



dk; kŷ; uxj i kfyd fuxe jk; x<+1/4-x-1/2

ekg vDVwĵ 2015

chekjh I s fucVus fo'kšk I QkbZ vfHk; ku
0 I at; ekdV o brokjh cktkj eagj jkst nok dk
fNMelko

jk; x<%&

eyfj; k o M&w dh f'kdk; r dks nŷkrs gq gj jkst I at; dkŷyDI o brokjh cktkj ea fo'kšk I QkbZ vfHk; ku o nok dk fNMelko dj; k tk jgk gA I kFk gh 'kgj ds fofHku okMk o I ngkLin txgka ea I QkbZ o nok fNMelko ds fy, gj jkst fo'kšk vfHk; ku pyk; k tk jgk gA



'kgj ea yxkrkj eyfj; k o M&w Qŷus dh f'kdk; r fey jgh gA vc rd I at; dkŷyDI {ks= I s gh T; knk M&w o eyfj; k ds ejht feyus dh tkudkj ehfM; k I s fey jgh gA bl s nŷkrs gq vk; ņr Jh iekn 'kŷyk us I at; dkŷyDI {ks= ea fo'kšk I QkbZ vfHk; ku pykus ds funŷk fn, gA I at; dkŷyDI {ks= ea fi Nys rhu fnuka I s yxkrkj ukys dh dpjk Mŷiæ txgka dh I QkbZ djkbZ tk jgh gA 'kfuokj dks I ņg I s gh ukys dh I QkbZ o vkl & ikl Qŷys dpjka dh I QkbZ djkbZ xbA

bl h rjg vfrfjDr I QkbZ dehZ yxkdj nok dk fNMelko uky} i kuh
 Hkjs txg o dpjk Māi x txgka ea djkbZ xbA bl h rjg {ks= ea Cyhfpax
 ikmMj Hkh fNMelko dj; k x; kA bl h rjg brokjh cktkj {ks= ea
 yxkrkj I QkbZ vfhk; ku tkjh gA ; gka Hkh 'kfuokj dks ukyh o dā/suj
 I QkbZ dj Cyhfpax ikmMj] puuk ds I kFk nok dk fNMelko dj; k x; kA
 b/kj vyx vyx okMkā ea Hkh I QkbZ vfhk; ku pyk; k x; kA b/kj okMZ

deka 22 fl ākh dkykuh] gkÅfl x
 ckMZ dkykuh] okMZ deka 37 jktho
 xkāk uxj] feVBēMk] uoki kjk]
 I kfo=h uxj] okMZ deka 38 ds iVsy
 dkykuh] dY; k.k dkykuh] I ksudj
 ikkj] nokj ikkj] rnt/hi kj] peMk
 xknko] okMZ deka 42 ds veyhHkksuk]
 Vka iks/Z uxj dkykuh] bānj k vkokl]
 I ksue/lt o ctjx ikkj dkykuh ea
 I kQ&I QkbZ o nok dk fNMelko
 dj; k x; kA bu okMkā ea I QkbZ o
 nok fNMelko dj okMZ ik"kh o
 ukxfjdka I siek.k i = fy, x, A



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Mxw I s cpus , gfr; kr t: jh

fuxe vk; Dr Jh 'kDyk us crk; k fd Mxw I s ukxfjdka dks Hkh , gfr; kr
 cjrur dh t: jr gA mlgkas crk; k fd Mxw ds ePNj I kQ i kuh ea
 i uirs gā vk\$; g fnu ea dVrs gA bl fy, dnyj ds i kuh dks gj jkst
 I qg&'kke cnyus ds I kFk ?kj] okVjikW] i kuh teko LFky o I kekuka
 dh Hkh fu;fer I QkbZ dh t: jr gA , d s txgka ea feVVh ry ds
 fNMelko I s Hkh ePNj ds i uis I sjkdk tk I drk gA

