छत्तीसगढ़ माध्यमिक शिक्षा मण्डल, रायपुर

lEiy&i'u i=

d{kk xii oh

Qly mRiknu ,o m|ku 'kkL=

¼fo|kfpr iHkkx½

NÙkhlx< ek/;fed f'k{kk e.My] jk;ij

i'u & i= dh ;ktuk

Scheme of Question Paper

fo"k;&& Qly mRiknu ,o m|ku 'kkL= i.kkd & 75

le; & 3 ?kV

ijh{kk & gk;j ld.Mjh ¼12oh½

¼v½ 'k{kf.kd mnn'; d vuqlkj eku

(A) Weightage as per Educational objective:

lo ØO	mnn';		vd	ifr'kr
1-	Kku (Knowledge)		30	40%
2-	vock/k (Understanding)		30	40%
3-	vuqi;kx ,o dk'ky (Application & Skill)		15	20%
		;kx	75	100%

¼c½ bdkbokj vdk dk eku

lOØO	bdkbZ dk uke	bdkbZ ij vkcfVr vd	i'u&i= d ik:i vuqlkj vkcfVr vd
1-	ty fudkl	05	05
2-	Hkw&lo{k.k	05	05
3-	ik| lj{k.k	10	10
4-	Qly pØ ,o 'k"; Øe ;ktuk	05	05
5-	[krh dh fof/k;k ,o [krh d idkj	05	05
6-	Qlyk dh [krh	15	15
7-	Ñf"k ilkj lok,	05	05
8-	vyÑr m|kfudh	07	07
9-	ik/k io/ku ,o Qyk dh [krh	10	10
10-	Qyk rFkk lfCt;k dh ijhj{k.k dh rduhd	08	08
	;kx	75	75

¼l½ dfBukbZ Lrj (Difficulty Level)

lO ØO	mnn';	vad	ifr'kr
1-	ljy (Easy)	30	40%
2-	vkSlr (Average)	30	40%
3-	dfBu (Difficult)	15	20%
	;kx	75	100%

¼n½ i'ui= fn'kk fun'k ,oa fodYi ;kstuk %&

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

- oLrfu"B i'u e ¼05½ cgfodYih; i'u rFkk ¼05½ fjDr LFkku dh ifr@mfpr tkMh cuk, dk i'u fn;k tkoxk vkj ;g iR;d lVe i'u Øekd 1 gkxk A
- iR;d lVe 1] 2 ,oa 3 vadk d i'uk e fHkUurk jgxh A leLr 04 vad ;k bll vf/kd vdk d y?kmÙkjh; rFkk nh?kmÙkjh; i'uk e fodYi fn;k tkuk g A fodYi i'u mlh bdkbZ l rFkk leku mnn';k d jgx A 04 vad ;k bll vf/kd vdk d i'u iR;d lVe ,d leku jgx A
- vf/kdre mÙkj lhek vfry?kmÙkjh; ½2 vad@30 'kCn½ ¼3 vad@50 'kCn½
  y?kmÙkjh; ¼4 vad@75 'kCn½ ¼5 vad@150 'kCn½
  nh?kmÙkjh; ¼6 vad ;k vf/kd@250 'kCn½

i'u & i= dk CyfiUV

Blue Print of Question Paper

fo"k;&& Qly mRiknu ,o m|ku 'kkL= i.kkd % 75

le; % 3 ?kV

ijh{kk % gk;j ld.Mjh ¼12oh½

bdkb l-Ø-	bdkb	bdkb ij vkcfVr vd	vdokj i'u							dy i'u
			1 vd	2 vd	3 vd	4 vd	5 vd	6 vd	6 vd ;k bl l vf/kd	
1	ty fudkl	5	&	1	1	&	&	&	&	2
2	Hk&lo{k.k	5	2	&	1	&	&	&	&	(2+1)
3	ik/k lj{k.k	10	1	&	1	&	&	1	&	(1+2)
4	Qly pØ ,o 'k"; Øe ;ktuk	5	&	&	&	&	1	&	&	1
5	[krh dhfof/k;k o [krh d idkj	5	&	&	&	&	1	&	&	1
6	Qlyk dh [krh	15	1	&	1	&	1	1	&	(1+3)
7	Ñf"k ilkj lok,a	5	1	&	&	1	&	&	&	(1+1)
8	vyÑr m|kfudh	7	1	1	&	1	&	&	&	(1+2)
9	ik/k io/ku ,o Qyk dh [krh	10	2	2	&	1	&	&	&	(2+3)
10	Qyk rFkk lfCt;k d ijhj{k.k dh rduhd	8	2	1	&	1	&	&	&	(2+2)
	;kx ¼vad½	75	10	10	12	16	15	12	&	75 vad
	;kx ¼ikB;k½		1(10)	5	4	4	3	2	-	(1+18)

Set - A

gk;j ld.Mjh Ldy lVhfQdV ijh{kk

Higher Secondary School Certificate Examination

lEiy&i'u i=

SAMPLE PAPER

fo"k; %& (Subject) - Qly mRiknu ,o m|ku 'kkL=

le; 3 ?k.Vk (Time- 3 Hrs)

d{kk %& (Class) - ckjgoh %12oh% **i.kd 75 (M.M.)**

(Instruction) & %funsZ'k%

1- lHkh i'u gy djuk vfuok;Z gA
Attempt all the Question

2- i'u Øekd 01 e 10 vad fu/kkZfjr gA ble nk mi[k.M gA [k.M ^^v** e 05 cgfodYih; i'u rFkk [k.M ^^c** e 05 fjDr LFkkuk dh ifr vFkok mfpr lc/k tkfM, A iR;d i'u d fy, 1 vad vkcfVr gA
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. Each question carries 1 marks.

3- i'u Øekd 02 l i'u Øekd 06 rd vfr y?kqRrjh; i'u gA iR;d i'u ij 02 vad vkcfVr gA mRrj dh vf/kdre 'kCn lhek 30 'kCn A
Q. No. 02 to 06 are very short answer type question & carries 02 marks each. Maximum word limit 30 words.

4- i'u Øekd 07 l i'u Øekd 10 rd y?kqRrjh; i'u gA iR;d i'u ij 03 vad vkcfVr gA mRrj dh vf/kdre 'kCn lhek 50 'kCn A
Q. No. 07 to 10 are short answer type question & carries 03 marks each. Maximum word limit 50 words.

5- i'u Øekd 11 l i'u Øekd 14 rd y?kqRrjh; i'u gA iR;d i'u e vkrfjd fodYi gA vkj iR;d i'u ij 04 vad vkcfVr gA mRrj dh vf/kdre 'kCn lhek 75 'kCn A
Q. No. 11 to 14 are short answer type question & carries 04 marks each. Each question has internal choice. Maximum word limit 75 words.

6- i'u Øekd 15 l i'u Øekd 17 rd nh?kmRrjh; i'u g A iR;d i'u e vkrfjd fodYi g vkj iR;d i'u ij 05 vd vkcfVr g A mRrj dh vf/kdre 'kCn lhek 100 'kCn A

Q. No. 15 to 17 are long answer type question & carries 05 marks each. Each question has internal choice. Maximum word limit 100 words.

7- i'u Øekd 18 l i'u Øekd 19 rd nh?kmRrjh; i'u g A iR;d i'u e vkrfjd fodYi g vkj iR;d i'u ij 06 vd vkcfVr g A mRrj dh vf/kdre 'kCn lhek 150 'kCn A

Q. No. 18 to 19 are long answer type question & carries 06 marks each. Each question has internal choice. Maximum word limit 150 words.

i'u 1& **[k.M ^V* / Section "A"**

lgh fodYi pudj fyf[k; & (1x5=5)

Choose the correct alternative-

(i) fuEu tjhc e fdl dh yEckb 100 QhV gkrh g &

¼v½ ehVj tjhc ¼c½ vfHk;Urk tjhc

¼l½ joU; tjhc ¼n½ x.Vj tjhc

Which of the following chain is 100 feet in length-

(a) Meter chain (b) Engineer chain

(c) Revenue chain (d) Guntar chain

(ii) dkcUMkfte g ,d &

¼v½ thok.k uk'kh ¼c½ [kjirokj uk'kh

¼l½ QQn uk'kh ¼n½ mijkDr lHkh

Corbendazim is a -

(a) Bacteriacide (b) Weedicide

(c) Fungicide (d) All of the above

(iii) /kku dk ifjokj g &

¼v½ xfeuh ¼c½ ekyolh

¼l½ ØlhQjh ¼n½ lkyulh

The family of paddy is-

(a) Graminee (b) Malvaceae

(c) Cruceferae (d) Solanaceae

(iv) fuEu ik/k dk okuLifrd uke *efUxQjk bfMdk* g &

¼v½ uhc ¼c½ ve:n

¼l½ vkoyk ¼n½ vke

The botanical name *Mangifera indica* is of -

(a) Lemon (b) Guava

(c) Aonla (d) Mango

(v) fuEu dh tkp ty eh Vj l djr g &

¼v½ ifDVu] ¼c½ ty h ifjiDo fcUn

¼l½ rkieku ¼n½ mijkDr lHkh

The following is Judged by Jelmeter

(a) Pectin (b) Jelly making point

(c) Temperature (d) Above in all

[k.M ^v** / Section "A"

fjDr LFkkuk dh ifr djk & **¼1x5=5)**

Fill in the blanks -

(i) iR;d tjhc d lkFk rhjk dh l[;k ---------- gkrh g A

The number of Arrow with each chain is .....

(ii) ¶y'k dkM i lkj dk ---------- lk/ku g A

Flash card is ..... aids of extension

(iii) ^^yky ckx** ---------- e g A

"Lal Bag" is in ..... .

(iv) ^^Xokfy;j 27** ---------- dh fdLe g A

"Gwalior 27" is variety of ..... .

(v) ty h ---------- ^{0}C rkiØe ij id tkrh g A

Jelly gets ripened .....in ^{0}C temperature

i'u 2& ty fudkl x.kkd dk ifjHkkf"kr dhft, A ¼2½

Define Drainage coefficient.

i'u 3& 'ky m|ku dk l{ki e le>kb; A ¼2½

Explane Rock Garden in brief.

i'u 4& Vh&cfMx dk ukekfdr fp= cukb; A ¼2½

Draw a labelled diagram of T-budding.

i'u 5& dkt dh tyok; l{ki e le>kb; A ¼2½

Explain the climate of Cashewnut in brief.

i'u 6& Cykfpx D;k dh tkrh g \ ¼1$1¾2½

Why blanching is done ?

i'u 7& ty fudkl d dkb N% ykHk fyf[k, A (½x6=3)

Write any six advantages of Drainage.

i'u 8& ,d ehVj tjhc l 500 ehVj dh njh ukih x;h A tjhc 0-3 ehVj cMh Fkh A j[kk dh okLrfod njh Kkr dhft, A ¼3½

A 500 meter distance is measured by meter chain. The chain is defeetive which is 0.3 meter longer than the standard chain. Calculate the actual length of the line.

i'u 9& ^^dkl** [kjirokj dk fu;=.k dl djx \ le>kb; A ¼3½

How will you control "Kaans" (*Soccharum spontaneum*)

i'u 10& xUuk dh [krh dh tkudkjh fuEu fcUnvk e nhft, & ¼3½

Give following information of sugar cane cultivation -

(a) okUlifrd uke (Botanical name)

(b) ifjokj (Family)

(c) mit (Yield)

i'u 11& tokgj jkt xkj ;ktuk dk l{ki e le>kb; A ¼4½

Explain 'Jawahar Rozgar Yojna' in brief.

^^vFkok (OR)**

vkipkfjd f'k{k.k ,o vukipkfjd f'k{k.k e vrj fyf[k, A ¼dkb 8½ (½x8)

Write difference between formal and non formal education. (any eight)

i'u 12& Hkkjrh; Ñf"k vul/kku lLFkku }kjk fodflr xykc dh dkb vkB fdLek d uke fyf[k,A (½x8)

Write any eight varity of Rose which is released by I.A.R.I.

