fofok/rk dk  
, d cMk fgl l k  
u'V gkrk tk jgk  
gA "



# , d ubZ mMku dk l d kj frfry; ka dk i kdZ

dykbMkt dksi



yxHkx 7-5 , dM+ ds {ks=Qy ea frfry; ka dk i kdZ , d  
cVj flyk; datjovjh] eYVhehfM; k i f"kk{k.k dlnz vks D; f; j; ks  
"kkw l fgr , d l xgky; ds l kfk ; g nsk eaviuh rjg dk  
vukfkk i kdZgA bl dh ; kst uk eai kp , dM+l svf/kd {ks=Qy  
ea QSyk "cVj flyk; Vsy" "kkfey gA ft l ea uokpkjh rjhds l s  
fMtkbu fd, x, rhu xqcn okysHkou eadatjovjh] l xgky;  
vks eYVhehfM; k dlnz fLFkr gksA buea l s l cl sigys , d  
i kjn "kzi klyhdkckzu/ dh Nr okyh "cVj flyk; datjovjh] vks  
i "Bhkfe eam | ku cuk; k x; ka i "Bhkfe ea 10]500 oxZ QhV ea  
QSykm | ku l fgr cMxqcn dsvkdj dsbl Hkou eai jsl ky  
i kskh i M+ & i kskka vks ?kjy wfrfry; ka dks j [kuk l Hko gksxA

nfu; k ea frfry; ka ds vud i kdZ gA i R; d dh viuh dN  
fo"kskrk vks i gpo gA cluj?kkVk eafLFkr frfry; ka dk ; g i kdZ  
vud : i ka eavukfkk gA ; gk; nl , dM+l svf/kd {ks=Qy ea  
i kskh i M+ & i kskk QSykgA cluj?kkVk dk ; g frryh i kdZ nsk dk  
igyk i kdZgA ft l ea , d i kdZ , d datjovjh] , d l xgky; ]  
, d vud akku iz; ks'kkyk vks , d "kfk.kd dlnz ekstn gA  
bl dsvykok bl dh , d vU; fo"kskrk ; g gsf d i klyhdkckzu/  
dh Nr dh uhpscuk nsk dk l cl scMh m+ ku i "Bhkfe okyk  
i kdZgsvks ; gk; i nf"kr l Hkh frfry; ka ds fy, nsk dk , dek=  
dsfVo iz tuu dk; Dae okyk i kdZgA

lkdZ dh fMtkbu ea Atkzvks i kuh dh n{krk i j Hkh dk Qh /; ku

" ; gk; nl , dM+l s  
svf/kd {ks=Qy ea  
i kskh i M+ & i kskk QSyk  
gA cluj?kkVk dk  
; g frryh i kdZ  
nsk dk igyk  
i kdZgA ft l ea  
, d i kdZ , d  
datjovjh] , d  
l xgky; ] , d  
vud akku  
iz; ks'kkyk vks  
, d "kfk.kd dlnz  
ekstn gA "



fp= %frfry; k dh dgjuh ilrf djrk E; fit+e M; jkkt .

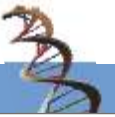
datjovjh] l svks l xgky; gksxl] tks frfry; ka ds thou ds  
fofHku i gya/kadksn "kkzsgq M; k; jkek vks del; Wj fdvkd  
dstfj, tkudkj i nku djsxA

frfry; ka ds bl i kdZ ea 10]500 oxZ QhV dh datjovjh ea  
vud ekbOkqfcvV] i kuh dk , d >juk vks cM+l sbl i kdZ  
dh i "Bhkfe ea, d ukyk , d gh LFku i j mi yC/k gA o'kz2004  
vks 2006 ds chp 18 iztkfr; ka dh yxHkx 41]000 l svf/kd  
frfry; ka dks dsfVo iz tuu bdkbz ea i snk fd; k x; k] rkfd  
buds iz tuu dk ekudhdj . k fd; k tk l d] ft Ugafrrfry; ka ds  
vf/kokl dh tkp djus ds fy, Vt; y i jh{k.k ea cVj flyk;  
datjovjh] ea Hkst k x; ka i kdZ ea fLFkr l xgky; vks , d  
eYVhehfM; k dlnz ea xkfQDI ] M; k; k; jkek]  
thfor i n"ki frfry; ka ds ueus vks frfry; ka dh dgkuh]  
mudh of)] fodkl ] iz tuu vks muds mnHko dh tkudkj  
i Lrf dh xbzgA