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; g gS Mæw ds y{k.k

fo' kšKka ds vuđ kj Mæw ds y{k.k I keku; r% 3 I s 14 fnu ckn fn[krs
gA bl ds eq; y{k.kka ea rst BB ds I kfk cđ[kkj vkuk] fl j vksj vka[kk
ea nnđ 'kjhj vksj tkMka ea nnđ Hkv[k de yxuk] th epykuk] mYVh o
nLr gksuk] peyh ds uhps yky /kCcs vksj xđkhj flFkfr ea vka] ukd I s
[ku Hkh vkuk 'kkfey gA , d s y{k.k gksus ij ejhtka dks rđar fpfdRI d
I s I ykg yuh pkfg, A

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Mæw I scpus ; g gS mi k;

dN I keku; , gfr; kr cjrdj Mæw I scpk tk I drk gS tks fuEu gA

1& ?kj ds vñj vksj vkl & iMkd ea ikuh tek u gksus nA

2& uhe dh i fRr; ka dk /kq/k ?kj ea QSyk, A

3& ikuh ds I Hkh crZuka dks [kqyk u j [ka

4& fdpu vksj ok'k: e dks I v[kk j [ka

5& dnyj dk ikuh I qg o 'kke cnysrjgA

6& f[kMfd; ka vksj njoktka ea tkyh yxok, a

7& 'kjhj ij ePNj dks nij j [kus okyh dhe dk mi; ksxA

8& 'kjhj dks ijh rjg I s <e dus okys di Ms i guA

9& I krs I e; ePNj nkuh dk mi; ksx djA

10& ?kj ds vkl & ikl ikuh teko flFkyka ea feVV rsy dk fNMeko

djA

nok fNMeko dks yđj vk; Ør us fn, funžk

0 'kgj ea py jgs nok fNMeko o I QkbZ

vfhk; ku dk vk; Ør us fy; k tk; tk

jk; x<%&

cđkokj dks 'kgj ds fofHkUu okMkđ ea py jgs
nok fNMelko vfHk; ku o l QkbZ dk; Z dk
vk; Đr Jh iækn 'kĐyk us tk; tk fy; kA



bl nkjku
mlgkaus fuxe
LokLF; fofHkx
ds vf/kdkfj; ka
o deĐkfj; ka dks t: jh funđ k fn, A

Mæw o eyfj; k ij fu; æ.k ikus gj jkst
'kgj ds fofHkUu {ks=ka ea nok fNMelko dj; k
tk jgk gđ bl ds l kFk gh l Đnu'khy {ks=ka
ea dpjk Mđiæ txg] ty Hkjo LFkkuka o
ukyka dh fu; fer l QkbZ djkbZ tk jgh gđ
bl ij fuxe vk; Đr Jh 'kĐyk us l đg l s
gh 'kgj ds fofHkUu {ks=ka dks fujh{k.k fd; kA
vk; Đr Jh ik.Mş us l cl s igys pdZkj
uxj {ks= dk fujh{k.k fd; kA bl ds ckn

feuh LVfM; e jkM gkrs gq dchj pksđ rd l QkbZ dk tk; tk fy; kA
bl nkjku , d&nks txgka ij l Melka ij xnxh fn[kh] ftl s rRdky
l QkbZ djkus l đđ/kr l QkbZ njksk dks funđ'kr fd; k x; kA bl ds ckn
feVBeĐk pksđ gkrs gq gkđh pksđ igđđ bl nkjku Hkh l Melka ij
vfrde.k o xnxh fn[kh] ftl s gvkus ds funđ k l đđ/kr deĐkfj; ka dks
fn, x, A bl ds ckn l fDrxđh pksđ] LVs ku pksđ] ?kMđ pksđ] l Đkk" k
pksđ] i Sysk jkM] pknuh pksđ] xkđh'kadj efnj jkM dk fujh{k.k vk; Đr
Jh ik.Mş us fd; kA bl nkjku nok fNMelko {ks= o fLFkfr dh
tkudkjh Jh ik.Mş us yh vkđ t: jh l đko fn, A b/kj cđkokj dks okMZ
dekd 6 fnun; ky dkykuh] v'kkđ fogkj dkykuh] vt; xyh] 'kekZ
xyh] bMcy; w l dkykuh ea ePNj ekjus Lis l s nok dk fNMelko dj; k

