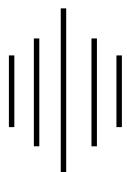
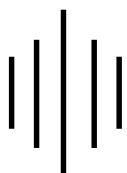




I Ei y&it u i =



d{kk x oha



i ; kbj . k

1/fo | k spr i t kk x 1/2

NÜkh! x<+ek/; fed f'k{k e.My] jk; ij

## itū & i= dh ; kstuk

### Scheme of Question Paper

fo"k; % i ; kbj .k

i wkkd % 75

I e; % 3 ?ka/s

i jh{kk % gkbz Ldy 1/10oh

**1/10 'kskf.kd mnas ; ds vuq kj eku**

**(A) Weightage as per Educational objective:**

10 00	mnas ;	vd	ifr'kr
1-	Klu (Knowledge)	22	30%
2-	vocksk (Understanding)	37	50%
3-	vujz kx ,oa dksly (Application & Skill)	16	20%
; kx		75	100%

**1/10 bdkbdkj vdkd dk eku**

1000	bdkbdkj uke	bdkbdkj ij vkcfr vd	itū&i= ds ik: i vuq kj vkcfr vd
1-	en k l jk.k ,oa icuku	10	4\$6 3/4 10
2-	ty rFkk egkl kxjh; I dkukadk l jk.k ,oa icuku	8	1\$2\$5 3/4 08
3-	tsof fofokr dk l jk.k	7	1\$2\$4 3/4 07
4-	intk.k ds i dkj] L=ks ,oa iejk intkd	10	1\$2\$2\$5 3/4 10
5-	intk.k ds i dkko rFkk fu; a.k ds mik;	10	1\$3\$6 3/4 10
6-	vki nk icuku	5	1 \$ 4 3/4 5
7-	i ; kbj .k l eL;k, j - I	5	1\$1\$3 3/4 5
8-	i ; kbj .k l eL;k, j - II	5	1 \$ 4 3/4 5
9-	vPNs i ; kbj .k fuelzk gsqiz kl	10	1\$1\$3\$5 3/4 10
10-	mi HkkDrk f'k{kk	5	2 \$ 3 3/4 5
11-			
12-			

## ॥ ፳ ዓይነት ስርዓት ስርዓት (Difficulty Level)

10 ØO	mnas ;	vd	i fr'kr
1-	I jy (Easy)	15	20%
2-	vld r (Average)	45	60%
3-	dfBu (Difficult)	15	20%
		; kx	75
			100%

የክፍል ከተማ = fn'kk funsk ,oa fodYi ; kst uk %

### (Instruction's & Scheme of Option for Question Paper)

- oLrfu"B itu e@105% cgfodYih; itu rFkk 105% fjDr LFKku dh i fr@mfpr tkMh cuk, dk itu fn; k tkosk vksj ; g iR; d l V e@itu Øekd 1 gksk A
- iR; d l V e@1] 2 ,oa3 vdks ds ituka e@fHkkurk jgsxh A l eLr 04 vd ; k bl l s vf/kd vdks ds y?kmÙkjh; rFkk nh?kmÙkjh; ituka e@fodYi fn; k tkuk gSA fodYi itu ml h bdkbz l srFkk l eku mnas ; kadsjgxsA 04 vd ; k bl l s vf/kd vdks ds itu iR; d l V e@,d l eku jgsxh A
- vf/kdre mÙkj l hek vfry?kmÙkjh; 1/2 vd@30 'kCn½/3 vd@50 'kCn½ y?kmÙkjh; 1/4 vd@75 'kCn½/5 vd@150 'kCn½ nh?kmÙkjh; 1/6 vd ; k vf/kd@250 'kCn½

# itu & i= dk Cyfi IV

## Blue Print of Question Paper

fo"k; %& i ; kbj . k

i wklid % 75

I e; % 3 ?ka/s

i jh{kk % gkbLdy ½ 10oh½

bdkbz I-Ø-	bdkbz	bdkbz ij vkcflvr vd	vdokj itu							dy itu
			1 vd	2 vd	3 vd	4 vd	5 vd	6 vd	7 vd ; k bl l s vf/kd	
1	I <sup>st</sup>	10	&	&	&	1	&	1	&	2
2	II <sup>nd</sup>	8	1	1	&	&	1	&	&	2\$1
3	III <sup>rd</sup>	7	1	1	&	1	&	&	&	2\$1
4	IV <sup>th</sup>	10	1	2	&	&	1	&	&	3\$1
5	V <sup>th</sup>	10	1	&	1	&	&	1	&	2\$1
6	VI <sup>th</sup>	5	1	&	&	1	&	&	&	1\$1
7	VII <sup>th</sup>	5	2	&	1	&	&	&	&	1\$2
8	VIII <sup>th</sup>	5	1	&	&	1	&	&	&	1\$1
9	IX <sup>th</sup>	10	2	&	1	&	1	&	&	2\$2
10	X <sup>th</sup>	5	&	1	1	&	&	&	&	2
11	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-
	; kx	75	10	5	4	4	3	2		18+(10) 1

**Set - A**

**gkbz Ldy | VHQdV ijhkk**

**High School Certificate Examination**

**| fiy&itu i=**

**SAMPLE PAPER**

**fo"k; % (Subject) - i; kbj.k  
d{kk % (Class) - nI oh**

**I e; 3 ?k.VK (Time- 3 Hrs)  
i wkd 75 (M.M.)**

**(Instruction) & Kunzkh**

- 1- **I hh itu gy djuk vfuok; ZgSA**

Attempt all the Question

- 2- **itu Øekd 01 ea 10 vd fu/kkrjr gSA nks mi [k.M gSA [k.M ^v\*\* ea 05  
cgfodYih; itu rFkk [k.M ^c\*\* ea 05 fjDr LFkkuk dh i firz vFkok mfpr  
I cak tkSM, A iR; d itu dsfy, 1 vd vkcfVr gSA**

Q. No. 01 Carries 10 Marks. There are two sub-section, Section A is Multiple choice carries 05 marks and section B is fill in the blanks or match the column carries 05 marks.

- 3- **itu Øekd 02 I situ Øekd 06 rd vfr y?kmRrjh; itu gSA iR; d itu  
ij 02 vd vkcfVr gSA mRrj dh vf/kdre 'kCn I hek 30 'kCn A**

Q. No. 2 to 06 are very short answer type question & it carries 02 marks each. Word limit is maximum 30.

- 4- **itu Øekd 07 I situ Øekd 10 rd y?kmRrjh; itu gSA iR; d itu ij 03  
vd vkcfVr gSA mRrj dh vf/kdre 'kCn I hek 50 'kCn A**

Q. No. 07 to 10 are short answer type question & it carries 03 marks each. Word limit is maximum 50.

- 5- **itu Øekd 11 I situ Øekd 14 rd y?kmRrjh; itu gSA iR; d itu ea  
vkrfjd fodYi gSvkj iR; d itu ij 04 vd vkcfVr gSA mRrj dh vf/kdre  
'kCn I hek 75 'kCn A**

Q. No. 11 to 14 are short answer type question & it carries 04 marks each. Each question has internal choice. Word limit is maximum 75.

- 6- itu Øekd 15 lsitu Øekd 17 rd nh?kñRrjh; itu gSA iR; d itu e vñrfjd fodYi gSvkj iR; d itu ij 05 vd vñcfVr gSA mRrj dh vf/kdre 'kCn I hek 100 'kCn A

Q. No. 15 to 17 are long answer type question & it carries 05 marks each. Each question has internal choice. Word limit is maximum 100.

- 7- itu Øekd 18 vkj 19 rd nh?kñRrjh; itu gSA iR; d itu e vñrfjd fodYi gSvkj iR; d itu ij 06 vd vñcfVr gSA mRrj dh vf/kdre 'kCn I hek 150 'kCn A

Q. No. 18 to 19 are long answer type question & it carries 06 marks each. Each question has internal choice. Word limit is maximum 150.

izu 1&

[k.M V\* @ Section (A)]

I gh fodYi pfu,

Choose the correct alternative

- (i) I eprVh; fuokfl ; ka dks dfYI ; e dkcluV i klr gsk gS &  
v- vknkhe ls c- dPN ouLifr; kls  
l- idkyfHkfr; kls n- buesl sdkbz ugha

1½

The people of coastal area get Calcium Corbonate.

- (a) Dry land (b) Mangrove vegetatation  
(c) Coral Reef (d) None of these

- (ii) ckny [kky vH; kj .; ftys ea fLFkr gS &  
v- jk; ij ea c- t'ki j ea  
l- egkl en ea n- fcykl ij ea

1½

Badal Khol senctury is in district-

- (a) Raipur (b) Jashpur  
(c) Mahasamund (d) Bilaspur

- (iii) buesl s jSM; kkehZ rRo ugha gS &  
v- gkbMstu &3 c- dkclu & 14  
l- ; jfu; e & 235 n- , Y; ehfu; e

1½

Element that is not radioactive-

- (a) Hydrogen - 3 (b) Carbon - 14  
(c) Uranium - 235 (d) Aluminium

- (iv) i V dh gplI rg dk Hkj k jx dkyk gks tkrk gS &  
v- Pbs ds dkj .k c- PbSO<sub>4</sub> ds dkj .k  
l- PbO ds dkj .k n- buesl sdkbz ugha A

1½

Brown colour painted surface become black-

- (a) Due to Pbs (b) Due to PbSO<sub>4</sub>  
(c) Due to Pbo (d) None of these

- (v) वक्तिनक्षेत्रका दोषों के लिए ग्रन्थ गृह & 1½  
 V- 1] C- 2] I - 3] n- 4  
 Disasters are of ..... types  
 (a) 1, (b) 2, (c) 3, (d) 4

**[क.म ह\* @ Section (B)]**

**fjDr LFku dh iFrz dft,**

**Fill in the blanks-**

- (i) ग्रन्थ नियन्त्रित करने वाले हैं जो वनों को बढ़ावा देते हैं। 1½  
 ..... makes green plant die.
- (ii) ट्रॉली में इंजन का दबाव बढ़ावा देता है। 1½  
 The life of an engine of a vehicle ..... with the biodiesel mixed fuel.
- (iii) लकड़ी का जलने वाला है। 1½  
 ..... causes stone cancer.
- (iv) फिरोज अली खान चिपको का संस्थापक है। 1½  
 ..... is the head of Chipko movement.
- (v) विजय कुमार एक भारतीय व्यक्ति है। 1½  
 Operation Deer was started in .....  
 Operation Deer was started in .....  
 Operation Deer was started in .....  
 Operation Deer was started in .....

- it u 2& जल संग्रह का उद्देश्य क्या है ? 1½  
 What is the aim of National water management ?
- it u 3& प्रदूषक क्या है ? 1½  
 What is a pollutant ?
- it u 4& चhattisgarh के जल संग्रह का उद्देश्य क्या है ? 1½  
 From which plant is biodiesel produced in Chhattisgarh ?
- it u 5& सामाजिक घटनाएँ वायु प्रदूषण का कारण होती हैं। 1½  
 Clarify the statement "Social activities causes atmospheric pollution."

- it u 6& dksydkrk eal jI kary eafdl i nkFkZdsfeykoV dsdkj.k gtljkao; fDr vi x  
gks x; s \ 1½  
The mixture of which substance in mustard oil handicapped thousands of people  
in Kolkata ?
- it u 7& ?kjywinikk.k dksfu; fu=r djusdsdkZrhu mik; fyf[k, A 1\$1\$1½  
Write three measures of controlling domestic pollution.
- it u 8& LoPN i ; kbj.k dh I qkn dYiuk D; kavko'; d gS\ 1½  
Why is pleasant imagination of clearly environment necessary ?
- it u 9& dy&dkj [kkukadsc<fsiz kx I sgksokyh i ; kbj.kh; I eL; kvksdsjkdkFkke ds  
dkbzrhu mik; fyf[k, A 1\$1\$1½  
Write any three measures for preventing the environmental problems caused  
due to increase in industries.
- it u 10& fdugh rhu HkkT; i nkFkZdsuke rFkk ml eafeykoV gksusokys i nkFkZdsuke  
fyf[k, A 1\$1\$1½  
Write the names of any 3 food products and substances mixed for adulteration.
- it u 11& I L; korzu D; k gS\ bl I senk dksD; k ykk gS\ 1½  
What is crop rotation ? How is it beneficial for soil ?
- ~vFkok OR\*\***
- d. Vj Ñf"k IsD; k I e>rs gS\ bl I senk dksD; k ykk gS\ 1\$2½  
What do you understand by contour cultivation ? How is it beneficial for soil?
- it u 12& Nrrhl x<+dksgcly LVV jkT; D; ka ?kkf"kr fd; k x; k \ 1½  
Why is Chhattisgarh declared as hilly State ?
- ~vFkok OR\*\***
- Nrrhl x<+jkT; }jk ?kkf"kr ou ulfr D; k gS\ 1½  
What is the forest policy declared by Chhattisgarh state ?
- it u 13& , d LFkku ij clyk cuus ds dkj.k M<sub>1</sub> I s iHkkfor {ks= ds ykska ds vU; =  
foLFkkiu , oai ; kbj.k ij iM<sub>1</sub>usokys pkj dkj.kks dksfyf[k, A 1½  
Write any four effects, of the displacement of the people of submerged area  
during the dam construction on environment and life.

**^Vflok OR\*\***

ekuoñr xfrfof/k; kads dkj.k yksadk i pLdkku o i yoku u ds pkj dkj. kka  
dks fyf[k, A 14½

Write any four causes of rehabilitation and re establishment due to human induced activities.

it u 14& gfjr xg i kko dk ukefdr vkj[k cukb, A 12\$2½

Draw a labelled ray diagram of green house effect.

**^Vflok OR\*\***

vEyh; o"kkZ dk ukefdr vkj[k cukb, A 12\$2½

Draw a labelled ray diagram of acid rain fall.

it u 15& fuEu ij l f{klr Vhi .kh fyf[k, & (2½+2½)

1½ dPN ouLi fr; k 1½ ickyfhlkfr; k

Write short notes on :-

- (1) Mangrove Vegetation                              (2) Coral Reefs.

**^Vflok OR\*\***

fuEu ij l f{klr fVi .kh fyf[k, & (2½+2½)

1½ vknz Hkfe 1½ okVj' kM icu/k dk egRo

Write short notes on :-

- (1) Dry land    (2) Water shed management.

it u 16& I enk i nkk. k D; k gS\ I enk ds 0; k d : i I s in fkr djus okys dkj dk  
o. klu dhft, A 1½ \$4½

What is marine pollution ? Describe the various factors that pollute the sea widely.

**^Vflok OR\*\***

en k i nkk. k D; k gS\ en k i nkk. k ds ekuoh; dkj. kka dk o. klu dhft, A 1½ \$4½

What is soil pollution ? Describe the anthropogenic causes of soil pollution.

it u 17& vPNs i ; kbj. k grq dk&dku I s fØ; kdyki djus pkfg, \ I f{klr ea o. klu  
dhft, A 15½

What are the healthy activities that one should do for healthy environment ?