fn; k tkrk gA frfry; ka ds fdl h vkokl vks iz tuu bdkb; ka  
dks xel; k B.Mk djus ds fy, fctyh dk mi ; ks ughafd; k  
tkrk gA i jsi kdZ {ks= eao'kkz ty nkgu dh 0; oLFkk gA fctyh  
dscdvi vks ckgjh ykbVx ds fy, l k; Atkz dk mi ; ks  
fd; k tkrk gA i jsi kdZ {ks= eao'kkz ty nkgu batfhu; jh yxw  
dh xbzgA

; g frryh i kdZ dpy l qjrk n[kus dh mRl qd i ; Vdkads  
fy, frfry; ka ds i n"ki fn [kkus ds fy, ugha gA cfYd ; g  
i ; kbj . k l calkh f"kk [kk] vud akku vks ; gk; rd fd frfry; ka dks  
, d l d k/ku ds: lk ea ycdj xkeh.k vkt hfodk c<kuseaHkh , d  
dlnz ds: i ea l fO; : i l s dk; Zdjrk gA cluj?kkVk fLFkr  
cluj?kkVk dk frryh i kdZ c&yk; dseplv/ dk u dpy , d  
vks jRu gscfyd nfu; k eaviuh rjg dk vukfkk i kdZgsvks  
, d gh Nr ds uhpvkt hfodk ds fodYi ka dks l efd r djrk  
gA





# dkfMz, ksykllh ea tB i kSj kfxdh dh I Hkkouk, ---

¼ B 8 I s tkjh

Lka ksth LVæ dks"kdk mi pkj ds I kfk thu mi pkj I s Hkfo'; eafpfdRI h; fodYi Hkh c<kusdh vk"kk gA

## Hkkjrh; ifjn';

; g cr nqkn gS fd fo"o ea vU; = gkus okys vkf.od dKfMz, ksykllh fodkl dk gekjsn'sk ij i; kI r i Hkko ugha i Ml gA Hkkjr ea dKfMz, ksykllh ea vkf.od thofokku rduhdka ds vuqz kx eafoyEc ds vucl dkj.k gA bu ea I snks egROI wkl dkj.k gA ¼½ i f"kr {kr dKfEdka dh deh} tks dKfMz, kso&dyj jkskads"khj fD; k foKku] Oked dKfMz, ksykllh i fksk ksykllh I adkh i {kka dks I e> I da vks vkf.od tBod rduhdka rFkk vkuoPh"kd v/; ; uka ea Hkh dQky gA vks ¼½, d s dlnz dk vHkko] tgl; vkf.od dKfMz, ksykllh fo'k; ea dKfEdka dks i f"kr {kr fd; k tk I da rhl j} pgs oKkfud ; k fDyfudy dKfMz, kllt LV] tks dKfMz, kso&dyj I eL; kvka ea vkf.od thofokku rduhdka dk mi; kx djuk pgs ¼ vkf.od , fi Mfe; ksykllh ds I k/kuka I fgr ¼ ; k jks dh fLFkr; ka dk dkj.k cuusokyh yf{kr vkf.od i fD; kvka ea u, y{; ka dh [kkt vFkok vksf/k ds fodkl gsrq i q; kkt Mh, u, rduhdka dks ykxw djuk pgs gA ; k thu varj.k vktekuk pgs gA mudsfy, bu {k=kaefo"kskKrk okysdkbZfof"kv dlnzughag} tks blga I gk; rk inku djA ; g fLFkr I Oked jksk} rfi=dkfoKku vks d j thofokku ds foijhr gA dKfMz, kso&dyj tB i kSj kfxdh ea , d cgd LFkRed dk; Dæ ds fodkl dh igy dh vfuok; Fk dksmPp i kFfedrk nh tkuh pfg, I D; kkd gekjsn'sk ea bl dh nj dkOh vf/kd gS vks bl eavks Hkh of) dk vuoku gA

