

## अभ्यर्थियों के लिए निर्देश

(इस पुस्तिका के प्रथम आवरण-पृष्ठ पर तथा उत्तर-पत्र के दोनों पृष्ठों पर केवल नीली या 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 लायें।
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 सं० और ओ० एम० आर० पत्र सं० 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 पंक्ति के सामने दिये गये वृत्त को उत्तर-पत्र के प्रथम पृष्ठ पर दिये गये निर्देशों के अनुसार 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 पंक्ति के सामने दिये गये सभी वृत्तों को खाली छोड़ दें। ऐसे प्रश्नों पर शून्य अंक दिये जायेंगे।
11. रफ कार्य के लिये प्रश्न-पुस्तिका के मुखपृष्ठ के अन्दर वाले पृष्ठ तथा अंतिम पृष्ठ का प्रयोग करें।
12. परीक्षा के उपरान्त केवल ओ० एम० आर० उत्तर-पत्र परीक्षा भवन में जमा कर दें।
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, भाग्य होगा/होगी।



**147.** Ozone can be easily detected by

- (1) Hg                      (2) AgCl                      (3) H<sub>2</sub>O<sub>2</sub>                      (4) silver

**148.** Mitochondria probably evolved from

- (1) endosymbiotic bacteria                      (2) archaeobacteria  
(3) parasymbiotic bacteria                      (4) eubacteria

**149.** The expression of most genes is regulated primarily at the level of

- (1) replication                      (2) translation  
(3) transcription                      (4) post-translational modification

**150.** Alcoholic fermentation differs from anaerobic respiration in being

- (1) intercellular      (2) intracellular      (3) internuclear      (4) extracellular

\*\*\*

140. Hybridomas are associated to production of  
(1) monoclonal antibodies (2) somatic hybrids  
(3) cancer cells (4) synthetic antibodies
141. One Dalton is equal to  
(1) 1 Picogram (2) 1 Microgram  
(3) 1 Nanogram (4)  $3.32 \times 10^{-24}$  gm
142. Which one of the following is a component of ribosomes?  
(1) rRNA (2) mRNA (3) tRNA (4) snRNA
143. Particulate theory of inheritance was proposed by  
(1) de Vries (2) Darwin (3) Weismann (4) G. J. Mendel
144. In Pinacol-Pinacolone rearrangement, the reactive species undergoing rearrangement is  
(1) carbocation (2) carbene (3) carbanion (4) free radical
145. The center of Pribnow box in *E. coli* lies usually -10 and contain  
(1) TCGGTAG (2) GACGATT (3) TATGTTG (4) AGACTTA
146. The actual reducing agent of haematite in blast furnace is  
(1) CO<sub>2</sub> (2) CO  
(3) nitrogen peroxide (4) nitric oxide

- 135.** The scaffold protein around which the bacterial DNA is attached, contains
- (1) more of basic amino acids
  - (2) more of acidic amino acids
  - (3) more of aromatic amino acids
  - (4) more of hydrophobic amino acids
- 136.** The RNA primer synthesised during replication is removed by
- (1) DNA polymerase-II
  - (2) DNA polymerase-III
  - (3) DNA polymerase -I
  - (4) RNA polymerase-II
- 137.** The Okazaki fragments contain approximately
- (1) 1000 nucleotides
  - (2) 100 nucleotides
  - (3) 10000 nucleotides
  - (4) 50000 nucleotides
- 138.** The technique of introduction of external gene(s) for improving genotype is
- (1) tissue engineering
  - (2) dairy technology
  - (3) genetic engineering
  - (4) enzyme technology
- 139.** The synthetic vaccines belong to
- (1) fourth generation
  - (2) third generation
  - (3) second generation
  - (4) first generation

129. The substrate for photorespiration is

- (1) glycolate      (2) fumaric acid      (3) maleic acid      (4) oxalic acid

130. HIV-1 reverse transcriptase contains

- (1) RNA polymerase activity      (2) DNA ligase activity  
(3) DNA polymerase activity      (4) endonuclease activity

131. PCR is used for

- (1) DNA-recombination      (2) DNA amplification  
(3) DNA-repair      (4) DNA identification

132. Which one of the following is not a cloning vector?

- (1) pBR322      (2) Ti plasmid      (3) Hind-III      (4) pUC-8

133. DNA blotting method is known as

- (1) Southern blotting      (2) Northern blotting  
(3) Western blotting      (4) RT-PCR

