

11. ekuoh 'kjhj o bfn; lLFkk

सराव प्रश्न

i'u- 1½ ek>k t kMhmkj 'kk/kk-

v xV	c xV
1½ ân;kp Bkd	v½ 350 feyh
2½ RBC	vk½ 7-4
3½ WBC	b½ 37° C
4½ jDrnku	b½ 72
5½fujkxh 0;DrhP;k 'kjhjp rkieku	m½ 50 r 60 y{k ifr ?k- feyh
6½ vkfDI tu;Dr jDrkpk lke	A½ 5000 r 10000 ifr ?k- feyh

mRrj %

v xV	c xV
1½ ân;kp Bkd	72
2½ RBC	50 r 60 y{k ifr ?k- feyh
3½ WBC	5000 r 10000 ifr ?k- feyh
4½ jDrnku	350 feyh
5½fujkxh 0;DrhP;k 'kjhjp rkieku	37° C
6½ vkfDI tu;Dr jDrkpk lke	7-4

i'u- 2½ [kkyhy rDrk i.k djk-

bfn; lLFkk	bfn;	dk;
1½'olu lLFkk		
2½ jDrkfHk l j.k lLFkk		

mRrj %

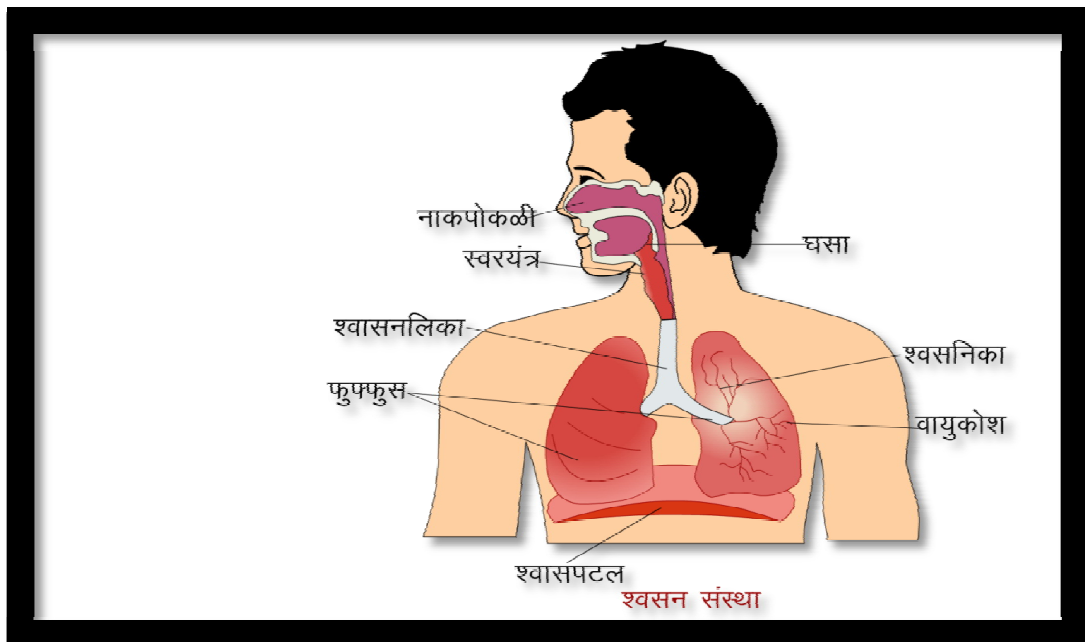
bfn; lLFkk	bfn;	dk;
1½'olu lLFkk	ukd ?k l k	1½ ukdku 'ok l ?k.k o mPNok l l kM.k 2½gok xkGu vkrel; ?kryh tkr- 1½?k"kk ikl u vUufydk o 'ok lufydk l: gkrkr- 'ok lufydk vUufydp;k i< vlr- 2½'ok lufydp;k ojP;k ckt l >k.d.k vIY;keG vUufydr vUu tkrkuk 'ok lufydk >kyh tkr R;keG vUukp d.k 'ok lufydr f'kjr ukghr-