^^vFkok (OR)**

,d vPNh gfj;kyh dh dkb vkB fo'k"krk, fyf[k, A (½x8)

Write any eight characteristics of good Lawn.

i'u 13& vkrfjd dkjd vke d ,dkUrj Qyu dk fdl idkj iHkkfor djrk g \ ¼4½

How does internal causes affect alternate bearing of Mango.

^^vFkok^^ (OR)

lkbM xf¶Vx dk lfp= o.ku dhft, A ½2$2¾4½

Describe side grafting with a labelled diagram.

i'u 14& lrjk Ldo'k cuku dh vko';d lkexh ,o fof/k fyf[k, A ½2$2¾4½

Write essential materials and method of preparing Orange squash.

^^vFkok^^ (OR)

Qy ,o lCth ifjj{k.k d vLFkk;h fl)kr fyf[k, A ¼dkb pkj½ (1x4=4)

Write temporary principles of fruit and vagetable preservation. (any four)

i'u 15& 'kL; ;ktuk dh fo'k"krk, fyf[k, A ¼dkb ikp½ (1x5=5)

Write characteristics of cropping scheme.

^^vFkok^^ (OR)

mRre Qly pØ d vko';d y{k.k fyf[k, A ¼dkb ikp½ (1x5=5)

Write essential criteria of good crop rotation. (Any five)

i'u 16& 'k"d [krh dh ub rduhdh dk l{ki e le>kb; A ¼5½

Explain new technology of dry farming in brief.

^^vFkok^^ (OR)

vrorh; [krh d idkjk dk l{ki e le>kb; A ¼5½

Explain types of inter cropping in brief.

i'u 17& iMh Qly l vf/kd mit ikIr dju d fy, l>ko fyf[k, A ¼dkb nl½

(½x10=5)

Write suggestion for fetching more yield from Ratoon cropping

^^vFkok^^ (OR)

lk;kchu l vf/kd mRiknu ikIr dju d fy, l>ko fyf[k, A ¼dkb nl½

(½x10=5)

Write suggestion for fetching more yield from Soyabean. (any ten)

i'u 18& ljte[kh dh [krh fuEu fcUnvk e l{ki e le>kb; A (1x6=6)

¼v½ egRo] ¼c½ tyok;] ¼l½ Hkfe

¼n½ [kkn ,o mojd ¼b½ chtnj ¼Q½ mit

Wxplain cultivation of Sunflower on following points in brief.

(a) Importance (b) Climate (c) Soil

(d) Manures and fertilizers (d) Seedrate (f) Yield

^^vFkok^^ (OR)

vk;LVj e'k:e dh mRiknu fof/k l{ki e le>kb; A (1x6=6)

Explain production method of Oyster Mushroom in brief.

i'u 19& [kjirokj fu;=.k dh ;kf=d fof/k;k fyf[k, A ¼dkb N%½ (1x6=6)

Write the mechanical method of weed control. (any six)

^^vFkok^^ (OR)

dhV fu;=.k dh d"k.k fof/k;k fyf[k, A ¼dkb N%½ (1x6=6)

Write the cultural method of insect pest control. (any six)

&&00&&

d{kk 12oh

fo"k;& Qly mRiknu ,o m|ku 'kkL=

^^lEiy mRrj**

mRrj 1& **[k.M ¼v½ oLrfu"V i'u** (1x5=5)

(i) & c

(ii) & l

(iii) & v

(iv) & n

(v) & v

[k.M ¼c½ fjDr LFkku (1x5=5)

(i) 10

(ii) n';

(iii) cxykj

(iv) ve:n

(v) 104-6°C

mRrj 2& fdlh Hkh Kkr {k=Qy l 24 ?kV dh vof/k d nkjku ftruh xgjkbZ rd d ikuh dk fudkl fd;k tkrk g ml ty fudkl x.kkd dgr g A ¼2½

mRrj 3& m|ku d vrxr iRFkjk ;k pVVkuk dh Ñf=e igkMh cukdj mle >kfM;k ;k ik/k mxkuk 'ky m|ku g A ble fo'k"kdj Qu] ije] Mfluk] ddVl vkfn ik/k yxkr g A ¼2½

mRrj 4&

mRrj 5& dkt d tyok; xe ,o vkn] len rVh; {k= mi;Dr] vf/kd 'khr e udlkuA ¼gkfudkjd½ ¼2½

mRrj 6& Cykfpx djr g] D;kfd&

¼1½ vuko';d rFkk gkfudkjd ,Utkbe u"V gk tkr g A

¼2½ Qyk d vnj mifLFkr vkDlhtu de gk tkrh g A

¼3½ Qy eyk;e rFkk uje gk tkr g A

¼4½ thok.kvk dh l[;k de gk tkrh g A

¼5½ ylyl inkFk rFkk nxU/k ckgj fudy tkr g A

¼dkb nk dkj.k fy[ku ij 2 vd½

mRrj 7& ty fudkl d ykHk & (½x6=3)

¼1½ enk e ok; lpkj c<rk g A

¼2½ [kr dh r;kjh ,o cokb le; ij dh tk ldrh g A

¼3½ ty Lrj uhpk gk tkrk g A

¼4½ Hkfe dh Hkkfrd jklk;fud ,o tfod n'kk l/kjrh g A

¼5½ enk rki Bhd jgrk g A

¼6½ enk ljpuk e l/kkj gkrk g A

¼7½ ykHk nk;d thok.kvk dh fØ;k 'khyrk e of) gkrh g A

mRrj 8& okLrfod yEckb ¾ $\frac{L^1}{L}$ x ekih x;h njh (1)

$L^1 = L + e$ ¾ 30$0-3 ¾ 30-3 ehVj ¼1½

¾ $\frac{30.3}{30} \times 500$ ¾ 505 ehVj ¼1½ ¼1$1$1¾3½

mRrj 9& dkl [kjirokj dk fu;=.k & ¼1½

¼1½ xh"e dkyhu] xgjh trkb

¼2½ Myihu ;k flethu 4&5 kg dk 1000 yhVj ikuh e ?kkydj 2&3 ckj dkl ik/k e fNMdko dj A ¼2½ ¼1$2¾3½

mRrj 10& xUuk dh [krh & (1x3=3)

(A) okuLifrd uke & *Idje vkfQlhuje*

(*Saccharam officinarum*)

(B) ifjokj & xfeuh (Graminae)

(C) mit & 500 l 850 fDoVy@ gDV;j

mRrj 11& bl ;ktuk dk Hkkjr d iFke i/kkue=h Lo- Jh tokgj yky ug: dh tUe 'krkCnh o"k 1889&90 e ykx fd;k x;k Fkk A bld ek/;e l xkeh.k {k=k e xjhch j[kk l uhp thou ;kiu dj jg ifjokjk d cjktxkj lnL;k dk jktxkj miyC/k djk;k tkrk g A ;g ;ktuk NAREGA d uke l tkuk tkrk g A bll xkeh.k {k= e ,lh lkenkf;d ifjlEifRr;k e ltu tk mudh vkfFkd rFkk lkekftd fLFkfr d ln<hdj.k e lgk;d g] vkfFkd c<krjh gr mRijd gk rFkk xkeh.k xjhck d vkfFkd Lrj e LFkk;h l/kkj yku e mi;kxh g A ¼4½

^^vFkok

Ø-	**vkipkfjd f'k{k.k**		**vukipkfjd f'k{k.k**
1-	f'k{k.k ikB;Øe ij dfUnr jgrk g A	1-	f'k{k.k dk; vko';drk ,o leL;k ,o leL;k eyd gkrk g A
2-	ikB;Øe io fu/kkfjr gkrk g A	2-	ikB;Øe f'k{kkFkh dh vko';drk& ulkj cuk; tkr g A
3-	fl)kr ,o i;kx nkuk crk; tkr g A	3-	djd lh[ku dk fl)kr ij vk/kkfjr gkrk g A
4-	lHkh f'k{kkFkh yxHkx leku me d gkr g A	4-	f'k{kkFkh fofHkUu me d tl&cPp] c<] 0;Ld vkfn gkr g A
5-	Nk= dk f'k{kd d fun'kkulkj pyuk iMrk g A	5-	f'k{kkfFk;k dh lgefr l gh fn'kk fun'ku gkrk g A
6-	Nk= fo"k;k dk v/;;u djr g A	6-	f'k{kkFkh leL;kvk dk v/;;u djr g A
7-	Nk= fMlykek ;k fMxh l lcf/kr gkrh g A	7-	iek.k i=k l dkb lc/k ugh gkrk A
8-	lLFkk d fu;ek dk vuikyu vko';d g A	8-	f'k{kkFkh cgr dn Lor= gkr g A
9-	e[; /;; fo|kfFk;k d 0;fDrRo dk fodkl djuk g A	9-	0;kogkfjd thou e iHkko Mkyuk g A
10-	vf/kdk'k f'k{k.k dk; d{kk rd gh lhfer jgrk g A	10-	cgr lk f'k{k.k dk; d{kk d ckgj Hkh gkrk g A

11- f'k{k.k f'k{kk 'kkL= fl)krk }kjk lpkfyr gkrk g A

11- f'k{k.k ilkj f'k{kk d fl)krk ij lpkfyr gkrk g A

12- vf/kdkj v/;kdik d gkFk e gkrk g A

12- vf/kdkj ik;% f'k{kkfFk;k d gkFk e gkrk g A (½x 8 = 4)

mRrj 12& (i) ekguh (ii) xxk (iii) ilk lkfu;k

(iv) lnkcgkj (v) lj[kk (vi) Hkhe

(vii) ltkrk (viii) xytkj (ix) xytkj

(x) l;kn; (xi) ekfguh dh cgu iek

(xii) Lokrh (xiii) gl (xiv) gkehHkkHkk

(xv) fg;kfxuh (xvi) uouhr (xvii) fprou

(xviii) fnYyh fiUlt (½x 8 = 4)

^^vFkok**

vPNh gfj;kyh dh fo'k"krk,¡ & (½x 8 = 4)

¼1½ gfj;kyh ,lh gk tk fd nj lgh ugh] cfYd ikl ln[ku e Hkh lnj yx A

¼2½ fdlh idkj d nxU/k u vk; A

¼3½ ijk o"k Hkj gjk jx cuk jg A

¼4½ dkey rFkk l?ku gk A

¼5½ l[kk d ifr lgu'khy gk A

¼6½ jkx ,o dhV d ifr jk/kd {kerk gk A

¼7½ ?kkl pHku okyh u gk A

¼8½ gfj;kyh ij Nk;k u iM A

mRrj 13& vkrfjd dkjd vke d ,dkUrj Qyu dk bl idkj iHkkfor djrk g &(1x4)

¼1½ ik/kk dk Qyr LoHkko& vke e igy o"k Qy vx dfydkvk ij ink gkr g] rk vxy o"k vx dfydk Qy ink u djd ijkg ink djrh g] ftl nlj o"k ik/kk fcuk Qyr d jg tkrk g A ifj.kkeLo:i vke e ,dkUrj Qyu gkrk gA

¼2½ ub of) dju dh vknr (Flushing habit)- vke d o{k vuojr :i lof) ugh djr ftld dkj.k ,dkUrj Qlu gk tkrk g A

¼3½ uj rFkk eknk Qyk d vuikr (Sex ratio)- jkekuh 113%1] rkrkijh 15%1] n'kgjh 3%1] yxMk 5%1] lkekuh] rkrkijh fdLe n'kgjh ,o yxMk fdLe dh ryuk e

fu;fer Qly nrk g A vFkkr ujQy dh l[;k eknk Qy dh ryuk e de gku ij ,dkUrj Qyu gkrk g A

¼4½ dkckgkbMV rFkk ukbVk tu dk vuikr (C:N ratio)- C:N ratio 10:1 lokf/kd vudy g A tc ik/kk e ukbVk tu dh vf/kdrk vkj dkckgkbMV dh deh gk rk ,dkUrj Qyu gkrk g A

