Ouestion Booklet No..... stal No. of Printed Pages: 28 (To be filled up by the candidate by blue/black ball-point pen) coll No. oil No. (Write the digits in words) erial No. of OMR Answer Sheet entre Code No. (Signature of Invigilator)

INSTRUCTIONS TO CANDIDATES

(Use only blue/black ball-point pen in the space above and on both sides of the OMR Answer Sheet)

- 1. Within 30 minutes of the issue of the Question Booklet, check the Question Booklet to ensure that it contains all the pages in correct sequence and that no page/question is missing. In case of faulty Question Booklet bring it to the notice of the Supermental It/Invigilators immediately to obtain a fresh Question Booklet.
- Examination Hall except the Admit Card. ank, inside the Do not bring any loose paper, written
- ilded or reutilated. A second OMR Answer uld not be A separate OMR Answer Sheet is gi will be evaluated. Sheet shall not be provided. Only
- Write all the entries by blue/black ball pun in the space provided above.
- On the front page of the OMR Answer Sheet, write by per your Roll Number in the space provided at the top, and by darkening the circles at the bottom. Also, write the Question Booklet Number, Centre Code Number and the Set Number (wherever applicable) in appropriate
- No overwriting is allowed in the entries of Roll Lo., Question Booklet No. and Set No. (if any) on OMR Answer Sheet and also Roll No. and OMR Answer Sheet Serial No. on the Question Booklet.
- 7. Any change in the aforesaid entries is to be verified by the Invigilator, otherwise it will be taken as
- Each question in this Booklet is followed by four alternative answers. For each question, you are to record the correct option on the OMR Answer Sheet by darkening the appropriate circle in the corresponding row of the OMR Answer Sheet, by ball-point pen as mentioned in the guidelines given on the first page of the OMR Answer Sheet.
- For each question, darken only one circle on the OMR Answer Sheet. If you darken more than one circle or darken a circle partially, the answer will be treated as incorrect.
- Note that the answer once filled in ink cannot be changed. If you do not wish to attempt a question, leave all the circles in the corresponding row blank (such question will be awarded zero mark).
- For rough work, use the inner back page of the title cover and the blank page at the end of this Booklet
- On completion of the Test, the Candidate must handover the OMR Answer Sheet to the Invigilator 2. in the examination room/hall. However, candidates are allowed to take away Text Booklet and copy of OMR Answer Sheet with them.
- Candidates are not permitted to leave the Examination Hall until the end of the Test. 3.
- If a candidate attempts to use any form of unfair means, he/she shall be liable to such punishment as the University may determine and impose on him/her.
- ायून निर्देश हिन्दी में अन्तिम आवरण-पृष्ठ पर दिये गए हैं।

SPACE FOR ROUGH WORK रफ़ कार्य के लिए जगह

No. of Questions: 120

Time: 2 Hours Full Marks: 360

Note:

- (1) Attempt as many questions as you can. Each question carries 3 marks.
 One mark will be deducted for each incorrect answer. Zero mark will be awarded for each unattempted question.
- (2) If more than one alternative answers seem to be approximate to the correct answer, choose the closest one.
- 1. A life cycle in which the dominant phase is a sporophyte is known as
 - (1) Sporophytic
- (2) Haplontic
- (3) Diplontic
- (4) Diplobiontic

- 2. Fucoxanthin pigment is found in
 - (1) Green algae

(2) Red algae

(3) Blue-green algae

- (4) Brown algae
- 3. Synzoospore is found in
 - (1) Vaucheria
- (2) Oedogonium
- (3) Spirogyra
- (4) Nostoc

(P.T.O.)

