

ek/; fed Lrj

fgnh

l e; % 3 ?k/s

dy vid % 100

funžk %

- 1- l Hkh izu vfuok; ZgA
- 2- l Hkh izuka dks/; kui mbd if<+ vks mUkj nhft, A
- 3- izu l f; k l l sll rd plj fodYi ka ea l sl okZ/kd mi ; q r mUkj ds vks l gh dk fu'kku yxkb, A

1- l jdkjh edku dh l fe=kk fdl izdkj ds ifjokj dh cgw cudj vkbZ Fkh\ 1

¼d½ xjhc ifjokj

¼[k½ jba ifjokj

¼x½ l kekl; ifjokj

¼k½ cMsi ifjokj

2- ^jkuh HkkHkh] i kuh fi yk\*\* dFku l sD; k Hkko izdV gsrk g& 1

¼d½ fouerk

¼[k½ pki yll h

¼x½ 0; x;

¼k½ bz; kz

3- Hkkjr dh ; scgknj cfV; k; "kh"kd i kB ea Hk; dj vlx yxh ns[kdj fdj .k cnh dk vi us vki dks i kuh l s fHkxks ysuk fdl izdkj l gk; d gq/k\ 1

¼d½ xehz l scpus ds fy,

¼[k½ ugnus ds fy,

¼x½ ykska dks vlx dh xehz l scpkus ds fy,

¼k½ ykska dks fn[kkus ds fy,

4- fuEufyf[kr l ekplj vak dks/; ku l sif<+ vks fn, x, fodYi ka ea l sl okZ/kd l gh fodYi ij l gh dk fu'kku yxkb, &

ubZfnYyh] 10 fl rEcj ¼i s V¼A uhnjy¼M eagq pkj nš kka ds Vuukžb¼/ ea v¼š pšii ; u V¼Qh Vhe dk  
i n' k¼u mEehinka l scgrj jgkA e¼; d¼p jkt¼nj fl g¼ us ; g fopkj 0; Dr fd; kA

mDr l ekpkj v¼k dks l ekpkj dh Hkk¼kk ea D; k dgrs g¼š 1

¼d¼ ¼ g¼M ykbu

¼[ k¼ ¼ c¼¼ l e¼Vj

¼x¼ ¼ b¼¼/¼s

¼¼k¼ ¼ l ekpkj foLrkj

5- fuEufyf[kr i¼Dr; ka dks /; kui ¼d if<+ v¼š i ¼Ns x, izu dk m¼k¼ nhft, &

l h[ks d¼k¼ uokct¼, s h n¼h n¼A

T; k¼T; k¼ dj Åps fd, ] R; k¼R; k¼ uhps u¼A

bu i¼Dr; ka ea x¼k dfo¼jghe dh fd l fo'k¼skrk dh iz¼k¼ k dj jgsg¼š 1

¼d¼ ¼ nku'k¼hyrk

¼[ k¼ ¼ fouerk

¼x¼ ¼ mnkjrk

¼¼k¼ ¼ l i¼érk

6- ^vydk¼ ea ey; t c¼n fd, \*\* i¼Dr ea ^vydk¼ l s D; k rkRi ; Z g¼š 1

¼d¼ ¼ i yda

¼[ k¼ ¼ Hkk¼š¼

¼x¼ ¼ yV¼

¼¼k¼ ¼ v¼k¼[ka

7- ^v/k¼ku /k¼h v/k¼k u /k¼k¼h\*\* ea dks¼¼ l k vy¼k¼ g¼š 1

¼d¼ ¼ 'y¼k

¼[ k¼ ¼ ; ed

¼x¼ ¼ : id

¼¼k¼ ¼ mRi ¼¼k¼

8- ^tks ty ck<¼uko e¼ ?¼j ea ck<¼nkeA  
nks¼ g¼k¼k my¼h¼p, ] ; gh l ; kuks d¼keAA\*\*