¼5½ chtk.k dk fxjuk (Ovule abortion)- Qy cuu dh ikjfHkd coLFkkvk e chtk.k {kh.k gk tkr g vkj Qyr ekjh tkrh g ifj.kkeLo:i ,dkUrj Qyu gkrk gA

^^vFkok**

lkbM xf¶Ve dk lfp= o.ku & ½2$2¾4½

¼1½ ey oUr dk p;u djr g A

¼2½ lk[k dk p;u ifly ekVkb ,o ,fPNd gk A

¼3½ ey oUr ij xf¶Vx ukbQ dh lgk;rk dVku yxkr g A

¼4½ lk[k ij LQku dh Hkkfr dVku yxrk g A

¼5½ lk[k dk eyoUr ij yxkdj ikyhFkhu iVVh ck/k nr g A

¼6½ 1½ ekg e ik/kk r;kj gk tkrk g A

mRrj 14& **lrjk Ldo'k&** (2+2=4)

vko';d lkexh & Qyk dk jl & 1 yhVj] ikuh & 1 yhVj] phuh & 2kg, lkbfVd vEy & 15gm, ikVf'k;e eVk ckb lYQkbV & 2gm, Qy dh lx/k & 4gm, [kku dk jx & vko';drkulkj A

fof/k& ¼1½ Qyk dk p;u & LoLFk] rktk Qy

¼2½ Qyk dk /kkuk ,o Nhyuk A

¼3½ Qyk l jl fudkyuk A

¼4½ pkluh cukuk A

¼5½ pkluh e jl feykuk A

¼6½ jx] jlUl feykuk A

¼7½ futhoh Ñr ckry e Hkjuk A

¼8½ lhy djuk ,o ycy yxkuk A

^^vFkok**

Qy ,o lCth ifjj{k.k d vLFkk;h fl)kr& (1x4=4)

¼1½ **lQkbZ (Cleaning)**- lM&xy rFkk pkV [kk; g, nkxh Qyk ,o lfCt;k dk vyx dj nr g A Qyk dk lkQ djd lko/kkuh iod ifV;k ,o Vkdjk e Hkju l vf/kd le; rd ljf{kr jgr g A

¼2½ **de rkiØe (Low Temperature)**- de rkiØe ij j[ku l l{etho fu"Øh; ;k de lfØ; gkr g ftll Qy ,o lfCt;k vf/kd le; rd ljf{kr jgr g A

¼3½ **vf/kd rkiØe**- lkekU; l vf/kd rkiØe ij Hkh Qy ,o lfCt;k dk vf/kd le; rd ljf{kr j[k ldr g A

¼4½ **ueh rFkk gok l cpko&** Qyk dk B.M 'k"d ,o ueh jfgr okrkoj.k e j[ku ij thok.kvk dk vf/kd iHkko ugh iMrk A ftll Qy ,o lfCt;k vf/kd le; rd ljf{kr jgr g A

¼5½ **gYd dhVk.k uk'kd inkFkZ dk i;kx&** Qyk rFkk lfCt;k dk ljf{kr j[ku d fy, phuh] fljdk] ued] ry o lkfM;e ctk,V dk i;kx ykHkdkjh jgrk g A bll vYidky d fy, mUg ljf{kr j[k ldr g A

mRrj 15& **'kL; ;ktuk dh fo'k"krk,¡ &** (1x5=5)

¼1½ ftu [krk e Qly pØ viuk;k tk jgk g mudk {k=Qy leku gkuk pkfg,A

¼2½ ftru o"k dk Qly pØ gk mru gh ;k x.kkd l[;k e [kr gkuk pkfg, A

¼3½ pkj dh Qlyk dk {k=Qy yxHkx 10 ifr'kr gkuk pkfg, A

¼4½ Qly pØ e ijrh Øe j[kuk pkfg, A

¼5½ 'kL; ;ktuk e Hkfe] Je] ith] flpkb] [kkn vkfn dk lefpr mi;kx gkuk pkfg, A

^^vFkok**

mRre Qly pØ d vko';d y{k.k& (1x5=5)

¼1½ Qly pØ ,lk gk fd ifro"k Qlyk dk dy {k=Qy yxHkx cjkcj gh gk A

¼2½ Qly pØ vf/kdre fl)krk dk ikyu dj jgk gk A

¼3½ Qly pØ bl idkj dk gkuk pkfg, fd foHkUu iHkko Mkyu oky dkjdk dk /;ku e j[kdj r;kj fd;k tkuk gk A

¼4½ miyC/k lk/kuk dk lefpr <x l mi;kx gk A

¼5½ Hkfe dh mojrk dk gkl U;ure gk A

mRrj 16& **'k"d [krh dh ub rduhdh &** (½x10=5)

¼1½ xh"e dkyhu trkb A

¼2½ eM cUnh A

¼3½ l[kk lgu dju okyh Qly mxkuk tl& Tokj] cktjk] tk] puk] vylh vkfnA

¼4½ cht nj dh ek=k de A

¼5½ ik/k vrj.k vf/kd A

¼6½ thok'k [kkn dk i;kx A

¼7½ ,Vh VkU ikbjUV jk;u tl& flfydku] ,ukDyk] gkbMkDlh yekbu vkfn dk i;kx A

¼8½ okVj gkofLVx A

¼9½ eYp A

¼10½ l[kk lgu dju okyh Qlyk d fdLe tl xg C-306] puk G-24

^^vFkok**

vrorh; [krh d idkj& (1¼x4=5)

¼1½ lekukUrj Qly mxkuk (Parallel cropping)- ,d lkFk nk ,lh Qlyk dk yuk ftud fodkl dk <x vyx&vyx rFkk mud chp 'kU; ifr;kfxrk dh ifjfLFkfr gk lekUrj Qly g A mnkgj.k vjgj d lkFk ex dk mn dk yukA

¼2½ lgpj :i e Qly mxkuk (Companion cropping)- bl [krh e ,d Qly nljh Qly dh inkokj ij vlj ugh Mkyrh g A vFkkr nk Qlyk dh inkokj 'k) Qly d cjkcj fey tkrh g A tl xUuk d lkFk xg ;k ljlk dh Qly mxkuk A

¼3½ flujtfVd [krh (Synergetic cropping)- ble e[; Qly rFkk xk.k Qly nkuk dh mit vyx&vyx 'k) Qlyk dh mit dh ryuk e c< tkrh g A tl cjlhe $ ljlk] xUuk $ vky A

¼4½ cgeftyh Qly mxkuk (Multistoryed cropping)- fofHkUu Åpkb vkj c<okj

okyh 3&4 Qly lkFk&lkFk mxkuk gh cgefty [krh g A

mnkgj.k & ukfj;y&dkyhfep&dkdk&vUukl A

mRrj 17& **iMh Qly l vf/kd mit ikIr dju d l>ko &** (½x10=5)

¼1½ xUu dh mi;Dr fdLe dh cokb tl & C 1148, CO1158

¼2½ e[; Qly Qjojh&ekp d iFke llrkg e vo'; dkV y A

¼3½ [kr dh lQkb dj ifRr;k dk tyk n A

¼4½ ijkuh eMk dk rkM A

¼5½ xUu dh iMh e igyh flpkb nj l dj A

¼6½ 150&200kg u=tu@gDV;j dh nj l n A

¼7½ uljh r;kj dj xi fQfyx dj A

¼8½ 3&4 ckj fudkb xMkb dj A

¼9½ dhV ,o jkx dk fu;=.k dj A

¼10½ ,d gh ckj iMh Qly y A

^^vFkok**

lk;kchu l vf/kd mRiknu ikIr dju d l>ko & (½x10=5)

¼1½ lk;kchu mfpr ty fudl okyh nkeV] efV;kj] VkeV enk e ck; A

¼2½ 65&80kg cht@gDV;j dh nj l ck; A

¼3½ cht dk mipkfjr rFkk jkbtkfc;e dYpj l fuof'kr dj ck; A

¼4½ mUur 'khy fdLe tl& xkjo] nxk] vdj] P.K. 172 vkfn ck; A

¼5½ 20&30kg u=tu] 60&80kg QkLQkjl] ,o 40&60kg ikVk'k ifrgDV;j n A

¼6½ tu&tykb d iFke llrkg rd vo'; ck; A

¼7½ vk';drkulkj flpkb dj A

¼8½ nk ckj fudkb&xMkb dj A ¼cokb d 30 o] 45o fnu½

¼9½ dhVk dk fu;=.k dj A

¼10½ jkxk dk fu;=.k dj A

¼11½ xe&ue tyok; oky {k=k e cokb dj A

mRrj 18& **ljte[kh dh [krh &** ¼1x6¾6½

¼v½ egRo& ry] cyt e 24&30% ry dh ek=k fyukfyd vEy d vf/kd gku d dkj.k dkyLVky dh of) dk jkdrk g A

¼c½ tyok;& 50cm dh okf"kd o"kk] cht vdj.k 4&5°C rkieku] cht idu d le; de rkieku ¼fgedkjh½ d ifr lonu'khy A chtidr le; LoPN] pedhy /ki mi;Dr A

¼l½ Hkfe& cyb nkej] efV;kj Hkfe ty fudkl okyh mi;Dr pH 6.7-8.5

¼n½ [kkn ,o mojd & 80kg u=tu] 60kg QkLQkjl ifr gDV;j A 1@3 u=tu Qy f[kyu d le; n A

¼b½ chtnj & 8kg @gDV;j

¼Q½ mit & 15&20 fDoVy@gDV;j

^^vFkok**

vk;LVj e'k:e d mRiknu fof/k & ¼1x6¾6½

¼1½ [krh dk ek/;e & /kku dk ijk ;k xg dh Hkl h yr g A

¼2½ mipkj djuk & bl xe ikuh mipkj ;k l'kkf/kr xe ikuh mipkj ;k jklk;fud mipkj fof/k l mipkfjr djr g A tl jklk;fud mipkj 25 yhVj ikuh e ½gm dkcMkfte ,o 35 feyh Qkeyhu e 2-5gm ijk dk 12&15 ?kV d fy, Mckr g A

¼3½ chtkb ;k Likfux djuk& 60&70% ueh ijk ;k Hkl h e chtkb djr g A

¼4½ cht c<okj fLFkfr & chtkb fd; x; ek/;e dk ikyhFkhu e Hkjdj th-vkb-rkj e yVdk nr g A 8 fnu d ckn ikyhFkhu Fkyh dkVdj iuh yVdk nr gA mRiknu d{k dh vknrk 70% gkuk pkfg, A lcg&'kke gtkj ;k Li;j l ikuh dk fNMdko djr g A

¼5½ rMkb & Fkfy;k dkVu d 3&4 fnuk e e'k:e mRiknu ikjHk gk tkrk g A io fodflr e'k:e dk gYd gkFkk l ekMdj rMkb dj A

¼6½ mit & 2½kg ek/;e l 2&3kg e'k:e mRiknu gkrk g A

mRrj 19& **[kjirokj fu;=.k dh ;kf=d fof/k;k &** (1x6)

¼1½ [kjirokjk dk gkFk l m[kkMuk (Hand pulling)

¼2½ gkFk l fudkb&xMkb djuk (Hand hoeing)

¼3½ [kjirokjk dk dkVuk (Weeds moving)

¼4½ Ñf=e vkoj.k (Mulching)

¼5½ ck< }kjk (Flooding)

¼6½ vkx yxkdj (Burning)

¼bu fcUnvk dk o.ku dju ij 1x6= 6 vd½

^^vFkok**

dhV fu;=.k d d"k.k fof/k;k& (1x6)

¼1½ [kr e 'kL;ko'k"kk dk u"V dju k &

¼2½ [kjirokjk dk u"V djuk

¼3½ xh"e dkyhu t rkb

¼4½ flpkb

¼5½ Qly pØ

¼6½ dhV ifrjk/kh fdLek dk i;kx

¼o.ku $ mnkgj.k nu ij 1x6= 6 vd½

&&00&&

Set - B

gk;j ld.Mjh Ldy lVhfQdV ijh{kk

Higher Secondary School Certificate Examination

lEiy&i'u i=

SAMPLE PAPER

fo"k; %& (Subject) - Qly mRiknu ,o m|ku 'kkL=

le; 3 ?k.Vk (Time- 3 Hrs)

d{kk %& (Class) - ckjgoh %12oh% **i.kd 75 (M.M.)**

(Instruction) & %funsZ'k%

1- lHkh i'u gy djuk vfuok;Z g A
Attempt all the Question

2- i'u Øekd 01 e 10 vad fu/kkfjr g A ble nk mi[k.M g A [k.M ^^v** e 05 cgfodYih; i'u rFkk [k.M ^^c** e 05 fjDr LFkkuk dh ifr vFkok mfpr lc/k tkfM, A iR;d i'u d fy, 1 vad vkcfVr g A
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. Each question carries 1 marks.