4.	Slimy and slippery nature of Nosto	c is due to covering of	
	(1) Mucilage (2) Gelatin	(3) Mucous (4) Jelly	
5.	When the entire body of a fungus structure, the organism is called (1) Epicarpic (2) Holocarpic	is used in the formation of reproduction (3) Acarpic (4) Eucarpic	ct
6.	A flask-shaped fruiting body of Aso	comycotina is called	
	(1) Perithecium	(2) Apothecium	
	(3) Cleistothecium	(4) Sclerotium	
7.	The flagella on the zoospores of Al (1) Equal terminal	bugo are (2) Unequal lateral	
	(3) Unequal terminal	(4) Equal lateral	
8.	Which one of the following is com	- 10 Note: \$5000	
	(1) Penicillium (2) Aspergillus	(3) Erysiphe (4) Mucor	
9.	Which one of the following is calle	d 'Reindeer's moss'?	
	(1) Usnea (2) Cladonia	(3) Parmelia (4) Loberia	

2

(P.T.O.)

10.	S.	R. Kashyap is	a s	cientist famous	s for	59		
	(1)	Bryology	(2)	Mycology	(3)	Phycology	(4)	Pteridology
				¥				
11.	Wh	nich one of the	foll	owing species	of R	<i>ccia</i> is aquatic	?	
	(1)	Riccia discolor	•		(2)	Riccia fluitans	;	
	(3)	Riccia crystalli	ina		(4)	Riccia Himala	yens	nis
12.	The	e air cavities in s which are ca	the	capsule of mo	ss ai	re partitioned v	vith	delicate strands of
	(1)	Trabeculae			(2)	Compartment	s	
	(3)	Partitions			(4)	Septa		
13.	The	gametophyte	of n	noss is				
	(1)	Capsule	(2)	Protonema	(3)	Seta	(4)	Zygote
14.	Wh	ich one of the	follo	owing does not	hav	e a pith?		
	(1)	Protostele	(2)	Dictyostele	(3)	Solenostele	(4)	Siphonostele
15.	Whi	ich one of the	follo	owing is a fossi	i1?			
	(1)	Selaginella	(2)	Rhynia	(3)	Pteris	(4)	Adiantum

3

16.	Gametangia of ferns ar	e produced or	1			
	(1) Prothallus (2) S	Sorus	(3)	Leaves	(4)	Ramenta
17.	Which one of the follow	wing is called	ʻwal	king fern'?		
	(1) Pteris (2)	Adiantum	(3)	Ophioglossum	(4)	Selaginella
18.	The enzyme involved in	n feedback inh	ibit	ion are called		
	(1) Holoenzyme		(2)	Apoenzyme		
	(3) Coenzyme		(4)	Allosteric enzy	me	
19.	Trimerous flowers, sup	erior ovary an	d a	xile placentatio	n is	found in
	(1) Amaranthaceae		(2)	Liliaceae		
	(3) Apocyanaceae		(4)	Rubiaceae		
20.	Rice fruit is an example	le of				
	(1) Achene (2)	Cypsela	(3)	Cremocarp	(4)	Caryopsis
21.	Pentoxylon was discove	ered by Birbal	Sah	nni from		
	(1) Nilgiri Hills		(2)	Western Ghat		42
	(3) Rajmahal Hills		(4)	Valley of Flow	ers	
22.	Floral buds are modified	ed into tendril	s in			
	(1) Bignonia (2)	Antigonon	(3)	Coccinia	(4)	Clematis

23.	Perisperm in seeds develops from					
	(1) Funiculus (2) Hilum	(3)	Nucellus	(4)	Obturator	e.
24.	Monosporic type of embryo sac deve	lopr	ment is found in	n		
	(1) Lilium (2) Allium	(3)	Oenothera	(4)	Fritillaria	
25.	Diploxylic vascular bundle is found	in				
	(1) Cycas leaves	(2)	Cycas root			
	(3) Pinus needle	(4)	Gnetum leaves			
26.	Stylopodium is found in the family					
	(1) Poaceae	(2)	Cyperaceae			
	(3) Apiaceae	(4)	Ranunculaceae	9	*	
27.	Betalins are present in the family	W				
	(1) Brassicaceae	(2)	Cactaceae			
	(3) Solanaceae	(4)	Apocynaceae			
28.	The resin duct of a gymnospermous	ste	m is an exampl	le of	ī	-
	(1) Intercellular space	(2)	Schizogenous	cavi	ty	
	(3) Lysigenous cavity	(4)	Big vacuole			
(55)	5					(P.T.O.)