## fu'd'kZ

dkfMz, ksykllh ds {k= ea vkt ds I e; ea tB i kSj kfxdh dk i Hkko foLe; dkjh gA ; |fi] vkf.od dKfMz, ksykllh viuh "kS'kokLFkk ea gS fQj Hkh ; g I gh ekxz ij gA vkuoPh"kdh] thukfEdI vks i kSv; kFEdI I s i ktr vkfodMka ds I pr vks foodi wkl eslu I svuoku gSfd bl eavHkur i dzrj Ddh gksch] dKfMz, kso&dyj jkska I s i hfMf jksx; ka dk thou cpk; k tk I dskA thuj i k/hu vks ev/kcyskbv+ dh Jqk yk ij mi yC/k tkudkj dh ds I kfk vyx&vyx jksx; ka ds fy, oS fDrd dKfMz, kso&dyj nokvadh mi yC/krk vxysn'sn"kd ea I Hko gksch] , d k ekuk x; k gS tks fo"kv tks [ke vkdyu vks mi pkj ds vi f{kr i R; qk ij vk/kfjr gA jks ds i Hkko funk ds fy, u&ks i kSj kfxdh vk/kfjr ulgs" I k/ku" ds I kfk mlur vksf/k vki fir] vks dks"kd foLFki u rFkk thu mi pkj fudV Hkfo'; ea mi yC/k gksA vkf.od ifrfcEcu rduhdka fu; fer : i I s fDyfudy vR; y ds ifj.kkeka dk vkdyu djuse] i kksLVds'ku vks fpdfRI h; gLr {k ka dseW; ka du ea mi; kx dh tk, achA ijUrq; g I c i ktr djus ds fy, "kdk ifj.kkeka dks fpdfRI h; vH; kl ea: i kUrjR djus ij vf/kd /; ku nus dh vko"; drk gA ; g I fu"pr djus dk I ok/ke rjhdk gSfd vuq akku ds ifj.kke iz kx "kkyvka dh nhokjka ea I hfer ugha jg tk, j vks , d I "kDr varjki" B cuS ftI ea vuq akkudeh] ck; k/vd m|eh vks dKfMz, kso&dyj fDyfuf"kv; u I cdsfey&tgsl i usdks i jk djus ds iz kl ea gkFk feyk, A vxysn"kd ea Hkkjr ea dKfMz, kso&dyj jks ea i {k i r of) dks nq'krs gq ck; k/vd dEi fu; k fudV Hkfo'; ea dKfMz, ksykllh ds dbZ dj km+ # i , ds ckt kj dh I Hkkouk dk vuoku yxk I drh gA ■



# निशुल्क में बालीटेक समाचार लेना चाहूँगा

uke% Jh@Jherh@MKW.....

i n@I xBu.....

Mkd dk i rk : .....

....."kgj : ..... jkt; ..... fi u

VyhOku Ydk; ky; ½ ..... ¼kokl ½ ..... b&ey.....

gLrk{kj



# Lekhy i kDI I sLVe dks"kdK rd ---

¼ st 5 I st kjh ½

, d gn; jksx dh vLFk eTtk ea I s fudky dj blga ek; kdkfMz y BUQKDVZ dsfy, I t jh dsngku jksx dsgn; ds vkl ikl QSyk; k tkrk gð tksgn; ekj i f" k; k mRiUu djrh gð vks jksx dksjgr nrh gð pkyhl jksx; ka dksydj vk"kk tud i fj. lke feysgð, d fu; ã=r cgpLnh; Vt; y bl I e; , evkbz jksx; ka dh dkmz, kekbl kbV mi plj dsfy, I etkr ¼ d gh vLFk I k ½ vLFkeTtk I smRiUu , e, I I h dsl kfk tkjh gð