	'ok lufydk QŋQl ok;dk'k 'ok liVy	'ok lufydekQr gok QŋQlkr uyh t kr- 'ok lufydP;k nku 'kk[kk vkgr- QŋQl ok;ph no?ko gk.;k l k Bh t k x k miyC/k d : u nrkr- jDrke/ku vkfDl tu 'kk"ku ?k.k o d kcu Mk;vkDl kbM ckgj Vkd.k ;k ok;ph iR;{k no?ko djrkr- 'ok liVy lkrR;ku vkdpu ilj.k d : u 'ok l kPNok l k l k Bh vko';d gkypkyh djr-
2½jDrkfHk l j.k l LFkk	ân; jkgf.kh@/keuh uhyk@¼'khjk½ jDrdf'kdk jDri'kh	ân; g li.k 'kjhjke/; jDrkfHk l j.k dj.kkj k Luk;e; ekly vo;o vkg- ân;kiklu 'kjhjkP;k oxoxG;k HkkxkdM jDr okgu u.kkU;k jDrokfgU;k ;k QŋQl /keuh 0;frfjDr brj lo /keU;k vkfDl tu;Dr jDr okgu urkr- 1½'kjhjkP;k fofok Hkkxkru ân;kdM jDr okgu urkr- 2½QŋQl'khjk 0;frfjDr brj lo uhykru dkcumk;vkDl kbM;Dr jDr okgu uy tkr- 1½'kjhjkP;k iR;d egRokP;k vo;okr jDrdf'kdkp tkG vlr- 2½ ;Fk vko';d vl.kkj ik"kn0;] vkfDl tu] lijd] thoulRo b- pk ijoBk jDrdf'kdkP;k fhkfrdru gkrk- rlp vuko';d ?kVd ;kp df'kdkP;k fhkfrdru i'khP;k ckgj iMrkr- 'kjhjkrhy fofok dk; fufujkG;k jDri'kh djr vlrkr- 1½ykgfgr jDri'kh&;k jDri'kh vkfDl tu o dkcumk;vkDl kbM ;kp ogu djrkr- 2½'or jDrdf.kdk& ;k ik<Ú;k i'kh 'kjhjkr lfudkp dke djrkr- 'kjhjkr dBgh jkxt rpk f'kjdko >kY;k l R;k oj

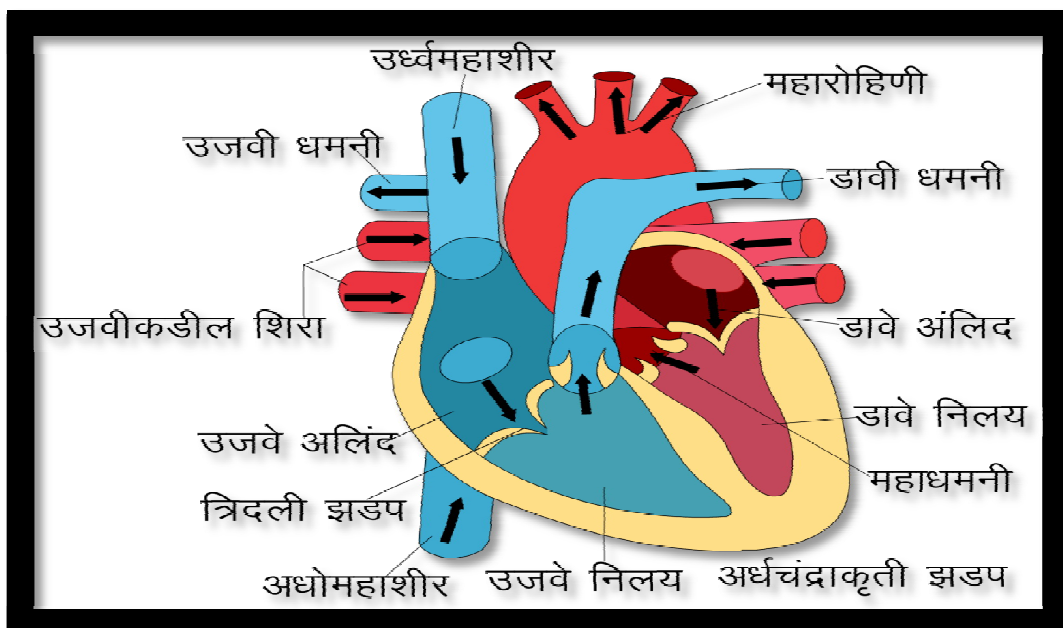
		;k i'kh gYk djrr- rlp l{ethokeG gk.kkÚ;k jkxkiku j{k.k djrr- 3½jDrivVhdK & ;k jDr xkBfo.;kP;k fØ;e/; Hkkx ?krkr-
	jDrno	;kr vl.kkjh vYC;ehu] XykC;yhU l Qk;fcukt u o ikFkkEchu vkf.k vln; vk;u fufujkGh dk; ?kMou vk.krkr- jDrnokeG jDr okg 'kdr-