3- i'u Øekd 02 l i'u Øekd 06 rd vfr y?kmRrjh; i'u g A iR;d i'u ij 02 vad vkcfVr g A mRrj dh vf/kdre 'kCn lhek 30 'kCn A
Q. No. 02 to 06 are very short answer type question & carries 02 marks each. Maximum word limit 30 words.

4- i'u Øekd 07 l i'u Øekd 10 rd y?kmRrjh; i'u g A iR;d i'u ij 03 vad vkcfVr g A mRrj dh vf/kdre 'kCn lhek 50 'kCn A
Q. No. 07 to 10 are short answer type question & carries 03 marks each. Maximum word limit 50 words.

5- i'u Øekd 11 l i'u Øekd 14 rd y?kmRrjh; i'u g A iR;d i'u e vkrfjd fodYi g vkj iR;d i'u ij 04 vad vkcfVr g A mRrj dh vf/kdre 'kCn lhek 75 'kCn A
Q. No. 11 to 14 are short answer type question & carries 04 marks each. Each question has internal choice. Maximum word limit 75 words.

6- i'u Øekd 15 l i'u Øekd 17 rd nh?kmRrjh; i'u g A iR;d i'u e vkrfjd fodYi g vkj iR;d i'u ij 05 vd vkcfVr g A mRrj dh vf/kdre 'kCn lhek 100 'kCn A

Q. No. 15 to 17 are long answer type question & carries 05 marks each. Each question has internal choice. Maximum word limit 100 words.

7- i'u Øekd 18 l i'u Øekd 19 rd nh?kmRrjh; i'u g A iR;d i'u e vkrfjd fodYi g vkj iR;d i'u ij 06 vd vkcfVr g A mRrj dh vf/kdre 'kCn lhek 150 'kCn A

Q. No. 18 to 19 are long answer type question & carries 06 marks each. Each question has internal choice. Maximum word limit 150 words.

i'u 1& **[k.M ^v* / Section "A"**

lgh fodYi pudj fyf[k; & (1x5=5)

Choose the correct alternative-

(i) {k= ifLrdk e fy[kr g &

¼v½ uhp l Åij ¼c½ Åij l uhp

¼l½ ck; l nk; ¼n½ nk; l ck;

In the field book it is written :-

(a) From bottom to top (b) from top to bottom

(c) From left to right (d) from Right to left

(ii) ,e-lh-ih-,- g ,d&

¼v½ QQnuk'kh ¼c½ thok.k uk'kh

¼l½ [kjirokj uk'kh ¼n½ mijkDr lHkh

MCPA is a -

(a) Fungi cide (b) Bacteria cide

(c) Weedi cide (d) All of the above

(iii) puk dk ifjokj g &

¼v½ lkyu lh ¼c½ yX;feuklh

¼l½ ØlhQjh ¼n½ xfeuh

The family of Gram is-

(a) Solanaceae (b) Leguminoceae

(c) Cruceferae (d) Graminee

(iv) fuEu ik/k dk okuLifrd uke *,ukdkfM;e vkDlhMVy* g &

¼v½ vke ¼c½ dVgy

¼l½ ve:n ¼n½ dkt

The botanical name *Anacardium occidantle* is of the following plant

(a) Mango (b) Jack fruit

(c) Guava (d) Cashewnut

(v) r;kj tyh dk Hkkj gkrk g &

¼v½ phuh dk 1½ xuk ¼c½ Qy dk 1½ xuk

¼l½ phuh dk 2½ xuk ¼n½ Qy dk 2½ xuk

The weight of prepared Jelly is-

(a) 1½ times of sugar (b) 1½ times of fruit

(c) 2½ times of sugar (d) 2½ times of fruit

[k.M ^^c** @ Section "B"

fjDr LFkkuk dh ifr djk & **¼1x5=5)**

Fill in the blanks -

(i) Øk l LVkQ e ---------- Hk tk, gkrh g A

There are ..... arms in a cross-staff.

(ii) oUnkou xkMu ---------- e fLFkr g A

Vrindavan garden is situated at ..... .

(iii) Vh-oh- i lkj dk ---------- lk/ku g A

T.V. is ..... aids of extension.

(iv) Ldo'k e ---------- ifjj{kh inkFk dk mi;kx gkrk g A

..... is used as preservative in squash

(v) [kk tk ---------- dh fdLe g A

Khaza is varity of ..... .

i'u 2& i"Bh; ty fudkl dh fof/k;k d uke fyf[k, A ¼dkbZ pkj½ ¼½x4=2½

Write the name of method of surface drainage. (any four)

i'u 3& xVh dk ukekfdr fp= cukb; A ¼2½

Draw a well labelled diagram of gootee.

i'u 4& ^^tyh jkrh g A** D;k \ le>kb; A ¼1$1¾2½

"Jelly weeps." why ? Explain.

i'u 5& vkoyk dk ik/k jki.k l{ki e le>kb; A ¼2½

Explain planting of Aonla in brief.

i'u 6& ckulk; dk l{ki e le>kb; A ¼2½

Explain Bonsai in brief.

i'u 7& ty fudkl d dkb N‚ mnn'; fyf[k, A (½x6=3)

Write any six objectives of Drainage.

i'u 8& vki xgvk dk fu;=.k dl djx A ¼3½

How will you control *Phalaris minar*

i'u 9& lk;kchu dh [krh dh tkudkjh fuEu fcUnvk e fyf[k, ‚& (1x3=3)

¼v½ tyok;] ¼c½ chtnj] ¼l½ mit

Write following information of soybean cultivation.

(a) Climate, (b) Seedrate (c) Yield.

i'u 10& ,d 820 QhV dh njh bthfu;j tjhc l ekih x;h A tjhc 3 bp cMh Fkh rk ukih x;h njh dh okLrfod yEckb dh x.kuk dhft, & ¼3½

820 feet distance is measuvel by engineer chain. The chain is defective which is 3 inch longer than the standard chain. Calculate the actual length of measured distance.

i'u 11& tokgj jktxkj ;ktuk dk l{ki e le>kb; A ¼4½

Explain 'Jawahar Rozgar Yojna' in brief.

^^vFkok^^ (OR)

vkipkfjd f'k{k.k ,o vukipkfjd f'k{k.k e vrj fyf[k, A ¼dkb 8½ (½x8)

Write difference between formal and non formal education. (any eight)

i'u 12& Hkkjrh; Ñf"k vuI/kku lLFkku }kjk fodfl r xykc d dkb vkB fdLek d uke fyf[k,A (½x8)

Write any eight varity of Rose which is released by I.A.R.I.

^^vFkok^^ (OR)

,d vPNh gfj;kyh dh dkb vkB fo'k"krk, fyf[k, A (½x8)

Write any eight characteristics of good Lawn.

i'u 13& vkrfjd dkjd vke d ,dkUrj Qyu dk fdl idkj iHkkfor djrk g \ le>kb; ¼4½

How does internal causes effect alternate bearing of Mango. Explain.

^^vFkok^^ (OR)

lkbM xf¶Vx dk lfp= o.ku dhft, A ½2$2¾4½

Describe side grafting with a well labelled diagram.

i'u 14& lrjk Ldo'k cuku dh vko';d lkexh ,o fof/k fyf[k, A ½2$2¾4½

Write essential materials and method of preparing Orange squash.

^^vFkok^^ (OR)

Qy ,o lCth ifjj{k.k d vLFkk;h fl)kr fyf[k, A ¼dkb pkj½ (1x4=4)

Write temporary principles of fruit and vagetable preservation. (any four)

i'u 15& 'kL; ;ktuk dh fo'k"krk, fyf[k, A ¼dkb ikp½ (1x5=5)

Write characteristics of cropping scheme.

^^vFkok^^ (OR)

mRre Qly pØ d vko';d y{k.k fyf[k, A ¼dkb ikp½ (1x5=5)

Write essential criteria of good crop rotation. (Any five)

i'u 16& 'k"d [krh dh ub rduhdh dk l{ki e le>kb; A ¼5½

Explain new technology of dry farming in brief.

^^vFkok^^ (OR)

vrorh; [krh d idkjk dk l{ki e le>kb; A ¼5½

Explain type of inter cropping in brief.

i'u 17& iMh Qly l vf/kd mit ikIr dju d fy, l>ko fyf[k, A ¼dkb nl½

(½x10=5)

Write suggestion for fetching more yield from Ratoon cropping

^^vFkok^^ (OR)

lk;kchu l vf/kd mRiknu ikIr dju d fy, l>ko fyf[k, A ¼dkb nl½

(½x10=5)

Write suggestion for fetching more yield from Soyabean. (any ten)

i'u 18& ljte[kh dh [krh fuEu fcUnvk e l{ki e le>kb; A (1x6=6)

¼v½ egRo] ¼c½ tyok;] ¼l½ Hkfe

¼n½ [kkn ,o mojd ¼b½ chtnj ¼Q½ mit

Wxplain cultivation of Sunflower on following points in brief.

(a) Importance (b) Climate (c) Soil

(d) Manures and fertilizers (d) Seedrate (f) Yield

^^vFkok^^ (OR)

vk;LVj e'k:e d mRiknu fof/k l{ki e le>kb; A (1x6=6)

Explain production method of Oyster Mushroom in brief.

i'u 19& [kjirokj fu;=.k d ;kf=d fof/k;k fyf[k, A ¼dkb N½ (1x6=6)

Write the mechanical method of weed control. (any six)

^^vFkok^^ (OR)

dhV fu;=.k d d"k.k fof/k;k fyf[k, A ¼dkb N½ (1x6=6)

Write the cultural method of insect pest control. (any six)

&&00&&

d{kk 12oh

fo"k;& Qly mRiknu ,o m|ku 'kkL=

^^lEiy mRrj**

mRrj 1& **[k.M ¼v½ oLrfu"V i'u** (1x5=5)

(i) & v

(ii) & l

(iii) & c

(iv) & n

(v) & v

[k.M ¼c½ fjDr LFkku (1x5=5)

(i) pkj

(ii) elj

(iii) J0;&n"; (Audio-Visual)

(iv) ikVf'k;e eVkcksb lYQkbV

(v) dVgy

mRrj 2& i"Bh; ty fudkl dh fo/k;k d uke&

¼1½ vLFkk;h ukfy;k] ¼2½ dV&vkmV ukfy;k

¼3½ LFkk;h ukfy;k] ¼4½ lery Hkfe e eMk dk dkVdj

mRrj 3&

mRrj 4& tyh jkrh g D;kfd & ¼1$1¾2½

¼1½ [kVkl dh vf/kdrk

¼2½ 'kDdj dh deh

mRrj 5& vkoyk d ik/k jki.k & ik/k vrj.k 10 x 10m xM< d vkdkj 1x1x1m] 50kg f.y.m., ½kg lijQkLQV rFkk 0-25kg E;jV vkQ ikVk'k 25 xke ,YMDl p.k

l xM<k Hkjdj tykb e ik/k yxkr g A ¼2 vd½

mRrj 6& cM o{kk dk dkV&NkVdj vR;Ur gh ckuk j[ku dh dyk ckuk; g A
t l fo'kky cjxn o{k dk 0-5 l 1m Åpk cukuk A ¼1$1¾2 vd½

mRrj 7& ty fudkl d mnn'; & (½x6=3 vd)