Describe in brief.

**~Vflok OR\*\***

i ; kbj.k tutkxfr dk; Øe dk&dk I sg\ iR; d dk o.ku dhft , A 1/2\$3½

What are the programmes of public awareness for environment ? Describe each in brief.

itzu 18& ou iC/k grqD; k&D; k I jdkjh iz kl fd; stk jgsg\ iR; d dk I fklr o.ku dhft , A 1/6½

What are the efforts made by the government for forest management ? Describe each effort in brief.

**~Vflok OR\*\***

Hkfe D; k gS\ Hkfe dsu"V vFkok nfrkr gkusdsdkj .kkadksfyf[k, A bl dscpko dsD; k&D; k mik; g\ (1+2½+2½)

What is land ? write the reasons of land deterioration and pollution. What are the means of its protection ?

itzu 19& ty inkk.k dk tho&turkaij D; k iHko iMrk gS\ ty inkk.k fu; a.k ds mik; fyf[k, A 1/2\$4½

What are the effect of water pollution on living organisms ? Write the measures of controlling water pollution.

**~Vflok OR\*\***

ok; qinkk.k dk ekuo LokLF; ij D; k iHko iMrk gS\ okgfud ok; qinkk.k dks fu; f=r djusds mik; fyf[k, A 1/3\$3½

What are effects of air pollution on human health ? Write the measures of controlling vehicle pollution.

&&00&&

## **^I Ei y mRrj\*\***

[k.M & ^\*

- (i) I epz rVh; fuokfI ; ka dks d\$YI ; e dkckuV i klr gsrk g&  
mRrj & ¼ ½ i dkyfHkfRr; ka l s
- (ii) ckny [kky vH; kj.; ftys es fFkr gS &  
mRrj & ¼ ½ t'ki j es
- (iii) bues l s j \$M; kkehZ rRo ugha gS &  
mRrj & ¼ ½ , Y; e hfu; e
- (iv) i V dh gpz l rg dk Hkj k jx dkyk gks tkrk gS &  
mRrj & ¼ ½ pbs ds dkj .k
- (v) vki nkVka dk i dkj gsrk gS &  
mRrj & ¼ ½ nks

^\*[k.M c\* mRrj

- (i) & SO<sub>2</sub> x§
- (ii) & C<Fh
- (iii) & vEyh; o"kkZ
- (iv) & Jh l Unjyky cgxqkk @ Jh pMh i z kn HKVV
- (v) & ekpz2001

- |         |   |
|---------|---|
| mRrj 2& | jk"Vh; ty i cl/ku i fj; kstuk dk mnas; [krh dh i hkokj vks [krh l sgkus<br>okyh vk; esof) djuk gSA  |
| mRrj 3& | os i nkFkZ tks vufpr LFku ij] vufpr ek=k esekuo }jk fol ftz fd, tks<br>g§ i nkd dgykrs g§A  |
| mRrj 4& | NRrhI x<+e ck; kMhty dk fuelk jru tks uked i ksks l s fd; k tk jgk<br>gSA   |
| mRrj 5& | I ekt dsfofHku jhfr&fjokt] t§ s 'kokadk ngu] R; k6kjkarFkk 'kknh&C; kg es<br>gkus okyh vkfr'kckth vknf dkj .kka l s ok; eMy i nfkr gsrk gSA |
| mRrj 6& | dkydkrk es l j l ksy es dke vks okyk no VbfØI ky QkLQV dh feykoV<br>ds dkj .k gtkjks 0; fDr vi x gks x, A                                   |

mRrj 7&	?kjyq i nkk.k dks fu; f=r djus ds 3 mik; fuEufyf[kr gS &
1½	?kjka ea /kjuk jfgr bZkuka ds mi ; kx dks c<kok nsuk A
2½	?kjyqdkM&djdV dks [kjysLFku ij Qdusdh ctk; feVvh dsxgjsxM<ksdks [kkndj ml eanck nsuk A
3½	?kjka ea[f[kMdh] njoktkarFkk jkskunkukadk I efpr i cdk gksuk pkfg, ] , oaj I kbz ?kjka ea fpeuh dh 0; oLFkk djuh pkfg, A
mRrj 8&	vkt dsI e; eaLoPN i ; kbj.k dh I qkn dYi uk vfr vko'; d g\$, d vPNk i ; kbj.k D; k gSA bl fo"k; ij vud ykskads vuuder gksI drsg, tksbl ckr ij fuHk] djrs g\$fd mudsI kpu\$ jgu\$ [kku&i ku] dke vknfn djus dk rjhdk D; k gSA ij fQj Hkh bl ckr ij I Hkh I ger gksfd dM&ddV] /ky] jkx] i nkk.k] HkhM} ruko] Mj] fpUrk, i vks vLoLFkrk] thou dh I qjrk dks{kfr i gpkrsqA vr%LoPN , oavPNs thou grq; g dgk tk I drk g\$fd thou dh xqkorrk dk Bkd vklkj i ; kbj.k dh xqkorrk gh g\$ LoPN ty] Hkkstu] ok; } vkokl i ; kbj.k ds vko'; d ?kVd gSA i kNfrd i nkFkkzdk I efpr mi ; kx ge dj I d\$ bl grqLoPN i ; kbj.k dh I qkn dYi uk vfuok; ZgSA
mRrj 9&	dy&dkj [kkuka ds c<rs i z kx I s gksus okyh i ; kbj.kh; I eL; kvka ds jkodFkke grqrhu mik; fuEufyf[kr gS &
1½	dy&dkj [kkuka ea fpefu; k Åpkbz ij yxkbz tkuh pkfg, A
2½	dkj [kkuka sckgj fudyusokysvif'k"V i nkFkkzdk I efpr mi pkj fd; k tkuk pkfg, A
3½	m   kxka ea df.kdh; i nkkdks fuLrkj.k ds fy, c\$ fQYVj dks fpefu; k s tkmuk pkfg, A Qfczd fQYVj ; k gkbz , uthLØej midj.kkakd i z kx djds ok; q i nkk.k de fd; k tk I drk gSA
mRrj 10&	rhu HkkT; i nkFkkz ds uke] ml eafeykoV gksus okys i z Ør i nkFkz
Ø-	HkkT; i nkFkz feykoVh i nkFkz
1½	'kq) ?kh & MkyMk
2½	gYnh & yM Økes
3½	dkyh fepz & i i hrsdk cht

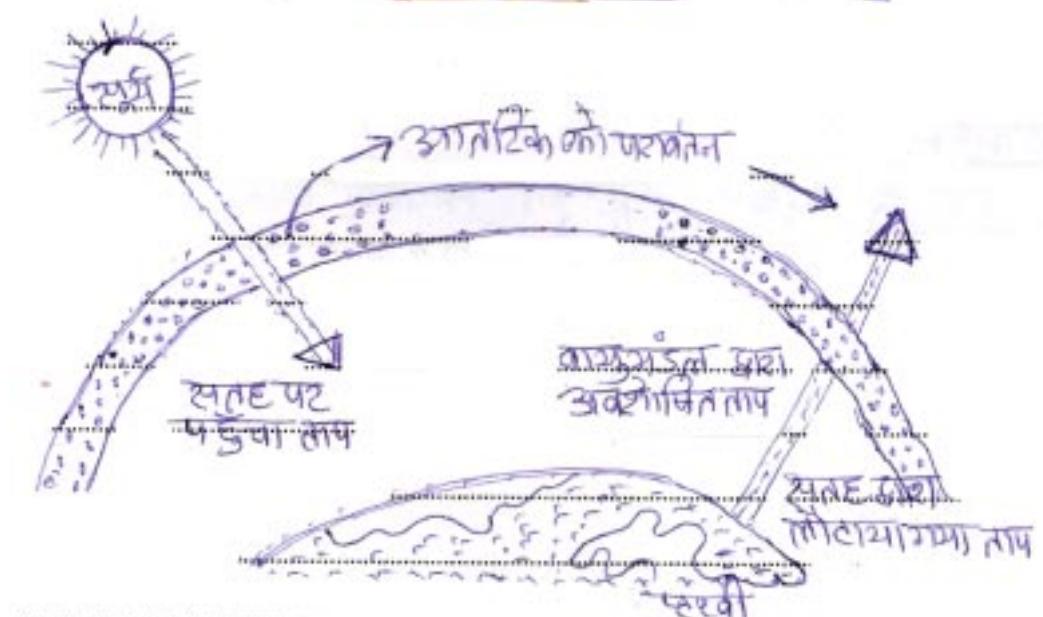
- mRrj 11& I L; koržu eñk I j{k.k dk , d mik; g\$ ; fn eñk ea iR; d o"kl , d gh i ñdkj dh QI y mxkbz tk, rkseñk dh možk 'kfDr I ekIr gkus yxrh g\$ vr%eñk dh možk 'kfDr dkscuk, j [kusdsfy, iR; d o"kl QI ykaeñifjoržu fd; k tk, rksbI sI L; koržu ; k QI y pØ dgrsg\$A  
mnkgj .k& ; fn eñk ea, d ckj xgj díkl ] eDdk] vkyqvkfn dh QI y cks dsckn nñ jh QI y ngyu dy ds i kskad h gkuh pkfg, ] bu i kskad h tMkae xkBz i kbz tkrh g\$ ftueñmi fLFkr thok. kqokrkoj.k dh ukbVlstu dks Hkfe ea fLFkj dj nsrk g\$ ftI I smožk 'kfDr c<+tkrh g\$A  
^vFkok\*\*
- d. Vj Ñf"k& bl i ñdkj dh Ñf"k igMka dh <yku aij vf/kd mi ; kxh g\$ [kska ea; k <yku okys{kska ea [kkspsrFkk dVd cuk, tkrs g\$ ftI I si ku h bl ea: d tkrk g\$A  
ykk& 1/1; g eñk I j{k.k dh , d tñod fof/k g\$A  
1/2 bl ea eñk dk vijn ughagksk g\$A
- mRrj 12& NRrhI x<+i ñfrd nf"V I s [kfut I ink I soñko'kkyh jgk g\$A ; g i kphure bfrgkI o I ñfr dk I k{kh jgk g\$ oržku ea N-x- jkT; }jk ouksdsI jf{kr djus rFkkml ds fpfdRI h; egRo dks tuekul rd igpkus ds fy, egRoi wkl dk; zfd, tk jgs g\$A ftI I sbl svc yks gcly LVV ds uke I s tkuus yxs g\$A  
^vFkok\*\*
- NRrhI x<+jkT; }jk ouksdsI j{k.k , oafodkl gsrq?kks"kr ou uhfr fuEukud kj g\$&  
1/1 ou {kska ea Ñf"k okfudh dk; k dks c<kok fn; k tk, xk A  
1/2 jkT; dsou xteka dks jktLo xteka ea cnyk tk, xk A  
1/3 jkT; dks gcly LVV cokus dh vo/kkj. kk dks eñl: i nusds fy, y?kqouki t vks vks/kh; i kskad h g\$ ftI I sbl svc yks gcly LVV ds uke I s tkuus yxs g\$A
- mRrj 13& , d LFkku ij ckdk cuus ds dkj.k M I s i ñkkfor {ks= ds ykska ds vU; = foLFkki u dk i ; kbj.k , oaykska ij fofhkuu i ñdkjka l s i ñkkko i Mfk g\$A t\$ &

११½ cfLr; kādksuohu {ks=kaecl kusI smudh I kñfrd fojkl r u"V gks tkrh gSA  
 १२½ ifj; kstuk LFky dh eñk] ouLifr rFkk vU; thokadh {kfr gks h gSA  
 १३½ foLFkkfir ifjokjka dks tgkj cl k; k tkrk gß ogkj ds i ; kbj.k ij foijhr iñkko  
     i MFrk gSA  
 १४½ u, LFku ij cl us ds dkj .k jkst xkj dh I eL; k gks h gSA  
                         ^vFkok\*\*

ekuoÑr xfrfot/k; kadsdkj .k yksxdk i ñLFkk u o i ñok u fuEu dkj .kka l s  
gksI drk gS &

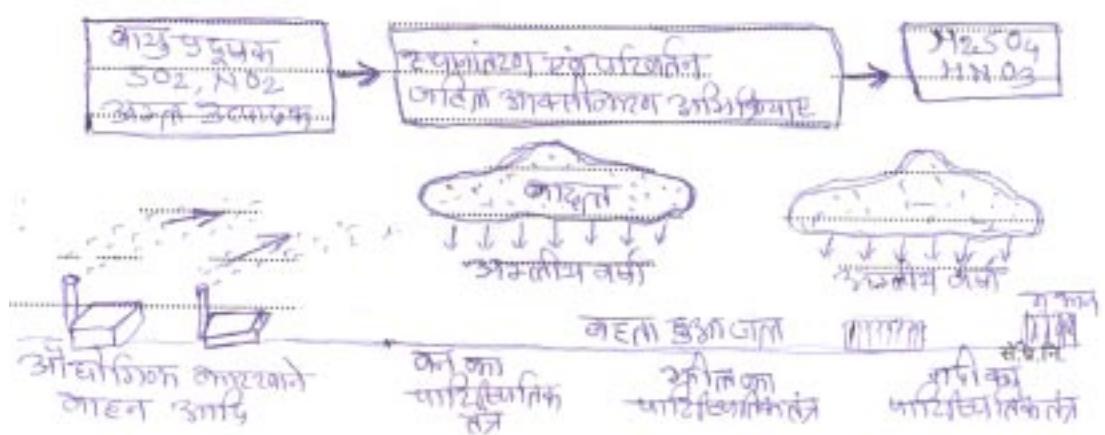
१५½ ; Ø dky dsI e; I hekorh xkoka l s yksxdk vU; = crk; k tkrk gSA  
 १६½ vks| ksxdhadj .k dsI e; yksxdk nli js LFkkuka ij cl k; k tkrk gSA  
 १७½ jyekx] jktekx] cukrs I e; vf/kxfgr Hkfe es cl s yksxdk vU; = cl k; k  
     tkrk gSA  
 १८½ ckakadsfuelz k {ks= ea, oamI dsMoc I sI Hkkfor i Hkkfor {ks= dsyksxdk vU; =  
     cl k; k tkrk gSA

mRrj 14& gfjr xg iñkko dk vkjs[k



^vFkok\*\*

vEyh; o"kkz & ukekfrdr vkj sk



mRrj 15& I f{klr fvli .kh&

## 11 dPN ouLifr; k&

dPN ouLifr; k fo'o dsÅ".k rFkk mi k".k dfVc/kh; {ks=kadh {kkj I g okfudh i kfjfLFkrdh 0; oLFkk gS ; s cMh rknkn ea i kskka vks tho tUryka dh , d h itkfr; kadsI xg.k {ks= g\$ tks, d ycsfodkl Øe eavki I eal cak jgsg\$ vks ftuea {kkj I gu djus dh mYy[kuh; {kerk g\$ ; s I eph rVjs[kk dks fLFkj djrh gS , oa I eph }kjk gks jgs dVko I s rVcak dh j{kk djrh gS A dPN ouLifr; k I eph Hkkjrh; I eph rV ij ifjjf{kr egkuka Tokjh; ] rkfM+ k i'; ty] {kkj; nynyka vks nynyh ehkuka ea i kbZ tkrh g\$ ; s /kkj .kh; eRL; {ks= dk I o/kh dh djrh gS ou vks i ; kbj .k eky; 1987 I sdPN ouLifr I j{k.k dk; l py jgk gS A

