

(To be filled up by the candidate by **blue/black ball-point pen**)

Roll No.

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Roll No.

(Write the digits in words) .....

Serial No. of OMR Answer Sheet .....

Day and Date .....

(Signature of Invigilator)

## INSTRUCTIONS TO CANDIDATES

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

1. Within 10 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 Superintendent/Invigilators immediately to obtain a fresh Question Booklet.
2. Do not bring any loose paper, written or blank, inside the Examination Hall *except the Admit Card without its envelope*.
3. A separate Answer Sheet is given. *It should not be folded or mutilated. A second Answer Sheet shall not be provided. Only the Answer Sheet will be evaluated.*
4. Write your Roll Number and Serial Number of the Answer Sheet by pen in the space provided above.
5. *On the front page of the Answer Sheet, write by pen your Roll Number in the space provided at the top, and by darkening the circles at the bottom. Also, wherever applicable write the Question Booklet Number and the Set Number in appropriate places.*
6. No overwriting is allowed in the entries of Roll No., Question Booklet No. and Set No (if any) on OMR sheet and also Roll No. and OMR sheet No. on the Question Booklet.
7. Any changes in the aforesaid entries is to be verified by the invigilator, otherwise it will be taken as unfair means.
8. Each question in this Booklet is followed by four alternative answers. *For each question, you are to record the correct option on the Answer Sheet by darkening the appropriate circle in the corresponding row of the Answer Sheet, by ball-point pen as mentioned in the guidelines given on the first page of the Answer Sheet.*
9. For each question, darken only one circle on the Answer Sheet. If you darken more than one circle or darken a circle partially, the answer will be treated as incorrect.
10. *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 marks).*
11. For rough work, use the inner back page of the title cover and the blank page at the end of this Booklet.
12. Deposit *only the OMR Answer Sheet* at the end of the Test.
13. You are not permitted to leave the Examination Hall until the end of the Test.
14. 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.

[ उपर्युक्त निर्देश हिन्दी में अन्तिम आवरण-पृष्ठ पर दिये गये हैं। ]

Total No. of Printed Pages : 14



15P/287/3

No. of Questions : 120

प्रश्नों की संख्या : 120

Time : 2 Hours ]

समय : 2 घण्टे ]

[ Full Marks : 360

[ पूर्णांक : 360

**Note :** (1) Attempt as many questions as you can. Each question carries 3 (three) marks. One mark will be deducted for each incorrect answer. Zero mark will be awarded for each unattempted question.

अधिकाधिक प्रश्नों को हल करने का प्रयत्न करें। प्रत्येक प्रश्न 3 (तीन) अंक का है। प्रत्येक गलत उत्तर के लिए एक अंक काटा जायेगा। प्रत्येक अनुत्तरित प्रश्न का प्राप्तांक शून्य होगा।

(2) If more than one alternative answers seem to be approximate to the correct answer, choose the closest one.

यदि एकाधिक वैकल्पिक उत्तर सही उत्तर के निकट प्रतीत हो, तो निकटतम सही उत्तर दें।

1. PCR (polymerase chain reaction) is used to :
  - (1) Grow E. coli in the laboratory
  - (2) Power cell activity
  - (3) Make many copies of a DNA sequence quickly
  - (4) Clean dried DNA from laboratory glassware
2. Rice, corn, and wheat are :
  - (1) Monocots
  - (2) Dicots
  - (3) Multicots
  - (4) Ferns
3. The group of organisms which convert light into food are called :
  - (1) Autotrophs
  - (2) Heterotrophs
  - (3) Decomposers
  - (4) Omnivores
4. A genetically identical copy of another organism is called :
  - (1) A genomorph
  - (2) A clone
  - (3) A clown or sport
  - (4) A monogene
5. Among the following, the richest source of protein is :
  - (1) Ground Nut
  - (2) Rice
  - (3) Potato
  - (4) Apple
6. AIDS stands for :
  - (1) Acquired Immune Disease Syndrome
  - (2) Acquired Immunity Dis-function Syndrome
  - (3) Acquired Immuno Deficiency Syndrome
  - (4) Acquired Infection Deficiency Syndrome