fgeVki k s fVd LVe dks"kdK I s mRiUu vLFk eTtk I s mRiUu I Qy mi; kx I s xhkhj : i I s jDrYi rk ds jksx; ka dk bykt Hkkjr eadn I e; I spy jgk gð tc I sLVe dks"kdK ds ifr ; g #fp c+h gð vr% bl idkj ikr fgeVki k s fVd dks"kdKvdksbPNr I ã; k I sc<k; k tkrk gSvks jksx dksfn; k tkrk gð bu I etkr fgeVki k s fVd LVe dks"kdKvka I sjfVuy {kfr okyspgkacsmi plj dh Hkh fj i kVZgð pgykaebu dks"kdKvka dksbV&fofV; y rks ij yxkusdh fj i kVZ I sir k pyr k gSfd bueabfPNr I ã; k eajDr okfgdkvka dk fuekz k gpykA bl I ãdk eavc rd ekuokai j fdl hrjg dsiz; kx ughafd, x, gð

tc 1998 ea ; g fj i kVZ fd; k x; k fd vk[k dh fyEcl ¼ d k mRiUu; k ds vki ikl NYystg kj dat DVk bok I st ãk {k=½, , I h dk mRiUu djrh gð , d Uks= fo"kskK ¼ kVfksykykI LV½ us budk mRiUu fd; kj blga d k mRiUu; y , fi Fkfy; k dsfy, I ãf/kz fd; k vks jkl k; fud : Ik I st ys d k mRiUu; k okys d ã jksx; ka ea blga i fr j k f r fd; ka n f V eaegROI wZ I ãkj gpykA bl fi ) kar & iek.k I s i k k l kgu i kdj geus vi us I k f kku ea o'kz 2001 ea t+ jren ykxka ea bl mi plj dks I Qyrki wZ vkj ãk fd; ka vc rd fyEcy I Sy mi plj I sgekjs d bñz earhu I ksl svf/kd jksx; ka dks bl fyEcy LVe dks"kdK mi plj I sn f V ea I ãkj gpyk gð bl I e; bl f pfdRI h; I kku dks Hkkjr ds d ã vl; vk f k s y ed d bñz ea vi uk; k tk jgk gð

tc jksx , d 0; fDr dks t d M+y s r k g S r k s M k D V j m l i j t h r i kus dh dks"kdK d j r k g S v k s c h e k j 0; fDr dks Bhd d j r k gð tc jksx cMh I ã; k eai Hkkfor d j r h g S r k s; g y M k b z Ø e " k %; ð v k s f Q j e g k; ð e a r t h y g k s t k r h gð I k f j o k f j d M k D V j b l y M k b z I s f u i V r k gð t c f d I k o z t f u d L o k L F; d k f e z d e g k; ð d k s l H k k y r s gð b l f L F k r e a L r j d k e g r o c c e a s l s t k u d k j h d k e g r o c c + t k r k gð b l t k u d k j h d k s i n k u d j u s o k y h f o k k u d h " k k [ k k d k s , f i M f e; k s y k I t h ¼ e g l e k j h f o k k u ½ d g r s gð ; g g e a v k d M s i n k u d j r h g S f d f d r u s y k s i H k k f o r gð t g k f n , x , { k s = e a c h e k j h e k s t m gð t k i p f y r c h e k j h d s l k f k t M s d k j d i r h r g k r s g v k s b l h i d k j v k x s H k h A b l i d k j d h t k u d k j h I s H k k j r d k s c k y; k o L F k k v a k R o j v k [ k d s y d d k d s j D V j x k D V j v k s g k y e a i k s y; k s i j f u; ã . k i k u s e a e n n d h A , f i M f e; k s y k I t h g e a H k k j r d s m u L F k y k a d h H k h t k u d k j h n r k g S t g k v c H k h i k s y; k s i k; k t k r k gð b l r j g d h t k u d k j h , d ; ð I s f u i V u s v k s m l s t h r u s d s f y , e g r o i w z g k r h gð n ã [ k d h c k r ; g g S f d , f i M f e; k s y k I t h d s { k s = e a H k k j r f i N y s , d ; k n k s n " k d k a e a d ã d e t k j i M + x; k j m l I e; t c V k d y s / M n o k c u u h " k q g p ã g e a; g d e t k j h t Y n h I s n j d j u s d h t + j r gð