i'u 3½ ukefunf'kr lcd vkdR;k dk<k-

v½ 'olulLFkk



vk½ ân;kph vkrjjpuk



i'u 4½ ldkj.k Li"V dj-

v½ ekuokp jDr rkcM;k jxkp vlr-

mRrj&ekuokP;k jDrkp jx yky fdok rkcMk vlrk- R;ke/; rkcM fgekXykchu vlr- fgekXykchu ykg;Dr ifFku vlu r ykfgr jDri'khe/; vlr-

vk½ 'okliVykph oj vkf.k [kkyh gk.;kph fØ;k ,dikBikB ,d gr-

mRrj& 'okliVykP;k fu;fer gk.kkÚ;k vkdpu vkf.k ilj.k ;k fØ;keG 'oklPNoklkph fØ;k ?kMr vlr- cjxM;kuk tkMyy Luk; ;k fØ;r lkgk; djr vlrkr- tOgk cjxM;k fdfpr oj mpyY;k tkrkr o 'okliVy [kkyh tkrk rOgk QŦQIkoj vyyk nkc deh gkrk R;keG ckgjhy gok ukdkokV QŦQIkr tkr ;kmyV tOgk cjxM;k iUgk io fLFkrhr ;rkr rOgk 'okliVy oj ;rk- R;keG QŦQIkrhy nkc ok<u gok ukdkokV ckgj iMr- v'kk i/nrhu 'oklPNoklkph fØ;k 0;ofLFkr ?kMou vk.k.;k lkBh 'okliVy lrr oj vkf.k [kkyh gk.;kph fØ;k ,dikBikB ,d gk.k xjtp vlr-

b½ jDrnkukl loJ"B nku lck/ky tkr-

mRrj & jDr g dBY;kgf df=e fdok jklk;fud in/nrhu cuork ;r ukgh- jDr QDr ftor jDrnkR;kdMup ?krk ;Å 'kdr- vi?kkr] jDrL=ko] ilodkG o 'kL=fØ;k v'kk fLFkrhe/; :X.kk l jDrkph vko';drk vlr- fujkxh 0;Drhu dyY;k jDrnkukeG ,[kkn;k :X.kkpk tho okp 'kdrk- dk.krhgh vi{kk u djrk dyy jDrnku g thounku vlr- Eg.kup jDrnkuky loJ"B nku lety tkr-

b½ ^O* jDrxV vlyY;k 0;Drhyk ^lkof=d nkrk* Eg.krkr-

mRrj & ^O* jDrxVkp;k 0;Drhe/; ykfgr jDri'khoj dBygh ifrtu ulr- v'kk 0;Drhp jDr xjt :X.kk l fnY;k l R;kP;k 'kjhjkr jDr xkBy tkr ukgh ^O* jDrxV vl.kkÚ;k 0;Drh nljk dk.krhgh jDrxV vl.kkÚ;k 0;Drhyk jDrnku d: 'kdrkr- Eg.ku ^O* jDrxV vlyY;k 0;Drhyk ^lkof=d nkrk* vl Eg.krkr-

m½ vkgkjr feBkp iek.k deh v lko-

mRrj & vkgkjr feBkp iek.k tkLr vly;k l frrD;kp iek.kkr 'kjhjkr lkfMve vk;u ?kry tkr- lkfMveP;k tkLr iek.kkeG