7. A healthy fresh water fish is placed in saltwater. The expected consequence of this would be that :
- (1) The fish becomes dehydrated and dies
  - (2) The fish becomes bloated and dies
  - (3) The fish suffers from fungal or bacterial disease and dies
  - (4) There is no observable effect on the fish provided there is sufficient food
8. A cell cycle consists of :
- (1) Mitosis and meiosis
  - (2) G1, the S phase, and G2
  - (3) Prophase, metaphase, anaphase and telophase
  - (4) Interphase and mitosis
9. All plants exhibit alternation of generations. This means their life cycle :
- (1) Includes both haploid and diploid gametes
  - (2) Shows only asexual reproduction
  - (3) Has both a multicellular haploid stage and a multicellular diploid stage
  - (4) Does not include meiosis
10. A plant's vascular tissue is composed of xylem and phloem. The xylem generally transports ....., whereas the phloem transports .....
- (1) water/sugar
  - (2) sugar/water
  - (3) water/water
  - (4) sugar/sugar
11. Tube feet is the locomotory organ in :
- (1) Starfish
  - (2) Jelly fish
  - (3) Silver fish
  - (4) Scoliodon
12. Which of the following vitamins is soluble as well as anti-oxidant ?
- (1) Vitamin - B1
  - (2) Vitamin-A
  - (3) Vitamin-D
  - (4) Vitamin-C
13. What is the harm from the depletion of Earth's ozone layer ?
- (1) The average temperature of earth's surface will increase gradually
  - (2) The oxygen content of the atmosphere will decrease
  - (3) Increased amount of Ultra violet radiation will reach earth's surface
  - (4) Sea levels will rise as the polar ice caps will gradually melt
14. Which of the following is a prime health risks associated with greater UV radiation through the atmosphere due to depletion of stratospheric ozone ?
- (1) Damage to digestive system
  - (2) Increased liver cancer
  - (3) Neurological disorder
  - (4) Increased skin cancer
15. Which of the following is not a primary contributor to the greenhouse effect ?
- (1) Carbon dioxide
  - (2) Carbon monoxide
  - (3) Chlorofluorocarbons
  - (4) Methane gas

16. The entry of water into root hairs is due to the force :  
 (1) Atmospheric pressure (2) Osmotic pressure  
 (3) Turgor pressure (4) Suction pressure
17. One of the most notable differences between gamete formation in animals and gamete formation in plants is that :  
 (1) Plants produce gametes in somatic tissue, while animals produce gametes in germ tissue.  
 (2) Plants produce gametes by mitosis, while animals produce gametes by meiosis.  
 (3) Plants produce only one of each gamete, while animals produce many gametes.  
 (4) Plants produce gametes that are diploid, while animals produce gametes that are haploid.
18. During strenuous exercise; glucose is converted into :  
 (1) Glycogen (2) Pyruvic acid (3) Starch (4) Lactic acid
19. A disease caused by fungus is .....  
 (1) Ringworm (2) Encephalitis  
 (3) Immune disorder (4) Cardiovascular diseases
20. In shoots, branching is inhibited by ..... from the tip of a growing shoot, but this effect is countered by ..... from the roots.  
 (1) Cytokinins ..... auxins (2) Gibberellins ..... ethylene  
 (3) Auxins ..... cytokinins (4) Gibberellins ..... abscisic acid
21. Germ theory of diseases was postulated by .....  
 (1) Louis Pasteur (2) Rober Kotch  
 (3) Rober Brown (4) Anton De Barry
22. Some plants are recognized by fungal pathogens on the basis of their stomatal pores. Which of the following would provide these plants immunity from fungal infection ?  
 (1) Removing all of the stomata from the plant  
 (2) Changing the spacing of stomatal pores in these plants  
 (3) Reinforcing the cell wall in the guard cells of stomatal pores  
 (4) Increasing the number of trichomes on the surfaces of these plants  
 [wp\_campaign\_1]
23. Potato is a modified form of :  
 (1) Root (2) Stem (3) Sheath (4) Rhizoid

