

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 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 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 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 : 18

12P/210/30

No. of Questions : 150

Time : 2 Hours]

[Full Marks : 450

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.*

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

1. Acetyl CoA directly gives rise to all *except* :

- | | |
|-----------------|-------------------|
| (1) Glucose | (2) Ketone bodies |
| (3) Cholesterol | (4) Fatty acids |

2. Ovarian reserve is best indicated by :

- | | |
|------------------|--------------|
| (1) LH | (2) FSH |
| (3) LH/FSH ratio | (4) Estrogen |

3. Hyperaldosteronism causes all *except* :

- | | |
|------------------|------------------------|
| (1) Hypokalemia | (2) Hyponatremia |
| (3) Hypertension | (4) Metabolic acidosis |

4. The chief mineral of bone is :

- | | |
|---------------------|-----------------------|
| (1) Calcium oxalate | (2) Calcium carbonate |
| (3) Hydroxyapatite | (4) Calcite |

5. Splicing is done by :

- | | | | |
|----------|----------|----------|-----------|
| (1) mRNA | (2) tRNA | (3) rRNA | (4) SnRNA |
|----------|----------|----------|-----------|

P. T. O.

6. Which of the following serves as a coenzyme for transketolase ?
(1) Thiamine (2) Biotin
(3) Pyridoxine (4) Cobalamine
7. Malabsorption is caused by all *except* :
(1) *Ascaris lumbricodes* (2) *Capillaria philippinensis*
(3) *Strongyloides* (4) *Giardia lamblia*
8. Shine-Dalgarno sequence in bacterial mRNA is near :
(1) UAA (2) UAG (3) AUG (4) UGA
9. A segment of a eukaryotic gene that is *not* represented in the mature mRNA is known as :
(1) Intron (2) Exon
(3) Plasmid (4) TATA box
10. Eukaryotic cell membrane is formed by all *except* :
(1) Cholesterol (2) Lecithin
(3) Triglycerides (4) Carbohydrates
11. Insulin is responsible for all *except* :
(1) Glycolysis (2) Glycogenesis
(3) Lipogenesis (4) Ketogenesis
12. Free radicals in lens are held by all *except* :
(1) Vitamin A (2) Vitamin E
(3) Vitamin C (4) Glutathione peroxidase
13. Hyaluronic acid is present in :
(1) Vitreous humor (2) Cornea
(3) Dermis (4) Mast cells
14. Sertoli cells have receptors for :
(1) Inhibin (2) Melatonin
(3) Luteinizing hormone (4) Follicle stimulating hormone

15. The main excitatory neurotransmitter in CNS is :
- (1) Aspartate (2) Glutamate
(3) Glycine (4) Acetylcholine
16. Which of the following element is known to influence body's ability to handle oxidative stress ?
- (1) Calcium (2) Potassium (3) Selenium (4) Iron
17. The enzyme associated with the conversion of androgen to estrogen in the growing ovarian follicle is :
- (1) Desmolase (2) Hydroxylase
(3) Isomerase (4) Aromatase
18. An enzyme that makes a double stranded DNA from a single stranded RNA template is known as :
- (1) DNA polymerase (2) RNA polymerase
(3) DNA topoisomerase (4) Reverse transcriptase
19. Proteins targeted for destruction in eukaryotes are covalently linked to :
- (1) Pepsin (2) Clathrin
(3) Ubiquitin (4) Laminin
20. Which of the following assist in protein folding ?
- (1) Proteases (2) Templates
(3) Proteosomes (4) Chaperones
21. Restriction endonuclease cut the DNA into fragments by :
- (1) DNA polymerase I (2) DNA polymerase-III
(3) DNA ligase (4) DNA topoisomerase
22. The chief organelle involved in apoptosis is :
- (1) Nucleus (2) Endoplasmic reticulum
(3) Golgi apparatus (4) Mitochondria
23. Functions of CD4 are all *except* :
- (1) Antibody production (2) Immunogenic memory
(3) Opsonization (4) Activate cytotoxic cells

