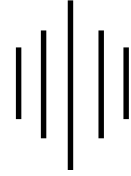




I xi y&itu i =



d{kk XII oha



i ; kbj .k

1/0 | kspr i tkkx1/2

NÜkhl x<+ek/; fed f'k{k e.My] jk; i j

## i u & i = dh ; kst uk Scheme of Question Paper

fo" k; %& i ; kbj . k

i wkk d % 75

l e; % 3 ?k/s

i jh{kk % gk; j l ds Mjh

**1/2 'k{kf.kd mnns'; ds vuq kj eku**

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

l 0 Ø0	mnns';	v d	i fr'kr
1-	Klu (Knowledge)	22	30%
2-	vock'sk (Understanding)	38	50%
3-	vuq; kx , oa dksy (Application & Skill)	15	20%
		75	100%

**1/2 bdkbzkj v dks dk eku**

l 0Ø0	bdkbz dk uke	bdkbz ij vkfvr v d	i u&i = ds ik: i vuq kj vkfvr v d
1-	t b fofo/krk dh vo/kkj .kk , oa izdkj	10	1\$2\$3\$4 ¾ 10
2-	t b fofo/krk dh i kfj l Fkfrd Hkfrdk	10	1\$1\$3\$5 ¾ 10
3-	t b fofo/krk dk l j {k . k	05	1 \$ 4 ¾ 5
4-	i ; kbj . k izl/ku	10	1\$3\$6 ¾ 10
5-	i ; kbj . k izl/ku ds mikxeu	05	1\$4 ¾ 5
6-	l dkkfjr @ l rr~fodkl	08	1\$2\$5 ¾ 8
7-	l dkkfjr fodkl ds enn xkj vk/kkj	07	1\$2\$4 ¾ 7
8-	l dkkfjr Nf" k , oa gfjr Øk i	08	2\$6 ¾ 8
9-	Ql y l g {kk	07	1\$1\$5 ¾ 7
10-	l eflor i hM d izl/ku	05	2\$3 ¾ 5
11-			
12-			



# i zu & i = dk Cyfi IV

## Blue Print of Question Paper

fo" k; %& i ; kbj . k

i wkkkd % 75

l e; % 3 ?k/s

i jh{kk %gk; j l dsMjh

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

**Set - A**

**Higher Secondary School Certificate Examination**  
**SAMPLE PAPER**

fo"k; %& (Subject) - i ; kbj.k  
d{kk %& (Class) - ckjgoha %12ohh

I e; 3 ?k.Vk (Time- 3 Hrs)  
i vkkb 75 (M.M.)

**(Instruction) & %un? k%**

- 1- I Hkh itu gy djuk vfuok; Z gSA  
Attempt all the Question
- 2- itu Øekad 01 ea 10 vad fu/kkZjr gSA nks mi [k.M gSA [k.M ^v\*\* ea 05  
cgfodYih; itu rFkk [k.M ^c\*\* ea 05 fjDr LFkkuka dh i firZ vFkok mfpR  
I cak tkfM, A iR; d itu dsfy, 1 vad 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 Øekad 02 I situ Øekad 06 rd vfr y?kqRrjh; itu gSA iR; d itu  
ij 02 vad vkcfVr gSA mRrj dh vf/kdre 'kCn I hek 30 'kCn A  
Q. No. 02 to 06 are very short answer type question & it carries 02  
marks each. Word limit is maximum 30.
- 4- itu Øekad 07 I situ Øekad 10 rd y?kqRrjh; itu gSA iR; d itu ij 03  
vad 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 Øekad 11 I situ Øekad 14 rd y?kqRrjh; itu gSA iR; d itu ea  
vkarfjd fodYi gsvk; iR; d itu ij 04 vad 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- izu Øekad 15 Isizu Øekad 17 rd nh?kmRrjh; izu gSA iR; d izu ea vkrfjd fodYi gSvkj iR; d izu ij 05 vð vkcfVr gSA mRrj dh vf/kdre 'kCn I hek 75 '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 75.

7- izu Øekad 18 Isizu Øekad 19 rd nh?kmRrjh; izu gSA iR; d izu ea vkrfjd fodYi gSvkj iR; d izu ij 06 vð vkcfVr 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.

iz u 1&1/2 I gh fodYi pūdj fyf[k; s &

(1x5=5)

Write correct choice-

(i) I okf/kd t d&fofo/krk okys nš kka ea Hkkjr dh fxurh gkrh gS & 1/4 1/2

1/4 1/2 12okj

1/4 1/2 13okj

1/4 1/2 14okj

1/4 1/2 11okj

The position of INDIA among the countries with maximum Bio-Diversity

(a) 12th

(b) 13th

(c) 14th

(d) 11th

(ii) Hkkjr dk B.Mk jfxLrku fdl inš k ea fLFkr gS & 1/4 1/2

1/4 1/2 jktLFkku

1/4 1/2 fgekpy inš k

1/4 1/2 tEew, oa dk' ehj

1/4 1/2 mRrj inš k

Cold desert of india is situated in the state

(a) Rajasthan

(b) Himachal Pradesh

(c) Jammu & Kashmir

(d) Uttar Pradesh

(iii) blntorh ck?k ifj; kstuk fdl ftyseal pkyr gS & 1/4 1/2

1/4 1/2 cLrj

1/4 1/2 nrnkMk

1/4 1/2 chtki j

1/4 1/2 dkrdj

Indravati Tiger project is run in

(a) Bastar

(b) Dantevada

(c) Bijapur

(d) Kanker

(iv) ty inš k I s dkŠ I k jksx ugha QSyk 1/4 1/2

1/4 1/2 gSt k

1/4 1/2 i hfy; k

1/4 1/2 Mk; fj; k

1/4 1/2 fVUd

The dieases not spread due to water pollution

(a) Cholera

(b) Jaundice

(c) Diahorrea

(d) Tetanus

(v) dšnh; inš k fu; U=. k ckMz fLFkr gS & 1/4 1/2

1/4 1/2 y[kuÅ

1/4 1/2 ubZ fnYyh

1/4 1/2 dksydkrk

1/4 1/2 efcbl

Central Pollution Control Board is in

- (a) Lucknow (b) New Delhi  
(c) Kolkata (d) Mumbai

1/2 1/2 fjdR LFkkuka dh i firZ dhft ; s & 1/4 x5=5)

Fill in the blank

- (i) , .Vhck; kSVd nok ----- i kSkA l s cukbz tkrh gSA 1/4 1/2  
Antibiotic medicines are obtain from ..... plants.
- (ii) ekuo fodkl fj i kS/Z2005 ds vuq kj Hkkjr dk fo'o ea -----LFkku gA 1/4 1/2  
As per the Human Development Report 2005 the position of india is .....  
in the World.
- (iii) xLus ds 'khjs l s ----- i klr gkrk gSA 1/4 1/2  
..... is obtain from sugarcane juice.
- (iv) b.Mkd YQku nok dk iz kS ----- ds fu; U=.k gsrqfd; k tkrk gSA 1/4 1/2  
Endosulphone is used for the control of .....
- (v) tc Ql y mRi knu ds l kFk&l kFk i 'kq kyu Hkh fd; k tkrk gS rks ml s -----  
[krh dgrs gSA 1/4 1/2  
When along with crop production animal husbandry is also practised it is called  
..... farming.

izu 2& l rr-fodkl ds nks egRo i wkZ vk; ke fyf[k, A 1/4 1/2

Write the two important components of sustainable development ?

izu 3& l izkkl i kSk l sfdl jkS dh nok curh gS \ 1/2 1/2

For which disease is the medicine obtain from sarpgandha plant used ?

izu 4& Ql y pØ fdl s dgrs gS \ 1/2 1/2

What is Crop Rotation ?

izu 5& enk ty dk i kSkka ds fy, D; k egRo gS \ 1/2 1/2

What is the importance of soil water for plants ?



izu 6& I eflor i hMed izU/kd ds dkbZ nks mnaf; fyf[k, A ¼1\$1½

Write the two objects (aims) of integrated pest management.

izu 7& i kf.k; ka dks fofHkUu R; kgkjka l s l EcfU/kr djus dk D; k mnaf; gSA ¼3½

What is the aims in relating different animals with festivals.

izu 8& {k; 'khy mi ; ksx eW; fdl sdgrsga\ mnkgj.k }kj k Li "V dhft, A ¼2+1½

What is the degradable consumption value? Explain with one example.

izu 9& Bkd vif'k"Vka ds fuLrkj.k ds dkbZ rhu mi k; fyf[k, A ¼1\$1\$1½

Write any three ways of disposal of solid wastes.

izu 10& vukt HkM/kju ds l e; Hk.Mkj xgka eaD; k&D; k l ko/kkfu; kaj [kuh pkfg, \ ¼3½

What are the precautions that should be taken during the storage of grains ?

izu 11& ekuo ds vflrRo gsrq tD fofu/krk vko'; d gD; ka \ ¼4½

Why is Bio-Diversity important for existence of man kind ?

**^Vflok OR\*\***

iNfr ea l rgyu cuk; s j[kus ds fy, tD&fofo/krk dk l j{k.k vko'; d gD; ka \ ¼4½

Bio-Diversity conservation is important to balance natural resources, Why ?

izu 12& jk"Vh; m | ku ij l f{kIr fVli .kh fyf[k, A ¼4½

Write short note on National Park.

**^Vflok OR\*\***

vH; kj.; ij l f{ki fVli .kh fyf[k, A ¼4½

Write short note on Sanctuary.

izu 13& l pkj ra= D; k gS\ nij rd l ns k Hkst us gsrq l pkj ra= dk ifr: i cukb, A

What is a communication system? Draw a model for communication system for sending messages to far off places. ¼2\$2½

**^Vflok OR\*\***

vkfFkd uhfr ds fdUgh pkj ?kVdka dk o.kU dhft, A ¼1\$1\$1\$1½

Explain any four components of economic policy.

izu 14& l rr~fodkl ea; pk dh Hkfedk dk o.kU dhft, A ¼4½

Explain the role of youths in Sustainable Development.

**^Vflok OR\*\***

I rr-fodkl eam | kx I engka dh Hkfedk dk o.ku dhft, A 1/4 1/2

Explain the role of industrial groups in Sustainable Development.

izu 15& fuEu ij I f{klr fVli .kh fyf[k, & 1/2 1/2 \$ 2 1/2 1/2

1/4 1/2 foylr iztkfr; k; 1/2 1/2 I dVkiUu tkfr; k;

Write short notes on:--

- (i) Extinct Species (ii) Threatened species

**^Vflok OR\*\***

fuEu ij I f{klr fVli .kh fyf[k, A 1/2 1/2 \$ 2 1/2 1/2

1/4 1/2 iR; {k eW; } 1/2 1/2 viR; {k eW; }

Write short notes on:--

- (i) Direct value (ii) Indirect Value

izu 16& I rr-fodkl , oahkfo"; ds I Hkkoukvka dh foopuk dhft, A 1/5 1/2

Describe the sustainable development and future possibilities.

**^Vflok OR\*\***

xteh.k izU/ku vkj I rr-fodkl dh vko'; drk dk fo'ySk.k dhft, A 1/5 1/2

Analyse the need of Rural management & Sustainable development.

izu 17& Ql y pØ ds dkbZ ikp fl ) kr fyf[k, A 1/4 \$ 1 \$ 1 \$ 1 \$ 1 1/2

Write any five principals of Crop Rotation.

**^Vflok OR\*\***

fefJr Ql y ds dkbZ ikp fl ) klr fyf[k, A 1/4 \$ 1 \$ 1 \$ 1 \$ 1 1/2

Write any five principals of Mixed Cropping.

izu 18& i ; kbj.k I j {k.k , oai nkk.k fu; æ.k dsfy, 0; fDr dks I kekftd Lrj ij D; k djuk pkfg, A 1/6 1/2

For conservation of Environmental and Pollution control what should an individual do at social level.

**^Vflok OR\*\***

i ; kbj.k izU/ku ds bffkdy 1/4 fdrd 1/2 igywi j izdk'k Mkfy, A 1/6 1/2

Explain Ethical consideration of Environmental management. 1/6½

What are the main effects of green revolution on Environment. Explain.

**OR**

Why is Drip Irrigation becoming popular. Explain. 1/6½

&&00&&

## ^i y mRrj\*\*

mRrj 1&¼½

- (i) & ¼½ 12 ok;
- (ii) & ¼ ½ tEew, oadk' ehj
- (iii) & ¼½ nrøkVkt
- (iv) & ¼½ fVVud
- (v) & ¼½ ubZfnYyh

¼½ fjDr LFkku dh i firZ

- (i) i fufl yhu
- (ii) 127 ok;
- (iii) , FkukW
- (iv) dhVka
- (v) fefJr

mRrj 2& I rr fodkl ds vk; ke fuEufyf[kr g&&

¼½ I d k/kukadk i q% pØ.k , oa i q% mi ; kx A

½ I d k/kukadk de I sde mi ; kx A

; k vU; vk; keka ij vad fn; s tk; a A

mRrj 3& I izdkk i kSk I sgn; k?kkr jkx dh nok curh gSA

mRrj 4& , d gh tehu ij fofHkuu izdkj dh QI ykadksosfYi d vk/kkj ij mxkuk QI y

pØ dgykrk gSA

mRrj 5& enk ty dk i kSkka ds fy, fo'kSk egRo g\$ D; kfd bl ds vHkko ea chT dk

vadj .k Hkh ugha gkr-k i kSk dh of) vksj Hkfe Ñf" k dk; Z Hkh I lko ugha gkr-k A

mRrj 6& I eflor i hMed izdku ds nks mnæs ; fuEu g&&

¼½ dhVka dks ijh rjg u"V u djds budh I d ; k dks vkfFkd {kfr Lrj I s vf/kd

u c<usnsuk A

½ tð fofokrk dks I jf{kr djuk , oa i ; kbj .k dks Hkh I jf{kr j [kuk A

mRrj 7& i kf.k; ka dks fofHkUu R; ksjkka l s l æf/kr djus dk mnæs; ; g gs fd tð  
fofo/krk dk l j {k.k gksftl l sekuo tkfr dk dY; k.k gks A

mRrj 8& ^og l E ink ftl s LFkkuh; Lrj ij mi ; ksx fd; k tkrk gsrFkk ftudk jk"Vh;  
; k varjkZVh; cktkj eamYys[k ughagksrk {k; l hy mi ; ksx eW; dgrsgA\*\*  
mngj.k & taxy dk bekjrh ydMh ¼ kxksj] chtk½ dks i klr djds bl dk  
0; kol kf; d mi ; ksx fd; k tkrk gs , oa bl l s tks vkfFkd ykHk gksck mRi knh  
mi Hkksx eW; gksck A

mRrj 9& Bkl vif"Vka dsfuLrkj.k dsrhu mik; fuEufyf[kr gs&

¼½ Mh-Mh-Vh- dk iz ksx ifrcf/kr gks A

½½ dM&djdV dk mi ; ksx fo | r mRi knu eafd; k tk; A

¾½ i qþØ.k dh ifØ; k }kjk dM&dpjs dks i q%mi ; ksx eayk; k tk l drk gSA  
¼ k vU; mik; fy[kusij vø fn; s tk; ½

mRrj 10& vukt Hk&lkj ds l e; Hk&lkj xgka eaj [kh tkus okyh l ko/kkfu; ka fuEu gs&

¼½ Hk&lkj xgka dh nhokjka Q'kz , oa Nr dh l QkbZ djds pggka ds fcykñ njkjk , oa  
VW&QW dks l heW l scan dj nsuk pkfg, A

½½ Hk&lkj xgka dks Hk&lkj .k ds i wZ esykFk; ks&50 bl h- nok l s mi pkfjr djuk  
pkfg, A