, f i M f e; k s y k I t h , d I p u k f o k k u gð t k s e k s t m k c h e k j ; k a l s y M u s e a g e k j h e n n d j r k gð t k u d k j h g h c p k o gð t k u d k j h d k v f k z g S r s k j g k u k A r s k j g k u s d k v f k z g S n r e u d s f [ k y k Q " k f D r " k k y h c u u A H k k j r u s l Q y r k i w z y M k b z d j L e k h y i k D I i j f o t ; i k b A ; g d q B j i k s y; k s v k s x k D V j i j f o t ; i k u s d s c g r u t n h d gð ; f n g e v l ; e k s t m k v k s m H k j r h c h e k j ; k a i j H k h f o t ; i k u k p k g r s gð r k s g e a V k d y s k u y n o k v k a v k s I k o z t f u d L o k L F; d h v k o " ; d r k gð v c r d d h f L F k r i k k l k g u d k j h g S v k s g e a H k k f o " ; d s f y , v k " k v k s f o " o k l gð ■

## vki ds eu ea , d jkp d fopkj g\ ge ml s ck; k\ d I ekpj ea Nki x d

f' k {kk} i k s l k f x d h o k f . k T ; h d j . k v k s t h o f o k k u r f k k t o i k s l k f x d h d s v l ; I ã f / k r e ã k a i j v k i d s f o p k j , d I f { k l r y s [ k d s : i e a ¼ v f / k d r e 250 ' k C n ½ c k ; k \ d I e k p j e a v k e f = r g ã A

i R ; d i z k f ' k r y s [ k i j **1000 #** - d k e k u n s i n k u f d ; k t k , x k A

R k s n j f d l c k r d h \ d y e m B k b , v k s f y [ k M k f y , !!



vi us ys [ k b & e y d j % b i o t e c h n e w s @ d b t . n i c . i n



# I ekpkj vks vk; kstu

## ns'k dk igyk frryh i kdZjk'V<sup>a</sup> dks l efi z

ns'k dk igyk frryh i kdZjk'V<sup>a</sup> dks l efi z Jh dfi y fl Ccy] ekuuh; foKku] i kS] kfxdh vks] iFoh foKku eah] Hkkjr l jdkj us25 uoEj 2006 dkscluj?kkVk ck; ykWTdy i kdZ c&ykj fLFkr ns'k ds igysfrryh i kdZdk mn?kVvu fd; kA ; g i kdZ vuq ddku] f"kk k vks] xkeh.k vkt hfodk dsfy, , d l efdr dlnzds: i eadk; ZdjxkA ; g jk'Vh; t b l d k/ku



ckysj eafrryh i kdZdk mn?kVvu djsrgg Jh dfi y fl Ccy] ekuuh; foKku , oai kS] kfxdh rFk i Foh foKku eah

fodkl ckMZ% uchMhch? t b i kS] kfxdh foHkx dh , d igy gA

Jh fl Ccy usdN i ztkfr; ka dks i q% i ktr djusts l d r ds : i eai kdZdh ds lVo i ztuu bdkbz eagt i k frrrfy; k i kdZea mMk dj bl ds [kayus dh l ka d r d ?kksk.kk dhA muds l kFk dukZ/d l jdkj dsou , oai ; kbj.k eah] Jh l h p b u h x l i k m i f L F k r F k A J h d f i y f l C c y u s b l v o l j i j n k s l h M h H k h t k j h d h i f t u d k u k e i B a x H k k j r h g s v k s ; g H k k j r r F k k i B a x l p p k d h f r r f y ; k a i j , d M R V k c d g & ; g f r r f y ; k a d h i g p k u d k , d l k e l l ; l k / k u g A

bl vol j ij ckyrsrgg Jh dfi y fl Ccy usbu vnhkr thokads l j {k.k dh t+ jr ij cy fn; k vks] dgk \*\*eak; ns'k Hkj dh t b fofo/krk dh l j {k k vks] fodkl ds fy, opuc) gA frrfy; k i vks] vU; i zdkj dh dhM s t s k fofo/krk ds fuekZkd kjh [k.M gA ; s tho thfor i ztkfr; ka dsfi jkfem dsl cl suhsokysLrj ij gsvks , d h i f j ; k s t u k v k a d s e k ; e l s b l g a c j k c j e g R o f n ; k t k u k p k f g , A c k / k l j {k . k ; k v n H k r 1 / d f j " e k b z " t h o k a d s l j {k . k i j / ; k u f n ; k t k r k g s f d l r q b l J a [ k y k d s f u p y s f g l l s i j e k s t m f r r f y ; k a v k s ] c h v y 1 / d h M k z