24. Biotic environment includes : to right  
 (1) Producers (2) Consumers (3) Decomposers (4) All of the above
25. 'Poppy' a flower belongs to which plant family ?  
 (1) Legumnuanceae (2) Cucurbitaceous  
 (3) Papaveraceae (4) Liliaceae
26. Plants wilt due to excess of :  
 (1) Transpiration (2) Guttation  
 (3) Translocation (4) Active transport
27. Plants synthesis protein from :  
 (1) Amino acids (2) Nucleotides (3) Sugars (4) Fatty acids
28. You are performing an experiment to determine the nutrient requirements for a newly discovered plant and find that for some reason your plants die if you leave boron out of the growth medium but do fine with as low as 5 parts per million in solution. This suggests that boron is :  
 (1) An essential macronutrient (2) A nonessential micronutrient  
 (3) An essential micronutrient (4) A nonessential macronutrient
29. Each basis inheritable character is controlled by a factor called .....  
 (1) Chromosome (2) DNA (3) RNA (4) Gene
30. Gene is made up of .....  
 (1) Proteins (2) RNA (3) DNA (4) All of them
31. Sugarcane + Potato is an inter-cropping system of :  
 (1) Autumn season (2) Zaid season  
 (3) Spring season (4) Rainy season
32. In ..... technique entire organism can be grown from a single cell or tissue.  
 (1) tissue culture (2) cloning  
 (3) genetic engineering (4) transfusion
33. A lipid membrane picked up by a virus from its host cell is called :  
 (1) A capsid (2) a capsomere  
 (3) an envelope (4) a gel capsule
34. Which of the following is not done in a wild life sanctuary ?  
 (1) Fauna is conserved (2) Flora is conserved  
 (3) Soil and flora is utilized (4) Hunting is prohibited
35. Which of the following cannot be used as a vector ?  
 (1) Phage (2) Plasmid  
 (3) Bacterium (4) All can be used as vectors

36. Which of the following is *not* an application of genetic engineering in plants ?  
 (1) nitrogen fixation  
 (2) DNA vaccines  
 (3) resistance to glyphosate  
 (4) production of insecticidal proteins in plants
37. Genetic engineering is the manipulation of ..... for practical purpose.  
 (1) Genetic bacteria (2) Genetic plant  
 (3) Genetic material (4) Genetic animal
38. Cuts in DNA are sealed with :  
 (1) Restriction enzymes (2) Ligases  
 (3) Reverse transcriptase (4) Polymerase
39. Sticky ends are the result of :  
 (1) Treatment of a nucleotide sequence with DNA ligase  
 (2) Exposure of eukaryotic DNA to a prokaryotic plasmid  
 (3) Cutting by restriction enzymes "off center" in a specific nucleotide sequence  
 (4) DNA breaking down in the presence of reverse transcriptase
40. You are conducting research on eight species of *Tribolium* flour beetles and you want to compare their proteins. Which of the following techniques might you use ?  
 (1) genetic engineering (2) gene therapy  
 (3) gel electrophoresis (4) polymerase chain reaction
41. Pomato is somatic hybrid between :  
 (1) Poppy and Potato (2) Potato and tomato  
 (3) Poppy and tamarind (4) Poppy and Tomato
42. The first mammal to be successfully cloned was a :  
 (1) cow (2) sheep (3) pig (4) human
43. When a plant structure such as a leaf is injured, it produces....., which may cause the part to age and drop off.  
 (1) cytokinins (2) ethylene (3) auxins (4) abscisic acid
44. Enzymes that can break the bonds that hold the DNA backbones together are called :  
 (1) Nucleases (2) Fissionases (3) Backbreakers (4) Debasers
45. Genetic material of viruses consists of :  
 (1) RNA (2) DNA  
 (3) Both RNA and DNA (4) Either RNA or DNA