¾½ Hk&lkj xg ueh jkskd gksuk pkfg, A

mRrj 11& ekuo ds LokFkZ jd i Ñfr l s dkbZ Hkh vufHkK ughagSA tð&fofo/krk l j {k.k ea  
Hkh ekuo dk vi uk fufgr LokFkZ fNi k g\$ D; kfd fcuk vi uh LokFkZ i firZ dsekuo  
tkfr vU; tho tUrqka, oaouLifr; ka ds l j {k.k ij tkj ughans l drk A ekuo  
tkurk gsfd ml dh l eLr vko'; drk, j i R; {k vFkok vi R; {k : i l s tð  
fofo/krk l s tMh gñ tksvuo.j.k : i l svi uh veW; l ok, j gea i nku djrsjgs  
gñ ; sfd l h Hkh jk"V<sup>a</sup> ds vkfFkd] l kekftd] i kfjLFkfrd rFkk vU; l Hkh i {kka i j  
vi uk 0; ki d i Hkko Mkyrh gSA

^vFkok\*\*

i Ñfr ea l rnyu cuk; sj [kus ds fy, tð fofo/krk dk l j {k.k fuEu dkj .kka l s  
vko'; d gs&

¼½ i ; kbj .k l rnyu grqA

½½ vkSk/kh; egRo dh nf"V l sA

¾½ ekuo vflrRo dks cuk; sj [kus dsfy, A ¼dkbz rhu fy [kus i j½

mRrj 12& **jk"Vh; m | ku &** og l jf{kr {ks= tks ol; thokæ dh mlufR o fodkl dsfy, vkjf{kr gksrk g\$ rFkk ogk; o{k mllenyu] pkj.k] vk[k\$ rFkk vl; ekuoh; fØ; kdyki ka ij ifrcdk jgrk g\$ jk"Vh; m | ku dgykrk gSA

**llkjR ds iæ[k jk"Vh; m | ku &**

¼½ dkc\$ jk"Vh; m | ku & mÙkj[k.M

½½ l ðnjou jk"Vh; m | ku & if'pe cakj

¾½ fxj jk"Vh; m | ku & xqtjkr

¼½ ckdokx<+jk"Vh; m | ku & e/; insk

½½ nqkkok jk"Vh; m | ku & mRrj insk

¾½ dkxj ?kkVh jk"Vh; m | ku & NRrhI x<+

^vFkok\*\*

**vh; kj. ; &** , d k {ks= ; k 'kj.k LFky tks ol; thokæ ds cpko vkj ns[k&j\$[k ds fy, l jf{kr gksrk g\$ tgk; dñ l hek rd ekuoh; fØ; kdyki t\$ s?kkd dkVuk] Ñf" k vkfn dh vuæfr gksrh g\$ vh; kj. ; dgykrk gSA

**iæ[k vh; kj. ; &**

¼½ vpkudekj & fcykl ij ¼N-x-½

½½ vlUkeykbZ & rfeyukMw

¾½ i fV; kj & djy

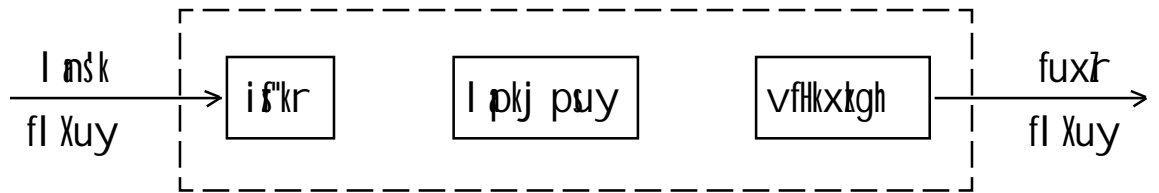
¼½ jkuhi g & mRrj insk

½½ iykew & fcgkj

¾½ ukxktÛ l kxj& vku/kz insk

mRrj 13& **l pkj ræ&** l pukvka dks , d LFkku l sni js LFkku ea Hkstus dh rduhd dks l pkj ræ dgrsg\$A vkt dy l puk& i =& if = dk] i [rd] rkj] j\$M; ks vkfn ek/; e l s tkus yxh g\$A vf/kdre xfr o rduhd ds dkj.k Vsyhfotu] VsyhQku] QDI ] b\$ju\$] ek\$kb\$y] , l -, e-, l -] mixg l pkj l s l puk tYn

igpklz tk l drh gš ; s l plj ræ dgykrsgšA  
 l jyre l plj ræ &



**^vFkok\*\***

**vkfkd ulfr ds 4 ?kVd fuEukuđ kj gš &**

- 1/1½ **Ńf'kulfr&** Ńf'k ulfr ea Hkw Lokfero rduhdh] mRi knu dh ek=k eW; ] l jdkj dh eW; ulfr] dhVuk'kd] ; æhdj.k vkfn 'kkfey gšA fd l ku Ql y puko] mRi knu] foØ; foRr i zdk dsfy, Loræ gšA
- 1/2½ **vkš kšxd ulfr&** l jdkj vkš kšxd fodkl dks fu; fer o fu; f=r djrh gš vkš kšxd fodkl dks i Hkkfor djus okys l jdkjh fl ) kr] fu; e] foRr i zdk vkfn dh 0; oLFkk djrh gšA
- 1/3½ **0; ki kfjd ulfr&** vk; kr&fu; kZr ulfr; kj fons kh 0; ki kj dh fn'kk o LoHkko] m | kxka dks l j {k.k} fons kh l gk; rk] Hkxrkku vkfn A
- 1/4½ **ekšnd ulfr&** fd l h nšk dh l jdkj ; k dšnh; cšd }kj k vFkØ; oLFkk eafdl h fo'kšk vkfkd mnæš; dh i kflr dsfy, l plkyu ea epk dh ek=k o i zdk dks ekšnd ulfr dgk tkrk gšA

mRrj 14& jk"Vª ds fodkl ea 0; fDr dh Hkfiedk dh ckr ds l kFk ; pk ds ; kxnku dks jš[kkadr fd; k tkrk gšA fd l h Hkh cMš i fforu dsfy, jk"Vh; pfj= fuelzk dsfy, vFkok nšk dsfodkl dsfy, tc Hkh egki q "kka us igy dh rc nšk ds ; pkvka dks gh vkgeku fd; k x; k A Lokh foostkuan vkš egkRek xkdkh us ; pk 'kfdR dks gh l cl s vf/kd egRo fn; k A

ošohdj.k vkš 'kgjhdj.k ds nšk ea Hkh ; pkvka dh Hkfiedk vxz kh gšA tezu vFkz kL=h ds vuđ kj Hkkjrh; vFkØ; oLFkk rsth l si xfr djrh gpZ 2020 rd fo'o dh rhl jh l cl s cMh vFkØ; oLFkk cu l drh gšA ft l l s ; pkvka dh vge Hkfiedk gšA nšk dh ; pk oxZ vkcknh fodkl ea egRo i wkZ ; kxnku nsjgh

gSA o{kkjksi .k eaHkh budk egRoiwkZ ; kxnku gSftl l sl ekt LoLFk gksxk , oa  
thou dh l kfkZdrk fl ) gksxh A

### ^vFlok\*\*

ns'k ds vkfFkZd fodkl eam | ksx txr dh egrh Hkfiedk gSA ; si ; kbj .k dks  
i nfr'kr djuseaHkh ; kxnku %udkjKRed% nsjgsgaftl l sok ; q , oa ty i nfr'kr  
gksjgk gS , oaHkfe dh mojk 'kfDr de gksjgh gSA vr%m | kska }kjk tks i nfr'k .k  
QSyk ; k tk jgk gSml dh {kfr i frZ , oaiZak dh ftEenkjh Hkh blghal egka dh gA  
tS & vks | kfxd bdkbz ka dk vif'k"V mi pkfjr dj ty ea'kkfey djusl sty 'kq  
cuk jgsk , oa ok ; q Hkh i nfr'kr ugha gksxh A , d h i kS | kfxdh dks fodfl r dj  
viuk ; k tk , tks l keftd , oa vkfFkZd fodkl dks i kRl kfgr dj i ; kbj .k  
l j {k .k Hkh dja A xkeh .k jkstxkj , oa Nf"k vk/kkfjr m | kska dks i kRl kgu nss  
okyh i kS | kfxdh dks vi ukus dh vko' ; drk gSA

mRrj 15& **foyr iztkr ; k&** , d s thoka dh tkfr ; k ; tks l a wkZ fo'o l s xk ; c gks pph gS  
, oamudh dgahHkh feyusdh l Hkkouk ughagSA foyr iztkr ; ka dh Js kh ea vkrs  
gA

**mkgj .k&** fdaxQ'kj] Mk ; ukl kj] yky i kMk] D ; wuyky rksk vkfn A  
, d ckj foyr gkus ij fdl h tkfr dsfof'k"V thu dhkh i kRl ughagks l drA  
ekuo cM+ i sekus ij foHkUu LFkyh ; ] tyh ; , oa ok ; ph ; i kf .k ; ka dk f'kd kj  
djr k gS ftl l s dkj .k vud tho tkfr ; k l nk&l nk dsfy , tS eMy l s  
foyr gks xbz gA

euq ; ds LokFkhZ , oa vekuoh ; fO ; k dyki ka ds dkj .k vud tSod  
tkfr ; ka dh foyr dk [krjk c<+tkus ds dkj .k orZeku ea l j {k .k dh egrh  
vko' ; drk gSA

**l dVkiUu tkfr ; k&** , d s thoka dh tkfr ; ka ftuds Hkfo" ; ea l dV ea i Meus dh  
l Hkkouk gS l dVkiUu tkfr ; ka dh Js kh ea vkrs gA bu thoka dh l q ; k /khj &  
/khjs de gks h tk jgh gSA bl fy , budk mi ; ksx l hfer gksx ; k gS vr% buds  
?kVrsjgusdh l Hkkouk c<fh tk jgh gSA

**mkgj .k&** ns'kh xk ; ] HkA ] cdjh , oa reke rjg ds Ql yka dh ns'kh iztkr ; k A



dN , d h Hkh l dVkiUu tkfr; k; gSftudk euq; ds }kjk dby 'kkd ; k  
nok ds: i eaf'kdj dj fn; k tkrk gSA QyLo: i budh l d; k eaHkh Hkhjh  
fxjkoV vk jgh gA

**tS &** 'kj] ck?k] Hkky] gkFkh] fgj .k vkfn A

**^vFlok\*\***

**iR; {k eW; &** l ank mRiUu dj ml dk eW; ds: i eami; kx djuk miHkx eW;  
dgykrk gSA vk; kr&fu; kZ l kd[]; dh dk fujh{k.k dj bl ds vU; ykHkka ds  
vk/kkj ij iR; {k eW; dks nks Hkxka ea foHkDr fd; k x; k gSA

og l ank ftl s LFkkuh; Lrj ij miHkx fd; k tkrk gS rFkk ftudk  
jk"Vh; varjkZVh; cktkj eamYs[k ughagrk {k; 'khy miHkx eW; dgrsgA  
**mkgj.k&** txy dh tykA ydMh dk LFkkuh; fuokl h bzku ds: i eami; kx djrs  
gA

og l ank ftl dh iBkokj txy eagrkh gS yfdu miHkx jk"Vh; , oa  
varjkZVh; cktkj ea Hkh gsrk gS mRi kh miHkx eW; dgykrk gSA bul s  
vkfFkd ykHk gsrk gSA

**mkgj.k&** txy dh bejrh ydMh dks i klr djdsbl dk 0; ki kfjd mi ; kx gsrk gA  
**tS &** txy dh bejrh ydMh dks i klr djdsbl dk 0; ki kfjd mi ; kx gsrk gSA tS s  
l kxk] 'kh'ke] chtk vkfn A

**viR; {k eW; &** viR; {k eW; dk vFkz gS & l ankva ds 0; fDrxr miHkx ds fcuk  
vkfFkd ykHk gsrk A ; g og ykHk gS tks tB fofo/krk }kjk ink; fd; s tkrsgA  
ftl ea l ank u rks mRiUu gsrh gS vksj u gh ml dk uk'k gsrk gSA

bl izdkj ds viR; {k eW; ds ykHk ds varxZ eukjatu] f'k{kk} oSkfud  
vuq akku] ty dh xqkoRrk] ekuoh; l ekt dsfy, Hkko fodYi mRiUu djuk  
vkfn vkrs gA

tB fofo/krk dk orZku l e; eavud egRo gA; g i kNfrd tho cd  
gA blgh ds }kjk vud iztkfr; k; i kNfrd : i l s mRiUu gsrh jgrh gA  
feVh] tyok; qvksj i kNfrd ouLifr; k; bu thoka dsfy, vk/kkj curh gA  
i kNfrd thu }kjk i klr vkupka'kd fofo/krk gh [krh] m | kx o nokbz ka ds

fodkl eaHkjij ; kxaku inkudjrh gSA

bl ds vrfjDr vkupka'kd fofo/krk , oasb fofo/krk] ty] feVvh dk  
l j {k.k} fodfl r iztkfr; ka dk l tu djusgrqtezykte nkrk dh rjg gh ugha  
vfi r qmuds i jkx.k] fu"kpou , oavxyh ih<h i hnk djusdk okrkoj .k r\$ kj djus  
dsfy, ftEenkj gSA

mRrj 16&

l rr~fodkl ] og fodkl gS tksorZeku ds vk/kkj ij Hkfo"; ds thou Lrj ea  
l qkkj yk l dsA i kfjLFkfrd l rgyu , oai ; kbj .k l j {k.k dh l kfkZdrk fVdkA  
fodkl ij vk/kkfjr gSA fo'o eai M&i k\$ks tho&tUrj i 'k&i {kh rFkk ekuo dh  
mRi fRr dk fuf'pr Oe cuk gprk gSA l Hkh vki l h rky esy }kjk viuh  
thoup; kziwkZdjrs gSA i Nfr ds Oe dks tc Hkh rkmusdk ekuoh; iz kl gsrk  
gS rc l sgh vl rgyu dh l fLFkr cu tkrh gSi Nfr dk Oe fujlurj l adfyr cuk  
jgsbl grqge ftruk nkgu djrs g\$ ml dh {kfri firZ dk izalku Hkh vko'; d  
gSA t\$ sge , d i M+/kjr h ij cMk djrs g\$ og i M+vkd'k eac<rk g\$ tehu  
l si kuh [kprk g\$ og i kuh i fRr; ka ds ek/; e l sok"i h Nfr gks tkrk gSA bl  
izdkj , d i M+rhu okLrfodrkvkaeal keatL; LFkfi r djrk gSA /kjr h] vkd'k  
vks i kuh dk l rgyu , oai rhdkRed l adyu gSA i M+}kjk {kfri firZ; oLFkk dks  
ge n l jsrjhds l Hkh l e> l drsg\$A , d i M+vkl &i kl dsrki dks l k\$ k yrk  
gS rFkk Nk; k inkudjrk gSA dkcZu MkbZ vkDI kbM ds cnys ea thounk; h  
vkd l itu NkM+k gSA , d i M+dh i fRr; kj tkuokj ka ds Hkktu ds: i esa z kx  
dh tkrh g\$ Qy Hkh i klr gksr\$ g\$ i f{k; ka , oa dh Vks ds fy, vkokl mi yC/k  
djkrk gSA i M+ds l v[kus ds ckn Hkh ml dh ydMk ds: i eami ; kx fd; k tkrk  
gSA l rr fodkl dsfy, Hkfo"; dh l EHkkouk mi ; Dr mnkgj.k l sLi"V gks  
tkrh gSA geai k Nfrd taxyka dk fouk'k jksduk gksxk A ge ftruk nkgu djrs  
g\$ ml ds i qHkj .k dk izalk Hkh djuk gksxk] rHkh i kfjLFkfrd l rgyu cuk jgsxA

**~vFlok\*\***

xkaka ds cgrj Hkfo"; dsfy, fu; k\$ tr dk; Oe dh vko' drk gSA ge tkurs  
g\$ fd gekjs n\$ k ds yxHkx 5 yk [k 30 gtkj xkaka ea n\$ k dh nks frgkbz l s  
vf/kd tul \$; k fuokl djrh gSA ge ; g Hkh tkurs g\$ fd n\$ k dh ixfr ds

fy, vc Hkh Ñf'k] i 'kq kyu rFkk vU; xkeh.k m | kska ds izaku iz kl ka dh vko'; drk gSA l rr fodkl grq xkeh.k izaku l s l ad/kr fuEufyf[kr dk; Z fd; s tk l drsg&