¼1½ Hkfe dh Hkkfrd n'kk e l/kkj djuk A

¼2½ Hkfe e ok; lpkj djuk A

¼3½ Hkfe e nyny u gku nuk A

¼4½ mfpr rkiØe cuk; j[kuk A

¼5½ gkfudkjd yo.kk dk ,d=.k jkduk A

¼6½ Ñf"k fØ;k, le; ij djuk A

¼7½ ykHk nk;d thok.kvk dh fØ;k'khyrk e of) djuk A

¼8½ MhukbVhfQd'ku dk jkduk A

mRrj 8& xgvk dk fu;=.k & ¼1$2¾3 vd½

¼1½ m[kkMdj (Uprooting)

¼2½ vkblkikV;jku 50% - 75% dk i;kx dj A

mRrj 9& lk;kchu dh [krh& (1x3=3)

¼v½ tyok; & bld fy, xe&ue tyok; mi;Dr gkrk g A cht vdj.k gr 40°F rFkk cf) d fy, 75&80°F rkiØe mi;Dr jgrk g A Qly idr le; o"kk dk gkuk gkfudkjd g A

¼c½ chtnj & 65&80 kg/gDV;j

¼l½ mit & 30&35 fDoVy@gDV;j

mRrj 10& okLrfod yEckb ¾ $\frac{L^1}{L}\times$ ekih x;h njh A ¼1 vd½

$L^1 = 100 + e, L = 100, e = \frac{3}{12} = \frac{1}{4} = 0.2$ QV ¼1 vd½

lgh yEckb $\frac{100.25}{100}\times 820 = 822.05$ QhV ¼1 vd½

¼1$1$1¾3 vd½

mRrj 12& (i) ekguh (ii) xxk (iii) ilk lkfu;k

(iv) lnkcgkj (v) lj[kk (vi) Hkhe

(vii) ltkrk (viii) xytkj (ix) xytkj

(x) l;kn; (xi) ekfguh dh cgu iek

(xii) Lokrh (xiii) gl (xiv) gkehHkkHkk

(xv) fg;kfxuh (xvi) uouhr (xvii) fprou

(xviii) fnYyh fiUlt (½x 8 = 4)

^^vFkok**

vPNh gfj;kyh dh fo'k"krk,¡ & (½x 8 = 4)

¼1½ gfj;kyh ,lh gk tk fd nj lgh ugh] cfYd ikl ln[ku e Hkh lnj yx A

¼2½ fdlh idkj d nxU/k u vk; A

¼3½ ijk o"k Hkj gjk jx cuk jg A

¼4½ dkey rFkk l?ku gk A

¼5½ l[kk d ifr lgu'khy gk A

¼6½ jkx ,o dhV d ifr jk/kd {kerk gk A

¼7½ ?kkl pHku okyh u gk A

¼8½ gfj;kyh ij Nk;k u iM A

mRrj 13& vkrfjd dkjd vke d ,dkUrj Qyu dk bl idkj iHkkfor djrk g &

¼1½ ik/kk dk Qyr LoHkko& vke e igy o"k Qy vx dfydkvk ij ink gkr g] rk vxy o"k vx dfydk Qy ink u djd ijkg ink djrh g] ftll nlj o"k ik/kk fcuk Qyr d jg tkrk g A ifj.kkeLo:i vke e ,dkUrj Qyu gkrk gA

¼2½ ub of) dju dh vknr (Flushing habit)- vke d o{k vuojr :i lof) ugh djr ftld dkj.k ,dkUrj Qlu gk tkrk g A

¼3½ uj rFkk eknk Qyk d vuikr (Sex ratio)- jkekuh 113%1] rkrkijh 15%1] n'kgjh 3%1] yxMk 5%1] lkekuh] rkrkijh fdLe n'kgjh ,o yxMk fdLe dh ryuk e fu;fer Qlu nrk g A vFkkr ujQy dh l[;k eknk Qy dh ryuk e de gku ij ,dkUrj Qyu gkrk g A

¼4½ dkckgkbMV rFkk ukbVk tu dk vuikr (C:N ratio)- C:N ratio 10:1 lokf/kd

vudy g A tc ik/kk e ukbVk tu dh vf/kdrk vkj dkckgkbMV dh deh gk rk ,dkUrj Qyu gkrk g A

¼5½ chtk.k dk fxjuk (Ovule abortion)- Qy cuu dh ikjfHkd coLFkkvk e chtk.k {kh.k gk tkr g vkj Qyr ekjh tkrh g ifj.kkeLo:i ,dkUrj Qyu gkrk gA ¼4½

^^vFkok**

lkbM xf¶Ve dk lfp= o.ku & ½2$2¾4½

¼1½ ey oUr dk p;u djr g A

½2½ lk[k dk p;u ifly ekVkb ,o ,fPNd gk A

¼3½ ey oUr ij xf¶Vx ukbQ dh lgk;rk dVku yxkr g A

¼4½ lk[k ij LQku dh Hkkfr dVku yxrk g A

¼5½ lk[k dk eyoUr ij yxkdj ikyhFkhu iVVh ck/k nr g A

¼6½ 1½ ekg e ik/kk r;kj gk tkrk g A

mRrj 14& **lrjk Ldo'k&** (2+2=4)

vko';d lkexh & Qyk dk jl & 1 yhVj] ikuh & 1 yhVj] phuh & 2kg, lkbfVd vEy & 15gm, ikVf'k;e eVk ckb lYQkbV & 2gm, Qy dh lx/k & 4gm, [kku dk jx & vko';drkulkj A

fof/k& ¼1½ Qyk dk p;u & LoLFk] rktk Qy

½2½ Qyk dk /kkuk ,o Nhyuk A

¼3½ Qyk l jl fudkyuk A

¼4½ pkluh cukuk A

¼5½ pkluh e jl feykuk A

¼6½ jx] jlUl feykuk A

¼7½ futhoh Ñr ckry e Hkjuk A

¼8½ lhy djuk ,o ycy yxkuk A

^^vFkok**

Qy ,o lCth ifjj{k.k d vLFkk;h fl)kr& (1x4=4)

¼1½ **lQkbZ (Cleaning)**- lM&xy rFkk pkV [kk; g, nkxh Qyk ,o lfCt;k dk vyx dj nr g A Qyk dk lkQ djd lko/kkuh iod ifV;k ,o Vkdjk e Hkju l vf/kd le; rd ljf{kr jgr g A

¼2½ **de rkiØe (Low Temperature)**- de rkiØe ij j[ku l l{etho fu"Øh; ;k de lfØ; gkr g ftll Qy ,o lfCt;k vf/kd le; rd ljf{kr jgr g A

¼3½ **vf/kd rkiØe**- lkekU; l vf/kd rkiØe ij Hkh Qy ,o lfCt;k dk vf/kd le; rd ljf{kr j[k ldr g A

¼4½ **ueh rFkk gok l cpko&** Qyk dk B.M 'k"d ,o ueh jfgr okrkoj.k e j[ku ij thok.kvk dk vf/kd iHkko ugh iMrk A ftll Qy ,o lfCt;k vf/kd le; rd ljf{kr jgr g A

¼5½ **gYd dhVk.k uk'kd inkFkk dk i;kx&** Qyk rFkk lfCt;k dk ljf{kr j[ku d fy, phuh] fljdk] ued] ry o lkfM;e ctk,V dk i;kx ykHkdkjh jgrk g A bll vYidky d fy, mUg ljf{kr j[k ldr g A

mRrj 15& **'kL; ;ktuk dh fo'k"krk,¡ &** (1x5=5)

¼1½ ftu [krk e Qly pØ viuk;k tk jgk g mudk {k=Qy leku gkuk pkfg,A

¼2½ ftru o"k dk Qly pØ gk mru gh ;k x.kkd l[;k e [kr gkuk pkfg, A

¼3½ pkj dh Qlyk dk {k=Qy yxHkx 10 ifr'kr gkuk pkfg, A

¼4½ Qly pØ e ijrh Øe j[kuk pkfg, A

¼5½ 'kL; ;ktuk e Hkfe] Je] ith] flpkb] [kkn vkfn dk lefpr mi;kx gkuk pkfg, A

^^vFkok

mRre Qly pØ d vko';d y{k.k& (1x5=5)

¼1½ Qly pØ ,lk gk fd ifro"k Qlyk dk dy {k=Qy yxHkx cjkcj gh gk A

¼2½ Qly pØ vf/kdre fl)krk dk ikyu dj jgk gk A

¼3½ Qly pØ bl idkj dk gkuk pkfg, fd foHkUu iHkko Mkyu oky dkjdk dk /;ku e j[kdj r;kj fd;k tkuk gk A

¼4½ miyC/k llk/kuk dk lefpr <x l mi;kx gk A

¼5½ Hkfe dh mojrk dk gkl U;ure gk A

mRrj 16& **'k"d [krh dh ub rduhdh &** (½x10=5)

¼1½ xh"e dkyhu trkb A

¼2½ eM cUnh A

¼3½ l[kk lgu dju okyh Qly mxkuk tl& Tokj] ckjk] tk] puk] vylh vkfnA

¼4½ cht nj dh ek=k de A

¼5½ ik/k vrj.k vf/kd A

¼6½ thok'k [kkn dk i;kx A

¼7½ ,Vh VkU likbjUV jlk;u tl& flfydku] ,ukDyk] gkbMkDlh yekbu vkfn dk i;kx A

¼8½ okVj gkofLVx A

¼9½ eYp A

¼10½ l[kk lgu dju okyh Qlyk d fdLe tl xg C-306] puk G-24

^^vFkok**

vrorh; [krh d idkj& (1¼x4=5)

¼1½ lekUrj Qly mxkuk (Parallel cropping)- ,d lkFk nk ,lh Qlyk dk yuk ftud fodkl dk <x vyx&vyx rFkk mud chp 'kU; ifr;kfxrk dh ifjfLFkfr gk lekUrj Qly g A mnkgj.k vjgj d lkFk ex dk mn dk yukA

¼2½ lgpj :i e Qly mxkuk (Companion cropping)- bl [krh e ,d Qly nljh Qly dh inkokj ij vlj ugh Mkyrh g A vFkkr nk Qlyk dh inkokj 'k) Qly d cjkcj fey tkrh g A tl xUuk d lkFk xg ;k ljlk dh Qly mxkuk A

¼3½ flujtfVd [krh (Synergetic cropping)- ble e[; Qly rFkk xk.k Qly nkuk dh mit vyx&vyx 'k) Qlyk dh mit dh ryuk e c< tkrh g A tl cjlhe $ ljlk] xUuk $ vky A

¼4½ cgeftyh Qly mxkuk (Multistoryed cropping)- fofHkUu Åpkbi vkj c<okj okyh 3&4 Qly lkFk&lkFk mxkuk gh cgeftyh [krh g A mnkgj.k & ukfj;y&dkyhfep&dkdk&vUukl A

mRrj 17& **iMh Qly l vf/kd mit ikIr dju d l>ko &** (½x10=5)

¼1½ xUu dh mi;Dr fdLe dh cokb tl & C 1148, CO1158

¼2½ e[; Qly Qjojh&ekp d iFke llrkg e vo'; dkV y A

¼3½ [kr dh lQkb dj ifRr;k dk tyk n A

¼4½ ijkuh eMk dk rkM A

¼5½ xUu dh iMh e igyh flpkb nj l dj A

¼6½ 150&200kg u=tu@gDV;j dh nj l n A

¼7½ uljh r;kj dj xi fQfyx dj A

¼8½ 3&4 ckj fudkb xMkb dj A

¼9½ dhV ,o jkx dk fu;=.k dj A

¼10½ ,d gh ckj iMh Qly y A

^^vFkok**

lk;kchu l vf/kd mRiknu ikIr dju d l>ko & (½x10=5)