29.	The wing on the seed of Pinus is de	veloped from
	(1) Integument	(2) Nucellus
	(3) Ovuliferous scale	(4) Carpellary scale
30.	The ovuliferous scale of Pinus is a p	part of
	(1) Megasporophyll	(2) Microsporophyll
	(3) Ovule	(4) Dwarf shoot
31.	Wood is classified as porous if it co	ntains
	(1) Vessels	(2) Tracheids
	(3) Companion cells	(4) Sclereids
32.	Which one of the following statemer	nts is not true for family Poaceae?
	(1) Fistular stem	
	(2) Spikelet inflorescence	
	(3) Ovary with two feathery stigma	
	(4) Gynoecium bicarpellary	
33.	One chambered, one seeded fruit dev	eloped from a bicarpellary inferior ovary is
	(1) Asteraceae	(2) Ranunculaceae
	(3) Solanaceae	(4) Amaranthaceae
(55)	6	

(P.T.O.)

34.	Cystoliths are usually found in fam	ly	
	(1) Acanthaceae	(2) Solanaceae	
	(3) Asclepiadaceae	(4) Poaceae	
35.	Which one of the following states Rubiaceae?	ments is wrong with regard to	family
	(1) Exstipulate leaves	(2) Inferior ovary	
	(3) Axile placentation	(4) Actinomorphic flower	
36.	Which one of the following plant is	related to anther culture?	
	(1) Calotropis procera	(2) Datura innoxia	
	(3) Ocimum sanctum	(4) Jatropha curcas	
37.	The first 5-carbon dicarboxylic acid	in Kreb's cycle is	
	(1) Acetyl CoA	(2) Citric acid	
	(3) α-ketoglutaric acid	(4) Oxaloacetic acid	
38.	'Physiognomy' is the study of		
	(1) Distribution of vegetation in rela	tion to temperature	
	(2) Effects of light on the flowering	of plants	
	(3) General appearance of vegetation		
	(4) Seasonal change in vegetation		

39.	The zone of atmosphere which conta	ains protective ozone layer is known as
	(1) Troposphere	(2) Thermosphere
	(3) Stratosphere	(4) Mesosphere
40.	'Blue baby' syndrome is caused due	to pollution by
	(1) Nitrates (2) Fluorides	(3) Cyanides (4) Arsenic
41.	The amount of water retained by the water is called as	ne soil after the drainage of gravitation
	(1) Wilting coefficient	(2) Soil moisture content
	(3) Field capacity	(4) Combined water
42.	Psychrometer is the instrument used	d to determine
	(1) Light intensity	(2) Relative humidity
	(3) Water potential	(4) Wind speed
43.	Air pollutant-photochemical oxidants	s include
	(1) Nitrous oxide, nitric oxide and n	nitric acid
	(2) Oxygen, chlorine and nitric acid	
	(3) Carbon monoxide, dust and sulp	phur dioxide
	(4) Ozone, peroxyacetyl nitrate and	aldehydes

A secondary poll-	utant is		_ s	
(1) CO	(2) CO ₂	(3) O ₃	(4) SO ₂	
The term 'niche'	tells us			
(1) How species	differ in their ter	mporal activitie	es with the annual cy	cle
(2) How a specie	s population is s	specialized with	nin a community	
(3) About vertical	stratification ar	nd light variab	ility in a vegetation	
(4) Pattern of dis	tribution of indiv	viduals within	a community	
dissolved materia	ls is known as			tracts of
Tiny liquid or soli	d particles floati	ng in the air	are known as	
(1) Clay particles		(2) Aerosol	s	
(3) Grit		(4) Jackson	n candle	
175786 184086 N				
Contrar appearant to contrar and	cale			
(3) Winkler scale		(4) Raunki	aer scale	
		9		(P.T.O.)
	(1) CO The term 'niche' (1) How species (2) How a species (3) About vertical (4) Pattern of dis Liquid that seeps dissolved material (1) Pellet Tiny liquid or soli (1) Clay particles (3) Grit Density of smoke	The term 'niche' tells us (1) How species differ in their term (2) How a species population is so (3) About vertical stratification are (4) Pattern of distribution of individual individu	(1) CO (2) CO ₂ (3) O ₃ The term 'niche' tells us (1) How species differ in their temporal activities (2) How a species population is specialized with (3) About vertical stratification and light variable (4) Pattern of distribution of individuals within Liquid that seeps through solid wastes or other dissolved materials is known as (1) Pellet (2) Leachate (3) Vadose Tiny liquid or solid particles floating in the air at a constant of the constant of th	(1) CO (2) CO ₂ (3) O ₃ (4) SO ₂ The term 'niche' tells us (1) How species differ in their temporal activities with the annual cy (2) How a species population is specialized within a community (3) About vertical stratification and light variability in a vegetation (4) Pattern of distribution of individuals within a community Liquid that seeps through solid wastes or other medium and has exidissolved materials is known as (1) Pellet (2) Leachate (3) Vadose (4) Litter Tiny liquid or solid particles floating in the air are known as (1) Clay particles (2) Aerosols (3) Grit (4) Jackson candle Density of smoke is measured on (1) Ringelmann scale (2) Montreal scale (3) Winkler scale (4) Raunkiaer scale