¼½ xkeh.k {ks=ka dh vks} kfxd bdkb; ka ea ekuo l a k/ku] foi .ku] l keku; izaku rFkk forr tS sizaku ds {ks=ka ea l keatL; LFkfi r djuk A

½ Ñf'k Hkfe dk fujrj fo'ySk.k dj xkeh.kka dh vko'; d l pko nrs jguk A

¾ i 'kq kyu rFkk eRL; ikyu tS h l Hkkoukvka dks c<ku A

¼¼ fodfl r ns'kkadh ifjLFkr; kadsvuq kj l rr fodkl grqviuk; s tk l dusdk fo'ySk.k djuk A

mRrj 17& fofHku Ql yka ds Ql y pØ cukrsl e; fuEufyf[kr fl ) kUr /; ku ea j [kus pkfg, &

¼½ xgjh tMks okyh Ql yka ds ckn de xgjh tMks okyh Ql ys mxkbZ tkrh gS ftl l sfd Ql yafofHku enk l rgka l sviuk i kSkd rRo xg.k dj l daA

½ vnyguh Ql yka ds ckn nyguh Ql ya mxkuh pkfg, A vnyguh Ql ya feVh dh ukbVrstu dks ydj detkj cukrh gSA tcd nyguh Ql yka dh tMka ea ik; k tkus okyk jk; tkSc; e cdVhfj; k feVh ea ok; pMy dh ukbVrstu dk fLFkjhdj.k djrk gSA

¾ vf/kd ty pkgus okyh Ql yka ds ckn de ty pkgus okyh Ql ya mxkuh pkfg, D; kfcd yxkrkj vf/kd ty pkgus okyh Ql yka ds mxkus l s feVh ea ok; q l pkj : d tkrk gSA bl l s feVh eami LFkr l (e thoka dh fØ; kvka ij gkfudkj d i Hkko i Mfk gSA

¼¼ vf/kd [kn pkgus okyh Ql yka ds ckn de [kn pkgus okyh Ql ya mxkuh pkfg,] ftl l s feVh dh mojr l jf{kr jgaA

½ vf/kd fujkb&xMkbZ pkgus okyh Ql yka ds ckn de fujkb&xMkbZ pkgus okyh Ql ya mxkuh pkfg, A

¼U; fl ) kUrka ij Hkh vad fn; s tk; a A½

**~vFtok\*\***

fefJr [krh ds fl ) kUr& Ql y ds feJ.k rS kj djus ds fy, fuEufyf[kr eq;

- fl ) kUr /; ku ea j [kus pkfg, &  
 1/1½ fefJr Ñf" k dsfy, puh xbZ QI yafeVWh ty rFkk tyok; qds I qo/kkuq kj  
 cka/uh pkfg, A  
 1/2½ vnyguh QI yka ds I kFk nyguh QI yka dk feJ.k djuk pkfg, A  
 1/3½ Åph c<usokyh QI yka ds I kFk Hkfe ea QSydj pyusokyh QI yacksuh pkfg, A  
 1/4½ xgjh tM+okyh QI yka ds I kFk mFkyh tM+okyh QI yacksuh pkfg, A  
 1/5½ , d gh izdkj ds dhV rFkk chekfj; ka dks 'kj.k nsus okyh QI yka dks , d I kFk  
 ughacksuk pkfg, A  
 1/6½; fl ) kUrka ij vad fn; s tk; s A½

mRrj 18& **i ; kbj.k I j{k.k&** inll.k dh jksdFkke ds fy, ge I Hkh dks I ekt ds I kFk  
 tM+dj i ; kbj.k inll.k fu; æ.k I czkh dk; Øe LFkkuh; ] i kns' kd , oajk"Vh;  
 Lrj ij cuk, tkuspkfg, A gekjk ; g iz kl gksuk pkfg, fd ge pkjksvkj QSy  
 jgs inll.k dks jksda & ; g rc I Hko gS

- 1/1½ I jdkj }kj k I Hkh m | kska ds inll.k jkskd I ; æ yxkuk vfuok; Zcukuk pkfg, A  
 1/2½ inll.k ds fu; eka dk dMkbZ I si ky u gks A I e; & I e; ij tkp A  
 1/3½ xyh ekjYyka ea dM&dpjs ds <j u yxus na A  
 1/4½ xnxh ds ckjs ea ykska dks tkx: d cuk; k tkos A  
 1/5½ okguka dh I e; & I e; ij inll.k I czkh tkp gks A  
 1/6½ ouka dh vko' ; drk dVkbZ jksdh tkuh pkfg, A  
 1/7½ c<fse: LFky dks jksdus o{kjksi .k dh ; kst ukvka dks c<kok A  
 1/8½ m | kska ds vif'k"V in kFkz dks ty ea Nk&Mus I s jksdk tk, A  
 1/9½ vif'k"V in kFkz ds mi pkj mi jkUr gh 'kq ty eafeykus dh vuæfr nh tkoA  
 1/10½ vksj kfxd HkfvV; ka dh fpefu; kj ÅpkbZ ij gks A  
 1/11½ m | kska dh LFkki uk vkcknh I snj gks A  
 1/12½ xkeh.k {ks=ka ea xksj dks [kys ea ckj Mkyus dh vuæfr u gks A

**~vFkok\*\***

**i ; kbj.k izdku ds bIFkdy usrd½ igy&**

ekuo ds pkjks vkj dk vkoj.k i ; kbj.k dgykrk gS ; g tfoD] vtfoD]

vkffkz] l kLÑfrd] rduhdh] l ekftd izdkj dk gkrk gSA bl vkoj .k dk gea  
l j {k.k djuk pkfg, A ; g gekjk ufrd nkf; Ro gš bl ds l j {k.k eagekj k l Hkh  
dk fgr gSA

; fn fdl h l eL; k ds l ek/kku eage l fØ; ughagšrks viR; {k : i l s  
l eL; k dks c<kus eage ftEenkj gSA

**i; kbj.k ds ifr gekjk ufrd drd; &**

11½ i kuh dk cplk& ty gšrks dy gš ty gh thou gš Hkfo"; dh l j {kk grq ty  
dh cpr vko'; d gš mi ; ks fd, i kuh dk i pØ.k vU; dk; kš eafd; k tkuk  
pkfg, A

12½ fctyh cplb, & fctyh dks cpkdj dks ys dh cpr dh tk l drh gš  
vuko'; d cYc] i [kka dk mi ; ks u djaA mRl oka dsk; Øe fnu eadja rkfd  
Åtkzcp l dsA

13½ dkxt cplb, & dkxt o{kka l srš kj gkrk gš dkxt cpkdj o{kka dks cpk; k  
tk l drk gš jnñh dkxt dks tyk, ugha cfYd nqkuka ij cp na rkfd  
fj l kb&fdfyx fd; k tk l dsA

14½ lykLVd& lykLVd , d vfo?kVu'khy inkfz gš ft l ea gkfudkj d rRo gš  
gš tks i ; kbj.k ds fy, vR; Ur gh gkfudkj d gSA vr%lykLVd ds LFkku ij  
dkxt] dkp] feVh] /kkrq l scuh oLrka dk iz ks djaA

15½ l kcp& l kcp i kuh eacgdj unh] ukyka dks nñ'kr djrk gSA

16½ cxhpk yxk, & 'kq) ok; q i klr djus gr] /ofu] ok; j ty] enk inñ.k jkslus  
grq cxhps yxk, aA

17½ okgu inñ.k& okguka dh l [; k fu; ã=r djaA ifcyd okgu dk iz ks  
vf/kd djaA bztuka dk j [kj [kko l e; & l e; ij djkoaA

mRrj 19& gekjs nš k ea gfjr Økär dk i kjkk l u-1968 ea Ñf" k mRi knu ea vk; h vnñkur  
Økär l snš [kk x; k A bl of) eamllur fdLeka dh cksuh iz tkfr; ka ds xg] /kku  
ds chtka dk mi ; ks fd; k x; k A

fi Nys 10 o"kkš ea Ñf" k j l k; u l ækh vl rfyv iz kska us i ; kbj.k dks  
i ; klr {kfr i gpk; h gSA fl pkbz dh l fo/kk c<us l s [kk | klu Ql yka dh rgyuk

ea/kku xsgWdk gh jdck c<# gS rFkk ijEijkxr Ql yka dh ?kkj mi {kk gpZ gSA ty dsfl pkbZ eavf/kd mi ; ks l s, d vkj rksenk ea yo.khdj .k o {kkjh; dj .k dh l eL; k c<# gSA rksnll jh vkj ty ds l kFk fofHkuu j l k; uka dsfj l ko ds }kjk Hkfe ea Hkhrj dh vkj tkdj Hkfe o ty L=ksrka dks inff'kr dj jga gSA bl h rjg j l k; fud mojdka ds iz ks ea Hkh ifro "kZ9&5 ifr'kr dh of) vkadh xbZ gS rFkk gekjk ns'k mu pkj cM+s ns'kka ea ekuk tkrk gS tks cM+s i ekus ij jkl k; fud mojdka dk mi ; ks dj jgs gSA bl h rjg Hkkr ea Nf'k j l k; uka ds mi ; ks ea Hkh c<# rjh ntZ dh x; h A tgka Hkkr ea l u-1971 ea 24 g tkj Vu dh Vuk'kdka dk bl rekya gsrk Fkk og c<# dj 1991 ea 82 g tkj Vu gks x; kA i ; kbj .k ds l keftd , oavkFkd vk; keka dh vkj nf'Vi kr dj us l s, j k izhr gsrk gS fd Nf'k dh ykr fnuk&fnu c<# h xbZ yfdu ml vuqkr ea Ql y dk eV; ugha c<# A

### ~vFtok\*\*

#### Vid fl pkbZ Drip Irrigation

fl pkbZ dh bl fof/k us Nf'k ckxokuh , oa i qi kRi knu ds {ks= ea ubZ Økfr dk l pkj fd; k gSA bl s l Mu fl pkbZ i) fr dsuke Hkh tkuk tkrk gSA fo'o ds dN fodfl r ns'kka ea bl iz kkyh l s50&50 ifr'kr Hkfe ea fl pkbZ dh tkrh gA vl; fl pkbZ dh i) fr; ka dh ryuk ea bl l s30&60 ifr'kr rd i kuh dh cpr dh tkrh gS rFkk 'ktjd] v) Z ktjd] Åph&uhph Hkfe; ka rFkk i oZ'h; {ks=ka ea fl pkbZ ; Ør Nf'k fd; k tk l drk gSA

fl pkbZ dh bl i) fr ea ty dh l gh ek=k i kSkka ds i Hkkoh {ks= ea nrs gA i kuh dh ek=k i kSkka dh iztkfr; kA mez i kSkks i fj {ks= LFkku ea j [kdj forfjr djrs gSA bl ds l kFk gh t: jr i Mus ij i kuh ea ?kyu'khy] i kSkd rRo o jkl k; fud mojd Hkh i kuh ea ?kkydj i kSkka ds tM+ {ks= ea i gpk; s tkrk gSA

#### Vid fl pkbZ ds ipyu c<# us ds dkj .k&

- 1/4 1/2 bl i) fr dsek/; e l s30&60 ifr'kr rd i kuh dh cpr gsrh gSA
- 1/2 1/2 mRi kn drk ea 50&100 ifr'kr rFkk mRi knu ea 2&4 xqk rd of) gsrh gSA
- 1/3 1/2 Ql yka dh xqkOrrk ea l qkkj gsrk gSA tS sLokn] jax , oavkd kj bR; kfn A

- ¼½ Je] /ku ty , oal e; dh cpr gksh gSA
- ½½ mtkZ dh cpr gksh gSA
- ¾½ [kshka , oafá pkbZ ukfy; ka ea vko' ; d [kji rokj i shk ugha gksh gSA
- ¾¾½ mo] dh dj .k }kjk 'ktq d , oal e i kshd rRokadk mi ; ksh I jy , oai kshkoh <ak I s  
fd; k tkrk gSA
- ¾¾¾½ bl i) fr I smcM&[kkcM+rFkk Åph&ulph tehuka dk mi ; ksh dj fl pkbZ dj  
I drsgSA

&&00&&

**Set - B**

**Higher Secondary School Certificate Examination**  
**SAMPLE PAPER**

fo"k; %& (Subject) - i ; kbj.k  
d{kk %& (Class) - ckjgoha %12ohh

I e; 3 ?k.Vk (Time- 3 Hrs)  
i vkkid 75 (M.M.)

**(Instruction) & %un? k%**

- 1- I Hkh itu gy djuk vfuok; Z gSA  
Attempt all the Question
- 2- itu Øekad 01 ea 10 vad fu/kkZjr gSA nks mi [k.M gSA [k.M ^v\*\* ea 05 cgfodYih; itu rFkk [k.M ^c\*\* ea 05 fjDr LFkkuka dh i firZ vFkok mfpr I cak tkfM, A iR; d itu dsfy, 1 vad 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 Øekad 02 I situ Øekad 06 rd vfr y?kqRrjh; itu gSA iR; d itu ij 02 vad vkcfVr gSA mRrj dh vf/kdre 'kCn I hek 30 'kCn A  
Q. No. 02 to 06 are very short answer type question & it carries 02 marks each. Word limit is maximum 30.
- 4- itu Øekad 07 I situ Øekad 10 rd y?kqRrjh; itu gSA iR; d itu ij 03 vad 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 Øekad 11 I situ Øekad 14 rd y?kqRrjh; itu gSA iR; d itu ea vkrfjd fodYi gsvk; iR; d itu ij 04 vad 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- izu Øekad 15 I s izu Øekad 17 rd nh?kzRrjh; izu gSA iR; d izu ea vkrfjd fodYi gSvkj iR; d izu ij 05 v d vkcfVr gSA mRrj dh vf/kdre 'kCn I hek 75 '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 75.

7- izu Øekad 18 I s izu Øekad 19 rd nh?kzRrjh; izu gSA iR; d izu ea vkrfjd fodYi gSvkj iR; d izu ij 06 v d vkcfVr 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.

[k.M V\*

izu 1&1/2 I gh fodYi pu dj fyf[k; s&

Write correct choice-

(i) iztkrh; fofokrk rFkk tkfr /kU; rk , d nu j s ds gkrh gS & 1/4 1/2

1/4 1/2 C; Øekuq krh

1/4 1/2 I ekuq krh

1/4 1/2 ijd

1/4 1/2 mi jkDr ea l s dkbZ ugha A

Species diversity and species richness are ..... to each other.

(a) Inversely Proportional

(b) Proportional

(c) Complementary

(d) None of the above

(ii) buea l s bekj rh ydMh gS & 1/4 1/2

1/4 1/2 ccw

1/4 1/2 vke

1/4 1/2 uhe

1/4 1/2 'kh' ke

Wood used for building purpose is

(a) Babool

(b) Mango

(c) Neem

(d) Shisham

(iii) ckxox<+jk"Vh; m | ku fLFkr gS & 1/4 1/2

1/4 1/2 NRrh l x<+

1/4 1/2 mRrj i nsk

1/4 1/2 e/; i nsk

1/4 1/2 xqt jkr

Bandhawgarh National Park is in

(a) Chhattisgarh

(b) Uttar Pradesh

(c) Madya Pradesh

(d) Gujrat

(iv) mPp dks/h dk bZku gS & 1/4 1/2

1/4 1/2 rjy gkbMkst u

1/4 1/2 i s/ky

1/4 1/2 Mhty

1/4 1/2 dSks l u

Fuel of high quality is

(a) Liquid Hydrogen

(b) Petrol

(c) Diesel

(d) Kerosine

(v) vksj kfxd fo"k&foKku vuq ddku dlnz fLFkr gS & 1/4 1/2

1/4 1/2 ubZ fnYyh

1/4 1/2 y[kuÅ

¼ ½ dksydkrk ¼n½ i Vuk

Industrial Poison Science Research Center is in

- (a) New Delhi (b) Lucknow  
(c) Kolkata (d) Patna

[k.M ^c\*

¼c½ fjDr LFkkukadh i firZ dhft; s &

Fill in the blank -

(i) fl udkuk i ksk l s ----- nok dk fuekZk fd; k tkrk gSA ¼1½  
..... medicine is obtain from chinchona plant

(ii) ekuo fodkl fj i kS/Z2005 ds vuq kj Hkkjr ----- I pdkad okysn'kkadh  
Jskh ea vkrk gSA ¼1½

According to the Human Development Report 2005 INDIA falls in the category of ..... index.