46. Medicine of quinine is provided by :
- (1) eucalyptus plant
  - (2) aconite plant
  - (3) cinchona plant
  - (4) money plant
47. Decomposers include :
- (1) bacteria
  - (2) fungi
  - (3) both
  - (4) animals
48. Which of the following wastes cannot be decomposed by bacteria to form compost ?
- (1) Kitchen wastes
  - (2) Plastic and polythene bags
  - (3) Dead plants
  - (4) Bodies of insects living in the soil
49. When trees are cut, amount of oxygen :
- (1) decreases
  - (2) increases
  - (3) both (1) and (2)
  - (4) remains same
50. If you could connect an active xylem vessel from a shoot to an active phloem sieve-tube member from a leaf using a "micropipe", which way would the solution flow between the two ?
- (1) The solution would flow from xylem to phloem.
  - (2) The solution would flow from phloem to xylem.
  - (3) The solution would flow back and forth from one to another.
  - (4) The solution would not flow between the two.
51. The movement of water in the xylem relies upon the :
- (1) ability of water molecules to hydrogen-bond with each other
  - (2) active transport
  - (3) evaporation of water from the leaf surface
  - (4) Both (1) and (3) are correct
52. If you wanted to force stomata to open, which of the following would work ?
- (1) Treat the plant with abscisic acid
  - (2) Stimulate water movement into the guard cells
  - (3) Stimulate water movement out of the guard cells
  - (4) Force the dermal cells around the stomata to dehydrate, thereby pulling the guard cells apart.
53. A term biotype means :
- (1) All individuals having same phenotype
  - (2) All individuals having same genotype
  - (3) All individuals with different phenotype
  - (4) All individuals with different genotype



54. Which of the following elements is a metal ?  
 (1) S (2) Se (3) I (4) Ga
55. Most plant and animal cells are similar in some respects since they both have in common :  
 (1) Cytoplasm and cellulose (2) Cytoplasm and contractile vacuole  
 (3) Cytoplasm and nucleus (4) Membrane and cell wall
56. Lamarck's theory of inheritance of acquired characters was challenged by :  
 (1) August Weismann (2) Hugo De Vries  
 (3) Herbert Spencer (4) Carl Linnaeus
57. Galvanised Iron sheets have a coating of :  
 (1) Tin (2) Lead (3) Zinc (4) Chromium
58. Endoplasmic reticulum is bound by :  
 (1) Cellulose wall (2) Membranes  
 (3) Sclerotised layer (4) Chitinised wall
59. Electric current is measured by :  
 (1) Voltmeter (2) Anemometer (3) Commutator (4) Ammeter
60. Which of the following is most likely to cause a rise in the average temperature of the Earth in the future ?  
 (1) Atomic warfare (2) CO<sub>2</sub> from fossil fuels  
 (3) Dust clouds from volcanoes (4) Depletion of the Earth's Ozone layer
61. A plant leaf appear to green because it :  
 (1) absorbs green light (2) reflects all but yellow and green light  
 (3) reflect green light (4) absorbs red and yellow light
62. Which of the following is true of the bryophytes ?  
 (1) It is the only group that shows an alternation of generations.  
 (2) Bryophytes exhibit extensive vascular tissue.  
 (3) The sporophyte (multicellular diploid) is the conspicuous stage.  
 (4) The gametophyte (multicellular haploid) is the conspicuous stage.
63. Which of the following is *not* characteristic of a monocot ?  
 (1) leaves with parallel veins  
 (2) flower parts usually in threes or multiples of three  
 (3) lateral meristems occurring rarely  
 (4) seed with two cotyledons
64. A green leaf-like structures at the base of the petals protecting the developing flower is called :  
 (1) sepal (2) rhizoid (3) calyx (4) anther

65. In flower, male reproduction consisting of filament and anther is :  
(1) corolla              (2) stamen              (3) carpel              (4) epicalyx
66. In plants :  
(1) Gametes are produced directly after meiosis  
(2) Gametes are produced directly after mitosis  
(3) No gametes are motile  
(4) Seeds are always produced
67. Which of the following problems is not created by noise pollution ?  
(1) Diarrhoea              (2) Hypertension              (3) Deafness              (4) Irritation
68. Sucrose enters a phloem sieve-tube cell because of :  
(1) Osmosis                                                      (2) Water potential  
(3) Active transport                                                      (4) A process regulated by auxin
69. Chordae tendinae is a part of the :  
(1) Heart                              (2) Lung                              (3) Notochord                              (4) Tendon
70. Nerve cell does not divide because they do not have :  
(1) Nucleus                              (2) Centrosome                              (3) Golgi body                              (4) Mitochondria
71. Khaira disease of rice is caused by :  
(1) protein deficiency                                                      (2) zinc deficiency  
(3)  $O_2$  depletion                                                      (4) pathogenic fungi
72. Yeast, used in making bread is a :  
(1) plant                              (2) seed                              (3) bacteria                              (4) fungus
73. Which of the following nutrients is not a structural component of the plant ?  
(1) Nitrogen                              (2) Calcium                              (3) Phosphorus                              (4) Potassium
74. Which of the following gases is released from rice fields in the most prominent quantities ?  
(1) Carbon dioxide                                                      (2) Methane  
(3) Carbon monoxide                                                      (4) Sulphur dioxide
75. The study of phenomena at very low temperatures is called :  
(1) Heat transfer                                                      (2) Morphology  
(3) Crystallography                                                      (4) Cryogenics
76. In which of the following groups of Arthropoda, do the body divisions include cephalotorax and abdomen ?  
(1) Crustacea only  
(2) Crustacea and Arachnida only  
(3) Crustacea, Arachnida and Onychophora only  
(4) Crustacea, Arachnida, Onychophora and Chilopoda