54.	The plants which are mostly found in arid zone and have their buds completely hidden in soil as bulbs or rhizomes are known as
	(1) Therophytes (2) Chamaephytes
	(3) Cryptophytes (4) Phanerophytes
55.	The facilitation model of succession characterizes the following
	(1) Inhibition view (2) Monoclimax view
	(3) Polyclimax view (4) Maturation of communities
56.	Carrying capacity of population is defined as
	(1) The level at which population is theoretically in equilibrium with its
	(2) The level at which population is theoretically well above with its surrounding environment
	(3) Population is fluctuating all the time with changing environment
	(4) Total number of individual in a population at a particular time
57.	Synergistic effect of two chemicals is defined as
	(1) The combined effect is equal to the sum of individual effect of the chemicals
	(2) The combined effect is less than the sum of the individual effect of the chemicals
	(3) The combined effect is more than the sum of the individual effect of chemicals
	(4) The combined effect may be equal to zero
55)	11 (P.T.O.)

(55)

49. The oxidizing agent used in COD test

(1) Potassium dichromate

	(3) Magnesium carbonate	(4) Potassium chlorate
50.	The most important method to estab	lish microbial diversity is
	(1) Measuring muramic acid in cell	wall
	(2) RFLP analysis	
	(3) 16S rRNA sequencing	
	(4) Measuring total DNA content	
51.	Ephemerals are the most common li	fe form in
	(1) Severe desert situations	(2) Severe cold situations
	(3) Humid regions	(4) Tropical rain forests
52 .	The amount of water that can be ab	sorbed from soil by plant is called
	(1) Holard (2) Chresard	(3) Echard (4) Solard
53.	The specific natality rate is represented of organism, $n = \text{new individuals in}$	ed by a formula (where $N = \text{initial number}$ the population and $t = \text{time}$)
	$(1) \frac{\Delta Nn}{\Delta t} \qquad (2) \frac{\Delta Nn}{N\Delta t}$	(3) $\frac{(\Delta Nn - \Delta N)}{\Delta t}$ (4) $\frac{(\Delta Nn + 2)}{\Delta t}$

10

(2) Potassium iodide

525111		cell wall of
58.	Pseudomurein is present in the	
	(1) Bacillus	(2) Clostridium
	(3) Streptococcus	(4) Methanococcus
59.	Which one of the following can	carry out photosynthesis?
	(1) Holobacteria	(2) Methanococcus
	(3) Mycoplasma	(4) Thermoplasma
60.	Aspergillus is a	
	(1) Chemoorganotroph	(2) Chemolithotroph
	(3) Photoorganotroph	(4) Photolithotroph
61.	An example of helical virus is	
	(1) Bacteriophage	(2) TMV
	(3) Herpes virus	(4) Turnip yellow mosaic virus
62.	Which one of the following is kn	nown for retroviruses?
	(1) Howard Temin	(2) Adolf Mayer
	(3) D. Iwanowski	(4) W. Stanley
63.	Riboflavin is obtained from	
	(1) Acetobacter sp.	(2) Ashbya gossypii
	(3) Aspergillus niger	(4) Rhizopus sp.
(55)		12