(iii) xhu fcxM dk dk; Z {ks= ----- I hek {ks= gSA ¼1½  
The work area of green brigade is ..... border region.

(iv) okQjhu dcl nok dk iz; ks ----- ds fy, fd; k tkrk gSA ¼1½  
Warfree cake is used for .....

(v) feJr Ql y ds fl )klr ds vuq kj nyguh Ql yka ds I kfk -----  
Ql yka dk feJ.k djuk pkfg, A ¼1½

According to the principles of mixed cropping leguminous plants are mixed with ..... crops.

izu 2& ^euq; i Nfr eami LFkr thoka, oai kskkadks vuqkfi'kd vk/kkj ij cny nrk gSA\*  
bl dFku dh i f"V dhft, A ¼2½

“Man change genetically the organisms and plants present in nature”. Explain.

izu 3& mi HkkDrk 'kcnkoyh dk tle D; ka gqk \ ¼2½  
Why the word consumer originate?

izu 4& odfyi d bZku ds dkbZ nks mnkgj .k nhft , A ¼1\$1½

Give two examples of optional fules.

izu 5& Vi d fl pkbZ dh nks fo' kSkrrk, a fyf[k, A ¼1\$1½

Give two main features of Drip Irrigation.

izu 6& vkfFkd Fkl gkVM Lrj D; k gS\ ¼2½

What is Economic Threshold Level?

izu 7& iztkfr; fofokrk fdl sdgrsg\ ¼3½

What is speices diversity?

izu 8& mRi knh mi Hkks eW; I sD; k vk'k; gS\ ¼3½

What is Direct Value ?

izu 9& jSM; kskethZ i nllk.k fu; æ.k ds dkbZ rhu mik; fyf[k, A ¼1\$1\$1½

Write three measures of controlling radioactivity pollution.

izu 10& Ñf" k mRi knu ds ifjogu I sD; k rRi ; Z gS\ ¼3½

What do you understand by the transportation of agricultural procedure ?

izu 11& I pkj ræ D; k gS\ bl dsnij rd I nsk Hkst usgrql pkj ræ dk ifr: i cukb, A

What is a communication system? Draw a model of communication system for sending messages to far of places? ¼2\$2½

### ~vFkok OR\*\*

vkfFkd uhfr ds fdugh pkj ?kVdka dk o.ku dhft , A ¼1\$1\$1\$1½

Explain any four components of economic policy.

izu 12& ekuo ds vflrRo grq t&fofo/krrk dk I j{k.k vko' ; d gSA D; ka \ ¼4½

Why is Bio-Diversity important for existence of man kind ?

### ~vFkok OR\*\*

iñfr eal rgyu cuk, j[kus ds fy, t&fofo/krrk dk I j{k.k vko' ; d gSA D; ka \ ¼4½

Bio-Diversity conservation is important to balance nature, Why?

izu 13& jk"Vh; m|ku ij I fklr fvli .kh fyf[k, A ¼4½

Write short note on National Park.

### ~vFkok OR\*\*

- vH; kj.; ij I f{ki fVli .kh fyf[k, A 1/4 1/2  
Write short note on Sanctuary.
- izu 14& I rr~fodkl ea; pk dh Hkfedk dk o.ku dhft, A 1/4 1/2  
Explain the role of youths in Sustainable Development.
- ^Vflok OR\*\***
- I rr~fodkl eam | ks I engka dh Hkfedk dk o.ku dhft, A 1/4 1/2  
Explain the role of industrial groups in Sustainable Development.
- izu 15& Ql y pØ ds dkbz ikp fl )kr fyf[k, A 1/4 \$1\$1\$1\$1 1/2  
Write any five principals of Crop Rotation.
- ^Vflok OR\*\***
- fefJr Ql y ds dkbz ikp fl )kr fyf[k, A 1/4 \$1\$1\$1\$1 1/2  
Write any five principals of Mixed Cropping.
- izu 16& fuEu ij I f{klr fVli .kh fyf[k, & 1/2 1/2 \$2 1/2 1/2  
1/4 1/2 foylr iztkfr; k; 1/2 1/2 I dVkiUu tkfr; k;  
Write short notes on:--  
(i) Extinct Species (ii) Threatened species
- ^Vflok OR\*\***
- fuEu ij I f{klr fVli .kh fyf[k, A 1/2 1/2 \$2 1/2 1/2  
1/4 1/2 iR; {k eW; ] 1/2 1/2 viR; {k eW;  
Write short notes on:--  
(i) Direct value (ii) Indirect Value
- izu 17& I rr~fodkl , oaHkfo"; ds I Hkkoukvka dh foopuk dhft, A 1/5 1/2  
Describe the sustainable development and future possibilities ?
- ^Vflok OR\*\***
- xteh.k izU/ku vkj I rr~fodkl dh vko'; drk dk fo'ySk.k dhft, A 1/5 1/2  
Analyse the need of Rural management & Sustainable development.
- izu 18& i; kbj.k I j{k.k , oa i nll.k.k fu; æ.k ds fy, 0; fDr dks I kekftd Lrj ij D; k  
djuk pkfg, A 1/6 1/2

For conservation of Environmental and Pollution control what should an individual do at social level.

**^Vflok OR\*\***

i ; kbj.k i zll/ku ds bffkdy ¼ufrd½ igywij izlk'k Mkfy, A ¼6½

Explain Ethical consideration of Enviromental management.

izu 19& gfjr Økfr ds i ; kbj.k ij gq i Hkkoka dh foopuk dhft, A ¼6½

What are the main effects of green revolution on Enviroment ? Explain.

**^Vflok OR\*\***

Vi d fl pkbz dk i pyu D; ka c<+jgk gS\ I e>kb, A ¼6½

Why is Drip Irrigation becoming popular? Explain.

&&00&&

# ^1 Eiy mRrj\*\*

[k.M ^v\*

mRrj 1&1/2

- (i) & 1/2 l ekuj krh
- (ii) & 1/2 'kh' ke
- (iii) & 1/2 e/; i n'sk
- (iv) & 1/2 rjy gkbMkst u
- (v) & 1/2 y[kuÅ

[k.M ^c\*

1/2 fjDr LFku dh i frZ

- (i) dφδ
- (ii) e/;
- (iii) Hkkjr clykn'sk
- (iv) pŋka dks ekjus ds fy,
- (v) vnyguh

mRrj 2& iR; d tho ea thu ds: i ea , d vupka'kd bdkbz ikbz tkrh gŋ fofo/k izdkj ds thu l eŋ thoka dks fofo/krk inku djrs gŋA bu thu l eŋka ea okNuh; ifjorZ dj eut; i Nfr eami fLFkr thoka , oai kŋka dks vi usvuŋ kj vkupka'kd vk/kkj ij cny nrk gŋA

**tŋ &** xk; ] eŋxZ ka , oal ŋj ds mlur 'khy iztkfr; k; i klr djuk A

mRrj 3& mi HkkDrk 'kCnkoyh dk tle fodkl , oavrg hu ekuoh; bPNkvka ds ifj.kke Lo: i gŋk A

mRrj 4& oŋfyi d bzku ds nks mnkgj.k fuEufyf[kr gŋ&

1/2 jru tkr dscht l sry fudkydj Mhty ds fodYi ds: i ea iz kx djuk A

1/2 , Fkuky dks i vŋy eafeykdj i vŋy ds fodYi ds: i ea iz kx djuk A

mRrj 5& nks fo'kŋkrk, a fuEufyf[kr gŋ&

¼½ bl dsek/; e l s30 l s60 ifr'kr i kuh dh cpr gkrh gSA  
 ½½ mRikndrk ea50 l s100 ifr'kr ,oamRiknu ea2 l s4 xuk of) gkrh gSA  
 mRrj 6& vkfFkd {kfr Lrj ij dhVka }kjk fd; s x; s Ql y ds udl ku dks vf/kd l e;  
 rd l gu ughafd; k tk l drk A vr%bl Lrj ij igpus l sigysgh fu; æ.k  
 ds mik; i k j Hk dj nsus pkfg, A

vkfFkd Fkd gkM Lrj dhVka dh l æ; k dk Ql y i k kka ij , d k ?kuRo  
 gkrk gSftl ij igpus l sjkd tk l ds A

mRrj 7& fdl h , d fo'kSk i {ks= ds vxZr mi l Fkr iztkfr; ka ds e/; i kbZ tkus okyh  
 fofo/krk dks iztkfr fofo/krk dgrsgA

mRrj 8& og l ank ftudh i shk kj rks taxy ea gkrh gSyfdu ftl dk mi Hkksx jk"Vh;  
 , oa varjZVh; cktkj ea Hkh gkrk g\$ mRiknh mi Hkksx eV; dgyrk gSA

mRrj 9& j\$M; ksk ehZ i nkk.k fu; æ.k ds rhu mik; &

¼½ ijek.kq ceka ds fuekZk , oami ; kx ij ifrczk yxk; k tk, A

½½ ijek.kq fctyh ?kja l smRilu dpjs dks nQucus dk ijk izdk fd; k tk; s A

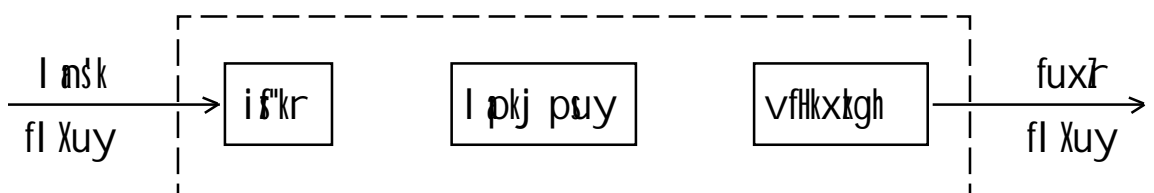
¾½ fj, DVjka ds j [k&j [ko ea i wkZ l rZdrk cjruh pkfg, A

¼ k vU; mik; ka ij vad fn, tk, A½

mRrj 10& Nf"k mRiknu ds ifjogu l srkRi ; ZgSfd [kk | kuka ds ifjogu ea yxsokguka dh  
 voLFkk Bhd gksA ifjogu ds nk\$ku vukt ueh l sl jf{kr gka, oafdl h Hkh n'kk  
 ea Hkhxuk ugha pkfg, A rkyi =h vkfn dk iz kx vukt dks <dus grq ifjogu  
 ds nk\$ku vo'; djaA

mRrj 11& l pkj ra=& l pukvka dks , d LFkku l sni js LFkku ea Hkstus dh rduhd dks  
 l pkj ra= dgrsgA vkt dy l puk& i =& if=dk] i [rd] rkj] j\$M; ks vkfn  
 ek/; e l s tkus yxh gS A vf/kdre xfr o rduhd ds dkj.k Vsyhfotu]  
 VsyhQku] QDI ] bVj usV] eks kbZy] , l -, e-, l -] mixg l pkj l s l puk tYn  
 igp kbZ tk l drh g\$ ; s l pkj ra= dgykrsgA

**l jyre l pkj ra= &**





^vFkok\*\*

vkfFkd ulfr ds 4 ?kVd fuEukuđ kj gđ &

1/1 1/2 Ñf'kulfr& Ñf'k ulfr ea Hkw LokfeRo rdudh] mRi knu dh ek=k eW; ] I jdkj dh eW; ulfr] dhVuk'kd] ; æhdj.k vkfn 'kkfey gSA fdl ku Ql y puko] mRi knu] foØ; foRr iZdk dsfy, Loræ gSA

1/2 1/2 vks|kfxd ulfr& I jdkj vks|kfxd fodkl dks fu; fer o fu; ñ=r djrh gđ vks|kfxd fodkl dks i Hkkfor djus okys I jdkjh fl )kr] fu; e] foRr iZdk vkfn dh 0; oLFkk djrh gSA

1/3 1/2 0; ki kfjd ulfr& vk; kr&fu; kZ ulfr; kj fons'kh 0; ki kj dh fn'kk o LoHkko] m | kska dks I j {k.k] fons'kh I gk; rk] Hkkrku vkfn A

1/4 1/2 ekñzd ulfr& fdl h n'sk dh I jdkj ; k dñh; cd }kj k vFkØ; oLFkk eafdl h fo'ksk vkfFkd mnñs; dh ikflr dsfy, I pkyu ea epk dh ek=k o iZdk dks ekñzd ulfr dgk tkrk gSA

mRrj 12& ekuo ds LokFkZ jd i Ñfr I sdbzHkh vufHkK ughagSA tđ&fofo/krk I j {k.k ea Hkh ekuo dk vi uk fufgr LokFkZfNi k gđ D; kñd fcuk vi uh LokFkZ i firZdsekuo tkfr vl; tho tUrka, oaouLifr; kads I j {k.k ij tkj ughansl drk A ekuo tkurk gsf d ml dh I eLr vko'; drk, i R; {k vFkok vi R; {k : i I s tđ fofo/krk I stñh gđ tksvuoj.k : i I svi uh veW; I ok, i gea inku djrsjgs gđ ; sfdl h Hkh jk"V<sup>a</sup> ds vkfFkd] I kekftd] i kfjLFkfrd rFkk vl; I Hkh i {kka i j vi uk 0; ki d i Hkko Mkyrh gSA

^vFkok\*\*

i Ñfr ea I rgyu cuk; sj [kus dsfy, tđ fofo/krk dk I j {k.k fuEu dkj .kka I s vko'; d gS&

1/1 1/2 i ; kbj.k I rgyu gsrqA

1/2 1/2 vksk/kh; egRo dh n"V I s A

1/3 1/2 ekuo vflrRo dks cuk; sj [kus dsfy, A 1/2dkbz rhu fy [kus i j 1/2

mRrj 13& jk"Vh; m | ku & og I jf{kr {ks= tks ol; thoka dh mlulfr o fodkl dsfy, vkjf{kr gks'k gđ rFkk ogk; o{k mlenu] pkj.k] vk[kv rFkk vl; ekuoh;

fØ; kdyki ka ij ifrczk jgrk gš jk"Vh; m|ku dgykrk gSA

**Hkkjr ds iæf[k jk"Vh; m|ku &**

- ¼1½ dkcW jk"Vh; m|ku & mÙkj[k.k.M
- ½2½ I ðnjou jk"Vh; m|ku & if'pe cakky
- ¾3½ fxj jk"Vh; m|ku & xqtjkr
- ¼4½ ckaokx<+jk"Vh; m|ku & e/; insk
- ½5½ nqkkok jk"Vh; m|ku & mRrj insk
- ¾6½ dkaxj ?kkVh jk"Vh; m|ku & NRrhl x<+

^vFkok\*\*

**vH; kj.;** & , d k {ks= ; k 'kj.k LFky tks oll; thoka ds cpko vks ns[k&jš[k ds fy, I jf{kr gsrk gš tgl; dñ I hek rd ekuoh; fØ; kdyki tš s?kka dkVuk] Ñf" k vkfn dh vuefr gsrh gš vH; kj.; dgykrk gSA