134. RF-value is related to

- (1) GFC      (2) IEC      (3) TLC      (4) GLC

**122.** Which one of the following cell organelles is involved in signalling processes?

- (1) Cell wall (2) Golgi body  
(3) Spherosomes (4) Plasma membrane

**123.** Which one of the following is known as the pacemaker of the heart?

- (1) AV node (2) Bundle of his  
(3) SA node (4) Purkinje system

**124.** Spectrin is a protein attached to

- (1) bacterial cell (2) mitochondrial membrane  
(3) erythrocytes covalently (4) erythrocytes non-covalently

**125.** Vitamin D is derived from

- (1) proteins (2) carbohydrates (3) cholesterol (4) HMG-CoA

**126.** Which one of the following ions bind strongly to valinomycin?

- (1)  $K^+$  (2)  $Na^+$  (3)  $Ca^{++}$  (4)  $Fe^{++}$

**127.** Malate-aspartate shuttle is operated in

- (1) liver (2) skin (3) heart (4) Both (1) and (3)

**128.** Electron-transport chain is inhibited by

- (1)  $Ca^{2+}$  (2) vitamin A (3) antimycin-A (4)  $O_2$





109. Lecithin contains a nitrogenous base, called as  
(1) choline           (2) inositol           (3) lysine           (4) histidine
110. The synthesis of prostaglandins is inhibited by  
(1) fluoride ion   (2) cyanide ion   (3) arsenate ion   (4) aspirin
111. Fatty acid synthesis takes place in  
(1) cytosol           (2) mitochondria   (3) microsomes   (4) chloroplast
112. Ketone bodies are utilized in  
(1) mitochondria                           (2) chloroplast  
(3) extra-hepatic tissues               (4) Golgi bodies
113. Which one of the following hormones regulate the volume of urine?  
(1) Antidiuretic hormone               (2) Thyroxine  
(3) Insulin                               (4) Adrenalin
114. The organisms that can grow on minimal medium are called  
(1) heterotrophs                       (2) autotrophs  
(3) auxotrophs                         (4) prototrophs
115. Most lethal mutations in diploid organisms are  
(1) recessive                           (2) beneficial  
(3) dominant                           (4) incomplete dominance

101. The total number of amino acids found in H and L chains of an immunoglobulin are  
(1) 214 and 446 (2) 275 and 350 (3) 250 and 500 (4) 100 and 300
102. CD4, commonly found on the surface of T-helper cells is a  
(1) phospholipid (2) glycoprotein (3) glycolipid (4) nucleoprotein
103. Which of the following is a heterosporous pteridophyte?  
(1) Isoetes (2) Nephrolepis (3) Lycopodium (4) Equisetum
104. Synthesis of RNA is terminated by a  
(1) Delta-factor (2) Sigma-factor (3) Alpha-factor (4) Rho-factor
105. Possible number of isomers of glucose is  
(1) 8 (2) 16 (3) 32 (4) 64
106. The carrier of the TCA cycle is  
(1) oxaloacetate (2) succinate (3) fumarate (4) malate
107. Morphine is obtained from  
(1) *Rauwolfia serpentina* (2) *Adhatoda vasica*  
(3) *Withania somnifera* (4) *Papaver somniferum*
108. Which one of the following is involved in DNA fingerprinting?  
(1) cDNA (2) Minisatellites  
(3) rRNA (4) Bacterial DNA

94. Glutathione is a  
(1) carbohydrate (2) lipid (3) tripeptide (4) vitamin
95. 'Lecithinase', known for causing lysis of erythrocytes and other tissues containing lipid, is produced by  
(1) *Aspergillus glaucus* (2) *Clostridium perfringenes*  
(3) *Streptococcus aureus* (4) *Streptococcus pyogenus*
96. Which one of the following when present in excess can inhibit activity of RuDF carboxylase?  
(1) Water (2) O<sub>2</sub> and CO<sub>2</sub> (3) CO<sub>2</sub> (4) O<sub>2</sub>
97. In brain, the major mechanism for removal of ammonia is  
(1) asparagine (2) aspartate (3) glutamine (4) glutamate
98. The inactive form of an enzyme is  
(1) neoenzyme (2) isoenzymes (3) zymogens (4) mesozymes
99. The beta-pleated sheet is present in  
(1) fibroin (2) globular proteins  
(3) liposomes (4) primary proteins
100. The immunoglobulins are made up of  
(1) phospholipids (2) glycoproteins  
(3) nucleoproteins (4) hologamy

88. Amylopectin is

- (1) water insoluble
- (2) partly soluble in water
- (3) water soluble
- (4) only soluble in organic solvents