dchj ds mDr nks ea l ; kuls dke l s rkr i ; Z g&& 1

¼d½ cMHi u dk dke

¼[k½ prj kbz dk dke

¼x½ bžkunkjh dk dke

¼k½ l e>nkj h dk dke

9- l kj yš[ku ds l e; fuEufyf[kr ea l sfdl ckr ij /; ku nuk vko'; d gkrk g&

¼d½ emy fcng

¼[k½ l yš[k

¼x½ ekud Hkk"kk

¼k½ mnkgj .k

1

10- jš[kkr dr dsfy, mi ; Ør egkojk D; k g&&

ekgu i <kbz dsfy, cgr ifjJe djrk g&&

¼d½ , fM+ kj jxMuk

¼[k½ ukdkapus pckuk

¼x½ jkr&fnu , d djuk

¼k½ fl j ij dQu ck/kuk

1

11- i=k fy[krs l e; fuEufyf[kr ea l sfdl ckr ij /; ku nuk vko'; d ugha gkrk&&

¼d½ i=k dh fo"k; &OLrq

¼[k½ iklrdrkz dk uke&irk

¼x½ fy[kus okys dk irk

¼k½ i=k fy[kus dh 'kSyh

1

12- fuEufyf[kr x|kák /; kui d d if<+ rFkk i nSx, izuka dsmÜkj nhft,

uhyke xhok ds dkj .k ekj dk uke j [kk x; k uhydBA-----ep sLo; aKkr ughafd dc uhydB  
usvi usvki dksfpfM+ k?kj dsfuokl h tho&tarqka dk l siki fr vksj l j {kd fu; Ør dj fy; kA l ojs  
gh og l c [kjxkskj dcrj vkfn dh l suk , d=k dj mudh j [kokyh djrk jgrkA fdl h us dN  
xM+dh vksj og viusrh[kspqigkj l sml snM nusnk&MkA , d ckj nM i kus ij dkbz fQj dHkh  
ml sØk/kr gkusdk vol j u nrk FkkA ml ds nM fo/kku ds l eku gh mu tho&tarqka ds i fr ml dk

iæ Hkh vl k/kkj .k FkkA ik; %og feVVh ea i[ k Qsykdj cB tkrk vksj os l c ml dh ych iN vksj  
l ?ku i[ kka ea Nq/k&Nq/koy [ksyrs jgrs FkkA

irk ughadS s, d fnu , d l kji tkyh?kj ea igpp x; kA l c tho&tarqHkkx dj b/kj&m/kj fNi x, ]  
doy , d f'k'kq [kjxks'k l kji dh idM+eavk x; kA fuxyusds iz kl eal kji usml dk vk/kk fi Nyk  
'kjhj rks egg eanck j [kk Fkk] 'kSk vk/kk tksckgj Fkk ml l spha-phadk Loj Hkh bruk rhozughafudy  
l drk Fkk fd fdl h dksLi "V l qkbZns l dA uhydB nij Åij > nys eal ks jgk Fkk ml h ds pks dës  
dkuka usml ean Loj dh 0; Fkk igpkuh vksj iN i[ k l eV dj l jZ l s, d > iVVse auhps vk x; kA  
\$\$ ml us l kji dks Qu ds ikl iatka l snck; k vksj fQj pöp l smrus igkj dj djds ml ds nks  
[k&M dj MkyA

fuEufyf[kr izuka ds l gh mÜkj ka ij l gh dk fu'kku yxkb, &&

(i) [kjxks'k ds cPps uhydB l sMjrs Fks D; kfid og

¼d½ l cdk l siki fr FkkA

¼[k½ l c dk l j {kd FkkA

¼x½ dBkj n&M nrk FkkA

¼k½ l kji dks Hkh ekj l drk FkkA

1

(ii) ekj us l kji ds VpM&D; ka dj fn, \

¼d½ [kjxks'k dks cpkus ds fy,

¼[k½ [kjxks'k ds cPps dks cpkus ds fy,

¼x½ vi us vki dks cpkus ds fy,

¼k½ vi uh cgknj h fn [kkus ds fy,

1

(iii) uhydB dks tho&tarq/ka dk l j {kd fdl us cuk; k\

1

(iv) ekj dk uke uhydB D; ka j [kk x; k\ vi us 'kCnka ea crkb, A

1

(v) vPNs l siki fr ds: i ea uhydB ds dkbZnks dke crkb, A

2

(vi) bl x | k&k ds vk/kkj ij uhydB ds j&x : i dk o.ku dhft, A

2

(vii) fdl ckr l s Kkr gkrk gSfd uhydB nil js tho&tarq/ka dh mNy&din l sukjkt+ugha gkrk Fkk\2