**iæf[k vH; kj.; &**

- ¼1½ vpkudekj & fcykl ij ¼N-x-½
- ½2½ vlukeykbZ & rfeyukMw
- ¾3½ i fV; kj & djy
- ¼4½ jkuhi g & mRrj insk
- ½5½ i ykew & fcgkj
- ¾6½ ukxktñ I kxj& vku/kz insk

mRrj 14& jk"Vª ds fodkl ea 0; fDr dh Hkkiedk dh ckr ds I kFk ; øk ds ; kxnku dks jš[kkñdr fd; k tkrk gSA fd I h Hkh cMª ifjorZ dsfy, jk"Vh; pfj= fuelZk dsfy, vFkok nšk dsfodkl dsfy, tc Hkh egki q "kka us igy dh rc nšk ds ; økvka dks gh vkgoku fd; k x; k A Lokh foosdkuan vks egkRek xkdkh us ; øk 'kfDr dks gh I cl s vf/kd egRo fn; k A

ošohdj.k vks 'kgjhdj.k ds nšj ea Hkh ; økvka dh Hkkiedk vxz kh gSA teZ vFkZ kL=h ds vuq kj Hkkjrh; vFkð; oLFkk rsth I si xfr djrh gpZ 2020 rd fo'o dh rhl jh I cl s cMª vFkð; oLFkk cu I drh gSA ft I I s ; økvka dh vge Hkkiedk gSA nšk dh ; øk oxZ vkcknh fodkl ea egRo i wkZ ; kxnku ns jgh

gSA o{kkjksi .k eaHkh budk egRoiwkZ ; kxнку gSftl l sl ekt LoLFk gksxk , oa  
thou dh l kFkZdrk fl ) gksxh A

### ^vFlok\*\*

nsk ds vkfFkZd fodkl eam | kx txr dh egrh Hkfiedk gSA ; si ; kbj .k dks  
i nfr'kr djuseaHkh ; kxнку ¼udkjRred½ nsjgs gSftl l sok ; q , oa ty i nfr'kr  
gksjgk gS , oaHkrie dh mojk 'kfDr de gksjgh gSA vr% m | kxka }kjk tks i nfr'kr  
QSyk ; k tk jgk gSml dh {kfr i frZ , oa izak dh ftEenkjh Hkh blghal engka dh gA  
tS & vks| kSxd bdkbz ka dk vif'k"V mi pkfjr dj ty ea'kkfey djusty 'kq  
cuk jgsk , oa ok ; q Hkh i nfr'kr ugha gksxh A , d h i kS| kSxdh dks fodfl r dj  
viuk ; k tk , tks l keftd , oa vkfFkZd fodkl dks i kRl kfgR dj i ; kbj .k  
l j {k .k Hkh dja A xkeh .k jkstxkj , oa Nf"k vk/kkfjr m | kxka dks i kRl kgu nsus  
okyh i kS| kSxdh dks vi ukus dh vko' ; drk gSA

mRrj 15& fofHkuu QI yka ds QI y pØ cukrsl e ; fuEufyf[kr fl ) kUr / ; ku ea j [kus  
pkfg , &

¼1½ xgjh tMks okyh QI yka ds ckn de xgjh tMks okyh QI ys mxkbz tkrh gS  
ftl l sfd QI ya fofHkuu enk l rgka l sviuk i kSkd rRo xg.k dj l daA

¼2½ vnyguh QI yka ds ckn nyguh QI ya mxkuh pkfg , A vnyguh QI ya feVvh  
dh ukbVrstu dks ydj detkj cukrh gSA tcfD nyguh QI yka dh tMka ea  
ik ; k tkus okyk jk ; tkSc ; e cDVhfj ; k feVvh ea ok ; eMy dh ukbVrstu dk  
fLFkjhdj .k djrk gSA

¼3½ vf/kd ty pkgus okyh QI yka ds ckn de ty pkgus okyh QI ya mxkuh  
pkfg , D ; kfid yxkrkj vf/kd ty pkgus okyh QI yka ds mxkus l s feVvh ea  
ok ; q l pkj : d tkrk gSA bl l s feVvh eami fLFkr l qe thoka dh fØ ; kvka ij  
gkfudkj d i Hkko i Mfk gSA

¼4½ vf/kd [kn pkgus okyh QI yka ds ckn de [kn pkgus okyh QI ya mxkuh  
pkfg , ] ftl l s feVvh dh mojk rk l j f {kr jga A

¼5½ vf/kd fujkb&xMkbz pkgus okyh QI yka ds ckn de fujkb&xMkbz pkgus okyh  
QI ya mxkuh pkfg , A

¼vU ; fl ) kUrka ij Hkh vad fn ; s tk ; a 1½

^vFlok\*\*

fefJr [krh ds fl )klr& Ql y ds feJ.k r\$ kj djus ds fy, fuEufyf[kr eq;  
fl )klr /; ku ea j [kus pkfg, &

¼½ fefJr Ñf"k dsfy, puh xbZ Ql ya feVWh ty rFkk tyok; qds l fo/kkuq kj  
ckà/uh pkfg, A

½½ vnyguh Ql yka ds l kFk nyguh Ql yka dk feJ.k djuk pkfg, A

¾½ Åph c<usokyh Ql yka ds l kFk Hkfe ea Qsydj pyusokyh Ql yackuh pkfg, A

¼¼½ xgjh tM+okyh Ql yka ds l kFk mFkyh tM+okyh Ql yackuh pkfg, A

½½ , d gh izdkj ds dhV rFkk chekfj; ka dks 'kj.k nsus okyh Ql yka dks , d l kFk  
ughacksuk pkfg, A

vU; fl )klrka ij vad fn; s tk; s A

mRrj 16& **foyr iztkr; k&** , d s thoka dh tkfr; kj tks l a wZ fo'o l s xk; c gks pph gs  
, oamudh dgahkh feyusdh l Hkkouk ughagSA foyr iztkr; ka dh Js kh ea vkrsgA  
gA

**mkgj.k&** fdaxQ'kj] Mk; ukl kj] yky i kMk] D; wuyky rksrk vkfn A

, d ckj foyr gkus ij fdl h tkfr dsfof'k"V thu dhkh iklr ughagks l drA  
ekuo cM+ i ekus ij foHkku LFkyh; ] tyh; , oa ok; ph; i kf.k; ka dk f'kd kj  
djr k g\$ ftl l s dkj.k vud tho tkfr; kj l nk&l nk dsfy, tD eMy l s  
foyr gks xbZ gA

euq; ds LokFkhZ , oa vekuoh; fØ; k dyki ka ds dkj.k vud tDod  
tkfr; ka dh foyr dk [krjk c<+tkus ds dkj.k orZeku ea l j {k.k dh egrh  
vko'; drk gSA

**l dVkiUu tkfr; k&** , d s thoka dh tkfr; ka ftuds Hkfo"; ea l dV ea i M+us dh  
l Hkkouk g\$ l dVkiUu tkfr; ka dh Js kh ea vkrsgA bu thoka dh l q; k /khj&  
/khjs de gks h tk jgh gSA bl fy, budk mi ; ksx l hfer gks x; k g\$vr% buds  
?kVrsjgusdh l Hkkouk c<fh tk jgh gSA

**mkgj.k&** ns kh xk; ] Hk& ] cdjh , oa reke rjg ds Ql yka dh ns kh iztkr; kj A

dN , d h Hkh l dVkiUu tkfr; kj g\$ftudk euq; ds }kj k dDy 'kk& ; k

nok ds: i eaf'kdj dj fn; k tkrk gSA QyLo: i budh l d; k eaHkh Hkkjh  
fxjkoV vk jgh gSA

**tj &** 'kj] ck?k] Hkky] gkFkh] fgj .k vkfn A

**^vFlok\*\***

**iR; {k eV; &** l ank mRiUu dj ml dk eV; ds: i eami; ksx djuk miHkksx eV;  
dgykrk gSA vk; kr&fu; kZ l ka[]; dh dk fujh{k.k dj bl ds vU; ykHkka ds  
vk/kkj ij iR; {k eV; dks nks Hkxka ea foHkDr fd; k x; k gSA

og l ank ftl s LFkkuh; Lrj ij miHkksx fd; k tkrk gS rFkk ftudk  
jk"Vh; varjkZVh; cktkj eamYys[k ughagkrk {k; 'khy miHkksx eV; dgrsgSA  
**mkgj.k&** taxy dh tykÅ ydMh dk LFkkuh; fuokl h bzku ds: i eami; ksx djrs  
gSA

og l ank ftl dh iñkokj taxy ea gsrh gS yfdu miHkksx jk"Vh; , oa  
varjkZVh; cktkj ea Hkh gsrk gS mRi knh miHkksx eV; dgykrk gSA bul s  
vkFFkd ykHk gsrk gSA

**mkgj.k&** taxy dh bejrh ydMh dks i klr djdsbl dk 0; ki kfjd mi ; ksx gsrk gSA  
**tj &** taxy dh bejrh ydMh dks i klr djdsbl dk 0; ki kfjd mi ; ksx gsrk gSA tS s  
l kxk&] 'kh'ke] chtk vkfn A

**viR; {k eV; &** viR; {k eV; dk vFkZ gS & l ankvka ds 0; fDrxr miHkksx ds fcuk  
vkFFkd ykHk gsrk A ; g og ykHk gS tks tñ fofo/krk }kjk ink; fd; s tkrsgSA  
ftl ea l ank u rks mRiUu gsrh gS vksj u gh ml dk uk'k gsrk gSA

bl izdkj ds viR; {k eV; ds ykHk ds varxZ eukjat u] f'k{kk} oSkfud  
vuq akku] ty dh xqkoRrk] ekuoh; l ekt dsfy, Hkkoh fodYi mRiUu djuk  
vkfn vkrs gSA

tñ fofo/krk dk orZku l e; ea vusd egRo gSA; g i kÑfrd tho cñd  
gSA blgh ds }kjk vusd iztkfr; k; i kÑfrd : i l s mRiUu gsrh jgrh gSA  
feVWh] tyok; qvksj i kÑfrd ouLifr; k; bu thoka dsfy, vk/kkj curh gSA  
i kÑfrd thu }kjk i klr vkupka'kd fofo/krk gh [krh] m | ksx o nokbz ka ds  
fodkl eaHkjij ; kx nku inku djrh gSA

bl ds vfrfjDr vkuo'ka'kd fofokrk , oatō fofokrk] ty] feVh dk  
l j {k.k} fodfl r iztkfr; ka dk l 'tu djusgrqtezykte nkrk dh rjg gh ugha  
vfi r qmuds i j k x . k j fu"kpū , oavxyh i h<h i h k djusdk okrkoj . k rš kj djus  
dsfy, ftEenkj gSA

mRrj 17&

l rr~fodkl ] og fodkl gS tksorēku ds vk/kkj ij Hkfo"; ds thou Lrj ea  
l qkkj yk l dsA i kfj fLFkfrd l rgyu , oai ; kōj . k l j {k.k dh l kfkZdrk fVdkÅ  
fodkl ij vk/kkfjr gSA fo'o eai M&i kōkō tho&tUrj i 'k&i {kh rFkk ekuo dh  
mRi fRr dk fuf'pr Øe cuk gpk gSA l Hkh vki l h rky ey }kjk viuh  
thoup; kziwkZ d j rsgā i Ñfr ds Øe dks tc Hkh r k M us dk ekuoh; iz kl gksrk  
gS rc l sgh vl rgyu dh fLFkfr cu tkrh gS i Ñfr dk Øe fujUrj l adfyr cuk  
jgsbl grqge ftruk nksu d j rsgā ml dh {kfri firZ dk izalku Hkh vko' ; d  
gSA tš sge , d i M+/kjr h ij cMk d j rsgā og i M+vkd'k eac<rk gš tehu  
l si kuh [khp rk gš og i kuh i fRr; ka ds ek/; e l sok"i h Ñr gks tkrk gSA bl  
izdkj , d i M+rhu okLrfodrkvkaeal keatL; LFkfi r d j rk gSA /kjr h j vkd'k  
vkš i kuh dk l rgyu , oai rhdkRed l adyu gSA i M+}kjk {kfri firZ; oLFkk dks  
ge n l jsrjhds l Hkh l e> l drsgā , d i M+vkl &i kl dsrki dks l kš[k ysk  
gS rFkk Nk; k i nku d j rk gSA dkcZu MkbZ vkDI kbM ds cnys ea thounk; h  
vkDI ltu NkM+k gSA , d i M+dh i fRr; kj tkuokj ka ds Hkktu ds : i esā z kx  
dh tkrh gš Qy Hkh i kl r gks s gš i f{k; ka , oa dh Vks ds fy, vkokl mi yC/k  
d j r k gSA i M+ds l v [kus ds ckn Hkh ml dh ydMk ds : i eami ; kx fd; k tkrk  
gSA l rr fodkl dsfy, Hkfo"; dh l EHkkouk mi ; Dr mnkgj . k l s Li "V gks  
tkrh gSA geai k Ñfrd txyka dk fouk'k jksduk gksk A ge ftruk nksu d j r s  
gš ml ds i qHk j . k dk izalk Hkh d j uk gksk] rHkh i kfj fLFkfrd l rgyu cuk jgskA

**~vFlok\*\***

xkōka ds cgrj Hkfo"; dsfy, fu; kš tr dk; Øe dh vko' drk gSA ge tkurs  
gā fd gekjs nš k ds yxHkx 5 yk [k 30 g tkj xkōka ea nš k dh nks frgkbz l s  
vf/kd tul ā; k fuokl d j rh gSA ge ; g Hkh tkurs gā fd nš k dh ixfr ds  
fy, vc Hkh Ñf'k] i 'kq kyu rFkk vl; xkeh . k m | kxka ds izalku iz kl ka dh

vko' ; drk gSA l rr fodkl grq xkeh.k izaku l s l ca/kr fuEufyf[kr dk; Z  
fd; s tk l drsg&

¼1½ xkeh.k {ks=ka dh vks} kfxd bdkb; ka ea ekuo l a k/ku] foi .ku] l keku; izaku  
rFkk foRr tS sizaku ds {ks=ka ea l keatL; LFkkr djuk A

¼2½ Ñf'k Hkfe dk fujrj fo'ySk.k dj xkeh.kka dh vko' ; d l pko nrsjguk A

¼3½ i'kqkyu rFkk eRL; ikyu tS h l Hkkoukvka dks c<kuuk A

¼4½ fodfl r nskadh ifjLFkfr; kadsvuq kj l rr fodkl grqviuk; s tk l dusdk  
fo'ySk.k djuk A

mRrj 18& i ; kbj.k l j{k.k& inlk.k dh jksdFkke ds fy, ge l Hkh dks l ekt ds l kFk  
tMdj i ; kbj.k inlk.k fu; a.k l calh dk; De LFkkuh; ] i kns'kd , oajk"Vh;  
Lrj ij cuk, tkuspkfg, A gekjk ; g iz kl gskuk pkfg, fd ge pkjksvkj QSy  
jgs inlk.k dks jksda & ; g rc l Hko gS

¼1½ l jdkj }kj l Hkh m | kska ds inlk.k jkskd l ; a yxkuk vfuok; Zcukuk pkfg, A

¼2½ inlk.k ds fu; eka dk dMkbZ l s ikyu gksA l e; & l e; ij tkp A

¼3½ xyh ekgyka ea dM&dpjs ds < j u yxus na A

¼4½ xnxh ds ckjs ea ykska dks tkx: d cuk; k tkos A

¼5½ okguka dh l e; & l e; ij inlk.k l calh tkp gksA

¼6½ ouka dh vko' ; drk dVkbZ jksdh tkuh pkfg, A

¼7½ c<fse: LFky dks jksdus o{kjksi .k dh ; kst ukvka dks c<kok A

¼8½ m | kska ds vif'k"V inkFkz dks ty ea NkMus l sjksdk tk, A

¼9½ vif'k"V inkFkz ds mipkj mijkr gh 'kq ty eafeykus dh vufr nh tkoA

¼10½ vks} kfxd HkfvV; ka dh fpefu; kj ApkbZ ij gks A

¼11½ m | kska dh LFkki uk vkcknh l snj gks A

¼12½ xkeh.k {ks=ka ea xkj dks [kys ea ckj Mkyus dh vufr u gks A

**~vFkok\*\***

**i ; kbj.k izaku ds bFkdy usrd½ igy&**

ekuo ds pkjks vkj dk vkoj.k i ; kbj.k dgykrk gS ; g tfod] vtfod]  
vkfFkz] l ka Ñfrd] rdudh] l ekftd izdkj dk gsrk gSA bl vkoj.k dk gea

I j {k.k djuk p kfg, A ; g gekjk ufrd nkf; Ro g\$ bl ds I j {k.k ea gekjk I Hkh dk fgr gSA

; fn fdl h I eL; k ds I ek/kku ea ge I fØ; ugha g\$ rks vi R; {k : i I s I eL; k dks c<kus ea ge ftEenkj gSA