89. Lindane is an example of

- (1) insecticide
- (2) herbicide
- (3) pesticide
- (4) rodenticide

90. Ras proteins contain subfamilies. The one of which is not a part of it

- (1) Rho protein
- (2) Rac protein
- (3) SH2 protein
- (4) Rab protein

91. Which one of the following bacterial oxidizes ferrous into ferric form?

- (1) *Leptothrix ochracea*
- (2) *Bacillus thermophilus*
- (3) *Pasteurella pestis*
- (4) *Treponema pallidum*

92. Folic acid deficiency may impair

- (1) biosynthesis of arginine
- (2) biosynthesis of fatty acids
- (3) hemoglobin synthesis
- (4) None of the above

93. A toxoid is a

- (1) heavy toxin
- (2) toxin that loses its activity
- (3) potent toxin
- (4) harmful toxin

- 81.** The entropy change for the melting of ice is  
(1) +ve                      (2) -ve                      (3) zero                      (4) No change
- 82.** Natural rubber is a polymer derived from  
(1) propylene              (2) ethylene              (3) isoprene              (4) butadiene
- 83.** Dry ice is  
(1) solid CO<sub>2</sub>                                      (2) solid SO<sub>2</sub>  
(3) solid benzene                                      (4) solid ice without water
- 84.** Genes that get expressed only when required, are called as  
(1) constitutive              (2) induced              (3) silent              (4) None of the above
- 85.** The rate limiting step in the synthesis of fatty acids is catalysed by  
(1) HMG-CoA synthase                                      (2) fatty acid synthase  
(3) thiolase                                      (4) acetyl-CoA carboxylase
- 86.** After extraction of cell lysate with phenol, the nucleic acid will be in  
(1) interphase                                      (2) the pellet  
(3) aqueous phase                                      (4) phenol phase
- 87.** One molecule of hemoglobin contains iron atoms  
(1) 1                                      (2) 4                                      (3) 2                                      (4) 3

75. The subunits of ribosomes are manufactured in the
- (1) nucleolus (2) endoplasmic reticulum  
(3) Golgi apparatus (4) mitochondria
76. The chemical reaction that converts glucose to pyruvic acid in a living cell occurs under
- (1) aerobic conditions  
(2) anaerobic conditions  
(3) Both aerobic and anaerobic conditions  
(4) fermentation conditions
77. Which of the following enzymes digest peptidoglycan layer in the bacterial cell wall?
- (1) Renin (2) Lysozyme (3) Pepsin (4) Trypsin
78. NMR frequency lies in
- (1) IR region (2) UV region  
(3) Radiofrequency region (4) X-ray region
79. Mond's process is used for the extraction of
- (1) copper (2) zinc (3) nickel (4) silver
80. An alkyl halide reacts with metallic sodium in dry ether. The reaction is called as
- (1) Sandmeyer reaction (2) Wittig reaction  
(3) Parasitism (4) Wurtz reaction

68. The cross of F1 with its homozygous recessive parent is called as  
(1) test cross      (2) back cross      (3) top cross      (4) direct cross
69. The restriction endonucleases recognize only  
(1) consensus sequences      (2) palindromic sequences  
(3) repeat sequences      (4) random sequences
70. The base in the wobble position of a codon  
(1) is the 3' (third) base      (2) is the 5' (first) base  
(3) is the second base      (4) often contains inosine
71. Alpha amanitin inhibits the action of  
(1) eucaryotic RNA polymerase III      (2) eucaryotic RNA polymerase I  
(3) eucaryotic RNA polymerase II      (4) DNA polymerase I
72. Kjeldahl method is used for estimation of  
(1) nitrogen      (2) carbon      (3) alcohol      (4) halides
73. Biuret method is used for estimation of  
(1) DNA      (2) protein      (3) RNA      (4) lipids
74. If one strand of DNA has the sequence 5'..ATCGAACC..3', the other complimentary strand will have the sequences  
(1) 5'..GCTTAGCT..3'      (2) 5'..TCGATTCG..3'  
(3) 5'..TTCCGGAA..3'      (4) 5'..GCTTCGAT..3'

0. Proteins absorb maximally at what wavelength?

- (1) 260 nm            (2) 280 nm            (3) 340 nm            (4) 412 nm

1. The colour of copper sulphide is

- (1) black            (2) brick red            (3) sky blue            (4) yellow

2. Blood groups were discovered by

- (1) Roland Ross    (2) Varmus            (3) Landsteiner        (4) Baltimore

3. Deficiency of vitamin E causes

- (1) blindness        (2) impotency        (3) skin diseases      (4) bone diseases