¼1½ lk;kchu mfpr ty fudl okyh nkeV] efV;kj] VkeV enk e ck; A

¼2½ 65&80kg cht@gDV;j dh nj l ck; A

¼3½ cht dk mipkfjr rFkk jkbtkfc;e dYpj l fuof'kr dj ck; A

¼4½ mUur 'khy fdLe tl& xkjo] nxk] vdj] P.K. 172 vkfn ck; A

¼5½ 20&30kg u=tu] 60&80kg QkLQkjl] ,o 40&60kg ikVk'k ifrgDV;j n A

¼6½ tu&tykb d iFke llrkg rd vo'; ck; A

¼7½ vk';drkulkj flpkb dj A

¼8½ nk ckj fudkb&xMkb dj A ¼cokb d 30 o] 45o fnu½

¼9½ dhVk dk fu;=.k dj A

¼10½ jkxk dk fu;=.k dj A

¼11½ xe&ue tyok; oky {k=k e cokb dj A

mRrj 18& **ljte[kh dh [krh &** ¼1x6¾6½

¼v½ egRo& ry] cyt e 24&30% ry dh ek=k fyukfyd vEy d vf/kd gku d dkj.k dkyLVky dh of) dk jkdrk g A

¼c½ tyok;& 50cm dh okf"kd o"kk] cht vdj.k 4&5°C rkieku] cht idu d le; de rkieku ¼fgedkjh½ d ifr lonu'khy A chtidr le; LoPN] pedhy /ki mi;Dr A

¼l½ Hkfe& cyb nkej] efV;kj Hkfe ty fudkl okyh mi;Dr pH 6.7-8.5

¼n½ [kkn ,o mojd & 80kg u=tu] 60kg QkLQkjl ifr gDV;j A 1@3 u=tu Qy f[kyu d le; n A

¼b½ chtnj & 8kg @gDV;j

¼Q½ mit & 15&20 fDoVy@gDV;j

^^vFkok**

vk;LVj e'k:e d mRiknu fof/k & ¼1x6¾6½

¼1½ [krh dk ek/;e & /kku dk ijk ;k xg dh Hkl h yr g A

½2½ mipkj djuk & bl xe ikuh mipkj ;k l'kkf/kr xe ikuh mipkj ;k jklk;fud mipkj fof/k l mipkfjr djr g A tl jklk;fud mipkj 25 yhVj ikuh e ½gm dkcMkfte ,o 35 feyh Qkeyhu e 2-5gm ijk dk 12&15 ?kV d fy, Mckr g A

¼3½ chtkb ;k Likfux djuk& 60&70% ueh ijk ;k Hkl h e chtkb djr g A

¼4½ cht c<okj fLFkfr & chtkb fd; x; ek/;e dk ikyhFkhu e Hkjdj th-vkb-rkj e yVdk nr g A 8 fnu d ckn ikyhFkhu Fkyh dkVdj iuh yVdk nr gA mRiknu d{k dh vknrk 70% gkuk pkfg, A lcg&'kke gtkj ;k Li;j l ikuh dk fNMdko djr g A

¼5½ rMkb & Fkfy;k dkVu d 3&4 fnuk e e'k:e mRiknu ikjHk gk tkrk g A io fodflr e'k:e dk gYd gkFkk l ekMdj rMkb dj A

¼6½ mit & 2½kg ek/;e l 2&3kg e'k:e mRiknu gkrk g A

mRrj 19& **[kjirokj fu;=.k dh ;kf=d fof/k;k &** (1x6)

¼1½ [kjirokjk dk gkFk l m[kkMuk (Hand pulling)

½2½ gkFk l fudkb&xMkb djuk (Hand hoeing)

¼3½ [kjirokjk dk dkVuk (Weeds moving)

¼4½ Ñf=e vkoj.k (Mulching)

¼5½ ck< }kjk (Flooding)

¼6½ vkx yxkdj (Burning)

¼bu fcUnvk dk o.ku dju ij 1x6= 6 vd½

^^vFkok**

dhV fu;=.k d d"k.k fof/k;k& (1x6)

¼1½ [kr e 'kL;ko'k"kk dk u"V djuk &

¼2½ [kjirokjk dk u"V djuk

¼3½ xh"e dkyhu t rkb

¼4½ flpkb

¼5½ Qly pØ

¼6½ dhV ifrjk/kh fdLek dk i;kx

¼o.ku $ mnkgj.k nu ij 1x6= 6 vd½

&&00&&

Set - C

gk;j ld.Mjh Ldy lVhfQdV ijh{kk

Higher Secondary School Certificate Examination

lEiy&i'u i=

SAMPLE PAPER

fo"k; %& (Subject) - Qly mRiknu ,o m|ku 'kkL=

le; 3 ?k.Vk (Time- 3 Hrs)

d{kk %& (Class) - ckjgoh %12oh% **i.kd 75 (M.M.)**

(Instruction) & %fun'k%

1- lHkh i'u gy djuk vfuok;g A
Attempt all the Question

2- i'u Øekd 01 e 10 vd fu/kkfjr g A ble nk mi[k.M g A [k.M ^^v** e 05 cgfodYih; i'u rFkk [k.M ^^c** e 05 fjDr LFkkuk dh ifr vFkok mfpr lc/k tkfM, A iR;d i'u d fy, 1 vd vkcfVr g A
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. Each question carries 1 marks.

3- i'u Øekd 02 l i'u Øekd 06 rd vfr y?kmRrjh; i'u g A iR;d i'u ij 02 vd vkcfVr g A mRrj dh vf/kdre 'kCn lhek 30 'kCn A
Q. No. 02 to 06 are very short answer type question & carries 02 marks each. Maximum word limit 30 words.

4- i'u Øekd 07 l i'u Øekd 10 rd y?kmRrjh; i'u g A iR;d i'u ij 03 vd vkcfVr g A mRrj dh vf/kdre 'kCn lhek 50 'kCn A
Q. No. 07 to 10 are short answer type question & carries 03 marks each. Maximum word limit 50 words.

5- i'u Øekd 11 l i'u Øekd 14 rd y?kmRrjh; i'u g A iR;d i'u e vkrfjd fodYi g vkj iR;d i'u ij 04 vd vkcfVr g A mRrj dh vf/kdre 'kCn lhek 75 'kCn A
Q. No. 11 to 14 are short answer type question & carries 04 marks each. Each question has internal choice. Maximum word limit 75 words.

6- i'u Øekd 15 l i'u Øekd 17 rd nh?kmRrjh; i'u g A iR;d i'u e vkrfjd fodYi g vkj iR;d i'u ij 05 vd vkcfVr g A mRrj dh vf/kdre 'kCn lhek 100 'kCn A

Q. No. 15 to 17 are long answer type question & carries 05 marks each. Each question has internal choice. Maximum word limit 100 words.

7- i'u Øekd 18 l i'u Øekd 19 rd nh?kmRrjh; i'u g A iR;d i'u e vkrfjd fodYi g vkj iR;d i'u ij 06 vd vkcfVr g A mRrj dh vf/kdre 'kCn lhek 150 'kCn A

Q. No. 18 to 19 are long answer type question & carries 06 marks each. Each question has internal choice. Maximum word limit 150 words.

i'u 1& [k.M ^V* / Section "A"

lgh fodYi pudj fyf[k; & (1x5=5)

Choose the correct alternative-

(i) x.Vj tjhc dh yEckb gkrh g &

¼v½ 100 QhV ¼c½ 66 ehVj

¼l½ 66 QhV ¼n½ 100 ehVj

The length of guntur chain is-

(a) 100 feet (b) 66 meter

(c) 66 feet (d) 100 meter

(ii) v'ox/kk dk ifjokj g A

¼v½ xfeuh ¼c½ yX;feukl h

¼l½ ØlhQjh ¼n½ lkyul h

The family of "Aswegandha" is-

(a) Graminee (b) Leguminoceae

(c) Cruceferae (d) Solanaceae

(iii) LVlVkl kbDyhu g ,d &

¼v½ [kjirokj uk'kh ¼c½ thok.k uk'kh

¼l½ QQn uk'kh ¼n½ mijkDr lHkh

Stroptocyclene is a-

(a) Weedi cide (b) Bactericide

(c) Fungi cide (d) All of the above

(iv) fuEu ik/k dk *lhfM;e Xokt kok* okuLifrd uke g &

¼v½ vke ¼c½ dVgy

¼l½ dkt ¼n½ ve:n

The botanical name *Psidium guajava* is of the following plant

(a) Mango (b) Jaelefruit

(c) Cashewnut (d) Guava

(v) r;kj tyh dh fcDl oY; gkrh g &

¼v½ 75-78^0 ¼c½ 85&88^0

¼l½ 65&68^0 ¼n½ 55&58^0

Brix value of prepared Jelly is -

(a) 75&78^0 (b) 85&88^0

(c) 65&68^0 (d) 55&58^0

[k.M ^c** @ Section "B"

fjDr LFkkuk dh ifr djk & **¼1x5=5)**

Fill in the blanks -

(i) vfHk;Urk tjhc e ---------- Vx gkr g A

There are ..... tags in Engineer chain

(ii) jke fuokl ikd ---------- e fLFkr g A

Ramnivas park is situated at .....

(iii) Qkukxke fjdkM ilkj dk ---------- lk/ku g A

Phonogram record is..... aids of extension.

(iv) vkeikyh ---------- dh fdLe g A

Amrapali is variety of ..... .

(v) VkeVk dpi dk fcDl oY; ---------- gkrk g A

Brix value of Tomato katchup is .....

i'u 2& ty fudk; dk ifjHkkf"kr dhft, A ¼2½

Define drainage.

i'u 3& ty m|ku dk l{ki e le>kb; A ¼2½

Explain water garden in brief.

i'u 4& bukfpx dk ukekfdr fp= cukb; A ¼1$1¾2½

Draw a well labelled diagram of Inarching.

i'u 5& ^tyh ugh terh g A** D;k \ le>kb; A ¼2½

"Jelly do not solidify." Why ? Explain.

i'u 6& dVgy dk ik/k jki.k l{ki e le>kb; A ½2½

Explain planting of Jackfruit in brief.

i'u 7& ty fudkl dh dkb N% fof/k;k d uke fyf[k, A (½x6=3)

Write the name of any six method of drainage.

i'u 8& vjgj dh [krh dh tkudkjh fuEu fcUnvk e fyf[k, A (1x3=3)

¼v½ okuLifrd uke ¼c½ chtnj ¼l½ mit

Write following information of Arhar (Redgram) cultivation.

(a) Botanical name (b) Seed rate (c) Yield

i'u 9& ,d 1248 fyd dh njh x.Vj tjhc l ukih x;h A tjhc 0-4 fyd NkVh Fkh rk ekih x;h njh dh lgh yEckb dh x.kuk dhft, A (3)

Aditance of 1248 link is measured by Guntar chain. The chain is defective which is 0.4 link shorter than standard chain. Calculate the actual lenght of measured distance.

i'u 10& vki ekFkk dk fu;=.k dl djx \ le>kb; A ¼3½

How will you control Motha (*Cyprus rotundus*). Explain.

i'u 11& tokgj jktxkj ;ktuk dk l{ki e le>kb; A ¼4½

Explain 'Jawahar Rozgar Yojna' in brief.

^^vFkok^^ (OR)

vkipkfjd f'k{k.k ,o vukipkfjd f'k{k.k e vrj fyf[k, A ¼dkb 8½ (½x8)

Write difference between formal and non formal education. (any eight)

i'u 12& Hkkjrh; Ñf"k vuI/kku lLFkku }kjk fodfIr xykc dh dkb vkB fdLek d uke fyf[k,A (½x8)

Write any eight varity of Rose which is released by I.A.R.I.