## 12 i dky fHkfUk; k&

i dky fHkfUk; k dks vks th ea dkjy dgk tkrk g\$ ft I s , d fo'ksk i dky ds tyh; i k.kh dsfy, i zDr fd; k tkrk gSA I eph ds vnk , d Nks/k I k i k.kh pwsds [ksy I sfpi dk jgrk g\$ og oghaij c<rkj budh I a; k eayxkrkj of) I s I eph ds Hkkh rj pwsdk , d pVVku bl i k.kh dh enn I smHkj dj vkrk g\$ pws I sfufet bl i k.kh vo'ksk dks i dky fHkfUk dgrsg\$ Hkkj r ea i dky fHkfUk; k dks i eck LFky g\$ &

1/1½ vMeku , oafudkckj }hi | eŋ

1/2½ y{k}hi

1/3½ ellukj dh [kkMh

1/4½ dPN dh [kkMh

^vFok\*\*

### 1/1½ vknz Hkfie%

nšk esavknzHkfie BMsvkj 'kld bykdsI syd j e/; Hkkjr eadfvCdkh; ekul uuh bykds vks nf{k.k ds ueh okys bykds eQsyh gSA ; g ck<+fu; &.k ea i Hkkoh g§ vks ryNV de djrh gSA ; g {k= 'khrdky ds fy, i f{k; ka vks tho tUrykadsfy, 'kj .kkxkg g§ fofoKku i zlkj dh eNfy; ka vks tUrykadsituu dsfy, Hkh ; g mRre {k= g§ I enh rQku vks v/kM ds i Hkkko dksI gu djus dh mPp {kerk buegksh g§ ; g I enh rV js[kk dksfLFkj djrh gSA

### 1/2½ okVj 'kM izkkyh dk egRo&

okVj 'kM i cik eq; : i I soukjki .k , oaokVj 'kM ij vklkfkjr Nf"k Hkfie ds fodkl ds fy, vPNscht mojd cgrj Nf"k Hkfie] midj .k , oacgrj Nf"k foKku fof/k; kdk i z kx fd; k tkrk gSA 0; ki d okVj 'kM fodkl dk; Øe Nf"k fodkl , oamRiknu c<kus dsfy, vf/kd i Hkkoh i )fr gSA

mRrj 16& I enh inkk.k& I enh inkk.k dsdkj .k I enh tho&tUrqqu"V gksjgsgSA I enh I Eink dh glfu gksjgh gSA

### I enh inkk.k ds i Hkkko

- (i) ufn; kadsI kfk vkusokys inkkd I s I enh thokdk u"V gksuk A
- (ii) nfrkr eNyh dks [kkusI sekuo chekj gksjgk gSA
- (iii) I enz esnqkuko'k i Vfy; e inkkfkk dsfjI ko I sekuo] eNfy; ka ij i HkkkoA
- (iv) I enh xgjkbZ ea mifLFkr jlk; ukak dk mi ; kx vksk/kh fuelkZk ea gksjgk g§ inkk.k I s bu inkkfkk dh xqkorrk i Hkkfor gksjgk gSA
- (v) I enh inkk.k I seksdh mi t de gksjgh gS& xgjih vkkfkkd {kfr A
- (vi) i jek.kq i jh{k.k I s I enh tho jSM; kskfezk I s i Hkkfor gks x, g§ tks d§ j mRifRr dk dkj .k cu x, g§A

^vFkok\*\*

eñk i nñk.k & eñk foñku i ñkj ds [kfut rRok] dkcfud i nñkFk] x§ ka, oa ty vñfn  
rRokadk , d fuf'pr vuñkr eñfeJ.k gñsk gñA fdI h dkj.ko'k I jñpuk , oa  
xqñkrk I ekIr gñs tkrh gñ bl sñnk i nñk.dgrs gñA

eñk i nñk.k ds dkj.k &

1½ ou fouk'k

2½ eñk eñj l k; uñadk mi ; kx

3½ vñl kñxd vif'k"V

4½ uxjh; vif'k"V

mRrj 17& vPNs i ; kbj.k gñqñfØ; kdyki & i ; kbj.k dks I e>u§ ml ds I ryu ml s tu  
mi ; kxh cukus gñqñf"Vdksk ges cnyuk gñsk A

i eñk fØ; kdyki &

1½ i ñfr eñekuoÑr i ; kbj.k dh fLFkfr tksekuo dsnñski wñzÑR; kñdsckn jg xbñ  
gñml s l j{.k. i nku fd; k tk, A

2½ i nñk.k jkñdusdkuñka dk I [rh I s ikyu djukuk pkfg, A

3½ i ; kbj.k f'k{.k dh vñk'; drk dks yñskadks I e>k; k tk, A

4½ i ; kbj.k vñpkj I fgrk dk fodkl A

5½ i ; kbj.k ds {k= ea i f'k{kr 0; fDr; kñ dh vñk'; drk i j /; ku A

^vFkok\*\*

i ; kbj.k tu tkxfr dk; Øe

i ; kbj.k dsifr tkxfr dsfy, vñd dk; Øe pyk, tk jgsqñtksfuEufyf[kr  
gñ&

1½ i kfjfLFkfrdh fodkl f'kfoj

2½ 0; k[; ku Jñkyk

3½ if'k{.k dk; Øe

4½ fQYe i n'kñ

5½ i n'kñ; kñ bñ; kfn

I kñkj.k tu ekul dks i ; kbj.k dh fofñku I eL; kvñal s voxr djk mul sgñs

I dus okys n̄fj.kke dh tkudkjh nh tkrh ḡ bu dk; Øekas I pkyu e  
'kkl u ds l kFk Lo; al oh l tFkkvka dh Hkh egRoi wkl Hkfedk gksus yxh gSA  
**mRrj 18& ou i cku ḡsq l jdkjh i z kl &**

ouks ds l j{k.k l EcU/kh uhfrxr fn'kk&funz kka esa ouka ij vkfJr 0; fDr; ka dh  
biku] plkj] x̄ bekjrh] ou mRiknu v̄k̄ bekjrh ydMh dh vko'; drk ekp  
dks l okz/kd egRo fn; k x; k gSA  
I a Ør ou i cU/ku dk; Øe ds i e[k f] kr fuEufyf[kr ḡ &  
1½ gkl gksrs gq cMsou {ks= dks LFkk; h l epk; dh Hkkxhnkjh l s i u% gjk&Hkj k  
cuk; k tk l drk gSA  
1½ LFkuh; l epk; dh ou l j{k.k v̄k̄ ou dh mRikndrk c<kuuseHkkx ysk ckgj  
ds 0; fDr; ka dks ; kstuk l svyx j [kk tk; sA  
Hkkjr ea l a Ør ou i cU/ku izkkyh ds vrxt 15000 xteou l fefr; k yxHkkx  
20 yk[k gDVs j {ks= esa u"V gksjgsouka dk i cU/k dj jgh ḡ A  
~vFok\*\*

**Hkkie D; k ḡ & Hkkie i Foh dk og Hkkx ḡ ftl ij ge fuokl djrs ḡ i 'kk  
i {kh] v̄k̄ l Hkh tho tUrqjgrsḡ ftl ij i M+i kksouLi fr mxrsgSA i Foh  
ds vñj vuod i kñfrd l a k/ku Hkjsḡ A ; g i jh i Foh dk 3@10 Hkkx ḡ v̄k̄  
bl sLFkye. My dgrsḡ A**

**Hkkie ds u"V ; k n̄fkr gksus ds dkj.k &**

1½ Hkkie {kj.k& rst o"kk] v̄kakh , oanQku l sfeVvh dh Åijh l rg dN gh fnuka  
esa cg tkrh ḡ tcf d bl ds cuusecḡ vf/kd l e; yxrk ḡ vr%feVvh dh  
j{kk djuk vko'; d ḡ Hkkie {kj.k ty , oao; qnksuks l s gksk gSA  
1½ Hkkie i nkk.k& Hkkie ds Hkkfrd jkl k; fud ; k tsod xqkkaesa, l k dkbZHkh vokfkr  
ifjorl ftl dk i Hkkko eu; rFkk vñ; thoka ij i M+ vFok Hkkie dh i kñfrd  
xqkorrk rFkk mi ; kfxrk u"V gksHkkie i nkk.k dgykrk gSA

**mRrj 19& ty i nkk.k dk tho tUrqjka ij i M+ okyk i Hkkie &**

ty dsfuf'pr Hkkfrd] jkl k; fud , oat sod xqk gksrḡ tc bu xqkkaefdl h  
vñ; dkj.kka l sifjorl vk tk rk gsrFkk bl ds PH eku esa ifjorl gks tk rk gA

bl n'kk e; g 'kq ty infkr ty dgykrk gSA infkr ty dk iñfr ds vU; iñFkk ij udkjkRed iñko iñus yxrk gSA iñfr e fo | eku ekuo ftI dsfy, ty gh thou gSA bl infkr ty dsmi ; kx eaqstkJ VkbQkbM] Mk; fj ; k] ifpl , oai hfy; k jkxkal siñkkfor gks tkrk gSA dñkh&dñkh rks nfkr ty dsI ou I svud iñkj ds iñI cñkh fodkj Hkh mRi uu gks tkrs gSA okgfud iñkk dk fu; f=r djus ds mik;

1½ Mhty jsy dsbatukadLFku ij fo | r pfyr jsy batukadk mi ; kx fd; k tkuk pkfg, A

2½ cñjh pfyr okguka dk vf/kdkf/kd mi ; kx fd; k tkuk pkfg, A

3½ I hl k&jfgr iñky rFkk Mhty e al a ksth iñFkk dk feyldj okguka e iñ kx djus I sok; q iñkk dk de fd; k tk I drk gSA

4½ vR; f/kd ok; q iñkk.kdkjh okguka ij iñkñh rFkk vU; okguka I smRi uu /kq; dk ekudhdj.k I svf/kd Lrj gksus ij dkvñh dk; bkgh dk iñkku gksuk pkfg, A

5½ okgu fuekz k djusokyh da fu; kats iñkk iñFkk de ek=k eamRI ftz gSA

^vFkok\*\*

**ok; q iñkk dk ekuo LokLF; ij iñus okyk iñko**

ok; q iñkk I seut; ds LokLF; ij cgq cjk iñko iñr gSA bl I s 'ol u&l cñkh cgq I s jkx tñ & QQMks dk dñ j] vLFkek vkg QQMka I s I Ecfl/kr nñ js jkx gks tkrs gSA ok; qeafoi fjr cgq I h /kkrvka ds d.k vud I sjkx mRi uu djrs gSA I hl sdsd.k fo'kñ : i I sukM e.My I sjkx mRi uu djrs gSA ukbVktu vkDI kbM I s QQMkagn; vkg vki[kkadsjkx] [kkl h o I hus eannz mRi uu djrh gSA

okrkoj.k eadkczu eksuks/kDI kbM dh mi fLFkr gksus I seut; dsjDr e ghetkycu ds v.kq vkl DI htu dh ryuk e 200 xqk vf/kd rsth I s Co<sub>2</sub> ds v.kvka I s tñus yxrsg ftI I s 'ol u e?kñ u egl v gks yxrh gSA vf/kd I e; rd bl ifjflFkfr eajgus ij ne ?kñ us I s eR; w gks tkrh gSA jkl k; fud xñ I a U=kñ rFkk ukfHkdh; i fj ; kstukvka I s ok; e.My e

fuLrkfjr gksus okys fofHklu fo"ksys jkl k; fud i nkFk vi uk nh?kldkyhu i Hkko  
euh; kads LokLF; ij NkMrs gSA mnkgj.k Lo: i 1984 dksHkkjr eaqpzHkki ky  
xS =kl nh eafeFkkbly vkl kl kbu/ dsfj l ko dsdkj.k vud yks ekjsx; sFk  
tcfd bl xS ds i Hkko dsdkj.k vud xHkbh efgykvks ds xHkLFk f'k'kqejs  
gq i hik gq FksA bl h izdkj fgjkf'kek o ukxkl kdh ij f}rh; fo'o ; q es  
fxjk; sx; sv.kqcekd fd fofdj.kads i Hkko I svkt Hkh ogkacgr I sf'k'kqviak  
rFkk ekufI d : i I sfof{klr i hik gks gSA

&&00&&

**Set - B**

**gkbz Ldy | VHQdV ijhkk**

**High School Certificate Examination**

**| fiy&itu i=**

**SAMPLE PAPER**

**fo"k; % (Subject) - i; kbj.k  
d{kk % (Class) - nI oh**

**I e; 3 ?k.VK (Time- 3 Hrs)  
i wkd 75 (M.M.)**

**(Instruction) & Kunzkh**

- 1- **I hkh itu gy djuk vfuok; ZgSA**

Attempt all the Question

- 2- **itu Øekd 01 ea 10 vd fu/kkrjr gSA nks mi [k.M gSA [k.M ^v\*\* ea 05  
cgfodYih; itu rFkk [k.M ^c\*\* ea 05 fjDr LFkkuk dh i firz vFkok mfpr  
I cak tkSM, A iR; d itu dsfy, 1 vd vkcfVr gSA**

Q. No. 01 Carries 10 Marks. There are two sub-section, Section A is Multiple choice carries 05 marks and section B is fill in the blanks or match the column carries 05 marks.

- 3- **itu Øekd 02 I situ Øekd 06 rd vfr y?kmRrjh; itu gSA iR; d itu  
ij 02 vd vkcfVr gSA mRrj dh vf/kdre 'kCn I hek 30 'kCn A**

Q. No. 2 to 06 are very short answer type question & it carries 02 marks each. Word limit is maximum 30.

- 4- **itu Øekd 07 I situ Øekd 10 rd y?kmRrjh; itu gSA iR; d itu ij 03  
vd vkcfVr gSA mRrj dh vf/kdre 'kCn I hek 50 'kCn A**

Q. No. 07 to 10 are short answer type question & it carries 03 marks each. Word limit is maximum 50.

- 5- **itu Øekd 11 I situ Øekd 14 rd y?kmRrjh; itu gSA iR; d itu ea  
vkrfjd fodYi gSvkj iR; d itu ij 04 vd vkcfVr gSA mRrj dh vf/kdre  
'kCn I hek 75 'kCn A**

Q. No. 11 to 14 are short answer type question & it carries 04 marks each. Each question has internal choice. Word limit is maximum 75.