4. In spermatogenesis, the acrosome of the sperm is formed by

- (1) Golgi complex    (2) Mitochondria    (3) Microsomes        (4) None of these

5. Which one of the following is a viral disease?

- (1) Ricketts            (2) Beri-beri            (3) Syphilis            (4) Measles

6. The mad cow disease in cattle is associated to

- (1) prions            (2) bacteria            (3) virus                (4) protozoans

7. Which one of the following acts as a neurotransmitter?

- (1) CO                (2) NO                (3) O<sub>2</sub>                (4) NO<sub>2</sub>



54. Abzymes are

- (1) antibodies
- (2) catalytic antigens
- (3) antibiotics
- (4) catalytic antibodies

55. Kranz anatomy is seen in

- (1) all monocots
- (2) all dicots
- (3) monocots and dicots with C4 pathway
- (4) legumes

56. Convergent evolution is illustrated by

- (1) rats and dogs
- (2) starfish and cuttlefish
- (3) bacterium and protozoans
- (4) dogfish and whale

57. Which of the following is a strongest acid?

- (1)  $\text{Cl}_2\text{CHCOOH}$
- (2)  $\text{ClF}_2\text{CCOOH}$
- (3)  $\text{F}_3\text{CCOOH}$
- (4)  $\text{CH}_3\text{COOH}$

58. Which one of the following is a basic amino acid?

- (1) Lysine
- (2) Glycine
- (3) Threonine
- (4) Tyrosine

59. The hybridized state of carbon in  $\text{CH}_3-\text{C}\equiv\text{CH}$  is

- (1)  $sp^2$  and  $sp$
- (2)  $sp^3$  and  $sp$
- (3)  $sp$
- (4)  $sp^3$

49. Lyases catalyse

- (1) hydrolytic reactions
- (2) transamination reactions
- (3) redox reactions
- (4) unsaturation generating reaction

50. Which of the following is a cofactor?

- (1) Biotin
- (2) Tetrahydrofolic acid
- (3) Copper
- (4) Methylcobalamin

51. Ribozymes are

- (1) enzymes using ribose as substrates
- (2) RNAs with enzyme activities
- (3) enzymes working on DNA
- (4) nucleoproteins

52. If concentration is measured in moles per litre and time in seconds, what would be the unit of the rate constant of the first-order reaction?

- (1)  $\text{sec}^{-1}$
- (2) L
- (3) Moles per litre  $\text{sec}^{-1}$
- (4) Moles per litre

53. The enzyme purification in one step may be achieved by

- (1) gel filtration chromatography
- (2) ion-exchange chromatography
- (3) ammonium sulphate fractionation
- (4) affinity chromatography

- 44.** Peptidyltransferase activity is contained with the
- (1) large ribosomal subunit
  - (2) small ribosomal subunit
  - (3) tRNA
  - (4) Both large and small ribosomal subunit
- 45.** The HIV-1 has one of the following as its genetic material
- (1) single-stranded DNA
  - (2) hybrid of DNA and RNA
  - (3) two strands of RNA
  - (4) double-stranded DNA
- 46.** During DNA replication, primase catalyses synthesis of
- (1) complementary DNA strand
  - (2) complementary RNA strand
  - (3) small RNA as a primer
  - (4) Okazaki fragments
- 47.** The pH of 0.1 N HCl and that of 0.1 N acetic acid would be
- (1) equal
  - (2) pH of HCl would be higher
  - (3) pH of acetic acid would be higher
  - (4) pH of acetic acid be lower
- 48.** Which one of the following lacks cellular machinery for protein biosynthesis?
- (1) Bacteria
  - (2) Fungi
  - (3) Lichens
  - (4) Viruses

37. Hydrophobic drug transporters found in plasma membrane are kept under  
 (1) channels (2) pumps  
 (3) ABC cassettes (4) group translocators
38. A gene codes for a protein of 200 amino acids length. The size of the gene would be  
 (1) 500 bp (2) 600 bp (3) 200 bp (4) 1000 bp
39. The forces that help maintain the three-dimensional functional conformation of a protein is mainly  
 (1) covalent (2) non-covalent  
 (3) Both covalent and non-covalent (4) ionic and non-covalent
40. Spliceosome removes introns from hnRNA in  
 (1) nucleus (2) mitochondria (3) chloroplast (4) archaebacteria
41. D-fructose can rotate the plane of a plane polarized light in a specific direction. It is specifically  
 (1) racemic (2) dextrorotatory  
 (3) levorotatory (4) less dextro- and more levorotatory
42. The muscle fibers are  
 (1) syncytial (2) perimysium (3) sarcolemma (4) endomysium
43. The disease Down syndrome is  
 (1) sex linked (2) autosomal (3) viral (4) bacterial