dks mi s {kr fd; k x; k FkA ; g t b fofo/krk dks i q% thfor djusvks l 'tu dh fn'kk eacks k x; k cht gsrFk ; g l ns'k vke vkneh rd i gpk pkfg, A\*\* mlgkaus Nf'kfoKku fo"fo |ky; ] c&ykj] dukZ/d tUrqi kf/kdj.k vks] v"kkcdk VLV QkV f j l p z b u b d k s y k l t h , . M n , u o k ; u e b / 1 / 4 V h 1 / 2 d s M h c h V h d s l k F k f e y d j d k ; Z d j u s d h i z ' k a k d h v k s " V h e b a M ; k " d h b l H k k o u k d h i z ' k a k d h j f t l u s i f j ; k s t u k d k s Q y t H k r f d ; k A

## b. Mk&fQuysM ck; kVsd dks&vki js'ku eau, dne

t b i k S ] k f x d h d s l k F k f Q u y S M d h i k F k f e d l j d k j h , t a h j v d k n e h v k W d f Q u y S M l f o ; v u d d k k u l g ; k s x d j r k g s f t l d k v f / n s ' k n h / z v o f / k f u f / k d j . k v k s o s ' o d l g ; k s x d s e k / ; e l s m p p L r j h ; v u d d k k u d j u k g A

bl l Qy f}i {kh; l g; kxkRed vuq ddku : i j s k k d k s i q% xfr nusdsfy, ubZfnYyh ea14&15 uoEj 2006 dks t b i k S ] k f x d h f o H k x ] u b Z f n Y y h e a f Q u y S M d s r h u l n L ; h ; f " k ' V e M y d k v k x e u g p k j f t l e a l q h t k u k : l j M k W t p d k j h o h u s u v k s M k W f l j i k g d d k u s u " k k f e y g A f " k ' V e M y d s b l n k s d k i z k s t u i k n i v k s Q l y t b i k S ] k f x d h i j i L r k o k a d k s f } r h ; v k e a . k n u s v k s n k s n s ' k k a d s c h p t b i k S ] k f x d h v u d d k k u l g ; k s x d k s e t a r c u k u k F k A

fopkjfoe" kZ ds nks ku ; g r ; fd; k x; k fd i Lrkoka dk f}rh; vkeak fuEufyf[kr fo'k'V Qkcd l {ks=ka l fgr i kni vks] Ql y t b i k S ] k f x d h d s {ks= e a g k a s %

- 1- t s o d v k s ] v t s o d r u k o k a i j / ; k u d s l n r d j r s g q r u k o d s i f r i k n i k a d h {k e r k d k f o d k l v k s }
- 2- t h u k f e d ] i k s V ; k f e d v k s : i k r j . k r d u h d k a e a f o " k s k : i l s f o f / k ; k a e a l g ; k s x A

; g r ; fd; k x; k fd fQuysM eai ; kbj.k t b i k S ] k f x d h i j , d d k ; Z k y k d k v k ; k s t u v i s y & e b z 2007 d s n k s k u f d ; k t k , x k v k s ] b l d s c k n v D r u j 2007 e a i L r k o k a d k s v k e i = r f d ; k t k , x k A

nksuka f" k'VeMy bl ij Hkh l ger gq fd fpdfRI k t b i k S ] k f x d h d s {ks= e a b l {ks= d h m H k j r h i k F k f e d r k v k a d k s l e k s / k r d j u s d s f y , f o L r k j f d ; k t k , x k v k s ] i j h l H k k o u k g s f d i L r k o k a d k r h l j k v k e a . k v k s k f / k f o d k l d h v f H k d y u k R e d f o f / k ; k a i j g k s k A ■

" ; g t b fofo/krk dks i q% thfor vks] l 'tu dh fn'kk eacks k x; k cht gsrFk ; g l ns'k vke vkneh rd i gpk pkfg, A "