(viii) mDr x | k&k dk l kj fyf[k, A

2

(ix) mi ; Ør x | k&k ds fy, mi ; Ør 'kh"kd dhft, A

1

13- fuEufyf[kr dk0; k&k dks /; kui wZd if<+ vksj iN s x, izuka ds mÜkj nhft, &&

fuhkZ Lokxr djks e`R; q dkj

e`R; q, d gSfoJke&LFkyA  
 tho tgl; l sfQj pyr k gS  
 /kkj.k dj uo&thou&l cyA  
 e`R; q, d l fjr k gS ft l e  
 Je l s dkrj tho ugkdjA  
 fQj urru /kkj.k djr k ru]  
 dk; k&: i h oL=k cgkdjA

fuEufyf[kr izuka ds l gh mUkj ij l gh dk fu'kku yxkb, &&

(i) e`R; q dk Lokxr djuk pkfg, D; k&d e`R; q  
 1/4d1/2 thou dh dfBukb; ka dks nij djr h gA  
 1/4[k1/2 thou l sefDr fnykrh gA  
 1/4x1/2 l s'kk&r i ltr gkr h gA  
 1/4k1/2 l su; k thou i ltr gkr k gA

1

(ii) uo&thou&l cy ea l cy dk D; k vFlz gS  
 1/4d1/2 l gkj k  
 1/4[k1/2 vkJ;  
 1/4x1/2 l eku cy  
 1/4k1/2 'kfDr' kkyh

1

fuEufyf[kr izuka ds mUkj fyf[k, &

(iii) e`R; q vksj l fjr k ea D; k l ekur k gS

2

(iv) fQj urru /kkj.k djr k ru]

dk; k : i h oL=k cgkdjA\*

mi ; Dr i fDr; ka dk vk'k; Li"V dhft, A

2

14- dYi uk pkoyk us'f'k(kdka ds euk djus ij Hkh , jksuksVdy bat hfu; fja: dk {ks-k D; ka pqrk\

1

15- ^Qdz y?kpfkk gea D; k l ans k nrh gS

1

16- ^vk jgh fgeky; l s i plkj

gS mnf/k xj trk ckj&ckjA\*\*

mi Dr i fDr; ka ea fgeky; vksj mnf/k fdu fn'kkvka ds l ipd gS

1

17- ^vyf{kr] ukpht+gW

xdz gW/kjrh dh tknpZ dks[k ea\*

mDr i fDr; ka ea /kjrh dh dks[k dks ^tknpZ D; ka dgk x; k gS

1



23- ^cgr fnukadsckn\* dfork eadfo usxdk] : i] j l & 'kCn Li 'kZclks, d l kFk dS sHkksck gS vi us'kCnka ea vfhko; Dr dhft, A 5

24- rckdij chMh] fl xjv] 'kjc vkfn dh u'kk[kksh l s gkus okys upl ku dks crkrs gg , d vuqNsn fyf[k, ; k egYys ds uksVI ckMZ ds fy, rRl cdkh , d uks/ rS kj dhft, A  
vFkok

vki dsfi rkth ds ikl di Ms/kkusdk l kcu cukusdh QDVjh gA vki ml l kcu dk foKki u cukb, A  
vFkok

vki vi uh ij kuh l kbfdy cpuk pkgrsgA ml l kbfdy dh fo'kSkrk crkrs gg , d foKki u fyf[k, A 5