77. The Ecological pyramid that is always upright :  
 (1) Pyramid of energy (3) Pyramid of biomass  
 (2) Pyramid of number (4) None of the above
78. Mycorrhiza exhibits the phenomenon of :  
 (1) Symbiosis (2) Antagonism (3) Parasitism (4) Commensalism
79. The largest and the most powerful adductor muscles in flying bird is the :  
 (1) coracobrachialis longus (2) pectoralis major  
 (3) pectoralis minor (4) tensor longus
80. Which one of the following does *not* have a specialized heart ?  
 (1) Amphioxus (2) Dog fish (3) Chameleon (4) Scaly ant-eater
81. Plant that eat insects are called :  
 (1) Omnivorous (2) Insectivorous  
 (3) Caprophagous (4) Insecticidal plants
82. The cryptozoite stage in the life cycle of Plasmodium is found in which one of the following ?  
 (1) Human erythrocytes (2) Human hepatocytes  
 (3) Salivary glands of Anopheles (4) Intestinal epithelium of Anopheles
83. Who among the following is associated with the invention of computers ?  
 (1) Edison (2) Mac Millen  
 (3) Babbage (4) Rangabhashyam
84. Activity of brain is recorded by :  
 (1) ECG (2) EEG (3) MET (4) CT
85. What kind of molecules must pass between the nucleus and the cytoplasm ?  
 (1) DNA (2) Protein  
 (3) Lipids (4) Carbohydrates
86. When all or a piece of a chromosome becomes attached to another chromosome, the aberration is called a(n) :  
 (1) Inversion. (2) Translocation. (3) Deletion. (4) Duplication.
87. Fruit most suitable for making jelly is :  
 (1) Papaya (2) Karonda (3) Mango (4) Banana
88. The best source of Vitamin C among the following :  
 (1) Lycopersicum esculentum (2) Citrus medica  
 (3) Capsicum annum (4) Phyllanthus emblica (Amla)
89. Which one of the bones had a maximum tendency towards reduction in the vertebrate phylogeny ?  
 (1) Dermal bones (2) Sesamoid bones  
 (3) Appendicular bones (4) Replacing bones

90. "Green house effect" with respect to global warming refers to :  
(1) Cooling & moist condition                      (2) Warming effect  
(3) Increased rainfall & greenery                      (4) Desertification
91. Insectivorous plant generally grow in soil which is deficient in :  
(1) Water                      (2) Nitrogen                      (3) Potassium                      (4) Calcium
92. A high BOD value in aquatic environment is indicative of :  
(1) A pollution free system  
(2) A highly polluted system due to excess of nutrients  
(3) A highly polluted system due to abundant heterotrophs  
(4) A highly pure water with abundance of autotrophs
93. The Casparian strip is analogous to :  
(1) Caulking to waterproof a seam in the bathtub.  
(2) Axle grease to lubricate a wheel.  
(3) A condom to prevent fertilization.  
(4) Masking tape to hold things together.
94. Protein helping in opening of DNA double helix in front of replication fork is :  
(1) DNA gyrase                      (2) DNA Polymerase I  
(3) DNA ligase                      (4) DNA topoisomerase
95. How many amino acids are involved in making proteins in humans ?  
(1) 20                      (2) 22                      (3) 24                      (4) 30
96. Amino acids join up into a large chain (polymer) to create what biological molecule(s) ?  
(1) Proteins                      (2) Lipids                      (3) Sugars                      (4) Nucleic acids
97. Which amino acid is coded for by the three-letter code Met ?  
(1) Phenyl alanine                      (2) Methionine                      (3) Arginine                      (4) Lysine
98. In fungi the reserve food invariably accumulated in the form of :  
(1) Protein and steroid                      (2) Sugar and oil  
(3) Protein and starch                      (4) Glycogen and oil drops
99. The part of cotton producing pure cellulose is :  
(1) Root hair                      (2) Leaf hair                      (3) Seed hair                      (4) Stem hair
100. Which of the following statements is correct ?  
(1) Xylem is made of all living cells  
(2) Xylem is made of living and non living cells  
(3) Xylem is made of non-living cells  
(4) Xylem does not contain cells