- 6- itu Øekd 15 Is itu Øekd 17 rd nh?kñRrjh; itu gSA iR; d itu e vñrfjd fodYi gSvkj iR; d itu ij 05 vd vñcfVr gSA mRrj dh vf/kdre 'kCn I hek 100 'kCn A

Q. No. 15 to 17 are long answer type question & it carries 05 marks each. Each question has internal choice. Word limit is maximum 100.

- 7- itu Øekd 18 vkj 19 rd nh?kñRrjh; itu gSA iR; d itu e vñrfjd fodYi gSvkj iR; d itu ij 06 vd vñcfVr gSA mRrj dh vf/kdre 'kCn I hek 150 'kCn A

Q. No. 18 to 19 are long answer type question & it carries 06 marks each. Each question has internal choice. Word limit is maximum 150.

**I gh fodYi pfu, %****Choos the correct alternative :-**

(i) uohu ty uhfr nsk eaykxwgs &amp;

1½

V- I u~2001 I s

C- I u~2002 I s

I - I u~2003 I s

n- I u~2004 I s

New water policy was implemented -

(a) From 2001

(b) From 2002

(c) From 2003

(d) From 2004

(ii) NRrhI x&lt;+eavH; kj. ; dh I f; k gs &amp;

1½

V- 11

C- 13

I - 15

n- 17

The numbers of sencturies is Chhattisgarh is

(a) 11, (b) 13, (c) 15, (d) 17

(iii) ijek.lqÅt k l a =ka ea 'khryd ds : i esiz kx gsk gs &amp;

1½

V- H<sub>2</sub>OC- N<sub>2</sub>OI - D<sub>2</sub>O

n- bues I s dkboz ugha

Used as coolant in atomic power

(a) H<sub>2</sub>O(b) N<sub>2</sub>O(c) D<sub>2</sub>O

(d) None of these

(iv) fo"kk.kvka I sjkx mRiUu gsk gs &amp;

1½

V- gsk

C- VkbQkbM

I - Mk; fj; k

n- ify; k

Disease caused due to virus-

(a) Cholera

(b) Typhoid

(c) Diahorria

(d) Jaundise

(v) ikFkb i dks gS &amp;

1½

V- HkdEi

C- ck&lt;+

I - I wkk

n- pØokr

Earthen disaster is -

- (a) Earthquake                          (b) Drought  
(c) Flood                                (d) Cyclone

[1. M 1/4 @ Section (B)]

### fjDr LFku dh iñz dñft, &

Fill in the blanks-

- (i) dy dkj [kuka dk xnk ty ----- dks c<sub>k</sub>ok nsk gSA      1½  
Dirty water of the factories gives rise to .....
- (ii) tul [; k foLQkV ----- dks viukdj jkduk gsk A      1½  
Population explosion has to be stopped adopting .....
- (iii) gfjr xg iñko e<sub>2</sub>CO<sub>2</sub> dk ; kxnu ----- gSA      1½  
The contribution of CO<sub>2</sub> in green house effect is .....
- (iv) vkijsku ex dk mnas; ----- ds f'kdkj dh jkdfkke djuk gSA      1½  
The purpose of operation Deer is to prevent ..... from hunting.
- (v) ty iñkk. k vf/fu; e e----- /kkjk, i gSA      1½  
Water pollution prevention and control act consist of ..... articles.

- itu 2& rkykck dks iDdk D; kacuk; k tkuk pkfg, \      1½  
Why should we contract permanent ponds ?
- itu 3& csk vfnokf; kadsfy, dks l k o{k iñt; uh; gS\      1½  
Which tree is worshipped by the Baiga tribes ?
- itu 4& i; kbj.k iñkk. k dks i fjHkkf"kr dhft, A      1½  
Define environmental pollution.
- itu 5& ykg v; Ld lsudyk eyck Hkfe ij D; k iñko Mkyrk gS\      1½  
How dose the waste produced by the extraction of iron ore effect the Soil ?
- itu 6& feBkb; kaejak dks iñkx lsfdl jkx dh iñkouk gsk gS\      1½  
Which disease is caused by using colour in sweets ?
- itu 7& vks kfxd iñkk. k dks fu; f=r djus dsdkzrh u mik; fyf[k, A      1\$1½  
Write any three measures controlling of industrial pollution.

itzu 8&	i jEijkxr ÅtkL=kska dk I j{.k D; ka vko'; d g\\$ \	13½
	Why is the conservation of traditional energy sources neccessary ?	
itzu 9&	ou {ks= ea [kuu i fj; kstuk i kjEHk djusou I j{.k vf/kfu; e 1980 dk D; k egRo g\\$ \	14\$1\$1½
	What is the importance of forest conservation act 1980 is starting a mining work in forest area ?	
itzu 10&	'kDdj e sfe ykoV dsfy, rhu inkFk dsuke fyf[k, A	14\$1\$1½
	Write the names of three substances mixed with Sugar.	
itzu 11&	gfjr xg i kko dk ukefdr vkj{.k cukb, A	12\$2½
	Draw a labelled ray diagram of green house effect.	
	<b>~vFkok OR**</b>	
	vEyh; o"kkz dk ukefdr vkj{.k cukb, A	12\$2½
	Draw a labelled ray diagram of acid rain fall.	
itzu 12&	I L; koru D; k g\\$ \ bl I senk dks D; k ykk g\\$ \	12\$2½
	What is crop ratation ? How is it beneficial for soil ?	
	<b>~vFkok OR**</b>	
	d. Vj Ñf"l I svki D; k I e>rs g\\$ \ bl I senk dks D; k ykk g\\$ \	12\$2½
	What do you understand by contour cultivation ? How is it beneficial for soil?	
itzu 13&	Nrrhl x<+dks gcly LVJ jkT; D; ka ?kks"kr fd; k x; k \	14½
	Why is Chhattisgarh declared as harbal State ?	
	<b>~vFkok OR**</b>	
	Nrrhl x<+jkT; }kjk ?kks"kr ou uhfr D; k g\\$ \	14½
	What is the forest policy declared by Chhattisgarh state ?	
itzu 14&	, d LFku ij ck/k cuus ds dkj.k M <sub>c</sub> I s i kfor {ks= ds ykska ds vU; = foLFkki u , oai ; kbj.k ij i Musokys pkj dkj.k ds fyf[k, A	14½
	Write any four effects, of the displacement of the people of submerged area during the dam construction on environment and life.	
	<b>~vFkok OR**</b>	

ekuoÑr xfrfot/k; kads dkj.k ykska dk i uLFki u o i uokl u ds pkj dkj.kka  
dksfyf[k, A 1½

Write any four causes of rehabilitation and re establishment due to human induced activities.

itzu 15& vPNs i ; kbj.k gsy dk&dk I s fØ; kdyki djus pkfg, \ I f{klr es o.klu  
dkft, A 1½

What are the healthy activities that one should do for healthy environment ? Describe in brief.

**^Vflok OR\*\***

i ; kbj.k tutlxfr dk; Øe dk&dk I sg8\ iR; d dk o.klu dkft, A 1\$3½

What are the programmes of public awareness for environment ? Describe each in brief.

itzu 16& fuEu ij I f{klr Vhi .kh fyf[k, & (2½+2½)  
1½ dPN ouLifr; k 1½ i dkj fllkfr; k

Write short notes on :-

- (1) Mangrove Vegetation (2) Coral Reefs.

**^Vflok OR\*\***

fuEu ij I f{klr fVi .kh fyf[k, & (2½+2½)

1½ vknz Hkfe 1½ okVj 'kM i cu/k dk egRo

Write short notes on :-

- (1) Dry land (2) Water shed management.

itzu 17& I enk inkk.D; k gS\ I enk inkk.ds ekuoh; dkj.kka dk o.klu dkft, A 1\$4½

What is marine pollution ? Describe the various factors that pollute the sea widely.

**^Vflok OR\*\***

enk inkk.D; k gS\ enk inkk.ds ekuoh; dkj.kka dk o.klu dkft, A 1\$4½

What is soil pollution ? Describe the anthropogenic causes of soil pollution.

izu 18& ou i zll/k grqD; k&D; k l jdkjh iz kl fd; stk jgsg\ ir; d dk l fklr o.kl  
dft, A 16½

What are the efforts made by the government for forest management ? Describe each effort in brief.

**~Vkok OR\*\***

Hkfe D; k g\\$\\ Hkfe dsu"V vFkok nfrkr gksusdsdkj .kkadksfyf[k, A bl dscpkd  
dsD; k&D; k mik; g\\$\\ (1+2½+2½)

What is land ? write the reasons of land deterioration and pollution. What are the means of its protection ?

izu 19& ty inll.k dk tho&tUryka ij D; k iHko iMrk g\\$\\ ty inll.k fu; a.k ds  
mik; fyf[k, A 12\$4½

What are the effect of water pollution on living organisms ? Write the measures of controlling water pollution.

**~Vkok OR\*\***

ok; qinll.k dk ekuo LokLF; ij D; k iHko iMrk g\\$\\ okgfud ok; qinll.k dks  
fu; f=r djasds mik; fyf[k, A 18\$3½

What are effects of air pollution on human health ? Write the measures of controlling vehicle pollution.

&&00&&

## **^I Ei y mRrj\*\***

[k.M & ^\*

mRrj &

- (i) c & 2002
- (ii) v & 11
- (iii) l & D<sub>2</sub>O
- (iv) n & i hfy; k
- (v) v & H<sub>2</sub>O

^ [k.M c\*

mRrj &

- (i) & ty inlk.k
- (ii) & ifjok fu; kstu
- (iii) & 80 ifr'kr
- (iv) & dLrjh ex
- (v) & 64

mRrj 2&

rkykckadks i Ddk bl fy, cukuk pkfg, ftl l svf/kd ty dk l p; gks l dsA

mRrj 3&

c<sub>8</sub>k vlfnokfl ; kadsfy, l ky o{k i T; uh; gSA

mRrj 4&

i ; kbj.k ea vokNuh; inkfkk dk l eko<sub>8</sub>k i ; kbj.k inlk.k dgykrk gSA

mRrj 5&

ykg v; Ld l sfudyk eyok H<sub>2</sub>ie dh mojk 'kfDr dks de dj nsrk gSA

mRrj 6&

feBkbz kaeajakadsi z kx l sdj j jkx dh l Hkkouk gks h gSA

mRrj 7&

vks l kxd inlk.k dks fu; f=r djus ds rhu mik; fuEufyf[kr gS &

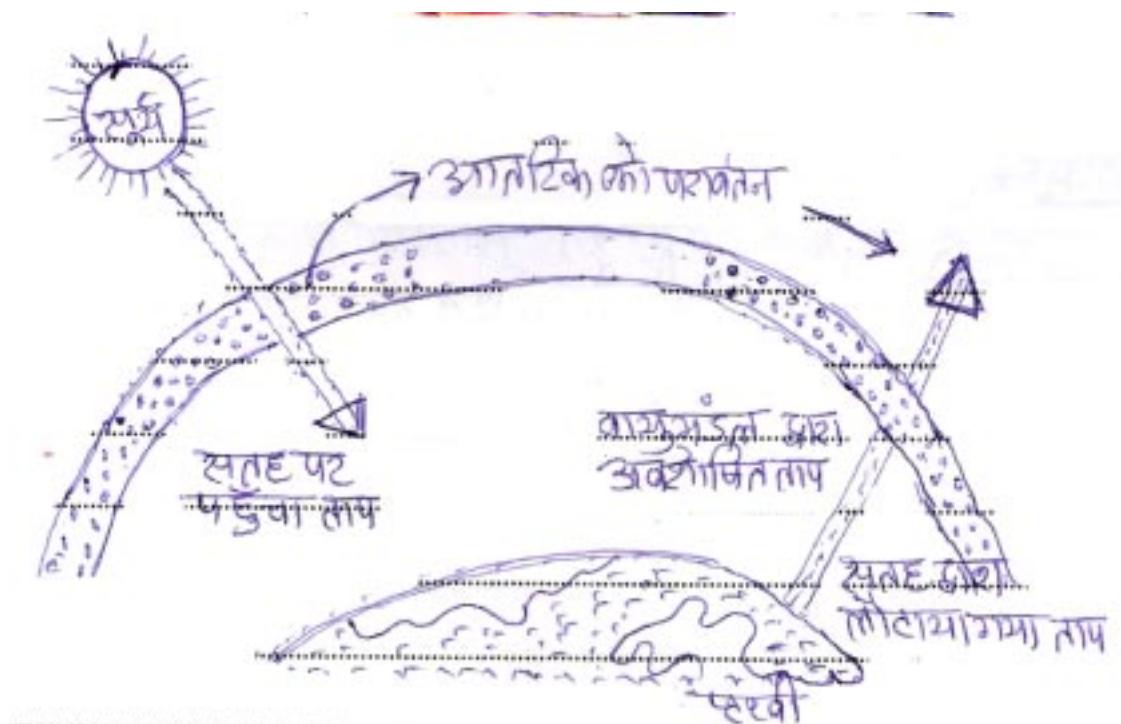
1- m | kx eamPp dkfV ds, oade inlk.kdkjh dPpseky dk mi ; kx gksuk pkfg, A

2- m | kxkaeangu i Øe dk mi ; kx djusokyh bdkb<sub>2</sub> kaeai ; klr Åph fupefu; ka dh l eifpr 0; oLFkk djuh pkfg, A

3- Qscd fQYVj ; k gkbz , uthLØc j mi dj .kkadk i z kx dj /kqj l s gks okys nji Hkkoka l scpk tk l drk gSA

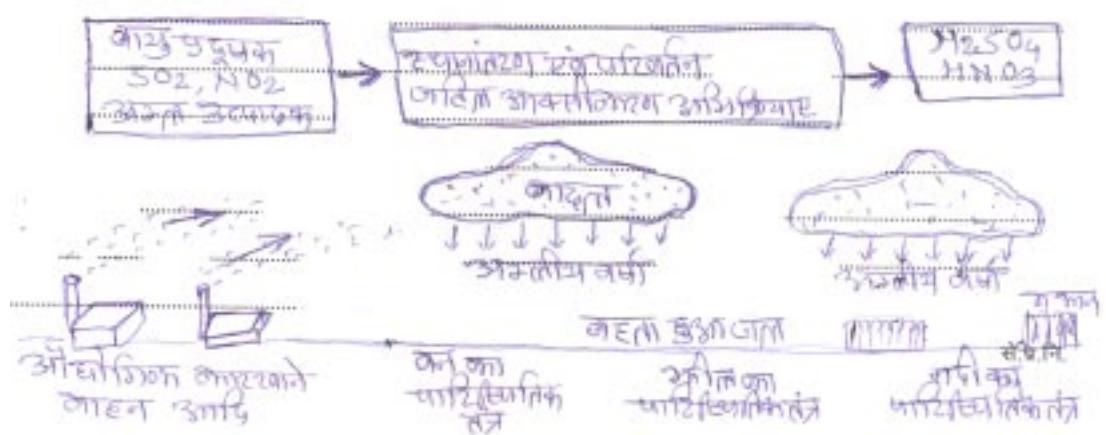
½ k vU; fu; f.k mik; fy[kus ij vd fn; k tk; A½