64.	Transduction was discovered by		
	(1) Robert Koch	2) Lederberg and Tatum	a
	(3) F. Griffith	4) Lederberg and Zinde	r
65.	Parasexuality was discovered in	*	
	(1) Aspergillus niger	2) Neurospora crassa	
	(3) Aspergillus nidulans	4) Penicillium citrinum	
66.	Damping-off of seedlings is caused	•	
	(1) Pythium (2) Puccinia	3) Ústilago (4) Ce	ercospora
67.	Gene-for-gene relationship between in	st and pathogen was de	monstrated first
	(1) Wilt of Arhar	(2) Flax rust	
	(3) Powdery mildew of Barley	(4) White rust of crucife	ers
68.	Active biochemical defense is induc	by	
	(1) Tyloses	(2) Phytoalexins	
	(3) Cork layer	(4) Gum deposition	
69.	Source of a potential biopesticide is		
	(1) Trichoderma (2) Curvularia	(3) Aspergillus (4) N	eurospora
55)	1		(P.T.O.)

70.	Downy mildews are caused by	
	(1) Ascomycota	(2) Basidiomycota
	(3) Oomycota	(4) Zygomycota
71.	Red rot of sugarcane is caused by	
	(1) Pythium	(2) Phytophthora
	(3) Colletotrichum	(4) Rhizoctonia
72.	Covered smut of barley is caused b	у
	(1) Ustilago hordei	(2) Ustilago avenae
	(3) Ustilago nuda	(4) Tilletia caries
73.	The pathogen of stem rust of whea	t infects its primary host by
	(1) Teliospores (2) Aeciospores	(3) Spermatia (4) Basidiospores
74.	A thick walled oospore develop in	
	(1) Citrus canker	(2) White rust of crucifers
	(3) Bunt of wheat	(4) Little leaf of brinjal
75.	Chemical name of kinetin is	
	(1) 6-furfuryl amino purine	(2) 6-furfuryl amino pyrimidine
	(3) 5-furfuryl amino purine	(4) 5-furfuryl amino pyrimidine
(55)	1.4	
11	14	

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(P.T.O.)

76.	The 'Polyclimax Theory' was given by				
	(1) Clements (2) Tansley	(3) Daubenmire (4) Watt			
77 .	In which one of the following isomoccur?	orphic alternation of generation does not			
	(1) Ectocarpus	(2) Ulva			
	(3) Draparnaldiopsis	(4) Laminaria			
	8				
78.	In which mitotic phase, the nucleol	us usually dissolves?			
	(1) Anaphase (2) Metaphase	(3) Prophase (4) Telophase			
79.	Synaptonemal complex is found between				
	(1) Sister chromatids				
	(2) Non-sister chromatids				
	(3) Sister as well as non-sister chromatids				
	(4) Nucleotides				
	5 5)				
80.	The eukaryotic DNA, in native form	n, is present in			
	(1) A conformation	(2) B conformation			
	(3) C conformation (4) Z conformation				

15

55)

81.	Which cell organelle is called suicide bag?		
	(1) Peroxisomes (2) Golgi bodies		
	(3) Mesosomes (4) Lysosomes		
82.	Which phase of the cell cycle is biosynthetically most active phase?		
	(1) Telophase (2) Anaphase (3) Metaphase (4) Interphase		
83.	Chromatin is composed of		
	(1) Histones, DNA and RNA		
	(2) Non-histones, DNA and RNA		
	(3) Histones, Non-histones and DNA		
	(4) Histones, Non-histones, DNA and RNA		
84.	Multiple allelism usually occurs at		
	(1) Different loci in the same chromosome pair of an individual		
	(2) Different loci in the different chromosome pairs of different individual		
	(3) Same locus in similar chromosome pairs of different individuals		
	(4) Same locus in dissimilar chromosome pairs of different individuals		
85.	Which one of the following trisomy is characterized by the formation of a rin three synaptic chromosomes?		
	(1) Primary (2) Secondary (3) Tertiary (4) Quarternary		
55)	** ***********************************		
00)	16		