25- fuEufyf[kr 'kCnkaeal sfdlghanks tkMka dk okD; ka eabl izdkj iz xsx dhft, fd mudk vFkLi"V gks tk, && 4

d- i qrd@xrk]

[k- vkj@vkj

x- pjuk@pxuk

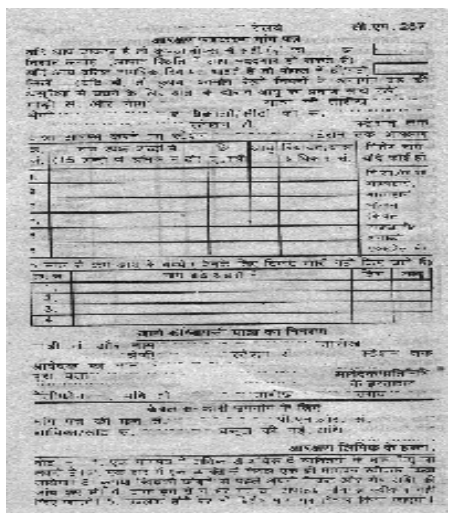
26- , d vLi rky ea pkj okMZ gA bu pkj ka okMka ea Øe'k%25] 35] 32 rFkk 28 ejht gA bu eal sigys okMZ ea Øe'k%13 i#k] 10 efgyk, j rFkk 2 cPps gA

nl jsokMZe a Øe'k%12 i#k] 18 efgyk, j rFkk 5 cPps gA rhl jsokMZe a Øe'k%10 i#k] 8 efgyk, j rFkk 14 cPps gA pkFks okMZ ea Øe'k%5 i#k] 15 efgyk, j rFkk 8 cPps gA

mDr l pukvka dks mi ; Ør rkfydk } jk n' kb, A 5

vFkok

jsy vkj {k.k i i =k



mDr i i=k dks Hkfj, A

27- cgknj dgkuh dh fdUgharhu iæd[k ?kVukvka dk mYyq[k dhft, ftul svki i Hkkfor gq gkA 5

28- fuEufyf[kr okD; ka dks 'kq) dhft, &&

¼d½ vki pykš ge vkrs gA

¼[k½ ge Hkkstu fd, gA

¼x½ rfgkjs dks ešus i qRkd nh FkhA

¼qk½ vki dh vuodka l kfm+ k; gea cgr i l an vkbA

¼M-½ ek; us pk; &pk; dh l h jV yxk j [kh gA 5

29- vki dsegYysea dMk mBkusokyh xkMh l e; l sugha vkrhA bl xnxh l si šnk gkus okyh l eL; kvka dks crkrs gq vki vi us ut nhdh uxji kfydk vf/kdkjh dks i=k fyf[k, A

vFkok

vi uh cgu dsfookg r; gks tkus dk l ekpkj nrs gq dydÜks ea jgus okys vi us ekek th dks i=k fyf[k, A 7

30- fuEufyf[kr ea l sfd l h , d fo"k; ij vi us fopkj yxHkx i pkl 'kCnka ea 0; Dr dhft, & 5

¼d½ ij fgr l fj l /keZ ufgan mt k

¼[k½ vuq kkl u gh 0; fDr dks egku cukrk gS

¼x½ ekuo l ok gh bZ oj l ok gS

¼qk½ i űfr gh thou dk vk/kkj

31. fuEufyf[kr ea l sfd l h , d fo"k; ij yxHkx 200 'kCnka ea fucdk fyf[k, & 10

¼d½ i nll. k ds [krjs

¼[k½ l pkj Økfr & oj nku ; k vfHk' kki

¼x½ c<rs okgu] c<rh ; krk; kr dh l eL; k

¼qk½ nij n' kZu l sykHk vksj gkfu; k;