'kjhjkrhy jDrnkc ok<rk- R;keG ;k 0;Drhuk mPp jDrnkckpk =k l gk.;kph 'kD;rk ok<r- fg fLFkrh /kkdknk;d vlr- dkgh oGI v'kk 0;Drhpk vpud eR; gk.;kpk lHko vlrk- Eg.kup vkgkjr feBkp iek.k deh vlo-

i'u 5% [kkyhy i'ukph mRrj reP;k 'kCnkr fygk

v½ jDrkfHk l j.k lLFkp 'olu] ipu o mRl tu lLFk'kh vl.kkjk lc/k dk;kP;k Lo: ikr fygk-

mRrj& 1½'olu] ipu vkf.k mRl tu ;k frUgh lLFkk ,dedkcjkcj dk;ep leUo;kr dke djrkr-

2½ ipu lLFkk fg dkgh tfVy vUinkFkkp fonk0; ik" k.kn0;kr : ikrj djr vlr-

3½ jDriokgr fg fonk0; ik" k.kn0; 'kk"ku ?kryh tkrkr urj ygku vkrM;kP;k mno/kkr R;kp 'kk" k.k dy tr-

4½ jDrkfHk l j.kkP;k fØ;e/; fg ik" k.kn0; lo i'khi;r ikgpoyh tkrkr-

5½ gorhy vkfDl tu 'olu lLFkP;k enru jDrke/; 'kk"kyk tkrk- fgeXykchuP;k enru 'kk"ku ?kryy vkfDl tu lo i'khi;r ikgkpoyk tkrk-R;kpoGh p;kip; fØ;u fuek.k >kyyk dkcu Mk;vkDl kbM 'kjhjru mPNok l kP;k fØ;u 'kjhjckgj iMrk-

6½ 'kjhje/; 'kk"ku ?kryy vko';d ik" kdn0; fo'k"kr% Xydktp vkfDl tuP;k enru en Toyu gkou vkfDl Mhdj.k gkÅu Åtk fuek.k dyh tkr- v'kk in/rhu ;k frUgh lLFkk ,dedkcjkcj leUo; lk/ku dk; djr vlrkr-

vk%ekuoh jDrkph l jpuk o dk; fygk

l½ ekuoh jDrkph l jpuk & ekuoh jDr g yky jxkp vlu iokgh vkg- jDr g nk; l;kxh Årh vkg- jDr g jDrno vkf.k jDri'kh ;k nku ie[k ?kVdkuh cuyy vlr-

1½ jDrno&jDrno fQdV fioGIj jxkpk] furG o dkgh l k vkEykh/keh no vlrk- ;kr lekj 90 r 92 % ik.kh] 6 r 8 % ifFku o 1 r 2 % vln; {kkj o brj ?kVd vlrkr- jDrnokr vYC;feuj Xykc;yhu l Qk;fcuk tu o ikFkkEchu v'kh fofok ifFku vlrkr- rlp dfY'kve] l k fMve] ikVf'kve v'kh vln; vk;u vlrkr-