- mRrj 8& i jEijkxr ÅtkL=kska dk I j{k.k fuEufyf[kr dkj. kka l svko'; d gS &  
 1- i ; kbj.k inkk.k dh I eL; k l scpko grqA  
 2- fodkl dk; Øeka , oa [kfst ka dks tkjh j [kus grqA  
 3- ekuo fouk'k dks jksdus grqA  
 ¼ k vU; I j{k.k mik; ij vd fn; k tk; A½  
 mRrj 9& ou I j{k.k vf/kfu; e 1980 jk"V dsfodkl dsfy, ; fn dkbl xj okfudh dk; l  
 djokrk gS½t s l M d fuekZ k] ck k fuekZ k½ rks dN 'krk ds vrxi ou {ks= ds  
 LFkkukUrj.k ds fy, I jdkj ds }kjk vufr yusdk i kku djrk gSA  
 mRrj 10& 'kDdj eafeykusokys inkFkZds: i eadkyspusdh Hk h] mi ; kx dh tk; i Rrh  
 , oadi Ms/kkus ds l M s dk mi ; kx gsrk gSA ; k vU; feykoVh inkFkZ ds uke  
 fyf[kus ij vd fn; s tk; gA  
 mRrj 11& gfjr xg i kko dk vkj{



^vFkok\*\*

vEyh; o"kk& ukekfrdr vkj s[k



mRrj 12& I L; korlu enk I j{k.k dk , d mik; g\$ ; fn enk ea iR; d o"kk , d gh i zdkj dh QI y mxkbZ tk, rksenk dh mojk 'kfDr I ekir gkus yxrh g\$ vr%enk dh mojk 'kfDr dkscuk, j [kusdsfy, iR; d o"kk QI ykaeifjorlu fd; k tk, rksbl sI L; korlu ; k QI y pØ dgrsgSA  
mnkgj .k& ; fn enk ea, d ckj xgj dkl ] eDdk] vkyqvkfn dh QI y cks dsckn nI jh QI y nguy dy ds i kskad dh gkuh pkfg, ] bu i kskad dh tMkae xkB s i kbZ tkrh g\$ ftueamifLFkr thok. kqokrkoj.k dh ukbVrstu dks Hkfe ea fLFkj dj nsrk g\$ ftI I smojk 'kfDr c<+tkrh gSA

^vFok\*

d. Vj Ñf"k& bl i zdkj dh Ñf"k i gkMka dh <ykukaij vf/kd mi ; kxh g\$ [kska ea; k <yku okys{kska ea [kkpsrFkk dVd cuk, tkrs g\$ ftI I si ku bl ea: d tkrk gSA

ykk& 1/2; g enk I j{k.k dh , d t\$od fo/fk gSA

1/2 bl ea enk dk vijnu ughagksk gSA

mRrj 13& NRrhI x<+i kÑfrd nf"V I s [kfut I i nk I soñko'kkyh jgk gSA ; g i kphure bfrgkI o I kÑfr dk I k{kh jgk g\$ orzku eaN-x- jkT; }jk ouka dks I jf{kr djus rFkkml dsfpfdRI h; egRo dks tuekul rd igpkus dsfy, egRoi wZ dk; Zfd, tk jgs gSA ftI I sbl svc yks gcjy LVV dsuke I s tkuus yxs gSA

^vFkok\*\*

NRrhI x<+jkT; }kj k ouksdsI j{k.k , oafodkl gsrq?kfs"kr ou uhfr fuEukud kj gS &

1/1 ou {ks=ea Ñf"k okfudh dk; k dks c<kok fn; k tk, xk A

1/2 jkT; dsou xkeka dks jktLo xkeka eacnyk tk, xk A

1/3 jkT; dks gcly LVV cukus dh vo/kkj .kk dks eirz: i nsus dsfy, y?kqouki t vksj vksk/kh; i kskka dksI jf{kr , oal of/kj fd; k tk, xk A

mRrj 14& , d LFku i j ckak cuus ds dkj .k Mrc I s iHkkfor {ks= ds ykska ds vU; = foLFkki u dk i ; kbj .k , oaykska i j fofhkuu i dkjka l s iHko i Mfk gSA tS &

1/1 cflr; kdksuohu {ks=eacl kusI smudh I kLÑfrd fojkl r u"V gks tkrh gSA i fj; kstuk LFky dh enk] ouLifr rFkk vU; thoka dh {kfr gksrh gSA

1/2 foLFkkfir i fjokjka dks tgkj cl k; k tkrk gS ogkj ds i ; kbj .k i j foijhr iHko i Mfk gSA

1/3 u, LFku i j cl us ds dkj .k jkst xkj dh I eL; k gksrh gSA

^vFkok\*\*

ekuoÑr xfrfof/k; kadsdkj .k ykska dk i pLFkki u o i poka u fuEu dkj .kk l s gksI drk gS &

1/1 ; Ø dky dsI e; I hekorh xkoka l s ykska dks vU; = crk; k tkrk gSA

1/2 vksj kfxdhadj .k dsI e; ykska dks nI js LFkku i j cl k; k tkrk gSA

1/3 jyekxj jktekxL cukrs I e; vf/kxfgr Hkfe es cl s ykska dks vU; = cl k; k tkrk gSA

1/4 ckakkadsfuekZk {ks= ea, oamI dsMrc I s iHkkfor iHkkfor {ks= ds ykska dks vU; = cl k; k tkrk gSA

mRrj 15& vPNs i ; kbj .k gsrqfØ; kdyki & i ; kbj .k dksI e>u§ ml dsI ryu ml s tu mi ; kxh cukus gsrqnf"Vdks k ges cnyuk gksk A

i ed[k fØ; kdyki &

1/1 i Ñfr eaeukoÑr i ; kbj .k dh fLFkfr tksekuo dsnkshi wLÑR; kadsckn jg xbZ gSml sI j{k.k inku fd; k tk, A

- 12½ i n̄kk.k jk̄dus dkuwka dk I [rh I s ikyu djukuk pkfg, A  
 13½ i ; kbj .k f' k{kk dh vko'; drk dks yksxka dks I e>k; k tk, A  
 14½ i ; kbj .k vpkpj I fgrk dk fodkl A  
 15½ i ; kbj .k ds {ks= ea i f' kf{kr 0; fDr; k dh vko'; drk i j /; ku A  
^vFkok\*\*

### i; kbj .k tu tkxfr dk; Øe

- i ; kbj .k dsifr tkxfr dsfy, vud dk; Øe pyk, tk jgsgrtksfuEufyf[kr g§ &  
 1½ i kfjfLFkfrdh fodkl f' kfoj  
 2½ 0; k [ ; ku Jäkyk  
 3½ i f' k{kk.k dk; Øe  
 4½ fQYe in'ku  
 5½ in'ku; k; bR; kfn  
 I k/kkj .k tu ekul dks i ; kbj .k dh fofHkUu I eL; kvka l svxr djk mul sgks I dus okys nñi fj .kce dh tkudkjh nh tkrh g§ bu dk; Øekads I pkyu e 'kkI u ds I kFk Lo; a l oh I LFkkvka dh Hkh egRoi wkl Hkfiedk gksus yxh gSA  
 mRrj 16& I f{klr fvli .kh&

### 1½ dPN ouLifr; k&

dPN ouLifr; k; fo'o dsÅ".k rFkk mi k§.k dfVca/kh; {ks=kadu {kkj I g okfudh i kfjfLFkrdh 0; oLFkk g§ ; s cMh rknkn ea i kskka vks tho tUryka dh , d h i tkfr; kads l xg.k {ks= g§ tks, d ycsfodkl Øe eavki l eal cdk jgsgrtksfuEufyf ftuea {kkj I gu djus dh mYy[kuh; {kerk g§ ; s l eph rVj{kk dks fLFkj djrh g§ , oa l eph }kjg gks jgs dVko I s rVca/k dh j{kk djrh g§ A dPN ouLifr; k; l eph Hkkjrh; l eph rV ij i fjjf{kr egkuka Tokjh; ] rkFM+ k; i ' ty] {kkjrh; nnykavks nnyh eHkuka ea i kbz tkrh g§ ; s /kkj .kh; eRL; {ks= dk I o/ku Hkh djrh g§ou vks i ; kbj .k eakjy; 1987 I sdPN ouLifr I j{kk dk; l py jgk g§A

### 1½ i dky fHkfUk; k&

i dky fHkfUk; k; dks vaxth ea dkjy dgk tkrk g§ ft I s , d fo'ks i dkj ds

tyh; i k.kh dsfy, iz Dr fd;k tkrk gSA I enz ds vnj , d Nk/k I k i k.kh  
 piusds [kky I sfpidk jgrk g\$ og oghaij c<fk] budh I ; k eayxkrkj of)  
 I sI enz ds Hkhrj piusdk , d pVvku bl i k.kh dh enn I smkkj dj vkrk g\$  
 piusI sfufe;r bl i k.kh vo'k\$ dks i oky fHkfUk dgrsg\$ Hkkjr ea i oky fHkfUk; ka  
 ds i eqk LFky g\$ &

1/1½ vMeku , oafudkckj }hi I eg

1/2½ y{k}hi

1/3½ ellukj dh [kkMh

1/4½ dPN dh [kkMh

^vFkok\*\*

### 1/1½ vknz Hkfe&

n'sk esavknz Hkfe BMs vkJ 'kjd bykdsI sydj e/; Hkkjr eadfvca/kh; ekul uuh  
 bykds vkJ nf{k.k dseuh okys bykds eQSyh gSA ; g ck<+fu; a.k ea i Hkkoh  
 g\$ vkJ ryNV de djrh gSA ; g {k= 'khrdky ds fy, i f{k; ka vkJ tho  
 tUrjkadsfy, 'kj.kkxkg g\$ foHkluu i dkj dh eNfy; ka vkJ tUrjkadsituu  
 dsfy, Hkh ; g mRre {k= g\$ I enh rQku vkJ v/kM ds i Hkko dksI gu djus  
 dh mPp {kerk buegksh g\$ ; g I enh rV j{kk dks fLFkj djrh gSA

### 1/2½ okVj 'kM izkkyh dk egRo&

okVj 'kM izkkyh dk egRo&; i I soukjki .k , oaokVj 'kM ij vkJ kfj r Nf'k Hkfe ds  
 fodkl ds fy, vPNs cht mojd cgrj Nf'k Hkfe] midj.k , oacgrj Nf'k  
 foKku fo/fk; kadk iz kx fd;k tkrk gSA 0; ki d okVj 'kM fodkl dk; Øe Nf'k  
 fodkl , oamRi knu c<kus dsfy, vf/kd i Hkkoh i ) fr gSA

mRrj 17& I enh inkk.k& I enh inkk.k dsdkj.k I enh tho&tUrqu"V gksjgsgSA I enh  
 I Eink dh gkf u gksjgh gSA

### I enh inkk.k ds i Hkko

- (i) ufn; kadk ds i kFk vkus okys inkkd I sI enh thokadk u"V gksuk A
- (ii) nfrkr eNyh dks [kus I sekuo chekj gksjgk gSA
- (iii) I enz esnqkluo'k i Vfy; e i nkFkk dsfj ko I sekuo] eNfy; ka ij i HkkoA

- (iv) I eph xgjkbZ ea mi fLFkr jlk; uka dk mi ; kx vksk/kh fuekZk es gks jgk g\$ inkk.k I s bu inkFkZ dh xqkoRrk iHkfor gksA
- (v) I eph inkk.k I seps dh mi t de gksjgh g\$ & xgjh vlfkZl {kfr A
- (vi) ijek.kq i jh{k.k I s I eph tho jSM; ksfekZk I s iHkfor gks x, g\$ tks d\$ j mRifRr dk dkj.k cu x, g\$A  
^vFkok\*\*

**eñk inkk.k & eñk foHku i dkj ds [kfut rRok] dkctud inkfkl x\$ ka, oaty vkn rRok dk , d fuf' pr vuqkr eafeJ.k gksA fdl h dkj.ko'k I jpk , oa xqkoRrk I ekir gks tkrh g\$ bl sñk inkk.k dgrs g\$A**

### **eñk inkk.k ds dkj.k &**

- 1½ ou fouk'k
- 2½ eñk eajl k; uka dk mi ; kx
- 3½ vkskfd vif'k"V
- 4½ uxjh; vif'k"V
- mRrj 18& **ou icuku gsrq I jdkjh izkl &**  
ouks ds I j{k.k I EcU/kh uhfrxr fn'kk&funZkA ouka ij vkfJr 0; fDr; kA dh bZku] plkj] x\$ bekjr] ou mRiknu vks bekjr] ydMh dh vko'; drk ekp dks I okI/kd egRo fn; k x; k g\$A  
I aDr ou icU/ku dk; Øe ds i e[ k fl )kr fuEufyf[kr g\$ &  
5½ gkl gksA gq cMs ou {k= dks LFkk; h I eph; dh Hkkxhnkjh I s iu% gjk&Hkj k cuk; k tk I drk g\$A  
6½ LFkuh; I eph; dh ou I j{k.k vks ou dh mRikndrk c<kuseHkkx ysk ckgj ds0; fDr; kA dks ; kstuk I s vyx j[k tk; sA  
Hkj r ea I aDr ou icU/ku izkkyh ds vrxr 15000 xteou I fefr; k yxHkkx 20 yk[k gDV\$ j {k= eau"V gksjgs ouka dk icU/k dj jgh g\$A  
^vFkok\*\*

**Hkfe D; k g\$ & Hkfe i Foh dk og Hkkx g\$ ftl ij ge fuokl djrs g\$ i 'k i {k] vks I Hkh tho tUrqjgrsg\$ ftl ij iM+i kso ouLifr mxrsgSA i Foh**

dsvnj vuad i kñfrd I d k/ku Hkjsg&A ; g ijh i Foh dk 3@10 Hkkx g\$ vks  
bl sLFkye. My dgrs g&A

### Hkfe ds u"V ; k nñkr gksus ds dkj.k &

1/1½ Hkfe {kj.k& rst o"kk} vkkh ,oanQku I sfeVvh dh Åijh I rg dN gh fnuka  
eacg tkrh g\$ tcfcd bl dscuuuseacgr vf/kd I e; yxrk g\$ vr%feVvh dh  
j{kk djuk vko'; d g\$ Hkfe {kj.k ty ,oa ok; qnksus I s gksk gSA