**i ; kbj.k ds ifr gekjk ufrd drd; &**

**11½** i kuh dk cplk& ty g\$ rks dy g\$ ty gh thou g\$ Hkfo"; dh I j {kk g\$ rty dh cpr vko'; d g\$ mi ; kx fd, i kuh dk i u%Ø.k vU; dk; k\$ eafd; k tkuk p kfg, A

**12½** fctyh cplb, & fctyh dks cplkj dks ys dh cpr dh tk I drh g\$ vuko'; d cYc] i [kka dk mi ; kx u djaA mRI oka ds dk; Øe fnu eadja rkd Åtkzcp I dsA

**13½** dkxt cplb, & dkxt o{kka I sr\$ kj gkrk g\$ dkxt cplkj o{kka dks cplk; k tk I drk g\$ jnñh dkxt dks tyk, ugha cfYd nqkuka ij cp na rkd fj I kb&fdyæ fd; k tk I dsA

**14½** lykfLVd& lykfLVd , d vfo?kVu'khy in kfkz g\$ ftI ea gkfudkj d rRo gkr\$ g\$ tks i ; kbj.k ds fy, vR; Ur gh gkfudkj d gSA vr%lykfLVd ds LFkku ij dkxt] dkp] feV[h] /kkrq I scuh oLr%ka dk iz kx djaA

**15½** I kcp& I kcp i kuh ea cgdj unh] ukyka dks nff'kr djrk gSA

**16½** cxhpk yxk, & 'kq) ok; q i klr djus g\$ /ofu] ok; j ty] enk inlk.k jks dus g\$ q cxhps yxk, aA

**17½** okgu inlk.k& okguka dh I [; k fu; f=r dja A ifcyd okgu dk iz kx vf/kd djaA bztuka dk j [kj [kko I e; & I e; ij djkoaA

mRrj 19& gekjs n\$ k ea gfjr Økär dk i kjkk I u-1968 ea Nf'k mRi knu ea vk; h vnHkur Økär I sn\$kk x; k A bl of) ea mlur fdLeka dh cksuh iztkfr; ka ds xg] /kku ds chtka dk mi ; kx fd; k x; k A

fi Nys 10 o"kk\$ ea Nf'k j I k; u I ækh vl rfyv iz k\$ka us i ; kbj.k dks i ; klr {kfr i gpk; h gSA fl pkbz dh I fo/kk c<us I s [kk | klu QI yka dh rgyuk ea /kku xg] dk gh jdck c<k g\$ rFkk ij Eij kxr QI yka dh ?kkj mi \$kk gpz gSA



ty dsfl pkbZ eavf/kd mi ; ks l s, d vksj rksenk eayo.khdj .k o {kkjh; dj .k  
 dh l eL; k c<# gSA rksnll jh vksj ty ds l kFk fofHkUu j l k; uka dsfjl ko ds  
 }kjk Hkfe ea Hkhrj dh vksj tkdj Hkfe o ty L=ksrka dks inff'kr dj jga gSA  
 bl h rjg j l k; fud mojdka ds iz ks ea Hkh ifro"lz9&5 ifr'kr dh of)  
 vkadh xbZ gS rFkk gekjk ns k mu pkj cM+s ns kka ea ekuk tkrk gS tks cM+s i ekus  
 ij jkl k; fud mojdka dk mi ; ks dj jgs gSA bl h rjg Hkkjr ea Nf'k j l k; uka  
 ds mi ; ks ea Hkh c<# rjh ntZ dh x; h A tgka Hkkjr ea l u-1971 ea 24 gtkj  
 Vu dh Vu k'kdka dk bl rky gsrk Fkk og c<# dj 1991 ea 82 gtkj Vu gks x; kA  
 i ; kbj .k ds l keftd , oavkFkd vk; kekadh vksj nf'Vi kr dj us l s, d k  
 i rhr gsrk gS fd Nf'k dh ykr fnuk&fnu c<# h xbZ yfdu ml vuqkr ea  
 Ql y dk eV; ugha c<# A

**^vFtok\*\***

**Vid fl pkbZ Drip Irrigation**

fl pkbZ dh bl fof/k us Nf'k ckxokuh , oa i qi kRi knu ds {ks= ea ubZ Økfr dk  
 l pkj fd; k gSA bl sl Mu fl pkbZ i) fr dsuke Hkh tkuk tkrk gSA fo'o ds  
 dN fodfl r ns kka ea bl iz kkyh l s 50&50 ifr'kr Hkfe ea fl pkbZ dh tkrh gA  
 vl; fl pkbZ dh i) fr; kadh rkyuk ea bl l s 30&60 ifr'kr rd i kuh dh cpr  
 dh tkrh gS rFkk 'ktjd] v) Z ktjd] Åph&uhph Hkfe; ka rFkk i oZ'h; {ks= ka ea fl pkbZ  
 ; Ør Nf'k fd; k tk l drk gSA

fl pkbZ dh bl i) fr ea ty dh l gh ek=k i kSkka ds i Hkkoh {ks= ea nrs gA  
 i kuh dh ek=k i kSkka dh iz tkfr; k] mez i kSk i fj {ks= LFkku ea j [kdj forfjr djrs  
 gSA bl ds l kFk gh t: jr i Mus ij i kuh ea ?kyu'khy] i kSkd rRo o jkl k; fud  
 mojd Hkh i kuh ea ?kkydj i kSkka ds tM+ {ks= ea i gpk; s tkrk gSA

**Vid fl pkbZ ds ipyu c<# us ds dkj .k&**

- 1/1½ bl i) fr dsek/; e l s 30&60 ifr'kr rd i kuh dh cpr gsrh gSA
- 1/2½ mRi kn drk ea 50&100 ifr'kr rFkk mRi knu ea 2&4 xqk rd of) gsrh gSA
- 1/3½ Ql yka dh xqkOrrk ea l qkkj gsrk gSA tS s Lokn] jax , oavkd kj bR; kfn A
- 1/4½ Je] /ku ty , oa l e; dh cpr gsrh gSA

15½ mtkZ dh cpr gksh gSA

16½ [kshka , oafá pkbZ ukfy; ka ea vko' ; d [kji rokj i shk ugha gksh gSA

17½ mojdhdj.k }kjk 'ktd , oal e i kskd rRokadk mi ; kx l jy , oai kkooh <ak l s  
fd; k tkrk gSA

18½ bl i) fr l smcM&[kkcM+rFkk Åph&ulph tehukadk mi ; kx dj fl pkbZdj  
l drsgSA

&&00&&

**Set - C**

**Higher Secondary School Certificate Examination**  
**SAMPLE PAPER**

fo"K; %& (Subject) - i ; kbj.k  
d{kk %& (Class) - ckjgoha %12ohh

I e; 3 ?k.Vk (Time- 3 Hrs)  
i vkkbd 75 (M.M.)

**(Instruction) & %un? k%**

- 1- I Hkh itu gy djuk vfuok; 7 gSA  
Attempt all the Question
- 2- itu Øekad 01 ea 10 v d fu/kkZjr gSA nks mi [k.M gSA [k.M ^v\*\* ea 05  
cgfodYih; itu rFkk [k.M ^c\*\* ea 05 fjDr LFkkuka dh i firZ vFkok mfpR  
I cdk tkfM, A iR; d itu dsfy, 1 v d 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 Øekad 02 I situ Øekad 06 rd vfr y?kqRrjh; itu gSA iR; d itu  
ij 02 v d vkcfVr gSA mRrj dh vf/kdre 'kCn I hek 30 'kCn A  
Q. No. 02 to 06 are very short answer type question & it carries 02  
marks each. Word limit is maximum 30.
- 4- itu Øekad 07 I situ Øekad 10 rd y?kqRrjh; itu gSA iR; d itu ij 03  
v d 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 Øekad 11 I situ Øekad 14 rd y?kqRrjh; itu gSA iR; d itu ea  
vkrfjd fodYi gsvk; iR; d itu ij 04 v d 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- izu Øekad 15 Isizu Øekad 17 rd nh?kmRrjh; izu gSA iR; d izu ea vkrfjd fodYi gSvkj iR; d izu ij 05 vð vkcfVr gSA mRrj dh vf/kdre 'kCn I hek 75 '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 75.

7- izu Øekad 18 Isizu Øekad 19 rd nh?kmRrjh; izu gSA iR; d izu ea vkrfjd fodYi gSvkj iR; d izu ij 06 vð vkcfVr 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.

iz u 1&¼½ I gh fodYi pu dj fyf[k; s &

Write correct choice-

(i) iFoh ij t b iztkfr; kmi yC/k gS & ¼½

¼½ yxHkx 10 yk[k ½ yxHkx 20 yk[k

¼½ yxHkx 30 yk[k ¼½ yxHkx 40 yk[k

There are about ..... living speices on EARTH

(a) 10 lakhs (b) 20 lakhs

(c) 30 lakhs (d) 40 lakhs

(ii) fdæfQ'kj iztkfr dh Jskh ea vkrk gS & ¼½

¼½ I dVxLr ½ I dVki lu

¼½ foylr ¼½ mi jkDr I Hkh

Kingfisher species falls in the category of

(a) Endangered (b) Threatened

(c) Extinct (d) All the above

(iii) ukxktu I kxj vH; kj.; i nsk ea fLFkr gS & ¼½

¼½ vku/kz i nsk ½ rfeyukMq

¼½ djy ¼½ e/; i nsk

Nagarjun Sagar Sanctuary is in the state

(a) Andhra Pradesh (b) Tamil Nadu

(c) Keral (d) Madya Pradesh

(iv) i ntk.k dks I ey u"V ugha fd; k tk I drk gS & ¼½

¼½ ty i ntk.k ½ ukfHkdh; i ntk.k

¼½ ok; q i ntk.k ¼½ enk i ntk.k

The pollution that cannot be removed from roots

(a) Water Pollution (b) Nuclear Pollution

(c) Air Pollution (d) Soil Pollution

(v) vkfFkd uhfr dk ?kVd ugha gS & ¼½

¼½ ekSnD uhfr ½ vks| kfxd uhfr

¼½ jktuSrd uhfr ¼½ 0; ki kfjd uhfr

It is not a component of economic policy

- (a) Financial/Money Policy (b) Industrial Policy  
(c) Political Policy (d) Trade Policy

[k.M ^c\*

1/2 1/2 fJDr LFkkuka dh i firz dhft ; s &

Fill in the blank

- (i) Hkkjr ea yxHkx -----ifr'kr vkskf/k; ka ikska l s iklr gsrh gA 1/4 1/2  
In India About ..... percent medicines are obtained from plants.
- (ii) i Fke ekuo fj i ks/ l u~----- ea r\$ kj dh xbz A 1/4 1/2  
First human report was made in .....
- (iii) Ql y pØ ----- l j {k.k ea l gk; d gS A 1/4 1/2  
Crop roatation helps in ..... conservation.
- (iv) uekxku nok dk iz kx ----- dsfy, fd; k tkrk gS A 1/4 1/2  
Nemagon medicine is used for .....
- (v) l j l k&puk ----- Ql y gS A 1/4 1/2  
Mustard - green grams(channa) is ..... cropping.

izu 2& ^tsod fofokrk , d eW; oku vkuok'kd l d k/ku gS A\* bl dFku dh i fV dhft, A 1/2 1/2

“Bio-Diversity is an valueable hierarchy gift to man kind”. Explain?

izu 3& i ; kbj.k l j {k.k dsfy, fdugh nks i ed[ k pukSr; ka dk uke nhft, A 1/4 \$ 1 1/2  
Write the names of any two challenges for enviroment conservation.

izu 4& o{ka ds dkbz nks ykHk fyf[k, A 1/4 \$ 1 1/2  
Write any two benefits of trees.

izu 5& Q0okjk fl pkbz D; k gS \ 1/2 1/2  
What is sprinkler system of irrigation ?

izu 6& vkfFkd {kfr Lrj l sD; k l e>rs gS \ 1/2 1/2  
What do you understand by economic loss level ?

izu 7& vuqk'kd fofokrk l sD; k rkr; Zgs\ 1/3 1/2

What do you understand by genetic diversity ?

izu 8& foyr iztkr; k; fdl s dgrsg\ 1/3 1/2

What are the extinct speices ?

izu 9& /ofu inkk.k fu; U=.k ds rhu mik; fyf[k, A 1/4 \$1\$1 1/2

Write three measure for the control of noise pollution ?

izu 10& t b i k s k f x d h d k i z k x Q l y l q k j d s f d u { k s = k a e a f d ; k t k j g k g s \ 1/3 1/2

In which field of crop improvement is biotechnology is used ?

izu 11& j k " V h ; m | k u i j l f k l r f v l i . k h f y f [ k , A 1/4 1/2

Write short note on National Park ?

**^Vflok OR\*\***

v h ; k j . ; i j l f k i f v l i . k h f y f [ k , A 1/4 1/2

Write short note on Sanctuary ?

izu 12& l p k j r a e D ; k g s \ n j r d l a n s k H k s t u s g r q l p k j r a e d k i f r : i c u k b , A 1/2 \$2 1/2

What is a communication system? Draw a model of communication system for sending messages to far of places?

**^Vflok OR\*\***

v k f k d u h r d s f d u g h p k j ? k v d k a d k o . k u d h f t , A 1/4 \$1\$1\$1 1/2

Explain any four components of economic policy.

izu 13& l r r - f o d k l e a ; p k d h H k f e d k d k o . k u d h f t , A 1/4 1/2

Explain the role of youths in Sustainable Development.

**^Vflok OR\*\***

l r r - f o d k l e a m | k x l e n g k a d h H k f e d k d k o . k u d h f t , A 1/4 1/2

Explain the role of industrial groups in Sustainable Development.

izu 14& e k u o d s v f l r r o g r q t b f o f o / k r k v k o ' ; d g s D ; k a \ 1/4 1/2

Why is Bio-Diversity important for existence of man kind?

**^Vflok OR\*\***

i n f r e a l r y u c u k ; s j [ k u s d s f y , t b f o f o / k r k d k l j { k . k v k o ' ; d g s

D; ka \ 1/4 1/2

Bio-Diversity conservation is important to balance nature, Why?

izu 15& I rr~fodkl , oahkfo"; ds I hkkoukvka dh foopuk dhft, A 1/5 1/2

Describe the sustainable development and future possibilities.

**^Vflok OR\*\***

xteh.k izu/ku vky I rr~fodkl dh vko'; drk dk fo'ysh.k dhft, A 1/5 1/2

Analyse the need of Rural management & Sustainable development?

izu 16& Ql y pØ ds dkbz ikp fl )kr fyf[k, A 1/4 \$1 \$1 \$1 \$1 1/2

Write any five principals of Crop Rotation.

**^Vflok OR\*\***

fefjr Ql y ds dkbz ikp fl )kr fyf[k, A 1/4 \$1 \$1 \$1 \$1 1/2

Write any five principals of Mixed Cropping.

izu 17& fuEu ij I f{klr fvli .kh fyf[k, & 1/2 1/2 \$2 1/2 1/2

1/4 1/2 foylr iztkfr; k; 1/2 1/2 I dVkiUu tkfr; k;

Write short notes on:--

- (i) Extinct Species (ii) Threatened species

**^Vflok OR\*\***

fuEu ij I f{klr fvli .kh fyf[k, A 1/2 1/2 \$2 1/2 1/2

1/4 1/2 iR; {k eW; ] 1/2 1/2 viR; {k eW;

Write short notes on:--

- (i) Direct value (ii) Indirect Value

izu 18& gfjr Økr ds i; kbj.k ij gg i hkkoka dh foopuk dhft, A 1/6 1/2

What are the main effects of green revolution on Enviroment ? Explain.

**^Vflok OR\*\***

Vi d fl pkbz dk ipyu D; ka c<+jgk gS\ I e>kb, A 1/6 1/2

Why is Drip Irrigation becoming popular? Explain?

izu 19& i; kbj.k I j{k.k , oainlk.k fu; æ.k dsfy, 0; fDr dks I kekftd Lrj ij D; k

djuk pkfg, A 1/6 1/2



For conservation of Environment and Pollution control what should an individual do at social level?