2½ jDri'kh& jDri'kh rhu idkP;k vlrr- ykfg r jDri'kh] 'or jDrdf.kdk o jDriVhdk ;k jDri'khph fuferh vlFkeTtr gkr-

v½ ykfg r jDri'kh & ;k jDri'kh vdkjku ygku] orGdkj o dnd ulY;k i'kh vlrr- ;k jDri'khr vDlhtu okgu u.kkj- fgeXykchu gk ?kVd vlrr- jDrP;k iR;d ?kufeyh e/; 50 & 60 y{k RBC vlrr- ;kph vk;e;knk lek 100 r 127 fnol vlrr-

c½ 'or jDrdf.kdk& ;k vdkjku ekB;k] dnd;Dr] jxghu i'kh vlrr- jDrP;k iR;d ?kufeyhe/; 5000&10]000 ik<Ú;k i'kh vlrr-

d½ jDriVhdk & ;k i'kh vfr'k; ygku o rcdMhP;k vdkjklkj[;k vlrr- ;k jDrP;k ,dk ?kufeyhe/; lek 2-5 y{k r 4 y{k vlrr-

II½ ekuoh jDrkph dk; &

1½ vkfDlhtu Q¶QlkdMu lo i'khdM u.;kp dk; jDr djr vkf.k dkcuMk;vkDlkbMp iR;d i'khru Q¶Qlki;r ogugh jDrknokj gkr-

2½ Xydk t] enkEy o vfeuk vkEy gh ygku vkrM;kru 'kk"kyh tkrkr o jDrP;k lkgk,;ku lo 'kjhjkr ikgpoyh tkrkr-

3½ fodj o lijd ;kP;k L=kokP;k fBdk.kkgu R;kP;k fØ;kP;k fBdk.kh ikgpoy.;kp dk;gh jDrP;k enrhu gkr-

4½ vekfu;k] ;fjvk] fØ,fVuhu b uk;Vktu;Dr VdkÅ inkFk Århe/; r;kj gkrkr- g inkFk jDrkokV oDdkdM ikBoyh tkrkr- rFk r inkFk xkGy tkrkr- o urj 'kjhjckgj Vkyh tkrkr-

5½ 'or jDrdf.kdk ;k jkxifrdkj d ifrfiMkph fuferh d:u 'kjhjke/; jkxifrdkj d 'kDrh ok<orkr- l{e thok.k o brj jkxtriklu 'kjhjpk l{j.k.k v'kk in/rhu jDr djr-

6½ ekuoh 'kjhjpk rkieu 37⁰ c vlrr- ;Fk foLQkj.k o jDrokfguh ldkpu ;kX; R;k fBdk.kh ;kX; oGh gkr vlrr o rkieukp fu;=.kgh Boy tkr-

7½ 'kjhjkrhy lfmve ikVf'kve ;klkj[;k {kkjpk lery Bo.;kp dk; jDrkeG gkr-

8½ t[ke >kY;koy gk.kkj jDrL=ko Fkkco.;kp dk; jDrnokrhy Qk;fcuktu o ikFkkEchu gh ifFku djrr-

b½ jDrnkukp egRo o xjt Li"V djk-

mRrj & jDr df=e i/nrhu r;kj djr k ;r ukgh- iR;d ln<
ek.k l kP;k 'kj hke/; lek 5 y h jDr vlr- vi?kkrkr jDrL=ko
>kY;k l 'kj hke/kh y jDrkp iek.k deh gkr- R;keG tho /kkD;kr ;Å
'kdrk- ;kph rkrMhu dkGth ?kryh ukgh rj R;k 0;Drhp ik.k okpork
;r ukgh- v'kkoGh R;k 0;Drhyk jDr ijk/kkukph xjt vlr-

vi?kkrxLr] 'kL=fØ;k djrkuk] ilodkGkr tKlr jDrL=ko
>kyY;k efgykuk jDrijk/kkukph xjt tKlr iek.kkr vlr- rlp
FkyIfe;k] vfufe;k o dUljxLr 0;Drh ;kukn[khy lrr jDrkph xjt
Hkkllr- tj dk.kh jDrnku dy ukgh rj v'kk xjt 0;Drhp ik.k okp.kkj
ukghr-

i'u 6½ Qjd Li"V djk.