- 31.** Enucleated protoplast is known as  
(1) cybrid                      (2) duplast                      (3) cytoplast                      (4) None of the above
- 32.** Ribosomes are  
(1) Lipoproteins                      (2) Nucleoproteins  
(3) Glycoproteins                      (4) None of the above
- 33.** The integrated form of a lysogenic bacteriophage is called  
(1) prophage                      (2) lysogen  
(3) cryptic phase                      (4) transducing phase
- 34.** Which of the following lipids has a net negative charge?  
(1) Phosphatidylcholine                      (2) Phosphatidylserine  
(3) Cholesterol                      (4) Phosphatidylethanolamine
- 35.** The lac repressor is a  
(1) RNA binding protein                      (2) DNA binding protein  
(3) complex carbohydrate                      (4) complex lipid
- 36.** Microtubules are the principal components of  
(1) Golgi bodies                      (2) cell walls  
(3) spindles                      (4) endoplasmic reticulum

24. The total number of codons in the genetic code is  
(1) 64                      (2) 16                      (3) 128                      (4) 256
25. The conversion of RNA into cDNA is catalysed by  
(1) RNA polymerase II                      (2) gyrase  
(3) reverse transcriptase                      (4) topoisomerase
26. The males of bees, ants and wasps are  
(1) X/X                      (2) haploid                      (3) X/O                      (4) polyploid
27. The scientific basis of Lamarckism is  
(1) natural selection                      (2) germplasm theory  
(3) mutation theory                      (4) use and disuse
28. Which of the following is the left-handed form of DNA ?  
(1) A-form of DNA                      (2) Z-form of DNA  
(3) B-form of DNA                      (4) C-form of DNA
29. Which ions are involved in muscle contraction?  
(1) Sodium and calcium                      (2) Sodium and potassium  
(3) Calcium and magnesium                      (4) Potassium and magnesium
30. Control of body temperature depends on  
(1) hypothalamus    (2) pituitary                      (3) medulla                      (4) heart

- 17.** Which of the following growth hormones stops premature dropping of fruits/flowers?  
(1) 2,4-D                      (2) NAA                      (3) IAA                      (4) IBA
- 18.** Antibodies are produced by  
(1) T-lymphocytes                      (2) virgin B-lymphocytes  
(3) plasma cells                      (4) dendrites
- 19.** The predominant antibody in the saliva is  
(1) IgG                      (2) IgM                      (3) IgA                      (4) IgD
- 20.** Iron is the central atom in hemoglobin whereas in chlorophylls it is  
(1) iron                      (2) magnesium                      (3) calcium                      (4) zinc
- 21.** Calcitonin inhibits the release of  
(1) phosphorus from bones                      (2) calcium from nerves  
(3) calcium from bones                      (4) calcium from muscles
- 22.** Antibodies chemically are  
(1) proteins                      (2) nucleoproteins  
(3) lipoproteins                      (4) complex carbohydrates
- 23.** Which one of the following enzymes is specifically involved in glyoxalate cycle?  
(1) Aconitase                      (2) Succinate dehydrogenase  
(3) Isocitrate lyase                      (4) Lactate dehydrogenase

14P/210/5

**No. of Questions/प्रश्नों की संख्या : 150**

**Time/समय : 2 Hours/घण्टे**

**Full Marks/पूर्णांक : 450**

**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.

अधिकतम प्रश्नों को हल करने का प्रयत्न करें। प्रत्येक प्रश्न 3 अंक का है। प्रत्येक गलत उत्तर के लिए एक अंक काटा जाएगा। 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 हों, तो निकटतम सही उत्तर दें।

1. The pyrenoid is found in which one of the following organelle of Spirogyra?  
(1) Chloroplast      (2) Vacuole      (3) Nucleolus      (4) Mitochondria
2. Litmus as a natural dye can be obtained from  
(1) fungi      (2) algae      (3) bacteria      (4) lichens
3. Double-stranded RNA viruses are called as  
(1) pox viruses      (2) reoviruses      (3) riboviruses      (4) adenoviruses





14P/210/5

Question Booklet No.....

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

Roll No.

--	--	--	--	--	--	--	--	--	--

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 change 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 mark).*
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.