¼mi ; Dr ea l sfd l h , d dks iZu i=k eafn; k tk, A½

ueus ds izu i=k dh  
ekud vad ;kstuk

izu l q; k	eY; kedu fonq	vad folkk tu	dgy vad
1-	$\frac{1}{2} \times \frac{1}{2}$	1	01
2-	$\frac{1}{2} d \frac{1}{2}$	1	01
3-	$\frac{1}{2} \times \frac{1}{2}$	1	01
4-	$\frac{1}{2} \times \frac{1}{2}$	1	01
5-	$\frac{1}{4} [k \frac{1}{2}$	1	01
6-	$\frac{1}{2} \times \frac{1}{2}$	1	01
7-	$\frac{1}{4} [k \frac{1}{2}$	1	01
8-	$\frac{1}{2} k \frac{1}{2}$	1	01
9-	$\frac{1}{2} d \frac{1}{2}$	1	01
10-	$\frac{1}{2} \times \frac{1}{2}$	1	01
11-	$\frac{1}{2} k \frac{1}{2}$	1	01
12-	(i) $\frac{1}{2} \times \frac{1}{2}$	1	01
	(ii) $\frac{1}{4} [k \frac{1}{2}$	1	01
	(iii) Lo; a cu x; k	1	01
	(iv) xhok dk jak uhyk gkus ds dkj .k	1	01
	(v) I I Hkh tho&trvka ds ifr iæ] I j {k.k	1\$1	02
	II vuqkkughurk ds fy, dBkj nM $\frac{1}{4} dUgha nks fo' k'krkvka dk mYys [k \frac{1}{2}$		
(vi) uhyh xnZu] I ?ku i q] yeh i N] rst+pkp rFkk iats			
	□ □ fdUgha rhu dk mYys [k vi f {kr	$\frac{1}{2} \times 3 = 1\frac{1}{2}$	

	□ □ iLrfr	½	02
(vi)	□ vius i[ k Qsyk dj cB tkrkA vU; thoka dk mu i[ kka l sypk&fNih dk [ksy [ksyusnrk	1\$1	02
	□ bl dkj.k foJke ea 0; o/kku iMfk ij fQj Hkh ukjkt u gksuk ¼mDr fcnq/ka dk mYys[ k vi s{kr½		
(viii)	, d frgkbZ 'kCnka eamfpr l kj Hkk"kk 'kq) rk	1½ ½	02
(ix)	uhydB] i f{k; ka dk jktk vkfn vksj 'kh"kd Hkh Lohdk; Z ¼mfpr 'kh"kd nus ij iwkvad fn, tk, ½	1	01
13-	(i) ¼k½	1	01
	(ii) ¼[k½	1	01
	(iii) l fjr dk ty LoPN] 'khry gsrk gA ; g ty euq; dks 'khryrk inku djrk gSBhd ml h izdkj e`R; qHkh tho dks thou dh l kjh Fkdku l snj dj 'kjhj vksj eu dks 'kkfr&'khryrk inku djrh gA chrs thou dh Fkdku mrkj nrh gA	2	02
	(iv) e`R; qds i'pkr~tho vi uk ij kuk 'kjhj R; kx dj uohu 'kjhj /kkj.k djrk gSBhd ml h izdkj ftl izdkj 0; fDr ij kus diM\$ mrkj dj u, diM\$ igurk gA	2	02
14-	cpiu l sgh rhoz bPNk gkus ds dkj .k	1	01
15-	euq; gh Hkn djrk gS tkuoj ugha	1	01
16-	fgeky; &mUkj] mnf/k & nf{k.k	½+½	01
17-	/kjr dh feVh eanck ukpht cht dN l e; ckn vadj vksj fQj i kks ea ifjofrZr gks tkrk gS bl fy, bl s tknpZ dsk dk dgk gA	1	01
18-	¼d½ if'peh mUkj in\$ k eafLFkr ejB eqt fQj uxj vkfn fnYyh ds vkl &i kl dk {k\$ k	1	01