x; kA bl h rjg okMZ 38 nscirkjk] [ksirkjk] bfnjk uxj jkM] fl)h
 fouk; d xyh] okMZ dekd 18 i BqMcjh ukys ds cxy ds vkl & ikl dh
 xnxh dh l Qkbz djkbz xbz vks] nok dk fNMeko dj; k x; kA fujh{k.k
 ds nk]ku LokLF; vf/kdkjh Jh th bZoj jko o LoPNrk fujh{k.d Jh
 l w žf.k frokjh 'kkfey FkA
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Rkykc ea Myok; k x; k MYyk puuk

okMZ dekd 41 Nkrke]k rkykc ea xnxh Qsyus , o rkykc ds ikuh l s
 ePNj i uius dh f'kdk; r feyh FkA bl sn]krs gq vk; o r Jh 'kDyk us
 rkykc dh l Qkbz o puuk fNMeko ds fun]k fn, FkA MYyk puuk dh
 xehz l s ePNj dk yokz u"V gks tkrk gA fun]k ds rgr rkykc ifj l j
 ea l Qkbz djkdj rkykc ds fduk] & fduk]s MYyk puuk Mkyok; k x; kA

**l at ; ekd] o brokjh cktkj ea gks jgk gj jkst
 nok dk fNMeko
 o fudkyk x; k ukys dk eyok] ePNj ekjus i kmMj o
 fyfDoM nksuka dk fNMeko**

jk; x < %&

eyfj; k o Maxw ij dkcw i kus gj jkst l at ; dk]yDl o brokjh cktkj



ea fo'kSk l Qkbz vfhk; ku
 pyk; k tk jgk gA ukys dk
 eyok fudkyk x; kA l kFk gh
 {ks= ea ePNj ekjus i kmMj o
 fyfDoM nksuka dk fNMeko
 dj; k x; kA

Maxw o eyfj; k dh f'kdk; r

l at ; dk]yDl o brokjh cktkj {ks= ea T; knk fey jgh gA bl sn]krs

gg vk; Dr Jh iekn 'kpyk us ; gka fo'kšk vfHk; ku pykus ds funž k fn,
gA bl ij yxkrkj pkFksfnu nksuka txgka ea I QkbZ djkbZ xbA I keokj
dks I qg I sgh vfrfjDr I QkbZ dehz yxkdj ukys dh I QkbZ dj eyok
dks fudyok; k x; kA bl ds ckn cktkj ea fLFkr I dMjh dpjk dyD'ku
i kba/ dks i wkr% I QkbZ djkbZ xbZ vkj {ks= ea ePNj dks ekjus ikmMj o
fyfDoM nksuka dk fNMeko dj; k x; kA b/kj I QkbZ njksk }kjk Hkh
viu&viu {ks= ea nok fNMeko dj; k tk jgk gA I keokj dks okMZ
deka 30 ckthjko egjkikjk] dshewlk] eksnkikjk] I ekf/k xyh] Hk/ku
xyh ea Lis ia }kjk nok dk fNMeko dj; k x; kA bl h rjg okMZ
deka 32 ds QVgkewlk] fiz n'kzh uxj dgjk ikjk] cd xyh] ik"kh
xyh] okMZ deka 41 Nkrkewlk cLrh] I gnokiyh cLrh] fVdjikjk ea Lis
ia I s nok dk fNMekok dj; k x; kA b/kj i ssk jkM ea eyfj; k QSyus
dh f'kdk; r feyus ij {ks= dh I QkbZ I fgr ikmMj o fyfDoM nksuka
dk fNMeko dj; k x; kA

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Ukxfjdka dh I rdVh t: jh

fuxe vk; Dr Jh iekn 'kpyk us dgk fd 'kgj ea tgka Hkh I QkbZ o
nok fNMeko gks jgk g\$ ogka ukxfjdka o {ks= ds tui frfuf/k; ka dh
I rdVh t: jh gA bl fy, gh nok fNMeko dk; l ea yxs dfez ka dks
iek.k&i= ukxfjdka o ik"khka I s vyx&vyx yus ds funž k fn, x,
gA I QkbZ o nok fNMeko I s I rdV gkus ds ckn gh ukxfjd o
tui frfuf/k uke] gLrk{kj o I hy ; Dr iek.k&i= nsjgs gA