86.	In a dihybrid cross, F2 phenotypic ratio 15:1 results due to			
	(1) Epistatic genes	(2)	Duplicate genes	
	(3) Inhibitory genes	(4)	Complementary genes	
87.	Which one of the following is incorporated into DNA as a base analogue?			
	(1) Ethyl methane sulphonate	(2)	Nitrous acid	
	(3) 5-Bromouracil	(4)	Sodium azide	
88.	Satellite DNA is made up of			
	(1) Tandemly repeat sequences			
	(2) Unique sequences			
	(3) Non-tandemly repeat sequences			
	(4) Interspersed repeat sequences			
89.	Which one of the following is most	preva	lent in natural plant population?	
	(1) Monoploids	(2)	Diploids	
	(3) Autopolyploids	(4)	Allopolyploids	
90.	A plant has $2n = 12$ chromosomes chromosomal variant of this plant wi would be called			
	(1) Disomic	(2)	Double monosomic	
	(3) Double trisomic	(4)	Nullisomic	
(55)	17	ī,	(P.T.O.)	

91.	Mendelian principle which has always stood the test of time is				
	(1) Law of dominance	(2) Law of segregation			
	(3) Law of co-dominance	(4) Law of independent assortment			
92.	The cross which is performed to a	scertain cytoplasmic inheritance is			
	(1) Back cross	(2) Distant cross			
	(3) Reciprocal cross	(4) Test cross			
93.	Which one of the following plant i	s an illuminating example of trisomy?			
	(1) Coccinia	(2) Tradescantia			
	(3) Datura	(4) Oenothera			
94.	Crosses between diploid males ar	nd triploid females are preferably made to			
	(1) Trisomic plants	(2) Monosomic plants			
	(3) Nullisomic plants	(4) Triploid plants			
95.	Karyotype has changed through				
	(1) Chromosome structural change	es			
	(2) Chromosome numerical changes				
	(3) Genic changes				
	(4) Chromosome structural, nume	rical and genic changes			
(55)		18			

96.	The most potent chemical mutagen is				
	(1) MMS	(2) MNNG	(3)	EMS	(4) BUrD
97.	Expression of cha	Expression of characters, in eukaryotic organisms, is mostly			
	(1) Monogenic		(2)	Monoallelic	
	(3) Polygenic		(4)	Multiple alle	tic
98.	Dimerization take	s place between	the ba	ases	
	(1) Adenine and	thymine	(2)	Guanine and	l thymine
	(3) Adenine and	adenine	(4)	Thymine and	l thymine
99.	Effect of colchicine on the dividing plant nuclei is				
	(1) Doubling of chromosome number				
	(2) Condensation of chromosomes				
	(3) Doubling and condensation of chromosomes				
	(4) Activation of cell division				
100.	The non-polar molecules show a tendency to associate in water compared with other low polar solvents. This tendency is called				
	(1) Hydrophillic effect (2) Hydrophobic effect				
	(3) Colloidal effec	et	(4)	Emulsifying	effect
55)			19		(P.T.O.)

101.	Solute potential of	water is		
			(3) 0·5 MPa	(4) 0·25 MPa
102.	Energy transfer am	ong pigments in	the antenna is a p	ourely
	(1) Chemical pheno	menon	(2) Physical phen	omenon
	(3) Biochemical phe	enomenon	(4) Gravitational	phenomenon
103.	Plastocyanin is pres	sent in		
	(1) Stroma		(2) Thylakoid me	mbrane
	(3) Luminal space		(4) Stroma lamel	lae
104.	Carotenoids give the	neir characteristi	c orange colour i	n 400-500 nm region
	(1) It is long polyer	nes		
	(2) It has multiple	conjugated doubl	le bond	
	(3) It has no porph	yrin like ring str	ucture	
	(4) It has no Mg in	its molecules		
105.	Changing oxidation PS-II ?	states of which	ion is responsible	for evolution of O ₂ at
	(1) Mg	2) Mn	(3) Ca	(4) Cl
(55)		20		