1/2½ Hkfe i nñk.k& Hkfe dshkfrd jkl k; fud ; k tsod xqkkaea, l k dkbzHkh vokkr  
ifjorl ftI dk i Hkko euñ; rFkk vU; thoka ij i MsvFkok Hkfe dh i kñfrd  
xqkoRrk rFkk mi ; kxrk u"V gks Hkfe i nñk.k dgykrk gSA

mRrj 19& ty i nñk.k dk tho tñryka ij i Mvs okyk i Hkko&

ty dsfuf'pr Hkfrd] jkl k; fud ,oat\$od xqk gksrg\$ tc bu xqkkaea fd l h  
vU; dkj.kkal sifjorl vk tkrk g\$ rFkk bl dSPH eku esifjorl gks tkrk gA  
bl n'kk ea; g 'kq) ty infkr ty dgykrk gSA infkr ty dk i kñfr ds  
vU; i nkFkk ij udkjkRed i Hkko i Mvs yxrk gSA i kñfr ea fo | eku ekuo  
ftI dsfy, ty gh thou gSA bl infkr ty ds mi ; kx eagst k] VkbQkbM]  
Mk; f; k] ifpl ,oai hfy; k jkxkal si Hkfor gks tkrk gSA dHkh&dHkh rks nñkr  
ty ds l ou I svuad i dkj ds i l cakh foodkj Hkh mRi uu gks tkrs g&A  
okgfud i nñk.k dks fu; f=r djus ds mik;

1/1½ Mhty jsy dsbatukadLFku ij fo | r pfyr jsy batukadk mi ; kx fd; k tkuk  
pkfg, A

1/2½ cVjh pfyr okguka dk vf/kdkf/kd mi ; kx fd; k tkuk pkfg, A  
I hl k&jfgr i Vjsy rFkk Mhty ea l a ksth i nkFkk dks feykdj okguka ea iz kx  
djus l sok; q i nñk.k dks de fd; k tk I drk gSA

1/4½ vR; f/kd ok; q i nñk.kdkjh okguka ij i kcnh rFkk vU; okguka l smRi uu /kqj dk  
ekudhdj.k I svf/kd Lrj gksus ij dkunlh dk; bkgd dk i ko/kku gksuk pkfg, A  
okgu fuelz k djusokyh da fu; kats i nñk.k i nkFkk de ek=k easRI ftz gksA

^vFkok\*\*

ok; q i nñk.k dk ekuo LokLF; ij i Mvs okyk i Hkko

ok; q i n<sup>kk</sup>.k I s eut<sup>h</sup>; ds LokLF; ij cgr cjk i<sup>kk</sup>ko iM<sup>r</sup>k gSA bI I s 'ol u&l cdkh cgr I s jks t<sup>h</sup> & QQM<sup>ks</sup> dk d<sup>h</sup> j] vLFkek vks QQM<sup>ks</sup> I s I EcflU/k<sup>r</sup> n<sup>l</sup> jsjks gks tkrs<sup>g</sup>A ok; qeofifjr cgr I h /kkvka ds d.k vud I sjks mRi Uu djrs<sup>g</sup>A I hI sdsd.k fo'ks : i I sukM<sup>h</sup> e.My I sjks mRi Uu djrs<sup>g</sup>A ukbV<sup>h</sup>st u vkDI kbM I s QQM<sup>ks</sup>gn; vks vki[kkadsjks] [kkj h o I hus eannz mRi Uu djrh gSA

okrkoj.k eadkcz ekuks/kDI kbM dh mi fLFkr gksus I s eut<sup>h</sup>; dsjDr ea ghel<sup>kk</sup>yscu ds v.kqvkDI htu dh ryuk e 200 x<sup>u</sup>vf/kd rsth I s Co<sub>2</sub> ds v.kvka l s tMusyxrs<sup>g</sup>ft I s 'ol u e?kyu egl v gksyxrh gSA vf/kd I e; rd bl ifjfLFkr eajgus ij ne ?kyus I s eR; wgs tkrh gSA

jkl k; fud x<sup>h</sup> I a U=k<sup>h</sup> rFkk ukfHkdh; i fj ; kstukvka I s ok; e.My ea fuLrkfjr gksus okys fofHkUu fo"ksys jkl k; fud i nkFk v i uk nh?kdkyhu i<sup>kk</sup>ko eut<sup>h</sup>; k<sup>h</sup>ds LokLF; ij NkM<sup>r</sup>sg<sup>g</sup>A mnkgj.k Lo: i 1984 dksHkjr eaq<sup>h</sup>Hkks ky x<sup>h</sup> =kl nh eafeFkkby vkl kd kbu<sup>h</sup> dsfj l ko dsdkj.k vud yks ekjsx; sFk<sup>h</sup> tcf d bl x<sup>h</sup> ds i<sup>kk</sup>ko dsdkj.k vud xHkbrh efgykvka ds xHkLFk f'k'kqej s gq i<sup>h</sup>k gq Fks A bl h i<sup>h</sup>dkj fgjk<sup>h</sup>kek o ukxkl kd h ij f}rh; fo'o ; q ea fxjk; s x; s v.kqceka fd fofaj. kka ds i<sup>kk</sup>ko I svkt Hkh ogkacgr I sf'k'kqvi a rFkk ekuf d : i I sfof{klr i<sup>h</sup>k gks<sup>g</sup>A

&&00&&

**Set - C**

**gkbz Ldy | VHQdV ijhkk**

**High School Certificate Examination**

**| fiy&itu i=**

**SAMPLE PAPER**

**fo"k; % (Subject) - i; kbj.k  
d{kk % (Class) - nI oh**

**I e; 3 ?k.VK (Time- 3 Hrs)  
i wkd 75 (M.M.)**

**(Instruction) & Kunzkh**

- 1- **I hkh itu gy djuk vfuok; ZgSA**

Attempt all the Question

- 2- **itu Øekd 01 ea 10 vd fu/kkjr gSA nks mi [k.M gSA [k.M ^v\*\* ea 05  
cgfodYih; itu rFkk [k.M ^c\*\* ea 05 fjDr LFkkuk dh i firz vFkok mfpr  
I cak tkSM, A iR; d itu dsfy, 1 vd vkcfVr gSA**

Q. No. 01 Carries 10 Marks. There are two sub-section, Section A is Multiple choice carries 05 marks and section B is fill in the blanks or match the column carries 05 marks.

- 3- **itu Øekd 02 l situ Øekd 06 rd vfr y?kmRrjh; itu gSA iR; d itu  
ij 02 vd vkcfVr gSA mRrj dh vf/kdre 'kCn I hek 30 'kCn A**

Q. No. 2 to 06 are very short answer type question & it carries 02 marks each. Word limit is maximum 30.

- 4- **itu Øekd 07 l situ Øekd 10 rd y?kmRrjh; itu gSA iR; d itu ij 03  
vd vkcfVr gSA mRrj dh vf/kdre 'kCn I hek 50 'kCn A**

Q. No. 07 to 10 are short answer type question & it carries 03 marks each. Word limit is maximum 50.

- 5- **itu Øekd 11 l situ Øekd 14 rd y?kmRrjh; itu gSA iR; d itu ea  
vkrfjd fodYi gSvkj iR; d itu ij 04 vd vkcfVr gSA mRrj dh vf/kdre  
'kCn I hek 75 'kCn A**

Q. No. 11 to 14 are short answer type question & it carries 04 marks each. Each question has internal choice. Word limit is maximum 75.

- 6- itu Øekd 15 lsitu Øekd 17 rd nh?kñRrjh; itu gSA iR; d itu e  
vkrfjd fodYi gSvkj iR; d itu ij 05 vd vkcñVr gSA mRrj dh vf/kdre  
'kCn I hek 100 'kCn A

Q. No. 15 to 17 are long answer type question & it carries 05 marks each. Each question has internal choice. Word limit is maximum 100.

- 7- itu Øekd 18 vkj 19 rd nh?kñRrjh; itu gSA iR; d itu e vkrfjd  
fodYi gSvkj iR; d itu ij 06 vd vkcñVr gSA mRrj dh vf/kdre 'kCn  
I hek 150 'kCn A

Q. No. 18 to 19 are long answer type question & it carries 06 marks each. Each question has internal choice. Word limit is maximum 150.

## I gh fodYi pfu,%

Choos the correct alternative :-

- (i) 'khrdky ea if{k; ka vks tho tUryakd k'kj .kxkg gS & 1½  
 V- dPN ouLifr; k<sub>j</sub> C- vknz Hkfe  
 I - i dkjy fHkfRr; k<sub>j</sub> n- bues l sdkbz ugha

Write the winter season birds and other living organisms take shelter in -

- (a) Mangrove Vegetation (b) Dry land  
 (c) Coral reefs (d) None of the above  
 (ii) Hkkjr e atb e. My ik{k.k dh dy I q;k gS & 1½  
 V- 12 C- 13  
 I - 14 n- 15

The number of biosphere resenes in India is -

- (a) 12 (b) 13  
 (c) 14 (d) 15  
 (iii) jSM; kskelz i nkFkz ds fo [k. Mu l s fuEu i klr ughagksk & 1½  
 V-  $\alpha$  & fdj.k C-  $\beta$  & fdj.k  
 I -  $\gamma$  & fdj.k n-  $\theta$  & fdj.k

Due to the breaking of a radio active material the following is not given out

- (a)  $\alpha$  rays (b)  $\beta$  rays  
 (c)  $\gamma$  rays (d)  $\theta$  rays  
 (iv) /k/k , oadkgs dk Nk; k jguk gksk gS & 1½  
 V- ty inkk.k ds dkj.k C- ok; q inkk.k ds dkj.k  
 I - jSM; ks fDVo inkk.k ds dkj.k n- bues l sdkbz ugha A

The occurence of log and mist is due to

- (a) Water pollution (b) Air pollution  
 (c) Radio active pollution (d) None of the above  
 (v) ok; p. Myh; i dkj ughagS & 1½  
 V- HkdEi C- ck<+

I - I  $\int_{\text{kk}}$  n- p $\emptyset$ okr

It is not an atmospheric disaster-

- |                |             |
|----------------|-------------|
| (a) Earthquake | (b) Floods  |
| (c) Drought    | (d) Cyclone |

[k.M ^C\* @ Section (B)]

### fjDr LFku dh ifrl dlf, &

Fill in the blanks-

- (i) dy dkj [kkuk] ea ----- ; l= yxkuk pkfg, A  $\frac{1}{4}\frac{1}{2}$   
..... equipment must be used in factories.
- (ii) Hkkjr e*a* ifro"kl ----- ds cjkjc tul [; k c<fh gSA  $\frac{1}{4}\frac{1}{2}$   
Every year India has increase in population by a size of .....
- (iii) gfjr xg iHko ea N<sub>2</sub>O dk ; kxnu ----- gSA  $\frac{1}{4}\frac{1}{2}$   
The contribution of N<sub>2</sub>O in the green house effect is .....
- (iv) fpi dks vknkyu dh 'kq vkr l u----- bZ e*a* gbl A  $\frac{1}{4}\frac{1}{2}$   
Chipko movement was started in the year .....
- (v) i kfjfLFkrdh fodkl f'kfoj dk mnns ; ----- dk i ; kbj.k iHkj ea l fO;  
l g; kx ysk gSA  $\frac{1}{4}\frac{1}{2}$   
The aim of Eco-development camp is to make active participation of .....

in environment improvement.

it u 2& N"kd dks QI y eafdrus ikuh dh vko'; drk g*s* bl dh tkudkjh D; kgksu  
pkfg, A  $\frac{1}{2}\frac{1}{2}$   
Why should farmers have a knowledge of how much water is required for the  
Crop ?

it u 3& jrutkr iks I s NRrhI x<+eafdl i nkFkl dk fuelk fd; k tk jgk gS\  $\frac{1}{2}\frac{1}{2}$   
What is produced from Jatropha in Chhattisgarh ?

it u 4& rkck v; Ld mR[kuu I sfudyk eyok Hkfe ij D; k iHko Mkyrk gS\  $\frac{1}{2}\frac{1}{2}$   
What is the effect of the waste obtained during extraction of copper on soil ?

it u 5& /ofu i nkk. k D; k gS\  $\frac{1}{2}\frac{1}{2}$   
What is noise pollution ?

- it u 6& [kk| rsy eaifrcfl/kr jx dh feykoV l sfdl jkx dsmRiUu gksu dh l Hkkouk jgrh g\\$ \ 12½  
Which disease can be caused due to the mixing of banned colours in edible Oil?
- it u 7& okgfud i nkk.k dksfu; f=r djus ds dkboz rhu mik; fyf[k, A 1\$1\$1½  
Write any three measures of control long of vehicular pollution ?
- it u 8& gkbMkstu ds b7ku ds : i esiaz kx dks c<kok nsus dsfy, D; k iz kl fd; s tk jgs g\\$ \ 13½  
What effort are being made to enhance the use of hydrogen as fuel ?
- it u 9& l dVxLr tho itkfr; kads fy, ol; tho ¼ j{k.k½ vf/fu; e 1972 dk D; k egRo g\\$ \ 13½  
What is the importance of wild life conservation act 1972 for the endangered species ?
- it u 10& fdllgh rhu el kyka ds uke , oamue feykoV fd; s tkus okys i nkFkk ds uke fyf[k, A 13½  
Write the names of any three spices and the name of substances mixed in it.
- it u 11& NRrhI x<+dks gcly LVJ jkT; D; ka ?kks"kr fd; k x; k \ 14½  
Why is Chhattisgarh declared as herbal State ?

### ^vFkok OR\*\*

- NRrhI x<+jkT; }kj k ?kks"kr ou uhfr D; k g\\$ \ 14½  
What is the forest policy declared by Chhattisgarh state ?
- it u 12& , d LFku ij ck/k cuus ds dkj.k M I s iHkfor {ks= ds ykska ds vU; = foLFkki u , oai ; kbj.k ij i Mts okys pkj dkj.kka dks fyf[k, A 14½  
Write any four effects, of the displacement of the people of submerged area during the dam construction on environment and life.