24. Antigen-antibody precipitation is maximum in :
- (1) Antigen excess
 - (2) Antibody excess
 - (3) Equivalence of antigen antibody
 - (4) Interaction of antibody with haptens
25. Which of the following is seen in a patient with severe hyperglycemia receiving insulin ?
- (1) Hypokalemia
 - (2) Hyperkalemia
 - (3) Hyponatremia
 - (4) Hybern timers
26. Most sensitive and specific test for diagnosis of iron deficiency is :
- (1) Serum iron levels
 - (2) Serum ferritin levels
 - (3) Transferrin saturation
 - (4) Serum transferrin receptor population
27. Glutathione present in the membrane of RBCs is :
- (1) A lipid
 - (2) A dipeptide
 - (3) A tripeptide
 - (4) An oligosaccharide
28. Urine on exposure to air and light turns black in :
- (1) Alcaptonuria
 - (2) Phenylketonuria
 - (3) Homocystinuria
 - (4) Maple syrup urine disease
29. Heme synthesis requires all *except* :
- (1) Iron
 - (2) Glycine
 - (3) Vitamin B6
 - (4) Selenium
30. All of the following are branched chain amino acids *except* :
- (1) Leucine
 - (2) Isoleucine
 - (3) Lysine
 - (4) Valine
31. Respiratory acidosis may be due to :
- (1) Pneumonia
 - (2) Vomiting
 - (3) Hyperventilation
 - (4) Starvation

32. Which of the following amino acid does *not* have a codon ?
 (1) Alanine (2) Valine (3) Taurine (4) Methionine
33. All of the following biochemical pathways occur in mitochondria *except* :
 (1) Krebs Cycle (2) Ketogenesis
 (3) Fatty acid oxidation (4) Fatty acid synthesis
34. Malonate competitively inhibits :
 (1) Fumarate dehydrogenase (2) Succinate thiokinase
 (3) Succinate dehydrogenase (4) Aconitase
35. Acetyl CoA carboxylase is :
 (1) An oxidoreductase (2) A transferase
 (3) A ligase (4) A hydrolase
36. Beta-oxidation of odd chain fatty acids produces :
 (1) Acetyl CoA (2) Propionyl CoA
 (3) Malonyl CoA (4) Succinyl CoA
37. Decreased glycolytic activity impaires oxygen transport by Hemoglobin due to
 (1) Decreased production of 2,3 bisphosphoglycerate
 (2) Low levels of oxygen
 (3) Reduced energy production
 (4) Reduced production of hemoglobin
38. The main enzyme responsible for activation of xenobiotics is :
 (1) Glutathione- S- transferase (2) Cytochrome P450
 (3) Cytochrome P450 reductase (4) Glucuronyl transferase
39. Which of the following statement is *correct* about Vitamin B 12 ?
 (1) The coenzyme form is Vitamin B 12 itself
 (2) It requires an intrinsic factor for its absorption
 (3) It is involved in the transfer of amino groups
 (4) It is present in plant sources

40. Phenylketonuria is due to deficiency of :
- (1) Phenylalanine hydroxylase (2) Phenylpyruvate hydroxylase
(3) Homogentisic acid oxidase (4) Tyrosine hydroxylase
41. In a solution, the concentration of H⁺ ion is 1×10 moles/l. The pH of the solution is
- (1) 3 (2) 4 (3) 6 (4) 12
42. Bacteria capable of growing in 3M NaCl are called :
- (1) Halophiles (2) Osmotolerant
(3) Aerotolerant (4) Thermophiles
43. Glycogen storage disease includes all of the following *except* :
- (1) Forber's disease (2) Fabry's disease
(3) Hers' Disease (4) Anderson's disease
44. Lesch-Nyhan syndrome is due to complete deficiency of :
- (1) HGPRTase (2) Xanthine oxidase
(3) Purine phosphorylase (4) Adenosine deaminase
45. Which of the following amino acid is excreted in maple syrup urine disease ?
- (1) Tryptophan (2) Phenylalanine
(3) Leucine (4) Arginine
46. The minimum number of polypeptide chain in immunoglobulin is :
- (1) Two (2) Four (3) Six (4) Eight
47. The osmotic pressure of a solution relating to solute molecules depend on the :
- (1) Size (2) Shape (3) Volume (4) Number
48. Bile salts make emulsification with fat for the action of :
- (1) Amylase (2) Lipase
(3) Trypsin (4) Pepsin
49. The epimer of glucose is :
- (1) Fructose (2) Ribose (3) Galactose (4) Deoxyribose