	¼[k½ dk; kzy; ea iz Ør Hkk"kk dk : i jktHkk"kk gA	1	01
19-	¼d½ fo   k \$ vky; ] ij \$ mi dkj] bl \$ gh vFkok fnus'k] dHkh] l nð	1+1	02
	¼[k½ okyk % nghokyk] Qyokyk] feBkbbkyk] Bsyokyk vkfnA nkj % i gjnkj] l e>nkj] [kcjnkj vkfn vFkok nku % i kunku] i hdnku] dVkj nku] fl njnk bZ & i <kb] dVkb] fl ykb] vkfn	1+1	02
	¼x½ 1- xjeh] 2- mlufr vFkok l w z % l j t] fnudj] fnokdj vkfnR; ] Hkkuqvkfn gok % i ou] l ehj] ok; qvkfn i kuh % ty] uhj] vkfn	1+1	02
20-	nksuka dk mfpr iz ksx gksus ij i wkZ vad fn, tk, A	1+1	02
21-	i klr dÜkkZ dks i=k u i klr gksus dh fLFkr ea l gj f{kr yKs/ vk, bl fy, A	1	01
22-	fo"k; & oLrq dh l e> l Vhdrk l exzi Lrf	2 1 1	04
23-	□ ekSy l hfj dh xdk □ i dh l qgyh Ql yka dk : i □ xllus ds j l dk Lokn □ /kku dh /rh fd'kksj ; ka ds xhrka dk Loj □ xkp dh /ky dk Li 'kz		

	* fdUgha plj fc&nyka dk mYys[k	$\frac{1}{2} \times 4 = 2$	
	* vfHk0; fDr	2	
	* Hkk"kk 'k@) rk	1	05
24-	fo"k; &oLrq dh l e>	02	
	l Vhdrk	01	
	jkpdrk	01	
	Hkk"kk 'k@) rk	01	05
25-	fdUgha nks 'kCnka ds tkMka dk		
	l Vhd mi ; @r	01	
	okD; iz ksx	1x4	04
	ifjiwkZ vad fn, tk, j		
26-	okMZ iq "k efgyk cPps diy ; ksx		
	okM&1 13 10 2 25		
	okM&2 12 18 5 35		
	okM&3 10 8 14 32		
	okM&4 5 15 8 28		
	mi ; @r rkfydk fuekZk ij iwKZ vad fn, tk, j		
	$\frac{1}{2}$ fdUgha nl l gh iz @Dr; k; Hkjh gkus ij iwKZ		
	vad fn, tk, $\frac{1}{2}$	$\frac{1}{2} \times 10 = 5$	05
27-	□ fueZyk ds chekj iMus ij cgnkj }kjk l ok		
	□ ek; dh ; kn ugha vkuk ijarq muds i fr		
	viuk drD; ; kn j[kuk vkj dguk fd		
	ek&cki dk dtkZ rks tle ij Hkjk		
	tkrk gA		
	□ vkRel Eekuh&fd'kkj ds xkyh nus ij		
	fryfeyk mBuk vkj ml dk dke djus		
	l sb&ckj		
	□ l jy an; vkj b&ekunkj		
	mDr ea l sfdUgha rhu fo'kSkrvka dk		
	mYys[k vi s{kr	03	

	vfhk0; fDr	1	
	'kq) Hkk"kk	1	05
28-	½d½ vki pfy,] ge vkrs gA		
	¼k½ geus Hkkst u fd; k gA		
	½x½ rfgæeS i qrd nh FkA		
	½k½ vki dh vucl l kfm+ k; geacgr i l n vkbA		
	¼³½ ek; us pk; &pk; dh jV yxk j [kh gA		
	i R; d 'kq) okD; ij i wkZ vad fn, tk, j	1x5	05
29-	i=k dh i kj Hkd vksj var dh vksj pkfj drk, j	½x4=2	
	¼i Bkd dk i rk] fnukad] l æksku] var		
	dh vksj pkfj drk, æ		
	fo"k; &oLrq dk i fri knu	3	
	'kq) Hkk"kk&i z kx	2	07
30.	Hkfi edk	01	
	fo"k; &oLrq	02	
	mi l gkj	01	
	Hkk"kk 'kq) rk	01	05
31.	Hkfi edk	02	
	fo"k; &oLrq	04	
	mi l gkj	02	
	Hkk"kk 'kq) rk	02	10