### ^vFkok OR\*\*

- ekuoÑr xfrfot/k; kads dkj.k ykska dk i pLFkki u o i pokl u ds pkj dkj.kka dks fyf[k, A 14½  
Write any four causes of rehabilitation and re establishment due to human induced activities.

it u 13&	gfjr xg i <sup>h</sup> ko dk ukekfr vkj <sup>h</sup> k cukb, A Draw a labelled ray diagram of green house effect.	1/2\$2½
	<b>^Vflok OR**</b>	
	vEy <sup>h</sup> ; o <sup>h</sup> kk dk ukekfr vkj <sup>h</sup> k cukb, A Draw a labelled ray diagram of acid rain fall.	1/2\$2½
it u 14&	I L; kor <sup>h</sup> D; k g <sup>h</sup> s\ bl I senk dks D; k y <sup>h</sup> kk g <sup>h</sup> s\ What is crop ratation ? How is it beneficial for soil ?	1/2½
	<b>^Vflok OR**</b>	
	d. Vj Nf <sup>h</sup> k I s D; k I e>rs g <sup>h</sup> \ bl I senk dks D; k y <sup>h</sup> kk g <sup>h</sup> s\ What do you understand by contour cultivation ? How is it beneficial for soil?	1/2\$2½
it u 15&	I en <sup>h</sup> i n <sup>h</sup> .k D; k g <sup>h</sup> s\ I en <sup>h</sup> ks d <sup>h</sup> 0; ki d : i I s in <sup>h</sup> kr djus okys dkj dk <sup>h</sup> dk o.ku dhft , A What is marine pollution ? Describe the various factors that pollute the sea widely.	1/1\$4½
	<b>^Vflok OR**</b>	
	e <sup>h</sup> nk i n <sup>h</sup> .k D; k g <sup>h</sup> s\ e <sup>h</sup> nk i n <sup>h</sup> .k d <sup>h</sup> ekuoh; dkj. kka dk o.ku dhft , A 1/1\$4½ What is soil pollution ? Discribe the anthropogenic causes of soil pollution.	
it u 16&	vPNs i ; kbj.k grq dks&dk <sup>h</sup> I s f <sup>h</sup> 0; kdyki djus pkfg, \ I f <sup>h</sup> kr ea o.ku dhft , A What are the healthy activities that one should do for healthy environment ? Describe in brief.	1/5½
	<b>^Vflok OR**</b>	
	i ; kbj.k tutkxfr dk; Øe dks&dk <sup>h</sup> I sg <sup>h</sup> \ i R; d dk o.ku dhft , A 1/2\$3½ What are the programmes of public awareness for environment ? Describe each in brief.	
it u 17&	fuEu ij I f <sup>h</sup> kr Vhi .kh fyf[k, & 1/1½ dPN ouLifr; k 1/2½ i ckyfHkfRr; k Write short notes on :-	(2½+2½)
	(1) Mangrove Vegetation	(2) Coral Reefs.

**^Vfok OR\*\***

fuEu ij l f{klr fVli .kh fyf[k, & (2½+2½)  
 ¼½ vknz Hkfe ½½ okVj 'km i cU/k dk egRo

Write short notes on :-

- (1) Dry land (2) Water shed management.  
 it u 18& ou i cU/k grqD; k&D; k l jdkjh i z kl fd; stk jgsgs\ i R; d dk l f{klr o.ku  
 dhft, A ½½

What are the efforts made by the government for forest management ? Describe each effort in brief.

**^Vfok OR\*\***

Hkfe D; k g\\$ \ Hkfe dsu"V vFkok nfrkr gksusdsdkj .kkadksfyf[k, A bl dscpkd  
 dsD; k&D; k mik; g\\$ \ (1+2½+2½)

What is land ? write the reasons of land deterioration and pollution. What are the means of its protection ?

- it u 19& ty inkk. k dk tho&tUr yka ij D; k i Hkko i Mfk g\\$ \ ty inkk. k fu; a.k ds  
 mik; fyf[k, A ½\$4½

What are the effect of water pollution on living organisms ? Write the measures of controlling water pollution.

**^Vfok OR\*\***

ok; qinkk. k dk ekuo LokLF; ij D; k i Hkko i Mfk g\\$ \ okgfud ok; qinkk. k dks  
 fu; f=r djusds mik; fyf[k, A ½\$3½

What are effects of air pollution on human health ? Write the measures of controlling vehicle pollution.

&&00&&

## **^I E i y mRrj\*\***

[k.M & ^\*

mRrj &

- (i) c & vknz Hkfe
- (ii) l & 14
- (iii) n & θ & fdj.k
- (iv) c & ok; q i nkk.k ds dkj.k
- (v) v & Hkd़i

^ [k.M c\*

mRrj &

- (i) & inkkd fu; fd
- (ii) & vklVfy; k ns̄k
- (iii) & 6 ifr'kr
- (iv) & 1973
- (v) & ; φk oxz

mRrj 2& N"kd dks QI y eafdrus ikuh dh vko'; drk gS; g tkudkjh gksuk bl fy,  
vko'; d gftl I sog ikuh dk nq i ; kx jkd I dsA

mRrj 3& jrutkr i kks I sNRRhl x<+eouLi fr rsy I sck; ksMhty dk fuekZk fd; k tk  
jgk gSA

mRrj 4& rkck v; Ld mR[kuu I sfudyk eyck o"kkdky eanji&nji rd Qsydj I idzea  
vk; h enk dks inffkr dj ml dh mojk 'kfDr de dj nsrk gSA

mRrj 5& og vokfNr vokt ft I I sdkukaeannzo d"V gk /ofu inkk.k dgykrk gSA  
; k vU; ij Hkh vd fn; k tk; sk A

mRrj 6& [kk | rsy e i frcf/kr jx dh feykoV I s dI j jkx mRi Uu gksudh I Hkkouk  
gks h gSA

mRrj 7& okgfud inkk.k fu; f. k ds mi k; fuEufyf[kr g&  
1/2 cVjh pfyr okguka dk vf/kdkf/kd mi ; kx A

- 12½ fo | r pfyr jy batukadk mi ; kx A  
 13½ i Vfky; e inkfkk̄ ea l a ksth inkfkk̄ dks feykdj i z kx A  
     ; k vU; fy[kus ij vd fn; k tk; sk A  
 mRrj 8& gkbM̄stu ds bZku ds: i eac<kok nusdsfy, ekuuh; mPpre U; k; ky; dh  
     ig y ij CNG I sokgukadks pykus dks vfuok; Z fd; k x; k gSA  
 mRrj 9& I dVxLr tho itkfr; kadsfy, oU; tho 1/1 j{k.k.1/2 vf/kfu; e 1972 ds vrxr  
     Nf"k m | kx] uxjhadj.k , oavks| kxhdj.k I sol; tho vkokl dks l jf{kr djus  
     dk i ko/kku gSA  
 mRrj 10& el kysdk uke                         feykoVh inkfkl  
     1/1 fi l h /kf; k                     & LVkp] yM̄ dk cjk nk  
     12½ fi l h fepz                     & jx fd; k gyk cjk nk] bV dk pjk  
     13½ dkyh fepz                     & i i hrsds l jkscht  
 mRrj 11& NRrhI x<+i kNfrd nf"V I s [kfut l i nk l so&k'kyh jgk gSA ; g i kphure  
     bfrgkl o l kNfr dk l k{kh jgk g\$ orEku eN-x- jkT; }jk ouksdks l jf{kr  
     djus rFkml ds fpfdRI h; egRo dks tuekul rd igpkusdsfy, egRoi wZ  
     dk; Z fd, tk jgs gSA ft l s bl svc ykx gcly LV ds uke l s tkuus yxs  
     gSA  
   ^vFkok\*\*  
     NRrhI x<+jkT; }jk ouksdks l j{k.k , oafodkl grq?kks"kr ou uhfr fuEukud k  
     gS &  
     1/1 ou {kska ea Nf"k okfudh dk; k dks c<kok fn; k tk, xk A  
     12½ jkT; ds ou xkeka dks jktLo xkeka e&cnyk tk, xk A  
     13½ jkT; dks gcly LV cukus dh vo/kkj.kk dks eirZ: i nusdsfy, y?kqouki t  
     vks vksk/kh; i kskka dks l jf{kr , oa l of/kz fd; k tk, xk A  
 mRrj 12& , d LFku ij ck dk cuus ds dkj.k M̄ l s i kfor {ks ds ykska ds vU; =  
     foLFki u dk i ; kbj.k , oaykska ij fofLkuu i dkjka l s i kko i M̄k gSA tS &  
     cfLr; kadsuohu {kskaeacI kus l smudh l kNfrd fojkl r u"V gks tkrh gSA  
     12½ i fj; kstuk LFky dh enk] ouLifr rFkk vU; thoka dh {kfr gks h gSA

13½ foLFkkfir i fjojk;kadks t gk; cl k; k tkrk g; ogk; ds i ; kbj.k ij foijhr i ~~kk~~  
i M;k gSA

14½ u, LFkku ij cl usdsdkj.k jkstxkj dh l eL; k gks;h gSA  
^vFkok\*\*

ekuoÑr xfrfot/k; kadsdkj.k yksxkdk i ~~u~~LFkk u o i ~~u~~ok u fuEu dkJ. kka l s  
gks l drk g; &

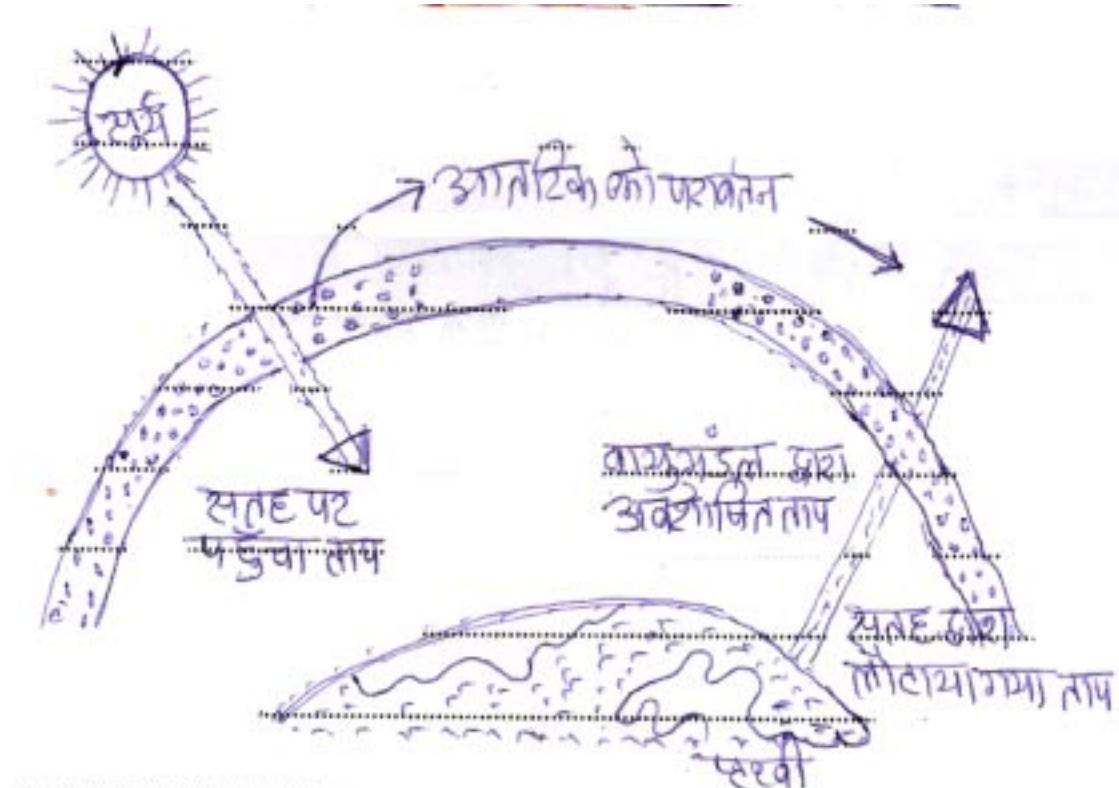
15½ ; Ø dky ds l e; l hekorh xkoka l s yksxkdk vU; = crk; k tkrk gSA

16½ vksj ksfxdhdj.k ds l e; yksxkdk njsLFkkuka ij cl k; k tkrk gSA

17½ jyekxj jktekxj cukrs l e; vf/kxfgr Hkfe es cl s yksxkdk vU; = cl k; k  
tkrk gSA

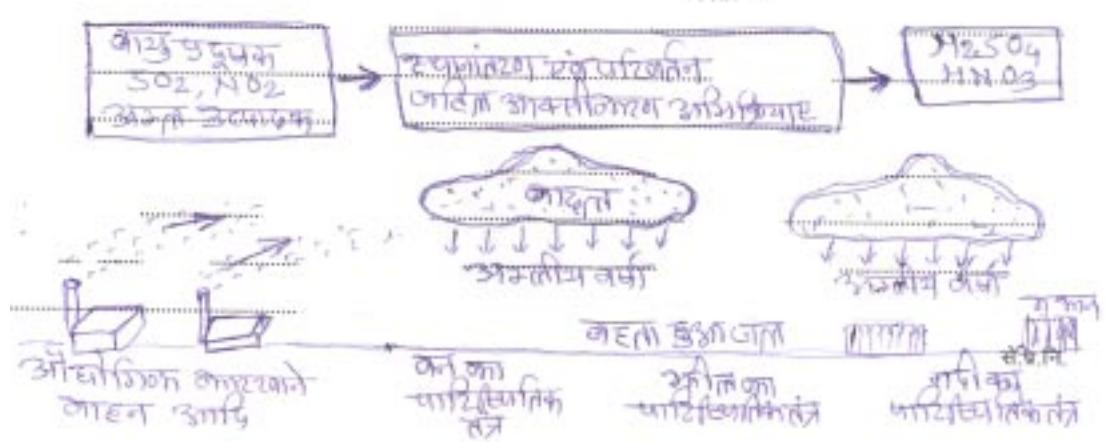
18½ ckakadsfuekz k {ks= ea, oamI dsM; l s l ~~kk~~for i ~~kk~~for {ks= dsyksxkdk vU; =  
cl k; k tkrk gSA

mRrj 13& gfjr xg i ~~kk~~o dk vksj{k



^vFok\*\*

## vEy়; o"kl & ukefdr vkj[s]k



mRrj 14& I L; korlu enk I j{.k dk , d mik; g\$ ; fn enk ea i R; d o"kl , d gh i zdkj dh QI y mxkbZ tk, rksenk dh mojk 'kfDr I ekIr gksusyxrh g\$ vr%enk dh mojk 'kfDr dkscuk, j [kusdsfy, i R; d o"kl QI ykaeifjorlu fd; k tk, rksbl sI L; korlu ; k QI y pØ dgrsgsA  
mnkgj .k& ; fn enk ea , d ckj xgj di k ] eDdkj vkyqvkfn dh QI y cks dsckn nli jh QI y nguy dy ds i kskadh gkuh pkfg, ] bu i kskadh tMksa xkB s i kbZ tkrh g\$ ftueamifLFkr thok.kqokrkoj.k dh ukbVst u dks Hkfe ea fLFkj dj nsrk g\$ ftI I smojk 'kfDr c<+tkrh gSA

^vFok\*\*

d. **Vij Nfk&** bl i zdkj dh Nf"k i gkMka dh <yku ka ij vf/kd mi ; kxh g\$ [kska ea; k <yku okys{ks=kaea [kkpsrFkk dVd cuk, tkrs g\$ ftI I si ku h bl ea: d tkrk gSA

ykk& 1/1 ; g enk I j{.k dh , d t\$od fof/k gSA

1/2 bl ea enk dk vijnu ughagksk gSA

mRrj 15& I eph inkk.k& I eph inkk.k ds dkj.k I eph tho&tUrq u"V gks jgs g\$ A  
I eph I Eink dh gkf u gks jgh gSA