v^{1/2} /keU;k o f'kj

/keU; k	f'kjk
1½ ân; k i k l u 'kjhjkP; k oxoxG; k HkkxkdM jDr u.kkÚ; k okfgU; kuk /keU; k Eg.krkr-	1½ 'kjhjkP; k fofo/k HkkxkdMu ân; kdM jDr okgu u.kkÚ; k okfgU; kuk uhyk Eg.krkr-
2½ /keU; k ; k 'kjhjke/; [kkyoj v l rkr-	2½ cgrd uhyk ; k Ropyxrp v l rkr-
3½ /keU; kP; k fhkfrdk t k M v l rkr-	3½ uhykP; k fhkfrdk ikrG v l rkr-
4½ /keU; kP; k i k dGhe/; >Mik u l rkr	4½ uhykP; k i k dGhe/; >Mik v l rkr-
5½ /keuh t k Lr Luk; e; v l Y; keG v k f D l t u v l y y jDr v f / k d i H k k o h i . k i R; d i ' k h i ; r i k g p o r-	5½ uhyk deh Luk; e; v l Y; keG f r P; k r h y > M i k j D r i o k g l j G h r i . k p k y B o r k r o R; k e G j D r m y V o k g r u k g h-
6½ l o /keU; k v k f D l t u; D r jDr o k g u u r k r- v i o k n & Q ¶ Q l j k f g . k h	6½ l o uhyk v k f D l t u f o j g h r jDr o k g u u r k r- v i o k n & Q ¶ Q l uhyk
7½ /keuhr d e k y] t k L r h r t k L r j D r n k c v l r k	7½ uhykr f d e k u d e h r d e h j D r n k c v l r k-

vk½ cfg% 'olu o vr% 'olu

cfg% 'olu	vr% 'olu
1½ ckg : u gok 'kjhjr ?k.k o 'kjhkr u gok ckgj l kM.k ; k ifØ ; kuk cfg% 'olu vl Eg.krkr-	1½ 'kjhkrhy lo i'kh vkf.k jDr ; knjE ; ku gk.kkÚ ; k ok ; P ; k nok.k?kok.khyk vr% 'olu Eg.krkr-
2- i'kh ; k cká okroj.k ; kP ; ke/ ; cfg% 'olu gkr-	2½ 'kjhkrhy i'khe/ ; p vr% 'olu gkr-
3½ cfg% 'oluke/ ; 'ok l kPNok l o ok ; ph nok.k?kok.k gkr-	3½ vr% 'oluke/ ; 'ok l kPNok l fdok ok ; ph nok.k?kok.k gkr ukgh-
4½ cfg% 'oluke/ ; 'ok l o mPNok l ; kpk leko'k gkrk-	4½ vr% 'oluke/ ; vkfDl tu ; k ok ; p ogu jDrkru i'khr vkf.k i'khiku dkc u Mk ; vkDl kbMp ogu jDrkr gkr-
5½ cfg% 'oluke/ ; vkfDl tupk fgeXykfcu'kh l ; x gkrk-	5½ vr% 'olukr i'khe/ ; p jk l k ; fud ifØ ; k gkÅu Åtkfuferh gkr-

i'u- 7½ jDrnku dj.kkÚ ; k 0 ; Drh l k Bh fujkxh v l Y ; kckcrp dk.kr fud" k y { kkr ? ; ky \

mRrj % jDrnku dj.kkjh 0 ; Drh l n < vlyh ikfgt- jDrnkR ; kp fgeXykfcup iek.k ; kX ; vly ikfgt rlp ykfgr jDri'kh o 'or jDri'khp iek.k ; kX ; vlk ; yk go- jDrnkR ; kP ; k jDrkr dk.krkgh ijthoh l { etho ulkok- mnk-&MX ; pk fo"kk.k eyfj ; kpk lyk÷ekfMve b-rlp R ; kP ; k jDrkph , Mlfo" k ; d rik l.kh dj.k vfuok ; vk g- R ; k 0 ; DrhP ; k rk fujkxh v l Y ; kckcrP ; k fofo/ k p k p . ; k d # u ? ; k 0 ; k r-rlp R ; kuk dk.krkgh v k t j j CyMi'kj ukgh ; kph [kk=h djkoh- ; k urjp rh 0 ; Drh jDrnkuk l k Bh ; kX ; Bjy-

i'u- 8½ d l k r fnyY ; k i ; k ; k p k ; kX ; fBdk.kh okij dj k- o fjd k E ; k t k x k Hkjk-