5.	Organic acid such as oxalic acid is relatively richer in oxygen compared to carbohydrates. So, RQ value of organic acid for complete oxidation, will be					
	(1) 3	(2) 1	(3) 4	(4) 6		
107.	During electron	During electron movement from FADH ₂ to O ₂ in mitochondria, number of ATP molecules produced are				
	(1) One	(2) Three	(3) Two	(4) Four		
108.	Conversion of fat to carbohydrates in germinating seeds involves					
	(1) Glyoxysome only					
	(2) Mitochondria only					
	(3) Glyoxysome and mitochondria both					
	(4) Glyoxysome	and chloroplast	both			
109.	The release of	free energy from	hydrolysis of one	ATP molecule is		
	$(1) \Delta G' = -6500$	cal/mol	$(2) \Delta G' = -22$	00 cal/mol		
	$(3) \Delta G' = -7600$	cal/mol	$(4) \Delta G' = -86$	00 cal/mol		
110.	NO ₂ is reduced	to NH ₃ by nitrit	e reductase enzym	ne. It involves		
	(1) 2e ⁻	(2) 4e ⁻	(3) 6e ⁻	(4) 3e ⁻		
(55)			21		(P.T.O.)	

111.	Characteristic feature of an enzyme which introduces a nick (or cut) on only one of the DNA strands during replication and does not require ATP to work is				
	(1) DNA topoisomerases (Type I)				
	(2) DNA topoisomerases (Type II)				
	(3) DNA ligases				
	(4) DNA polymerases				
112.	Which level of protein organisation is most stable on heating to 80 °C?				
	(1) Primary structure (2) Secondary structure				
	(3) Tertiary structure (4) Quaternary structure				
113.	Polysomes consist of				
	(1) Several dictyosomes				
	(2) Several ribosomes				
	(3) Several ribosomes attached to the same mRNA				
	(4) Several ribosomes attached to the different mRNA				
114.	tRNA fmet is absent in				
	(1) Bacteria (2) Cyanobacteria				
	(3) Eukaryotes (4) Viruses				
115.	Which one of the following is a hydrogen transferring coenzymes?				
	(1) Pyridoxine phosphate (2) CoA				
	(3) Riboflavin coenzymes (4) Lipoic acid				
(55)	22				

116.	Sigmoidal type of curve is the characteristic feature of				
	(1) Isoenzymes	(2)	Allosteric enzymes		
	(3) Coenzymes	(4)	Ribozymes		
117.	Auxin increases				
	(1) Respiration rate	(2)	Photosynthesis		
	(3) Toxic effect	(4)	Fat metabolism		
118.	Leaf fall in a plant occurs due to				
	(1) Decrease in auxin content				
	(2) Increase in auxin content				
	(3) Decrease in abscisic acid conten	t			
	(4) Decrease in gibberellic acid cont	ent	製		
119.	Phytochrome far red is required for	flow	ering in		
	(1) Both long and short day plants				
	(2) Long day plants only				
	(3) Short day plants only				
	(4) Day neutral only				

120. Which one of the following statements is correct?

- (1) 16 molecules of ATP per hexose molecule is used in C3 pathway
- (2) 18 molecules of ATP per hexose molecule is used in C₃ pathway
- (3) 28 molecules of ATP per hexose molecule is used in C4 pathway
- (4) 18 molecules of ATP per hexose molecule is used in C4 pathway

* * *

SPACE FOR ROUGH WORK

रफ़ कार्य के लिए जगह

अभ्यर्थियों के लिए निर्देश

(इस पुस्तिका के प्रथम आवरण-पृष्ठ पर तथा ओ॰एम॰आर॰ उत्तर-पत्र के दोनों पृष्टों पर केवल नीली/काली बाल-प्याइंट पेन से ही लिखें)