50. Human heart muscle contains :
- (1) D-ribose (2) D-arabinose (3) D-xylose (4) D-lyxose
51. Honey contains the hydrolytic product of :
- (1) Lactose (2) Maltose (3) Starch (4) Insulin
52. Osmosis is opposite to :
- (1) Affusion (2) Effusion (3) Diffusion (4) Confusion
53. The surface tension of a solution is increased by :
- (1) Bile salts (2) Bile acids
(3) Conc. Sulphuric acid (4) Acetic acid
54. Large amount of teichoic acid polymer is found in :
- (1) Gram +ve bacteria (2) Gram -ve bacteria
-- (3) Green algae (4) Blue green algae
55. Fatty acids can be transported into and out of mitochondria through :
- (1) Active transport (2) Passive transport
(3) Facilitated transfer (4) Nonfacilitated transfer
56. Iodine solution produces no colour with :
- (1) Starch (2) Cellulose (3) Glycogen (4) Dextrin
57. Barfode's solution is *not* reduced by :
- (1) Glucose (2) Sucrose (3) Ribose (4) Mannose
58. N-acetylneuraminic acid is known as :
- (1) Sialic acid (2) Hippuric acid
(3) Mucic acid (4) Glucuronic acid
59. Blood group substances consist of :
- (1) Lactose (2) Fucose (3) Maltose (4) Mucose
60. The component of cartilage and cornea is :
- (1) Keratan sulphate (2) Chondroitin sulphate
(3) Antimony sulphate (4) Cadmium sulphate

12P/210/30

61. Enzymes mediating transfer of one molecule to another are :
(1) Transferases (2) Lyases (3) Oxidases (4) Ligases
62. Magnesium is required for :
(1) Aldolase (2) ATPase
(3) Dismutase (4) Phosphatase
63. Thiamine level is best monitored by :
(1) Transketolase level in blood
(2) Thiamine level in blood
(3) Glucose - 6 - phosphate dehydrogenase activity
(4) Reticulocytosis
64. Phenylalanine is the precursor of all *except* :
(1) Tyrosine (2) Thyroxine (3) Epinephrine (4) Melatonin
65. In dividing cells, spindle is formed by :
(1) Tubulin (2) Ubiquitin (3) Laminin (4) Keratin
66. Substrate level phosphorylation is seen in the conversion of :
(1) Succinyl CoA to succinate
(2) Acetoacetate to alpha ketoglutarate
(3) Succinate to fumarate
(4) Fumarate to malate
67. The carrier of the citric acid cycle is :
(1) Succinate (2) Fumarate (3) Malate (4) Oxaloacetate
68. Fructokinase is present in :
(1) Intestine (2) Adipose tissue (3) Brain (4) Heart
69. Lecithin contains a nitrogenous base as :
(1) Ethanolamine (2) Choline
(3) Inositol (4) Lipositol
70. Phosphatidyl inositol is found in :
(1) Cabbage (2) Cauliflower (3) Soyabean (4) Apple

71. The concentration of sphingomyelins increases in :
(1) Gaucher's disease (2) Niemann-Pick disease
(3) Fabry's disease (4) Tarui's disease
72. RuBP carboxylase can utilize following as the substrate :
(1) Water (2) O_2 and CO_2 (3) CO_2 (4) O_2
73. Gangliosides are the glycolipids in :
(1) Brain (2) Liver
(3) Kidney (4) Muscle
74. The protein moiety of lipoprotein is known as :
(1) Apoprotein (2) Pre-protein (3) Pseudoprotein (4) Post-protein
75. The prostaglandins are synthesized from :
(1) Linoleic acid (2) Linolenic acid
(3) Oleic acid (4) Arachidonic acid
76. Chaulmoogric acid was earlier used in the treatment of :
(1) Bronchitis (2) Nephritis
(3) Leprosy (4) Oedema
77. Before the action of lipase, the fat is emulsified by :
(1) Lipoproteins (2) Phospholipids
(3) Digitonin (4) Ergosterol
78. Long chain fatty acids are first activated to acyl CoA in :
(1) Cytosol (2) Mitochondria (3) Lysosomes (4) Microsomes
79. The great majority of absorbed fat appears in the form of :
(1) HDL (2) Chylomicrons (3) DL (4) VLDL
80. Carboxylation of acetyl CoA to malonyl CoA requires :
(1) Biotin (2) FAD (3) NAD^+ (4) $NADP^+$
81. The prostaglandin synthesis is inhibited by :
(1) Arsenite (2) Aspirin (3) Fluoride (4) Cyanide