^^vFkok^^ (OR)

,d vPNh gfj;kyh dh dkb vkB fo'k"krk,a fyf[k, A (½x8)

Write any eight characteristics of good Lawn.

i'u 13& vkrfjd dkjd vke d ,dkUrj Qyu dk fdl idkj iHkkfor djrk g \ ¼4½

How does internal causes effect alternate bearing of Mango.

^^vFkok^^ (OR)

lkbM xf¶Vx dk lfp= o.ku dhft, A ½2$2¾4½

Describe side grafting with a well labelled diagram.

i'u 14& lrjk Ldo'k cuku dh vko';d lkexh ,o fof/k fyf[k, A ½2$2¾4½

Write essential materials and method of making Orange squash.

^^vFkok^^ (OR)

Qy ,o lCth ifjj{k.k d vLFkk;h fl)kr fyf[k, A ¼dkb pkj½ (1x4=4)

Write temporary principles of fruit and vagetable preservation. (any four)

i'u 15& 'kL; ;ktuk dh fo'k"krk, fyf[k, A ¼dkb ikp½ (1x5=5)

Write characteristics of cropping scheme.

^^vFkok^^ (OR)

mRre Qly pØ d vko';d y{k.k fyf[k, A ¼dkb ikp½ (1x5=5)

Write essential criteria of good crop rotation. (Any five)

i'u 16& 'k"d [krh dh ub rduhdh dk l{ki e le>kb; A ¼5½

Explain new technology of dry farming in brief.

^^vFkok^^ (OR)

vrorh; [krh d idkjk dk l{ki e le>kb; A ¼5½

Explain type of inter cropping in brief.

i'u 17& iMh Qly l vf/kd mit ikIr dju d fy, l>ko fyf[k, A ¼dkb nl½

(½x10=5)

Write suggestion for fetching more yield from Ratoon cropping

^^vFkok^^ (OR)

lk;kchu l vf/kd mRiknu ikIr dju d fy, l>ko fyf[k, A ¼dkb nl½

(½x10=5)

Write suggestion for fetching more yield from Soyabean. (any ten)

i'u 18& ljte[kh dh [krh fuEu fcUnvk e l{ki e le>kb; A (1x6=6)

¼v½ egRo] ¼c½ tyok;] ¼l½ Hkfe

¼n½ [kkn ,o mojd ¼b½ chtnj ¼Q½ mit

Wxplain cultivation of Sunflower on following points in brief.

(a) Importance (b) Climate (c) Soil

(d) Manures and fertilizers (d) Seedrate (f) Yield

^^vFkok (OR)**

vk;LVj e'k:e d mRiknu fof/k l{ki e le>kb; A (1x6=6)

Explain production method of Oyster Mushroom in brief.

i'u 19& [kjirokj fu;=.k d ;kf=d fof/k;k fyf[k, A ¼dkb N½ (1x6=6)

Write the mechanical method of weed control. (any six)

^^vFkok (OR)**

dhV fu;=.k d d"k.k fof/k;k fyf[k, A ¼dkb N½ (1x6=6)

Write the cultural method of insect pest control. (any six)

&&00&&

d{kk 12oh

fo"k;& Qly mRiknu ,o m|ku 'kkL=

^^lEiy mRrj**

mRrj 1& **[k.M ¼v½ oLrfu"V i'u** (1x5=5)

(i) & l

(ii) & n

(iii) & c

(iv) & n

(v) & l

[k.M ¼c½ fjDr LFkku (1x5=5)

(i) 9

(ii) t;ij

(iii) J0;

(iv) vke

(v) 28 l 30

mRrj 2& Qly dh inkokj c<ku gr Hkfe dh lrg ;k v/kk lrg l vfrfjDr ty dk Ñf=e :i l ckgj fudkyuk ty fudkl dgykrk g A ¼2½

mRrj 3& ty m|ku& ty m|ku tyk'k; dk y?k :i gh gkrk g A m|ku d lcl uhp oky LFkku xgjk dj tyk'k; cuk;k tkrk g A ble ty e mxu oky ik/k t l dey] den vkfn yxk;k tkrk g A

mRrj 4& ¼2½

mRrj 5& tyh ugh terh g D;kfd& ¼1$1¾2 vd½

¼1½ tyh d fy, vR;f/kd 'kDdj dk i;kx djuk A

¼2½ tyh d fy, /khj&/khj nj rd rFkk vf/kd idkuk A

mRrj 6& dVgy d ik/k jki.k & ik/k vrj.k 10x10m, xM< dk vkdkj 1x1x1 m r;kj dj ble 50kg F.Y.M. 0.5kg E;jV vkQ ikVk'k rFkk 25gm 5% ,YVDl p.k feykdj Hkj nr g A ik/k tykb l flrEcj rd yxkr g A ½2 vd½

mRrj 7& ty fudkl d fof/k;k d uke & (½x6=3 vd)

¼1½ vLFkk;h ukfy;k ¼2½ dV&vkmV ukfy;k

¼3½ LFkk;h ukfy;k ¼4½ eMk dk dkVdj

¼5½ Vkby MUl ¼6½ eky MUl

¼7½ LVku MUl ¼8½ ikbi MUl

¼9½ iky MUl

mRrj 8& vjgj dh [krh ¼1x3=3 vd½

¼1½ okuLifrd uke & dtul dtku (Cajanus Cajan)

¼c½ chtnj & 12&15 kg/gDV;j

¼l½ mit & 15&18 fDoVy@gDV;j

mRrj 9& lgh njh ¾ $\frac{L^1}{L}\times$ ekih x;h njh A ¼1 vd½

$L^1 = L - e = 100 - 0.4 = 99.6$ fyd ¼1 vd½

$L = 100$

lgh eki ¾ $\frac{99.6}{100}\times 1248 = 1243$ fyd ¼1 vd½

¼1$1$1¾3 vd½

mRrj 10& ekFkk dk fu;=.k &

¼1½ xh"e dkyhu trkb & ¼1 vd½

¼2½ 2-4 D 4.5kg, 600&800 yhVj ikuh e ?kkydj ekFkk ij fNMdko dj ;k 2-8kg ,lVe dk 1100 fyVj ikuh e ?kkydj io vdj.k fNMdko dj A ½2 vd½

mRrj 11& bl ;ktuk dk Hkkjr d iFke i/kkue=h Lo- Jh tokgj yky ug: dh tUe 'krkCnh o"k 1889&90 e ykx fd;k x;k Fkk A bld ek/;e l xkeh.k {k=k e

xjhch j[kk l uhp thou ;kiu dj jg ifjokjk d cjktxkj lnL;k dk jktxkj miyC/k djk;k tkrk g A ;g ;ktuk NAREGA d uke l tkuk tkrk g A bll xkeh.k {k= e ,lh lkenkf;d ifjlEifRr;k e ltu tk mudh vkfFkd rFkk lkekftd fLFkfr d ln<hdj.k e lgk;d g] vkfFkd c<krjh gr mRijd gk rFkk xkeh.k xjhck d vkfFkd Lrj e LFkk;h l/kkj yku e mi;kxh g A ¼4½

^^vFkok**

Ø-	**vkipkfjd f'k{k.k**		**vukipkfjd f'k{k.k**
1-	f'k{k.k ikB;Øe ij dfUnr jgrk g A	1-	f'k{k.k dk; vko';drk ,o leL;k ,o leL;k eyd gkrk g A
2-	ikB;Øe io fu/kkfjr gkrk g A	2-	ikB;Øe f'k{kkFkh dh vko';drk& ulkj cuk; tkr g A
3-	fl)kr ,o i;kx nkuk crk; tkr g A	3-	djd lh[ku dk fl)kr ij vk/kkfjr gkrk g A
4-	lHkh f'k{kkFkh yxHkx leku me d gkr g A	4-	f'k{kkFkh fofHkUu me d tl&cPp] c<] 0;Ld vkfn gkr g A
5-	Nk= dk f'k{kd d fun'kkulkj pyuk iMrk g A	5-	f'k{kkfFk;k dh lgefr l gh fn'kk fun'ku gkrk g A
6-	Nk= fo"k;k dk v/;;u djr g A	6-	f'k{kkFkh leL;kvk dk v/;;u djr g A
7-	Nk= fMIykek ;k fMxh l lcf/kr gkrh g A	7-	iek.k i=k l dkb lc/k ugh gkrk A
8-	lLFkk d fu;ek dk vuikyu vko';d g A	8-	f'k{kkFkh cgr dn Lor= gkr g A
9-	e[; /;; fo|kfFk;k d 0;fDrRo dk fodkl djuk g A	9-	0;kogkfjd thou e iHkko Mkyuk g A
10-	vf/kdk'k f'k{k.k dk; d{kk rd gh lhfer jgrk g A	10-	cgr lk f'k{k.k dk; d{kk d ckgj Hkh gkrk g A
11-	f'k{k.k f'k{kk 'kkL= fl)krk }kjk lpkfyr gkrk g A	11-	f'k{k.k ilkj f'k{kk d fl)krk ij lpkfyr gkrk g A
12-	vf/kdkj v/;kdik d gkFk e gkrk g A	12-	vf/kdkj ik;% f'k{kkfFk;k d gkFk e gkrk g A (½x 8 = 4)

mRrj 12& (i) ekguh (ii) xxk (iii) ilk lkfu;k

(iv) lnkcgkj (v) lj[kk (vi) Hkhe

(vii) ltkrk (viii) xytkj (ix) xytkj

(x) l;kn; (xi) ekfguh dh cgu iek

(xii) Lokrh (xiii) gl (xiv) gkehHkkHkk

(xv) fg;kfxuh (xvi) uouhr (xvii) fprou

(xviii) fnYyh fiUlt (½x 8 = 4)

^^vFkok**

vPNh gfj;kyh dh fo'k"krk,¡ & (½x 8 = 4)

¼1½ gfj;kyh ,lh gk tk fd nj lgh ugh] cfYd ikl ln[ku e Hkh lnj yx A

¼2½ fdlh idkj d nxU/ku vk; A

¼3½ ijk o"k Hkj gjk jx cuk jg A

¼4½ dkey rFkk l?ku gk A

¼5½ l[kk d ifr lgu'khy gk A

¼6½ jkx ,o dhV d ifr jk/kd {kerk gk A

¼7½ ?kkl pHku okyh u gk A

¼8½ gfj;kyh ij Nk;k u iM A

mRrj 13& vkrfjd dkjd vke d ,dkUrj Qyu dk bl idkj iHkkfor djrk g &

¼1½ ik/kk dk Qyr LoHkko& vke e igy o"k Qy vx dfydkvk ij ink gkr g] rk vxy o"k vx dfydk Qy ink u djd ijkg ink djrh g] ftll nlj o"k ik/kk fcuk Qyr d jg tkrk g A ifj.kkeLo:i vke e ,dkUrj Qyu gkrk gA

¼2½ ub of) dju dh vknr (Flushing habit)- vke d o{k vuojr :i l of) ugh djr ftld dkj.k ,dkUrj Qlu gk tkrk g A

¼3½ uj rFkk eknk Qyk d vuikr (Sex ratio)- jkekuh 113%1] rkrkijh 15%1] n'kgjh 3%1] yxMk 5%1] lkekuh] rkrkijh fdLe n'kgjh ,o yxMk fdLe dh ryuk e fu;fer Qyu nrk g A vFkkr ujQy dh l[;k eknk Qy dh ryuk e de gku ij ,dkUrj Qyu gkrk g A

¼4½ dkckgkbMV rFkk ukbVktu dk vuikr (C:N ratio)- C:N ratio 10:1 lokf/kd vudy g A tc ik/kk e ukbVktu dh vf/kdrk vkj dkckgkbMV dh deh gk rk ,dkUrj Qyu gkrk g A ¼4½