- प्रश्न-पुस्तिका मिलने के 30 मिनट के अन्दर ही देख लें कि प्रश्नपत्र में सभी पृष्ठ मौजूद हैं और कोई पृष्ठ या प्रश्न छूटा नहीं है। पुस्तिका दोषयुक्त पाये जाने पर इसकी सूचना तत्काल कक्ष-निरीक्षक को देकर सम्पूर्ण प्रश्नपत्र की दूसरी पुस्तिका प्राप्त कर लें।
- परीक्षा भवन में प्रवेश-पत्र के अतिरिक्त, लिखा या सादा कोई भी खुला कागज साथ में न लायें।
- ओ॰एम॰आर॰ उत्तर-पत्र अलग से दिया गया है। इसे न तो मोइं और न ही विकृत करें। दूसरा ओ॰एम॰आर॰ उत्तर-पत्र नहीं दिया जायेगा। केवल ओ॰एम॰आर॰ उत्तर-पत्र का ही मूल्यांकन किया जायेगा।
- सभी प्रविष्टियां प्रथम आवरण-पृष्ठ पर नीली/काली बाल पेन से निर्धारित स्थान पर लिखें।
- 5. ओ०एम०आर० उत्तर-पत्र के प्रथम पृष्ट पर पेन से अपना अनुक्रमांक निर्धारित स्थान पर लिखें तथा नीचे दिये वृत्तां को गाढ़ा कर दें। जहाँ-जहाँ आवश्यक हो वहाँ प्रश्न-पुस्तिका का क्रमांक एवं केन्द्र कोड नम्बर तथा सेट का नम्बर उचित स्थानों पर लिखें।
- 6. ओ०एम०आर० उत्तर-पत्र पर अनुक्रमांक संख्या, प्रश्न-पुस्तिका संख्या व सेट संख्या (यदि कोई हो) तथा प्रश्न-पुस्तिका पर अनुक्रमांक सं० और ओ०एम०आर० उत्तर-पत्र सं० की प्रविष्टियों में उपस्लिखन की अनुमित नहीं वे
- उपर्युक्त प्रविष्टियों में कोई भी परिवर्तन कक्ष निरीक्षक द्वारा प्रमाणित होना चाहिये अन्यथा यह एक अनुचित साम का प्रयोग माना जायेगा।
- 8. प्रश्न-पुस्तिका में प्रत्येक प्रश्न के चार वैकल्पिक उत्तर दिये गये हैं। प्रत्येक प्रश्न के बैंकल्पिक उत्तर के लिये आपक ओ०एम०आर० उत्तर-पत्र की सम्बन्धित पंक्ति के सामने दिये गये वृत्त को ओ०एम०आर० उत्तर-पत्र के प्रथम दृष्य पर दिये गये निर्देशों के अनुसार पेन से गाड़ा करना है।
- प्रत्येक प्रश्न के उत्तर के लिये केवल एक ही वृत्त को गाढ़ा करें। एक से अधिक वृत्तों को गाढ़ा करने पर अक एक वृत्त को अपूर्ण भरने पर वह उत्तर गलत माना जायेगा।
- 10. ध्यान दें कि एक बार स्थाही द्वारा अंकित उत्तर बदला नहीं जा सकता है। यदि आप किसी प्रश्न का उत्तर नहीं देना द्यान हैं, तो सम्बन्धित पंक्ति के सामने दिथे गये सभी वृत्तों को खाली छोड़ दें। ऐसे प्रश्नों पर शृन्य अंक दिये जायें।
- रफ़ कार्य के लिये प्रश्न-पुस्तिका के मुखपृष्ठ के अन्दर वाले पृष्ठ तथा अंतिम पृष्ठ का प्रयोग करें।
- 12. परीक्षा की समाप्ति के बाद अभ्यर्थी अपना ओ०एम०आर० उत्तर-पत्र परीक्षा कक्ष/हाल में कक्ष निरीक्षक को सींप दें। अन्य अपने साथ प्रश्न-पुस्तिका तथा ओ०एम०आर० उत्तर-पत्र की प्रति ले जा सकते हैं।
- 13. परीक्षा समाप्त होने से पहले परीक्षा भवन से बाहर जाने की अनुमित नहीं होगी।
- यदि कोई अभ्यर्थी परीक्षा में अनुचित साधनों का प्रयोग करता है, तो वह विश्वविद्यालय द्वारा निर्धारित दंड का/की, अपं होगा/होगी।