82. In a well fed state, acetyl CoA obtained from diet is least used in the synthesis of :
- (1) Citrate (2) Acetoacetate
(3) Oxalosuccinate (4) Palmitoyl CoA
83. Most nonpolar amino acid is :
- (1) Arginine (2) Glycine (3) Leucine (4) Lysine
84. Aminoacyl t-RNA is required for all *except* :
- (1) Methionine (2) Hydroxyproline
(3) Cystine (4) Cysteine
85. The principal site for acidification of urine is :
- (1) Proximal convoluted tubule (2) Distal convoluted tubule
(3) Collecting duct (4) Loop of Henle
86. Prostaglandin decreases cAMP levels in :
- (1) Thyroid (2) Lung (3) Adipose tissue (4) Platelets
87. HDL is synthesized and secreted from :
- (1) Liver (2) Kidney
(3) Pancreas (4) Muscle
88. The lowered glucokinase leading to diminished fatty acid synthesis in the liver is caused by :
- (1) Feeding (2) Overfeeding (3) Starvation (4) Diarrhea
89. The edible part of litchi is :
- (1) Mesocarp (2) Thalamus (3) Aril (4) Seed coat
90. Fatty liver results in the deficiency of :
- (1) Vitamin A (2) Stearic acid (3) Caproic acid (4) Pantothenic acid
91. Ketone bodies are utilized in :
- (1) Mitochondria (2) Extrahepatic tissues
(3) Nucleus (4) Chromosomes

92. Eicosanoids are synthesized from :
(1) Palmitic acid (2) Stearic acid
(3) Butyric acid (4) Arachidonic acid
93. Cyclo-oxygenase is known as :
(1) Suicidal enzyme (2) Inhibiting enzyme
(3) Oxidizing enzyme (4) Reducing enzyme
94. Leukotrienes are important in :
(1) Oxidation reaction (2) Reduction reaction
(3) Allergic reaction (4) Inhibitory reaction
95. The basic amino acid is :
(1) Glycine (2) Proline (3) Serine (4) Histidine
96. Proteins react with Biuret reagent suggesting 2 or more :
(1) Hydrogen bond (2) Peptide bond
(3) Disulfide bond (4) Hydrophobic bond
97. The milk protein in infants is digested by :
(1) Pepsin (2) Trypsin (3) Chymotrypsin (4) Chymosin
98. Trypsin hydrolyzes peptide linkages in the small intestine containing :
(1) Arginine (2) Histidine (3) Serine (4) Aspartate
99. The half life of an antibody is about :
(1) One week (2) Two weeks (3) Three weeks (4) Four weeks
00. The metabolism of protein is integrated with carbohydrate and fat through :
(1) Oxaloacetate (2) Malate (3) Citrate (4) Isocitrate
01. Amino acids provide the nitrogen for the synthesis of :
(1) Phospholipids (2) Uric acid
(3) Glycolipids (4) Chondroitin sulfates
02. Keratin, the protein of hair, is synthesized from :
(1) Glycine (2) Proline (3) Methionine (4) Serine

103. The end product of amino acid nitrogen metabolism in uricotelic animals is :
(1) Urea (2) Uric acid
(3) Bilirubin (4) Biliverdin
104. Most amino acids are substrate for transamination *except* :
(1) Alanine (2) Serine (3) Threonine (4) Valine
105. Oxidative conversion of amino acids to their corresponding keto acids occur in :
(1) Liver & Kidney (2) Adipose tissue (3) Pancreas (4) Intestine
106. The symptoms of ammonia intoxication includes :
(1) Blurring of vision (2) Mental retardation
(3) Constipation (4) Diarrhea
107. Amino acid with dissociation constant closest to physiological pH is :
(1) Serine (2) Histidine (3) Threonine (4) Proline
108. Sources of nitrogen in urea cycle are :
(1) Aspartate and ammonia (2) Glutamate and ammonia
(3) Arginine and ammonia (4) Uric acid
109. Force not acting in an enzyme substrate complex :
(1) Electrostatic (2) Covalent
(3) Hydrogen (4) Van der Waals
110. Cellular oxidation is inhibited by :
(1) Cyanide (2) Carbon dioxide
(3) Chocolate (4) Carbonated beverages
111. Triple bonds are formed between :
(1) A-T (2) G-C (3) A-G (4) C-T
112. Which fatty acid is found exclusively in breast milk ?
(1) Linoleic acid (2) Linolenic acid
(3) Docosahexanoic acid (4) Palmitic acid