101. Which cells decay faster, if exposed freely to the air ?  
 (1) Heart wood (2) Sap wood  
 (3) Wood rich in fibres (4) Softwood
102. Law of limiting factors is concerned with :  
 (1) Internal factors affecting transpiration  
 (2) External factors affecting photosynthesis  
 (3) External factors affecting growth  
 (4) Internal factors affecting respiration
103. In the context of alternative sources of energy, ethanol as a viable bio-fuel can be obtained from :  
 (1) Potato (2) Rice (3) Sugarcane (4) Wheat
104. RNA contains :  
 (1) Hexose (2) Ribose (3) Fructose (4) Glucose
105. Parthenogamy represents the :  
 (1) Union of two vegetative nuclei (2) Union of two parent hyphae  
 (3) Union of two gametes of one sex (4) Union of three gametes
106. Euploidy is explained by :  
 (1) One chromosome more than one haploid Set  
 (2) One chromosome less than the haploid set  
 (3) One chromosome more than diploid set  
 (4) Exact multiple of a basic set of chromosome
107. Preserving germplasm in frozen state is :  
 (1) Cryopreservation (2) Cold storage  
 (3) In situ preservation (4) Vernalisation
108. Pure line breed refers to :  
 (1) Heterozygosity and linkage  
 (2) Heterozygosity and independent assortment  
 (3) Heterozygosity only  
 (4) Homozygosity only
109. DNA is associated with highly basic protein called :  
 (1) Histones (2) Non-histones (3) Albumins (4) Non-albumin
110. Photophosphorylation was discovered by :  
 (1) Arnon (2) Hill  
 (3) Calvin (4) Ruben and Kaman
111. Taq DNA polymerase is isolated from :  
 (1) *Thermus aquaticus* (2) *Thermus inequalis*  
 (3) *Bacillus thurengiensis* (4) *Bacillus amylovoa*

112. 'Heart, of heart' is :  
(1) Bundle of His (2) AV node (3) SA node (4) Purkinje fibers
113. 'AIDS' is due to :  
(1) Destruction of killer- T -cells (2) Destruction of helper- T -cells  
(3) Lack of interferons (4) Autoimmunity
114. Intercalated disc is found in :  
(1) Muscles of heart (2) Vertebrae  
(3) Muscles of legs (4) Pubic symphysis
115. Jalprika is a variety of :  
(1) Maize (2) Jowar (3) Paddy (4) Barley
116. In the angiosperms, the :  
(1) gametophyte is prominent, and the sporophyte is dependent upon the gametophyte.  
(2) sporophyte is prominent, with the sporophyte and gametophyte living independently.  
(3) sporophyte is prominent, and the gametophyte is dependent upon the sporophyte.  
(4) gametophyte is prominent, and the sporophyte stage has disappeared.
117. Genome is :  
(1) Genes on nuclear DNA  
(2) Nuclear DNA + mitochondrial DNA  
(3) Nuclear DNA + chloroplast DNA  
(4) Nuclear DNA + Mitochondrial DNA + Chloroplast DNA
118. Plasmids are generally found in :  
(1) bacteria (2) vertebrates  
(3) all living organisms (4) bacteriophages
119. The identification of the function of a gene in a genome can be accomplished using :  
(1) Functional genomics (2) Gene microarrays  
(3) Gel electrophoresis (4) Bioinformatics
120. Three dimensional shape of tRNA is :  
(1) L-shaped (2) Clover leaf-like  
(3) X-shaped (4) Y-shaped