**I eph inkk.k ds i Hkko**

(i) ufn; kads I kfk vksokys inkkd I sI eph thok dk u"V gksuk A

- (ii) n̄l̄kr eNȳl̄ dks [kkus l̄ sekuo chekj gks jgk gSA
- (iii) I epz eanq̄l̄ uko'k i t̄f̄y; e i nkFk̄l̄ dsfj l̄ ko l̄ sekuo] eNfy; k̄ i j i t̄kkoA
- (iv) I epb̄ xgjkb̄l̄ ea mifLFkr j l̄ k; uk̄ dk mi ; k̄ vks/k̄h fuelk̄l̄ e gks jgk ḡl̄ i nk̄.k l̄ s bu i nkFk̄l̄ dh xqkoRrk i t̄kkfor gks h gSA
- (v) I epb̄ i nk̄.k l̄ sekos dh mi t de gks jgh gS& xgj̄h vlfk̄l̄ {kfr A
- (vi) i jek.k̄ i jh{k.k̄ l̄ s I epb̄ tho jSM; k̄kfez̄k l̄ s i t̄kkfor gks x, ḡl̄ tks d̄l̄ j mRifRr dk dkj.k cu x, ḡl̄ A

^vFok\*\*

**eñk i nk̄.k & eñk foñkuu i dkj ds [kfut rRok̄ dkcfud i nkFk̄l̄ x̄l̄ ka, oa ty vlfn rRok̄ dk , d fuf'pr vuñkr eafeJ.k gks k gSA fdl̄ h dkj.ko'k l̄ jpuuk , oa xqkoRrk l̄ ekir gks tkrh ḡl̄ bl̄ s eñk i nk̄.k dgrs ḡl̄ A**

### **eñk i nk̄.k ds dkj.k &**

- 1/1½ ou fouk'k
- 1/2½ eñk eaj l̄ k; uk̄ dk mi ; k̄
- 1/3½ vks/k̄xd vif'k"V
- 1/4½ uxjh; vif'k"V
- mRrj 16& vPNs i ; kbj.k ḡqfØ; kdyki & i ; kbj.k dks l̄ e>ūl̄ ml ds l̄ ryu ml s tu mi ; k̄h cukus ḡqnf"Vdks k ges cnyuk gks k A

### **i ed[k fØ; kdyki &**

- 1/1½ i ñfr eaeukoÑr i ; kbj.k dh fLFkfr tksekuo dsnkski wklÑR; kadsckn jg xbz ḡml s l̄ j{k.k i nku fd; k tk, A
- 1/2½ i nk̄.k jkdusdkuuk̄dk l̄ [rh l̄ s ikyu djukuk pkfg, A
- 1/3½ i ; kbj.k f'k{k dh vko'; drk dks ykska dks l̄ e>k; k tk, A
- 1/4½ i ; kbj.k vpkpj l̄ fgrk dk fodkl A
- 1/5½ i ; kbj.k ds {ks e a i f'k{k 0; fDr; k̄ dh vko'; drk i j /; ku A

^vFok\*\*

### **i ; kbj.k tu tkxfr dk; Øe**

i ; kbj.k dsifr tkxfr dsfy, vud dk; Øe pyk, tk jgs ḡtksfuEufyf[kr ḡl̄ &

11½ i kfj fLFkfrdh fodkl f'kfoj  
12½ 0; k[ ; ku Jækyl  
13½ if'k{k.k dk; Øe  
14½ fQYe in'ku  
15½ in'ku; k; bR; kfn  
I kkkj.k tu ekul dks i ; kbj.k dh foftklu I eL; kvka l s voxr djk mul sgks  
I dus okys nñi fj.kke dh tkudkj h nh tkrh g\$ bu dk; Øekads l pkyu ea  
'kkI u ds l kfk Lo; al oh l LFkkyka dh Hkh egRoi wkz Hkiedk gksus yxh gSA

mRrj 17& I f{kIr fVli.kh&

### 16½ dPN ouLifr; k&

dPN ouLifr; k fo'o ds Å".k rFkk mi k\$.k dfVcalkh; {ks=kadhl {kkj I g okfudh  
ikfjfLFkrdh 0; oLFkk g\$ ; s cMh rknkn ea i kskka vks tho tUryka dh , d h  
itzkfr; kads l xg.k {ks=g\$ tks, d yasfodkl Øe eavki l eal aak jgsg\$ vks  
ftuea {kkj I gu djus dh mYy[kuh; {kerk g\$ ; s l epn rVjs[kk dks fLFkj  
djrh g\$, oa l epn }kjk gks jgs dVko l s rVcalk dh j{kk djrh gSA dPN  
ouLifr; k l epn Hkkjrh; l epn rV ij ifjjf{kr egkuka Tokjh; ] rkfM+ k i';  
ty] {kkjh; nynyka vks nynyh efkuka ea i kbZ tkrh g\$ ; s/kj.kh; eRL; {ks=  
dk l o/ku Hkh djrh g\$ou vks i ; kbj.k ea=ky; 1987 l sdPN ouLifr l j{k.k  
dk; l py jgk gSA

### 17½ i dky fHkfUk; k&

i dky fHkfUk; ka dks vaxth ea dkjy dgk tkrk g\$ ft l s, d fo'k\$ i dkj ds  
tyh; i k.kh dsfy, iz Dr fd; k tkrk gSA l epn ds vnj , d Nk/k l k i k.kh  
pusds [kky l sfpi dk jgrk g\$ og oghaij c<fkj budh l a; k eayxkrkj of)  
l s l epn ds Hkhj pwsdk , d pVvku bl i k.kh dh enn l smHkj dj vkrk g\$  
pus l sfufeZ bl i k.kh vo'k\$ dks i dky fHkfUk dgrsg\$ Hkkj r ea i dky fHkfUk; ka  
ds i e[ k LFky g\$&

18½ vMeku , oafudkckj }hi l ey

19½ y{k}hi

13½ ellukj dh [kkMh]

14½ dPN dh [kkMh]

^vFkok\*\*

### 11½ vknz Hkfe&

n's k esavknzHkfe BMsvkj 'kjd bykdsI syd j e/; Hkjjr esdfVc/kh; ekul uh bykds vks nf{k.k ds ueh okys bykds e QSyh gSA ; g ck<+fu; &.k ea i Hkkoh g§ vks ryNV de djrh gSA ; g {k= 'khrdky ds fy, if{k; ka vks tho tUrykadsfy, 'kj .kkxkg g§ fofHkuu izdkj dh eNfy; kavks tUrykadsituu dsfy, Hkh ; g mRre {k= g§ I enk rQku vks v/kM ds i Hkkko dksI gu djus dh mPp {kerk buegks h g§ ; g I enk rV j[kk dks fLFkj djrh gSA

### 12½ okVj 'kM izkkyh dk egRo&

okVj 'kM i cdk eq; : i I soukjki .k , oaokVj 'kM ij vkl/kkfjr Nf'k Hkfe ds fodkl ds fy, vPNs cht mojd cgrj Nf'k Hkfe] mi dj.k , oacgrj Nf'k foKku fof/k; kadk iz kx fd; k tkrk gSA 0; ki d okVj 'kM fodkl dk; Øe Nf'k fodkl , oamRi knu c<kus dsfy, vf/kd i Hkkoh i ) fr gSA

mRrj 18& ou i cdku grqI jdkjh iz kl &

ouks ds I j{k.k I EcU/kh uhfrxr fn'kk&funz kka esouka ij vkfJr 0; fDr; ka dh bZku] pkjk x§ bekjrh] ou mRi knu vks bekjrh ydMh dh vko'; drk ekx dksI okt/kd egRo fn; k x; k gSA

I a Ør ou i cdku dk; Øe ds i edk fl ) kr fuEufyf[kr gS &

1½ gkl gksrs gq cM&ou {k= dks LFkk; h I enk; dh Hkkxhbkjh I s i u% gjk&Hkj k cuk; k tk I drk gSA

LFkuh; I enk; dh ou I j{k.k vks ou dh mRi kndrk c<kuseHkkx ysk ckgj ds 0; fDr; ka dks ; kstuk I svyx j [kk tk; sA

Hkjjr esal a Ør ou i cdku izkkyh ds vrxi 15000 xteou I fefr; k yxHkkx 20 yk[k gDV§ j {k= esu"V gksjgsouka dk i cdk dj jgh gSA

^vFkok\*\*

Hkfe D; k gS & Hkfe i Foh dk og Hkkx g§ ftI ij ge fuokl djrs g§ i 'k

i {kh} vkg I Hkh tho tUrqjgrsg] ftl ij i M+i kgs o ouLi fr mxrsgSA i Foh  
 dsvnj vuod i kñfrd I d k/ku Hkjsg&A ; g i jh i Foh dk 3@10 Hkkx g§ vkg  
 bl sLFkye. My dgrsg&A

**Hkfe ds u"V ; k nñkr gksus ds dkj.k &**  
 1/1½ Hkfe {kj.k& rst o"kk] vkkh ,oarQku I sfeVvh dh Åijh I rg dñ gh fnuka  
 eacg tkrh g§ tcfid bl dscuuseacgr vf/kd I e; yxrk g§ vr%feVvh dh  
 j{kk djuk vko'; d g§ Hkfe {kj.k ty ,oaok; qnksks I s gksk gSA  
 1/2½ Hkfe i nñk.k& Hkfe dsHkkfrd jkl k; fud ; k tsod xqkkaea, d k dkboZHkh vokñkr  
 ifjorlu ftl dk i kko euñ; rFkk vU; thoka ij i M&vFkok Hkfe dh i kñfrd  
 xqkoRrk rFkk mi ; kxsrk u"V gks Hkfe i nñk.k dgykrk gSA

**ty inñk.k dk tho tUrqyka ij i M&s okyk i kko&**  
 ty dsfuf'pr Hkfrd] jkl k; fud ,oatsod xqk gksrg] tc bu xqkkaeafdl h  
 vU; dkj.kkal sifjorlu vk tkrk gSrFkk bl dsPH eku esafjorlu gks tkrk gA  
 bl n'kk ea; g 'kñ ty infñkr ty dgykrk gSA infñkr ty dk i ñfr ds  
 vU; inkFkk ij udkjkRed i kko i M&s yxrk gSA i ñfr ea fo | eku ekuo  
 ftl dsfy, ty gh thou gSA bl infñkr ty ds mi ; kx eaqst] VkbQkbM]  
 Mk; fj ; k] ispl ,oaihy; k jkxkal s i kfor gks tkrk gSA dHkh&dHkh rks nñkr  
 ty ds l ou I svuod izdkj ds i v I cakh fodkj Hkh mRi uu gks tkrs g&A  
**okgfud i nñk.k dks fu; f=r djus ds mik;**

1/1½ Mhty jy dsbatukadLFku ij fo | r pfyr jy batukadk mi ; kx fd; k tkuk  
 pkfg, A

1/2½ cñjh pfyr okguak dk vf/kdkf/kd mi ; kx fd; k tkuk pkfg, A

1/3½ I hñ k&jfgr i vky rFkk Mhty ea l a ksth i nkFkk dks feykdj okguak ea i z kx  
 djus l sok; q inñk.k dks de fd; k tk l drk gSA

1/4½ vR; f/kd ok; q inñk.kdkjh okguak ij i kcmh rFkk vU; okguak l smRi uu /kñj dk  
 ekudhdj.k l svf/kd Lrj gksus ij dkuuh dk; zkgh dk i ko/kku gksuk pkfg, A

1/5½ okgu fuekz k djusokyh da fu; kats inñk.k i nkFkz de ek=k eamRI ftz gksA

## ^vFkok\*\*

ok; q i nkk.k dk ekuo LokLF; ij i M<sub>us</sub> oky<sub>k</sub> i <sub>kk</sub>

ok; q i nkk.k I s eut; ds LokLF; ij cgr cjk i <sub>kk</sub> i M<sub>rk</sub> gSA bl I s 'ol u&l <sub>dk</sub> cgr I s jkx t<sub>S</sub> & QQM<sub>ks</sub> dk d<sub>S</sub> j] vLFkek v<sub>kj</sub> QQM<sub>ka</sub> I s I EcflUkr n<sub>l</sub> jsjkx gks tkrsg<sub>A</sub> ok; qeofifjr cgr I h /kkr<sub>u</sub> kadsd.k vud I sjkx mRi Uu djrsg<sub>A</sub> I hl sdsd.k fo'k<sub>k</sub> : i I suM<sub>h</sub> e.My I sjkx mRi Uu djrsg<sub>A</sub> ukbV<sub>l</sub> st u v<sub>kD</sub> kbM I s QQM<sub>kg</sub>n; v<sub>kj</sub> v<sub>kj</sub>[k<sub>ka</sub> dsjkx] [k<sub>ki</sub>] h o I hus eann<sub>Z</sub> mRi Uu djrh gSA

okrkoj.k eadkc<sub>l</sub> ekuks<sub>kD</sub> kbM dh mi fLFkr gks I s eut; dsjDr ea ghekk<sub>y</sub> kfcu ds v.kq v<sub>kD</sub> ht u dh ryuk ea 200 x<sub>u</sub> vf/kd rsth I s Co<sub>2</sub> ds v.k<sub>u</sub> k<sub>a</sub> I s t<sub>M</sub> usyxrsg<sub>ft</sub> I s 'ol u ea?k<sub>u</sub> egl v gks yxr<sub>h</sub> gSA vf/kd I e; rd bl i fjfLFkfr ea jgus ij ne ?k<sub>u</sub> us I s eR; w gks tkrh gSA

jkl k; fud x<sub>S</sub> I a U=k<sub>a</sub> rFkk ukfHkd<sub>h</sub>; i fj; kstukvka I s ok; p.My ea fuLrkfjr gks okys fo"ksys jkl k; fud i nkFkZ vi uk nh?k<sub>D</sub> kyhu i <sub>kk</sub> eut; k<sub>a</sub> ds LokLF; ij NkM<sub>rs</sub> g<sub>A</sub> mnkgj.k Lo: i 1984 dksHkj<sub>r</sub> eaqbzHk<sub>s</sub> ky x<sub>S</sub> =kl nh ea feFkk<sub>b</sub> y vkl kd kbu<sub>v</sub> dsfj l ko dsdkj.k vud ykx ekjsx; sFk<sub>s</sub> tcfd bl x<sub>S</sub> ds i <sub>kk</sub> ko dsdkj.k vud xHk<sub>b</sub> rh efgylkvka ds xHkLFk f'k'k<sub>q</sub> ej s gq i <sub>h</sub> k gq Fks A bl h i dkj fgjk<sub>s</sub> kek o ukxkl kd<sub>h</sub> ij f}rh; fo'o ; q ea fxjk; s x; sv.kqceka fd fofdj.k<sub>a</sub> ds i <sub>kk</sub> ko I svkt Hkh ogkacgr I sf'k'k<sub>q</sub> vi x rFkk ekufl d : i I s fo{klr i <sub>h</sub> k gks g<sub>A</sub>

&&00&&