**OR**

Explain Ethical consideration of Environmental management? 1/2

00

## ¶ fi y mRrj\*\*

[k.M ^v\*

mRrj 1&¼½

- (i) & ¼½ yxHkx 20 yk[k
- (ii) & ¼ ½ foylr
- (iii) & ¼½ vkakz inŝk
- (iv) & ¼½ ukfHkdh; inŝk.k
- (v) & ¼ ½ jktuŝrd uhfr

[k.M ^c\*

- (i) 90 ifr'kr
- (ii) 1990
- (iii) enk
- (iv) I # Ñfe uk'kh
- (v) fefJr

mRrj 2& fofok idkj dsthokadsdkj.k gh iFoh ij thou gSftl eal Hkh idkj dsthoka  
dk viuk fof'k"V ; kxнку gŝ tŝ fofokrk l s thu] iztkfr , oa ifjræ ds  
vri cakka dh tkudkj h gkrh gSA

mRrj 3& i ; kbj.k l j{k.k dh nks iedk pqr; k fuEu gS &

¼½ i ; kbj.k , oa inŝk.k , d l eL; k A

½ tyk'k; ka eac<rh xmxh , oa vif'k"V A

mRrj 4& o{kka ds ykHk &

¼½ o{kka l s i k.k ok; q vkDI htu i klr gkrh gSA

½ o{kka ds veW; vkSkf/k; k; i klr gkrh gSA

mRrj 5& Qookjk fl pkbzi) fr ea ty dks Qookjds: i eagok ea NkMk tkrk gSftl ds  
dkj.k ty o"kkZ ds i kuh dh rjg tehuh l rg ij Ql yka dks i klr gkrk gSA

mRrj 6& vkfFkd {kfr Lrj ij dhVka }kjk fd; sx; s Ql y ds upl ku dks vf/kd l e;

rd l gu u dj bl Lrj ij igpusl sigysgh fu; æ.k dsmik; ] vkfFKZd {kfr  
Lrj dgykrk gSA

mRrj 7& , d gh iztkfr ds thoka ea gkus okyh fofo/krk dks vkuo pka' kd fofo/krk dgrsgA  
iR; sd tho ea thu dk , d l eng gsrk gS , oafofHkuu izdkj ds thoka ea fofo/k  
izdkj ds thu l eng ik; s tkrs gS , oa tho ds vkuo pka' kd xqk ea gkus okyk  
ifjorZ l eLr thu l eng ea ifjorZ dj nrk gSA

mRrj 8& , d sthoka dh tkfr; k; tksiFoh l sl ekir gks p d h gSm l gafoy r iztkfr; ka dgrs  
gS A mnkgj.k & Mk; ukl kj] fdæfQ'kj vkfn A

mRrj 9& /ofu inM.k fu; æ.k ds rhu mik; fuEu gS &

¼½ i s kj gkuZ ij ikcñh A

½½ dkj [kkuka dk 'kgj l snj LFkki uk A

¾½ VckS tM batuka ij 'kkj voo' kkskd dk iz kx A

¼ k vU; fu; æ.k dsmik; ka ij Hkh v d fn; s tkoa A½

mRrj 10& t b i kS] kSxdh dk iz kx Ql y l qkkj ds fuEukfyf [kr {ks=kaeafd; k tk jgk g&

¼½ iz kx' kkyk ea t b fofo/krk okys tkfr; ka dk l j {k.k A

½½ j kx j kS kh o dhV J s kh Ql y ka dk fodkl A

¾½ de enk dVko

¼ k vU; Ql y l qkkj dsmik; ij v d fn; s tk; a A½

mRrj 11& **jk"Vh; m | ku &** og l j f {kr {ks= tks ol; thoka dh mluf r o fodkl ds fy,  
vkj f {kr gsrk gS r Fkk ogk; o {k ml e n y u] pkj .k] vk [k v r Fkk vU; ekuoh;  
fØ; k dyki ka ij i frczk jgrk gS jk"Vh; m | ku dgykrk gSA

**Hkkjr ds iæ[k jk"Vh; m | ku &**

¼½ dk c v jk"Vh; m | ku & mUkj k [k.M

½½ l tñjou jk"Vh; m | ku & i f' pe cak y

¾½ fxj jk"Vh; m | ku & xqt jkr

¼½ cka kox <+ jk"Vh; m | ku & e/; i n s k

½½ nqkkok jk"Vh; m | ku & mRrj i n s k

¾½ dkæj ?kkVh jk"Vh; m | ku & NRrhl x <+

^vFtok\*\*

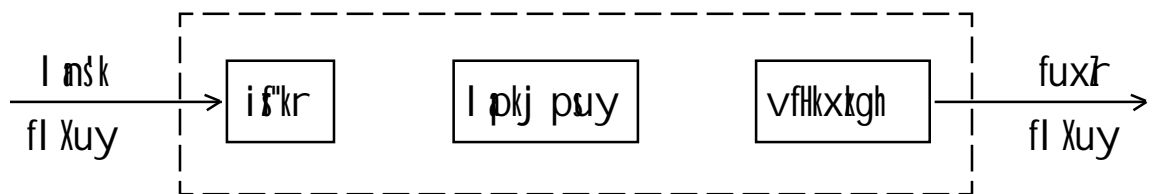
**vH; kj.;** & , d k {ks= ; k 'kj.k LFky tks ol; thoka dsc pko vks ns[k&j]k ds fy, I jf{kr gksrk g\$ tgl; dN I hek rd ekuoh; fØ; kdyki t\$ s?kka dkVuk] Ñf"k vkfn dh vuøfr gksrh g\$ vH; kj.; dgykrk gSA

**iæ[k vH; kj.; &**

- ¼1½ vpkudekj & fcykl ij ¼N-x-½
- ½2½ vlukeykbZ & rfeyukMw
- ¾3½ i sV; kj & djy
- ¼4½ jkuhi j & mRrj insk
- ½5½ iykew & fcgkj
- ¾6½ ukxktū I kxj& vku/kz insk

mRrj 12& **I pkj ra=&** I pukvka dks , d LFkku I sni js LFkku ea Hkstus dh rduhd dks I pkj ra= dgrsgA vkt dy I puk& i=&if=dk] i [rd] rkj] j\$M; ks vkfn ek/; e I s tkus yxh g\$ A vf/kdre xfr o rduhd ds dkj.k Vsyhfotu] VsyhQku] QDI ] bV/jus] ekckbZ] , I -, e-, I -] mixg I pkj I s I puk tYn igpkbz tk I drh g\$ ; s I pkj ra= dgykrsgA

**I jyre I pkj ra= &**



^vFtok\*\*

**vkfFkd uhfr ds 4 ?kVd fuEukuq kj g\$ &**

- ¼1½ Ñf"kuhfr& Ñf"k uhfr ea Hkw Lokfero rduhdh] mRi knu dh ek=k eW; ] I jdkj dh eW; uhfr] dhVuk'kd] ; æhdj.k vkfn 'kkfey gSA fd I ku QI y puko] mRi knu] foØ; foRr iædk dsfy, Lora= gSA
- ½2½ **vk\$ k\$xd uhfr&** I jdkj vk\$ k\$xd fodkl dks fu; fer o fu; f=r djrh g\$ vk\$ k\$xd fodkl dks i Hkkfor djus okys I jdkjh fl ) kr] fu; e] foRr iædk

vkfn dh 0; oLFkk djrh gSA

**1/3 1/2** 0; ki kfjd ulfr& vk; kr&fu; kZr ulfr; kj fonskh 0; ki kj dh fn'kk o LoHkko] m | ksxka dks I j {k.k} fonskh I gk; rk] Hkxrkku vkfn A

**1/4 1/2** ekfnd ulfr& fdI h nsk dh I jdkj ; k dlnh; cd }kj k vFkD; oLFkk eafdl h fo'ksk vkfFkd mnas; dh ikflr dsfy, I pkyu ea epk dh ek=k o izak dks ekfnd ulfr dgk tkrk gSA

mRrj 13& jk"V<sup>a</sup> ds fodkl ea 0; fDr dh Hkfiedk dh ckr ds I kFk ; pk ds ; ksxnku dks j[kkfdr fd; k tkrk gSA fdI h Hkh cMsi fjorZu dsfy, jk"Vh; pfj= fuelZk dsfy, vFkok nsk dsfodkl dsfy, tc Hkh egki q "kkausigy dh rc nsk ds ; pkvka dks gh vkgoku fd; k x; k A Lokh foosdkuan vksj egkRek xkdkh us ; pk 'kfDr dks gh I cl svf/kd egRo fn; k A

oShodj.k vksj 'kgjhdj.k ds nksj ea Hkh ; pkvka dh Hkfiedk vxzkh gSA teZu vFkZ kL=h ds vuq kj Hkjr rh; vFkD; oLFkk rsth I si xfr djrh gpZ 2020 rd fo'o dh rhl jh I cl scMh vFkD; oLFkk cu I drh gSA ftI I s ; pkvka dh vge Hkfiedk gSA nsk dh ; pk oxZ vkcknh fodkl ea egRo iwZ ; ksxnku nsjgh gSA o{kkjksi .k ea Hkh budk egRo iwZ ; ksxnku gsftI I sl ekt LoLFk gksxk , oa thou dh I kFkZdrk fl ) gksxh A

**^vFlok\*\***

nsk ds vkfFkd fodkl ea m | ksx txr dh egrh Hkfiedk gSA ; si ; kbj.k dks inff'kr djusea Hkh ; ksxnku %udkjRed% nsjgs gftI I sok; q, oa ty inff'kr gksjgk gS, oa Hkfe dh mojk 'kfDr de gksjgh gSA vr-%m | ksxka }kj k tks inff.k QSyk; k tk jgk gSml dh {kfrirZ, oaizak dh ftEenkjh Hkh blghaI egka dh gA tS & vksj kfxd bdkbz kadk vif'k"V mipfjr dj ty ea'kkfey djusty 'kq) cuk jgsxk , oa ok; q Hkh inff'kr ugha gksxh A , s h i kSj kfxdh dks fodfl r dj viuk; k tk, tks I kekftd , oa vkfFkd fodkl dks i kRl kfgr dj i ; kbj.k I j {k.k Hkh dja A xkeh.k jkstxkj , oa Nf"k vk/kkfjr m | ksxka dks i kRl kgu n.s.s okyh i kSj kfxdh dks vi ukus dh vko' ; drk gSA

mRrj 14& ekuo ds LokFkZ jd i Nfr I s dkbz Hkh vufHkK ugha gSA tB&fofo/krk I j {k.k ea

Hkh ekuo dk vi uk fufgr LokFkZfNik gS D; kAd fcuk vi uh LokFkZi firZdsekuo  
 tkfr vl; tho tUrjka, oaouLifr; kadsI j {k.k ij tkj ughansI drk A ekuo  
 tkurk gSfd ml dh l eLr vko'; drk, j i R; {k vFkok vi R; {k : i l s tD  
 fofokrk l stMh gS tksvuo.j.k : i l svi uh veW; l ok, j geainku djrsjgs  
 gS ; sfdl h Hkh jk"V<sup>a</sup> dsvkfFkZd l kekftd l kfjflFkfrd rFkk vl; l Hkh i {kka ij  
 vi uk 0; ki d i Hkko Mkyrh gSA

^vFkok\*\*

i Nfr eal rgyu cuk; sj [kusdsfy, tD fofokrk dk l j {k.k fuEu dkj .kka l svko'; d  
 gS &

1/4 1/2 i ; kbj .k l rgyu gsrqA

1/2 1/2 vksk/kh; egRo dh n"V l sA

1/3 1/2 ekuo vLrRo dks cuk; sj [kusdsfy, A 1/4dkbz rhu fy [kus i j 1/2

mRrj 15& l rr~fodkl ] og fodkl gS tksorZeku ds vk/kkj ij Hkfo"; ds thou Lrj ea  
 l qkkj yk l dsA i kfjflFkfrd l rgyu , oa i ; kbj .k l j {k.k dh l kFkZdrk fVdkA  
 fodkl ij vk/kkfjr gSA fo'o eal M&i kSk; tho&tUrj i 'k&i {kh rFkk ekuo dh  
 mRi fRr dk fuf'pr Oe cuk gprk gSA l Hkh vki l h rky ey }kjk vi uh  
 thoup; kzi wkZ djrs gSA i Nfr ds Oe dks tc Hkh rkmusdk ekuoh; iz kl gsrk  
 gSrc l sgh vl rgyu dh lFkfr cu tkrh gS i Nfr dk Oe fujlurj l adfyr cuk  
 jgsbl gsrqge ftruk nksu djrs gS ml dh {kfri firZdk izaku Hkh vko'; d  
 gSA tS sge , d i M+/kjr h ij cMk djrs gS og i M+vkd'k eac<rk gS tehu  
 l sikuh [kprk gS og ikuh i fRr; ka ds ek/; e l sok"i h Nfr gks tkrk gSA bl  
 izdkj , d i M+rhu okLrfodrkvkaeal keatL; LFkfi r djrk gSA /kjr h] vkdk'k  
 vksj ikuh dk l rgyu , oa i rhdkRed l adyu gSA i M+}kjk {kfri firZ0; oLFkk dks  
 ge n l jsrjhds l Hkh l e> l drsgSA , d i M+vkl & i kl dsrki dks l ks [k ysk  
 gS rFkk Nk; k inku djrk gSA dkcZu MkbZ vkDI kbM ds cnys ea thounk; h  
 vkDI htu NkM+k gSA , d i M+dh i fRr; kj tkuokj ka ds Hkktu ds : i esa z, ks  
 dh tkrh gS Qy Hkh i klr gks s gS i f {k; ka , oa dh Vks ds fy, vkokl mi yC/k  
 djkrk gSA i M+ds l v [kusdsckn Hkh ml dh ydMh ds : i eami ; ks fd; k tkrk

gSA l rr fodkl dsfy, Hkfo"; dh l EHkkouk mi ; Ør mnkgj.k l sLi"V gks  
tkrh gSA gea i kÑfrd txyka dk fouk'k jksduk gksxk A ge ftruk nkgu djrs  
gñ ml ds i qHkj .k dk izak Hkh djuk gksxk] rHkh i kfjLFkfrd l rnyu cuk jgsxA

### ^vFlok\*\*

xkoka dscgrj Hkfo"; dsfy, fu; kfr dk; Øe dh vko' drk gSA ge tkurs  
gñfd gekjs nsk ds yxHkx 5 yk[k 30 gtkj xkoka ea nsk dh nks frgkbz l s  
vf/kd tul ã; k fuokl djrh gSA ge ; g Hkh tkurs gñfd nsk dh ixfr ds  
fy, vc Hkh Ñf'k] i 'kq kyu rFkk vU; xkeh.k m | kska ds izaku iz kl ka dh  
vko'; drk gSA l rr fodkl gsrq xkeh.k izaku l s l ã/kr fuEufyf[kr dk; Z  
fd; stk l drsgñ &

¼½ xkeh.k {ks=ka dh vks} kfxd bdkb; ka ea ekuo l ã k/ku] foi .ku] l keU; izaku  
rFkk forr tS s izaku ds {ks=ka ea l keatL; LFkfi r djuk A

½½ Ñf'k Hkfe dk fujrj fo'yšk.k dj xkeh.kka dh vko'; d l Øko nrs jguk A

¾½ i 'kq kyu rFkk eRL; ikyu tS h l Hkkoukvka dks c<kuuk A

¾¾ fodfl r nskkadh i fjLFkfr; kadsvuq kj l rr fodkl gsrqviuk; stk l dusdk  
fo'yšk.k djuk A

mRrj 16& fofHku Ql yka ds Ql y pØ cukrs l e; fuEufyf[kr fl ) kUr /; ku ea j [kus  
pkfg, &

¼½ xgjh tMks okyh Ql yka ds ckn de xgjh tMks okyh Ql ys mxkbz tkrh gñ  
ftl l sfd Ql ya fofHku enk l rgka l sviuk i kskd rRo xg.k dj l ãA