¼5½ chtk.k dk fxjuk (Ovule abortion)- Qy cuu dh ikjfHkd coLFkkvk e chtk.k {kh.k gk tkr g vkj Qyr ekjh tkrh g ifj.kkeLo:i ,dkUrj Qyu gkrk gA

^^vFkok**

lkbM xf¶Ve dk lfp= o.ku & ½2$2¾4½

¼1½ ey oUr dk p;u djr g A

¼2½ lk[k dk p;u ifly ekVkb ,o ,fPNd gk A

¼3½ ey oUr ij xf¶Vx ukbQ dh lgk;rk dVku yxkr g A

¼4½ lk[k ij LQku dh Hkkfr dVku yxrk g A

¼5½ lk[k dk eyoUr ij yxkdj ikyhFkhu iVVh ck/k nr g A

¼6½ 1½ ekg e ik/kk r;kj gk tkrk g A

mRrj 14& **lrjk Ldo'k&** (2+2=4)

vko';d lkexh & Qyk dk jl & 1 yhVj] ikuh & 1 yhVj] phuh & 2kg, lkbfVd vEy & 15gm, ikVf'k;e eVk ckb lYQkbV & 2gm, Qy dh lx/k & 4gm, [kku dk jx & vko';drkulkj A

fof/k& ¼1½ Qyk dk p;u & LoLFk] rktk Qy

½2½ Qyk dk /kkuk ,o Nhyuk A

¼3½ Qyk l jl fudkyuk A

¼4½ pkluh cukuk A

¼5½ pkluh e jl feykuk A

¼6½ jx] jlUl feykuk A

¼7½ futhoh Ñr ckry e Hkjuk A

¼8½ lhy djuk ,o ycy yxkuk A

^^vFkok**

Qy ,o lCth ifjj{k.k d vLFkk;h fl)kr& (1x4=4)

¼1½ **lQkbZ (Cleaning)**- lM&xy rFkk pkV [kk; g, nkxh Qyk ,o lfCt;k dk vyx dj nr g A Qyk dk lkQ djd lko/kkuh iod ifV;k ,o Vkdjk e Hkju l vf/kd le; rd ljf{kr jgr g A

¼2½ **de rkiØe (Low Temperature)-** de rkiØe ij j[ku l l{etho fu"Øh; ;k de lfØ; gkr g ft ll Qy ,o lfCt;k vf/kd le; rd ljf{kr jgr g A

¼3½ **vf/kd rkiØe-** lkekU; l vf/kd rkiØe ij Hkh Qy ,o lfCt;k dk vf/kd le; rd ljf{kr j[k ldr g A

¼4½ **ueh rFkk gok l cpko&** Qyk dk B.M 'k"d ,o ueh jfgr okrkoj.k e j[ku ij thok.kvk dk vf/kd iHkko ugh iMrk A ft ll Qy ,o lfCt;k vf/kd le; rd ljf{kr jgr g A

¼5½ **gYd dhVk.k uk'kd inkFkk dk i;kx&** Qyk rFkk lfCt;k dk ljf{kr j[ku d fy, phuh] fljdk] ued] ry o lkfM;e ctk,V dk i;kx ykHkdkjh jgrk g A bll vYidky d fy, mUg ljf{kr j[k ldr g A

mRrj 15& **'kL; ;ktuk dh fo'k"krk,¡ &** (1x5=5)

¼1½ ftu [krk e Qly pØ viuk;k tk jgk g mudk {k=Qy leku gkuk pkfg,A

¼2½ ftru o"k dk Qly pØ gk mru gh ;k x.kkd l[;k e [kr gkuk pkfg, A

¼3½ pkj dh Qlyk dk {k=Qy yxHkx 10 ifr'kr gkuk pkfg, A

¼4½ Qly pØ e ijrh Øe j[kuk pkfg, A

¼5½ 'kL; ;ktuk e Hkfe] Je] ith] flpkb] [kkn vkfn dk lefpr mi;kx gkuk pkfg, A

^^vFkok**

mRre Qly pØ d vko';d y{k.k& (1x5=5)

¼1½ Qly pØ ,lk gk fd ifro"k Qlyk dk dy {k=Qy yxHkx cjkcj gh gk A

¼2½ Qly pØ vf/kdre fl)krk dk ikyu dj jgk gk A

¼3½ Qly pØ bl idkj dk gkuk pkfg, fd foHkUu iHkko Mkyu oky dkjdk dk /;ku e j[kdj r;kj fd;k tkuk gk A

¼4½ miyC/k llk/kuk dk lefpr <x l mi;kx gk A

¼5½ Hkfe dh mojrk dk gkl U;ure gk A

mRrj 16& **'k"d [krh dh ub rduhdh &** (½x10=5)

¼1½ xh"e dkyhu trkb A

¼2½ eM cUnh A

¼3½ l[kk lgu dju okyh Qly mxkuk tl& Tokj] cktjk] tk] puk] vylh vkfnA

¼4½ cht nj dh ek=k de A

¼5½ ik/k vrj.k vf/kd A

¼6½ thok'k [kkn dk i;kx A

¼7½ ,Vh VkU likbjUV jlk;u tl& flfydku] ,ukDyk] gkbMkDlh yekbu vkfn dk i;kx A

¼8½ okVj gkofLVx A

¼9½ eYp A

¼10½ l[kk lgu dju okyh Qlyk d fdLe tl xg C-306] puk G-24

^^vFkok**

vrorh; [krh d idkj& (1¼x4=5)

¼1½ lekukUrj Qly mxkuk (Parallel cropping)- ,d lkFk nk ,lh Qlyk dk yuk ftud fodkl dk <x vyx&vyx rFkk mud chp 'kU; ifr;kfxrk dh ifjfLFkfr gk lekUrj Qly g A mnkgj.k vjgj d lkFk ex dk mn dk yukA

¼2½ lgpj :i e Qly mxkuk (Companion cropping)- bl [krh e ,d Qly nljh Qly dh inkokj ij vlj ugh Mkyrh g A vFkkr nk Qlyk dh inkokj 'k) Qly d cjkcj fey tkrh g A tl xUuk d lkFk xg ;k ljlk dh Qly mxkuk A

¼3½ flujtfVd [krh (Synergetic cropping)- ble e[; Qly rFkk xk.k Qly nkuk dh mit vyx&vyx 'k) Qlyk dh mit dh ryuk e c< tkrh g A tl cjlhe $ ljlk] xUuk $ vky A

¼4½ cgeftyh Qly mxkuk (Multistoryed cropping)- fofHkUu Åpkb vkj c<okj okyh 3&4 Qly lkFk&lkFk mxkuk gh cgeftyh [krh g A mnkgj.k & ukfj;y&dkyhfep&dkdk&vUukl A

mRrj 17& **iMh Qly l vf/kd mit ikIr dju d l>ko &** (½x10=5)

¼1½ xUu dh mi;Dr fdLe dh cokb tl & C 1148, CO1158

¼2½ e[; Qly Qjojh&ekp d iFke llrkg e vo'; dkV y A

¼3½ [kr dh lQkb dj ifRr;k dk tyk n A

¼4½ ijkuh eMk dk rkM A

¼5½ xUu dh iMh e igyh flpkb nj l dj A

¼6½ 150&200kg u=tu@gDV;j dh nj l n A

¼7½ uljh r;kj dj xi fQfyx dj A

¼8½ 3&4 ckj fudkb xMkb dj A

¼9½ dhV ,o jkx dk fu;=.k dj A

¼10½ ,d gh ckj iMh Qly y A

^^vFkok**

lk;kchu l vf/kd mRiknu iklr dju d l>ko & (½x10=5)

¼1½ lk;kchu mfpr ty fudl okyh nkeV] efV;kj] VkeV enk e ck; A

¼2½ 65&80kg cht@gDV;j dh nj l ck; A

¼3½ cht dk mipkfjr rFkk jkbtkfc;e dYpj l fuof'kr dj ck; A

¼4½ mUur 'khy fdLe tl& xkjo] nxk] vdj] P.K. 172 vkfn ck; A

¼5½ 20&30kg u=tu] 60&80kg QkLQkjl] ,o 40&60kg ikVk'k ifrgDV;j n A

¼6½ tu&tykb d iFke llrkg rd vo'; ck; A

¼7½ vk';drkulkj flpkb dj A

¼8½ nk ckj fudkb&xMkb dj A ¼cokb d 30 o] 45o fnu½

¼9½ dhVk dk fu;=.k dj A

¼10½ jkxk dk fu;=.k dj A

¼11½ xe&ue tyok; oky {k=k e cokb dj A

mRrj 18& **ljte[kh dh [krh &** ¼1x6¾6½

¼v½ egRo& ry] cyt e 24&30% ry dh ek=k fyukfyd vEy d vf/kd gku d dkj.k dkyLVky dh of) dk jkdrk g A

¼c½ tyok;& 50cm dh okf"kd o"kk] cht vdj.k 4&5°C rkieku] cht idu d le; de rkieku ¼fgedkjh½ d ifr lonu'khy A chtidr le; LoPN] pedhy /ki mi;Dr A

¼l½ Hkfe& cyb nkej] efV;kj Hkfe ty fudkl okyh mi;Dr pH 6.7-8.5

¼n½ [kkn ,o mojd & 80kg u=tu] 60kg QkLQkjl ifr gDV;j A 1@3 u=tu

Qy f[kyu d le; n A

¼b½ chtnj & 8kg @gDV;j

¼Q½ mit & 15&20 fDoVy@gDV;j

^^vFkok**

vk;LVj e'k:e d mRiknu fof/k & ¼1x6¾6½

¼1½ [krh dk ek/;e & /kku dk ijk ;k xg dh Hkklh yr g A

¼2½ mipkj djuk & bl xe ikuh mipkj ;k l'kkf/kr xe ikuh mipkj ;k jklk;fud mipkj fof/k l mipkfjr djr g A tl jklk;fud mipkj 25 yhVj ikuh e ½gm dkcMkfte ,o 35 feyh Qkeyhu e 2-5gm ijk dk 12&15 ?kV d fy, Mckr g A

¼3½ chtkb ;k Likfux djuk& 60&70% ueh ijk ;k Hkklh e chtkb djr g A

¼4½ cht c<okj fLFkfr & chtkb fd; x; ek/;e dk ikyhFkhu e Hkjdj th-vkb-rkj e yVdk nr g A 8 fnu d ckn ikyhFkhu Fkyh dkVdj iuh yVdk nr gA mRiknu d{k dh vknrk 70% gkuk pkfg, A lcg&'kke gtkj ;k Li;j l ikuh dk fNMdko djr g A

¼5½ rMkb & Fkfy;k dkVu d 3&4 fnuk e e'k:e mRiknu ikjHk gk tkrk g A io fodflr e'k:e dk gYd gkFkk l ekMdj rMkb dj A

¼6½ mit & 2½kg ek/;e l 2&3kg e'k:e mRiknu gkrk g A

mRrj 19& **[kjirokj fu;=.k dh ;kf=d fof/k;k &** (1x6)

¼1½ [kjirokjk dk gkFk l m[kkMuk (Hand pulling)

¼2½ gkFk l fudkb&xMkb djuk (Hand hoeing)

¼3½ [kjirokjk dk dkVuk (Weeds moving)

¼4½ Ñf=e vkoj.k (Mulching)

¼5½ ck< }kjk (Flooding)

¼6½ vkx yxkdj (Burning)

¼bu fcUnvk dk o.ku dju ij 1x6= 6 vd½

^^vFkok**

dhV fu;=.k d d"k.k fof/k;k& (1x6)

¼1½ [kr e 'kL;ko'k"kk dk u"V djuk &

¼2½ [kjirokjk dk u"V djuk

¼3½ xh"e dkyhu t rkb

¼4½ flpkb

¼5½ Qly pØ

¼6½ dhV ifrjk/kh fdLek dk i;kx

¼o.ku $ mnkgj.k nu ij 1x6= 6 vd½

&&00&&