% fgeXykchu] vkEykh/keh] 'ok l i v y] v l F k e T t k] , f P N d] v u f P N d] vkEy/keh½

v½ jDrkrhy rkcm ; k i'khe/ ; ----- g ykgkp l ; x vl r-

mRrj % fgeXykchu

v^{k½} ----- g mnjikdGh o mjikidGh ;kP;k njE;ku vl r-

mRrj % 'okliVy

b½ ân; Luk; ----- vl rkr-

mRrj % vufPNd

b½ vkfDI tu;Dr jDrkp lke pH ----- vl rk-

mRrj % vkEykfj/keh

m½ RBC ph fuferh ----- e/; gkr-

mRrj % vlFkeTtke/;

i'u- 9½ vkeP;krhy oxG dk.k r vkG[kk-

v½ A, O, K, AB, B

mRrj % K %brj lo jDrkp xV vkgr-½

v^{k½} jDRkn0;] jDriVhdK] jDr ijk/kku] jDrdf.kdk

mRrj % jDr ijk/kku %brj lo jDrkp ?kVd vkgr-½

b½ 'oklufydK] ok;dk'k] 'okliVy] df'kdK

**mRrj % df'kdK %brj lo 'olu lLFkrhy Hkkx vkgr df'kdK 'kjhkr
lo= vk<Grkr-½**

b½ U;VkfQy] XykC;fyU l] vYC;feu] ikFkkfEcu

mRrj % U;VkfQy %brj lo jDrnokrhy ifFku vkgr-½

i'u- 10½ [kkyhy mrkjK okpk o jkx@fodkj vkG[kk-

**vk t frp ckG nhM o"kkp >ky] i.k r fujkxh] glj ukgh- r
lkj[k fdjfdj djr] fnolfnol v'kDr fnlr vkg- R;kyk /kki ykxr-
R;kpk 'okl Qkj tyn vkg- R;kph u[k fuGIj fnl ykxyh vkgr-**

**mRrj % ckGkp ân; 0;ofLFkr dk; djhr uly- ckGkyk vkfDI tu deh
iMr vly R;keG R;kph u[k fuGIj fnlr vkgr- rlp R;kyk 'olu
lLFkp n[khy cjp fodkj vl.;kpk lHko vkg-**

i'u- 11½ reP;k 'tkjP;k ddkp jDrnkckP;k fodkjp funku
MkDVjkuh dy vkg- R;kpk jDrnk fu;=.kkR jkg.;k lBh R;kuh dk;
djko cj \

mRrj % l/kkj.ki.k o;Ldj ek.k l kuk mPp jDrnkckpk 0;k/kh vl 'drk-
mPp jDrnkckph dkj.k vud vlrr- ;kidh ddkuk uedk dk.kR;k
dkj.kkeG =kl grrk vkg g tk.ku ?k.k xjtp vkg- yBbi.kk] 'kkjhjd
0;k;kepk vHkko] [ki tkLr iek.kkr QkLV&QM [kk.k] vkgjkr vfr
feBkp okij] ekufld r.kko v'kh vud dkj.k mPp jDrnkckl
dkj.khHkr vlrr ddkuh MkDVjP;k lYY;ku l kj vk"l/k o vkgkj
?;k;yk gok- jDrnk mrjo.kkjh vk"l/k fu;fer ?;khr- ddkuh
vkgjkr feBkp iek.k deh djko- rlp ddkuh rydV inkFk ?k.k
VkGy ikfgt- ddkuh jkt ;kx vkf.k /;ku/kkj.kk vl mik; djkor-
rk.kr.kkogh deh djkor-