## अभ्यर्थियों के लिए निर्देश

(इस पुस्तिका के प्रथम आवरण-पृष्ठ पर तथा उत्तर-पत्र के दोनों पृष्ठों पर केवल नीली/काली बाल-प्वाइंट पेन से ही लिखें)

1. प्रश्न पुस्तिका मिलने के 10 मिनट के अन्दर ही देख लें कि प्रश्नपत्र में सभी पृष्ठ मौजूद हैं और कोई प्रश्न छूटा नहीं है। पुस्तिका दोषयुक्त पाये जाने पर इसकी सूचना तत्काल कक्ष निरीक्षक को देकर सम्पूर्ण प्रश्नपत्र की दूसरी पुस्तिका प्राप्त कर लें।
2. परीक्षा भवन में लिफाफा रहित प्रवेश-पत्र के अतिरिक्त, लिखा या सादा कोई भी खुला कागज साथ में न लाये।
3. उत्तर-पत्र अलग से दिया गया है। इसे न तो मोड़ें और न ही विकृत करें। दूसरा उत्तर-पत्र नहीं दिया जायेगा। केवल उत्तर-पत्र का ही मूल्यांकन किया जायेगा।
4. अपना अनुक्रमांक तथा उत्तर-पत्र का क्रमांक प्रथम आवरण-पृष्ठ पर पेन से निर्धारित स्थान पर लिखें।
5. उत्तर-पत्र के प्रथम पृष्ठ पर पेन से अपना अनुक्रमांक निर्धारित स्थान पर लिखें तथा नीचे दिये वृत्तों को गाढ़ा कर दें। जहाँ-जहाँ आवश्यक हो वहाँ प्रश्न-पुस्तिका का क्रमांक तथा सेट का नम्बर उचित स्थानों पर लिखें।
6. ओ० एम० आर० पत्र पर अनुक्रमांक संख्या, प्रश्न-पुस्तिका संख्या व सेट संख्या (यदि कोई हो) तथा प्रश्न-पुस्तिका पर अनुक्रमांक संख्या और ओ० एम० आर० पत्र संख्या की प्रविष्टियों में उपरिलेखन की अनुमति नहीं है।
7. उपर्युक्त प्रविष्टियों में कोई भी परिवर्तन कक्ष निरीक्षक द्वारा प्रमाणित होना चाहिये अन्यथा यह एक अनुचित साधन का प्रयोग माना जायेगा।
8. प्रश्न-पुस्तिका में प्रत्येक प्रश्न के चार वैकल्पिक उत्तर दिये गये हैं। प्रत्येक प्रश्न के वैकल्पिक उत्तर के लिये आपको उत्तर-पत्र की सम्बन्धित पक्ति के सामने दिये गये वृत्त को उत्तर-पत्र के प्रथम पृष्ठ पर दिये गये निर्देशों के अनुसार बाल-प्वाइंट पेन से गाढ़ा करना है।
9. प्रत्येक प्रश्न के उत्तर के लिये केवल एक ही वृत्त को गाढ़ा करें। एक से अधिक वृत्तों को गाढ़ा करने पर अथवा एक वृत्त को अपूर्ण भरने पर वह उत्तर गलत माना जायेगा।
10. ध्यान दें कि एक बार स्याही द्वारा अंकित उत्तर बदला नहीं जा सकता है। यदि आप किसी प्रश्न का उत्तर नहीं देना चाहते हैं, तो सम्बन्धित पक्ति के सामने दिये गये सभी वृत्तों को खाली छोड़ दें। ऐसे प्रश्नों पर शून्य अंक दिये जायेंगे।
11. रफ कार्य के लिये इस पुस्तिका के मुखपृष्ठ के अंदर वाला पृष्ठ तथा अंतिम खाली पृष्ठ का प्रयोग करें।
12. परीक्षा के उपरान्त केवल ओ० एम० आर० उत्तर-पत्र ही परीक्षा भवन में जमा करें।
13. परीक्षा समाप्त होने से पहले परीक्षा भवन से बाहर जाने की अनुमति नहीं होगी।
14. यदि कोई अभ्यर्थी परीक्षा में अनुचित साधनों का प्रयोग करता है, तो वह विश्वविद्यालय द्वारा निर्धारित दंड का/की भागी होगा/होगी।