½½ vnyguh Ql yka ds ckn nyguh Ql ya mxkuh pkfg, A vnyguh Ql yafeVvh  
dh ukbVrstu dks ydj detkj cukrh gñA tcf d nyguh Ql yka dh tMka ea  
i k; k tkus okyk jk; tksc; e cDVhfj; k feVvh ea ok; qMy dh ukbVrstu dk  
fLFkjhdj.k djrk gSA

¾½ vf/kd ty pkgus okyh Ql yka ds ckn de ty pkgus okyh Ql ya mxkuh  
pkfg, D; kñd yxkrkj vf/kd ty pkgus okyh Ql yka ds mxkus l s feVvh ea  
ok; q l pkj : d tkrk gSA bl l s feVvh eami LFkr l qe thoka dh fØ; kvka i j  
gkfudkj d i Hkko i Mfk gSA

¼½ vf/kd [kkn pkgus okyh QI yka ds ckn de [kkn pkgus okyh QI ya mxkuh pkfg,] ftl l s feVh dh mojr k l jf{kr jga A

½½ vf/kd fujkb&xMkbZ pkgus okyh QI yka ds ckn de fujkb&xMkbZ pkgus okyh QI ya mxkuh pkfg, A

¼U; fl ) kUrka ij Hkh vad fn; s tk; a A½

**^vFlok\*\***

**fefJr [ksh ds fl ) kUr&** QI y ds feJ.k r\$ kj djus ds fy, fuEufyf[kr eq; fl ) kUr /; ku ea j [kus pkfg, &

¼½ fefJr Ñf'k ds fy, puh xbZ QI ya feVh ty rFkk tyok; qds l fo/kkuq kj ck/uh pkfg, A

½½ vnyguh QI yka ds l kFk nyguh QI yka dk feJ.k djuk pkfg, A

¾½ Åph c<us okyh QI yka ds l kFk Hkfe ea Qydj pyus okyh QI ya cksuh pkfg, A

¼½ xgjh tM+okyh QI yka ds l kFk mFkyh tM+okyh QI ya cksuh pkfg, A

½½ , d gh izdkj ds dhV rFkk chekfj; ka dks 'kj.k nus okyh QI yka dks , d l kFk ugha cksuk pkfg, A

¼U; fl ) kUrka ij vad fn; s tk; s A½

mRrj 17& **foyr iztkr; k&** , d s thoka dh tkfr; kj tks l a wkz fo'o l s xk; c gks pph gs , oamudh dghaHkh feyusdh l Hkkouk ughagSA foyr iztkr; ka dh Js kh ea vkrs gA

**mknkj.k&** fdaxQ'kj] Mk; ukl kj] yky i kMk] D; wuyky rksk vkfn A

, d ckj foyr gks ij fdl h tkfr ds fo'k"V thu dhkh i klr ughagks l drA ekuo cM+ i kus ij foHku LFkyh; ] tyh; , oa ok; ph; i kf.k; ka dk f'kd kj djrk g\$ ftl l s dkj.k vud tho tkfr; kj l nk&l nk ds fy, tB eMy l s foyr gks xbZ gA

euq; ds LokFkhZ , oa vekuoh; fØ; k dyki ka ds dkj.k vud tBod tkfr; ka dh foyr dk [krjk c<+ tkus ds dkj.k orZku ea l j{k.k dh egrh vko' ; drk gSA

**l dVkiu tkfr; k&** , d s thoka dh tkfr; ka ftuds Hkfo"; ea l dV ea i M+us dh



I Hkkouk g\$ I dVki Uu tkfr; ka dh Jskh ea vkrs g\$A bu thoka dh I d; k /khj &  
/khjsde gkrh tk jgh g\$A bl fy, budk mi; ksx I hfer gksx; k g\$vr% buds  
?kVrsjgus dh I Hkkouk c<rh tk jgh g\$A

**mngj.k&** ns'kh xk; ] Hk\$ ] cdjh , oa reke rjg ds Ql yka dh ns'kh iztkfr; k; A  
dN , d h Hkh I dVki Uu tkfr; k; g\$ftudk euq; ds }kjk d\$y 'kk\$; k  
nok ds: i eaf'kdj dj fn; k tkrk g\$A QyLo: i budh I d; k ea Hkh Hkkjh  
fxjkoV vk jgh g\$A

**t\$ &** 'kj] ck?k] Hkky] gkFkh] fgj .k vkfn A  
**^vFtok\*\***

**iR; {k eW; &** I ank mRi Uu dj ml dk eW; ds: i eami; ksx djuk mi Hkksx eW;  
dgykrk g\$A vk; kr&fu; k\$ I ka[; dh dk fujh{k.k dj bl ds vU; ykHka ds  
vk/kkj ij iR; {k eW; dks nks Hkkska ea foHkDr fd; k x; k g\$A

og I ank ftl s LFkkuh; Lrj ij mi Hkksx fd; k tkrk g\$ rFkk ftudk  
jk"Vh; vrjzVh; cktkj eamYs[k ughagkrk {k; 'khy mi Hkksx eW; dgrsg\$A

**mngj.k&** taxy dh tykÅ ydMh dk LFkkuh; fuokl h bzku ds: i eami; ksx djrs  
g\$A

og I ank ftl dh i\$kokj taxy ea gkrh g\$ysdu mi Hkksx jk"Vh; , oa  
vrjzVh; cktkj ea Hkh gkrk g\$ mRi knh mi Hkksx eW; dgykrk g\$A bul s  
vkfFkd ykHk gkrk g\$A

**mngj.k&** taxy dh bejrh ydMh dks i klr djdsbl dk 0; ki kfjd mi; ksx gkrk g\$A

**t\$ &** taxy dh bejrh ydMh dks i klr djdsbl dk 0; ki kfjd mi; ksx gkrk g\$A t\$ s  
I kxk\$] 'kh'ke] chtk vkfn A

**viR; {k eW; &** viR; {k eW; dk vFkz g\$ & I ankvka ds 0; fDrxr mi Hkksx ds fcuk  
vkfFkd ykHk gksk A ; g og ykHk g\$ tks t\$ fofo/krk }kjk ink; fd; s tkrsg\$A  
ftl ea I ank u rks mRi Uu gkrh g\$ v\$] u gh ml dk uk'k gkrk g\$A

bl izdkj ds viR; {k eW; ds ykHk ds vr\$z euksjat u] f'k{kk] o\$kfud  
vuq \$kku] ty dh xqkoRrk] ekuoh; I ekt dsfy, Hkkoh fodYi mRi Uu djuk  
vkfn vkrs g\$A

tö fofokrk dk oržeku l e; eavud egRo gđ; g ikÑfrd tho cđ  
gđA blgh ds }kjk vud iztkfr; k; ikÑfrd : i l smRi lu gksh jgrh gđA  
feVWh tyok; qvkj ikÑfrd ouLifr; k; bu thoka dsfy, vk/kkj curh gđA  
ikÑfrd thu }kjk ikr vkuokā'kd fofokrk gh [ksh] m | ksx o nokbz ka ds  
fodkl eaHkjij ; ksxnku inku djrh gđA

bl ds vrfjDr vkuokā'kd fofokrk , oa tđ fofokrk ty] feVWh dk  
l j {k.k} fodfl r iztkfr; ka dk l tu djusgrqtezykte nkrk dh rjg gh ugha  
vfi r qmuds i jkx.k] fu"kpū , oavxyh ih<h i šk djusdk okrkoj .k rš kj djus  
dsfy, ftEenkj gđA

mRrj 18& gekjs nšk eafjr Økār dk i kjkk l u-1968 ea Ñf"k mRi knu eavk; h vnHkur  
Økār l sn[kk x; k A bl of) eamllur fdLeka dh ckuh iztkfr; ka ds xgll /kku  
dschtka dk mi ; ksx fd; k x; k A

fi Nys 10 o"kkž ea Ñf"k j l k; u l cakh vl rfy r iz kska us i ; kbj .k dks  
i ; klr {kfr i gpk; h gđA fl pkbz dh l qo/kk c<us l s [kk | klu Ql yka dh rgyuk  
ea/kku xgll dk gh jdck c<k gsrFkk ijEijkr Ql yka dh ?kkj mi škk gplz gđA  
ty dsfl pkbzeavf/kd mi ; ksx l s, d vkj rksenk eayo.khdj .k o {kkjh; dj .k  
dh l eL; k c<h gđA rksnll jh vkj ty ds l kFk fofHkuu j l k; uka dsfj l ko ds  
}kjk Hkrie eafHkrj dh vkj tkdj Hkrie o ty L=kska dks inñ"kr dj jga gđA

bl h rjg j l k; fud mojdka ds iz ksx eaHkh i fro"l29&5 i fr'kr dh of)  
vka dh xbz gsrFkk gekjk nšk mu pkj cMš nšk ka ea ekuk tkrk gš tks cMš i škus  
ij jkl k; fud mojdka dk mi ; ksx dj jgs gđA bl h rjg Hkkjr ea Ñf"k j l k; uka  
ds mi ; ksx eaHkh c<h rjh ntz dh x; h A tgka Hkkjr ea l u-1971 ea 24 gtkj  
Vu dh Vuk'kdka dk bl rky gsrk Fkk og c<ej 1991 ea 82 gtkj Vu gksx; kA

i ; kbj .k ds l keftd , oavkfkd vk; keka dh vkj nñ"Vi kr djus l s, d k  
i rhr gsrk gšfd Ñf"k dh ykr fnuk&fnu c<h xbz yfdu ml vuqkr ea  
Ql y dk eV; ugha c<k A

~vFtok\*\*

## Vid fl pkbz Drip Irrigation

fl pkbz dh bl fof/k us Ñf"k cxxokuh , oa i qj kRi knu ds {ks= ea ubz Økār dk

I p̄kj fd; k gSA bl s l Mu fl p̄kbz i) fr dsuke Hkh tkuk tkrk gSA fo'o ds dñ fodfl r ns kka eabl iz kkyh l s50&50 i fr'kr Hkfe eaf l p̄kbz dh tkrh gA vl; fl p̄kbz dh i) fr; ka dh rgyuk eabl l s30&60 i fr'kr rd i kuh dh cpr dh tkrh gsrFkk 'ktd] v) Z ktd] Åph&uhph Hkfe; ka rFkk i ozh; {ks=kaeaf l p̄kbz ; ðr Ñf" k fd; k tk l drk gSA

fl p̄kbz dh bl i) fr ea ty dh l gh ek=k i kSkka ds i Hkkoh {ks= ea nrs gA i kuh dh ek=k i kSkka dh iz tkfr; k̄ mez i kSk i fj {ks= LFkku ea j [kdj forfjr djsr gA bl ds l kFk gh t: jr i Musij i kuh ea?kyu'khy] i kSkd rRo o jkl k; fud mo] d Hkh i kuh ea?kkydj i kSkka ds tM+ {ks= ea i gpk; s tkr s gA

**Vid fl p̄kbz ds ipyu c<us ds dkj.k&**

- 1/1½ bl i) fr dsek/; e l s30&60 i fr'kr rd i kuh dh cpr gsrh gSA
- 1/2½ mRi kn drk ea 50&100 i fr'kr rFkk mRi knu ea 2&4 xuk rd of) gsrh gSA
- 1/3½ Ql yka dh xqkoRrk ea l qkij gsrk gSA tS sLokn] jax , oa vdkdj bR; kfn A
- 1/4½ Je] /ku ty , oa l e; dh cpr gsrh gSA
- 1/5½ mtkz dh cpr gsrh gSA
- 1/6½ [ksrka , oa fa p̄kbz ukfy; ka ea vko' ; d [kji rokj i Snk ugha gsr s gA
- 1/7½ mo] dh dj .k }kjk 'ktd , oa l (e i kSkd rRoka dk mi ; ksx l jy , oa i Hkkoh <ax l s fd; k tkrk gSA
- 1/8½ bl i) fr l smcM& [kkcM+rFkk Åph&uhph tehuka dk mi ; ksx dj fl p̄kbz dj l drsgA

mRrj 19& **i ; kbj.k l j {k.k&** i nllk.k dh jksdFkke ds fy, ge l Hkh dks l ekt ds l kFk tM dj i ; kbj.k i nllk.k fu; æ.k l czkh dk; ðe LFkkuh; ] i kns' kd , oa jk"Vh; Lrj ij cuk, tkuspkfg, A gekjk ; g iz kl gksuk pkfg, fd ge pkjksvkj QSy jgs i nllk.k dks jksda & ; g rc l Hko gS

- 1/1½ l jdkj }kjk l Hkh m | kska ds i nllk.k jkskd l ; æ yxkuk vfuok; Zcukuk pkfg, A
- 1/2½ i nllk.k ds fu; eka dk dMkbz l si ky u gksA l e; & l e; ij tkp A
- 1/3½ xyh ekgyka ea dM&dpjs ds <j u yxus na A
- 1/4½ xnxh ds ckjs ea ykska dks tkx: d cuk; k tkos A

- 1/5½ okguka dh l e; & l e; ij inllk.k l ædkh tkp gks A
- 1/6½ ouka dh vko'; drk dVkbZ jksdh tkuh pkfg, A
- 1/7½ c<fse: LFky dks jksdus o{kkjksi .k dh ; kst ukvka dks c<kok A
- 1/8½ m | kska ds vif'k"V inkFkkZ dks ty ea NkMus l sjksdk tk, A
- 1/9½ vif'k"V inkFkkZ ds mipkj mijkur gh 'kq) ty eafeykus dh vuøfr nh tkoA
- 1/10½ vksj kfxd HkfVV; ka dh fpefu; k; Åpkbz ij gks A
- 1/11½ m | kska dh LFkki uk vkcknh l snj gks A
- 1/12½ xkeh.k {ks=ka ea xksj dks [kys ea ckj Mkyus dh vuøfr u gks A

**^vFkol\*\***

**i ; kbj.k l ædku ds bFkdy ufrd½ igy&**

ekuo ds pkjks vkj dk vkoj.k i ; kbj.k dgykrk g\$ ; g tšod] vtšod] vkfFkd] l ka.Ñfrd] rdudh] l ekftd iædkj dk gsrk gSA bl vkoj.k dk gea l j {k.k djuk pkfg, A ; g gekjk ufrd nkf; Ro g\$ bl ds l j {k.k eagekj l Hkh dk fgr gSA

; fn fdl h l eL; k ds l ek/kku eage l fØ; ugha gsrks viR; {k : i l s l eL; k dks c<kus eage ftEenkj gSA

**i ; kbj.k ds ifr gekjk ufrd drd; &**

1/1½ i kuh dk cpko& ty gsrksdy g\$ ty gh thou g\$ Hkfo"; dh l j {kk gsrq ty dh cpr vko'; d g\$ mi ; ks fd, i kuh dk i uøpØ.k vU; dk; k; eafd; k tkuk pkfg, A

1/2½ fctyh cplb, & fctyh dks cpkdj dks ys dh cpr dh tk l drh g\$ vuko'; d cYc] i a[ kka dk mi ; ks u djaA mRl oka dsk; Øe fnu eadja rkd Åtkzcp l dsA

1/3½ dkxt cplb, & dkxt o{ kka l sr\$ kj gsrk g\$ dkxt cpkdj o{ kka dks cpk; k tk l drk g\$ jnñh dkxt dks tyk, ugha cYd nqpkuka ij cp narkfd fj l kb& fdya fd; k tk l dsA

1/4½ lyfLVd& lyfLVd , d vfo?kVu'khy inkFkZ g\$ ft l ea gkfudkj d rRo gsrk g\$ tks i ; kbj.k ds fy, vR; Ur gh gkfudkj d gSA vr% lyfLVd ds LFkku ij dkxt] dkp] feVVh] /kkrq l scuh oLrøka dk iz ks djaA

- 15½ I kcp& I kcp i kuh ea cgdj unh] ukyka dks nff'kr djrk gSA
- 16½ cxhpk yxk, & 'kq) ok; q i klr djus gr] /ofu] ok; j] ty] enk inlk.k jkdus  
grqcxhps yxk, aA
- 17½ okgu inlk.k& okguka dh I d; k fu; fi=r dja A ifcyd okgu dk iz ksx  
vf/kd djaA bztuka dk j [kj [kko l e; &l e; ij djkoaA

&&00&&