113. Enzyme that protects the brain from free radical injury is :
(1) Myeloperoxidase (2) Superoxide dismutase
(3) Monoamine oxidase (4) Hydroxylase
114. Natural rubber is a polymer derived from :
(1) Ethylene (2) Propylene (3) Isoprene (4) Butadiene
115. Which protein prevents contraction by covering binding sites on actin and myosin ?
(1) Troponin (2) Calmodulin (3) Thymosin (4) Tropomyosin
116. Uremia occurs in :
(1) Cirrhosis of liver (2) Nephritis
(3) Diabetes mellitus (4) Coronary thrombosis
117. The sparing action of methionine is :
(1) Tyrosine (2) Tryptophan (3) Arginine (4) Cystine
118. Which of the following inhibitor of thymidylate synthase is used as a chemotherapeutic agent ?
(1) Methotrexate (2) Fluorouridine
(3) Aminopterin (4) Trimethoprim
119. Which of the following best describes the role of sigma factor in RNA synthesis ?
(1) It is essential for elongation
(2) It is responsible for the recognition of the specific initiation sites on a DNA template
(3) It is responsible for releasing the completed chain
(4) It is responsible for separation of DNA strands
120. In oxidative phosphorylation, the ATP production and respiratory chain are linked by :
(1) Chemical methods (2) Physical methods
(3) Chemiosmotic methods (4) Conformational changes

12P/210/30

121. TRH stimulation testing is useful in the diagnosis of disorders of which of the following hormones ?
(1) Insulin (2) ACTH
(3) Growth hormone (4) PTH
122. Elasticity of the corneal layer of skin is due to the presence of :
(1) Histidine (2) Keratin (3) Lysine (4) Cysteine
123. Entropy in a biological system does *not* increase because :
(1) It is an open system (2) It is a closed system
(3) It is governed by vitalism (4) It is related to thermodynamics
124. HIV virus contains :
(1) Single stranded DNA (2) Single stranded RNA
(3) Double stranded DNA (4) Double stranded RNA
125. All of the following drugs can cross placenta *except* :
(1) Phenytoin (2) Diazepam
(3) Morphine (4) Heparin
126. The oxidation and phosphorylation is completely blocked by :
(1) Oligomycin (2) Streptomycin (3) Puromycin (4) Gentamycin
127. Zinc is a constituent of :
(1) Carbonic anhydrase (2) Malate dehydrogenase
(3) Amylase (4) Aldolase
128. The absorption of calcium is increased by :
(1) Fat (2) Protein (3) Cereal (4) Vitamin A
129. Biological value of proteins depend on the presence of :
(1) Essential amino acids (2) Semi-essential amino acids
(3) Non-essential amino acids (4) Incomplete proteins
130. Carotenes are transported through :
(1) Proteins (2) Lipids (3) Minerals (4) Lipoproteins

131. The poor source of Vitamin D is :
(1) Milk (2) Butter (3) Egg (4) Liver
132. Sterilized milk is devoid of :
(1) Vitamin A (2) Vitamin B (3) Vitamin C (4) Vitamin D
133. Blotting technique used for identification of protein is :
(1) Northern blot (2) Southern blot (3) Eastern blot (4) Western blot
134. The serum enzyme used to evaluate pancreatic function is :
(1) ALP (2) Amylase (3) AST (4) LDH
135. The key regulatory enzyme of cholesterol synthesis is :
(1) HMG CoA synthase (2) HMG CoA reductase
(3) Thiolase (4) Mevalonate kinase
136. All of the following Vitamins play a key role in TCA cycle *except* :
(1) Niacin (2) Riboflavin (3) Thiamine (4) Folic acid
137. Dry ice is :
(1) Solid ice without any water (2) Solid CO_2
(3) Solid C_6H_6 (4) Solid SO_2
138. Aminosugar is the component of :
(1) Glycogen (2) Cellulose
(3) DNA (4) Blood group substances
139. Purely ketogenic amino acid is :
(1) Arginine (2) Leucine (3) Tryptophan (4) Valine
140. Number of disulphide bonds in the structure of insulin is :
(1) One (2) Two (3) Three (4) Four
141. Deficiency of copper affects the formation of normal collagen by reducing the activity of :
(1) Galactosyl transferase (2) ALA synthetase
(3) Lysyl hydroxylase (4) Lysyl oxidase

142. The sugar residues in amylose are linked by :
- (1) Alpha-1, 4 linkage (2) Beta-1, 4 linkage
(3) Beta-1, 6 linkage (4) Alpha-1, 2 linkage
143. Which of the following lipid accumulates in Tay-sach's disease ?
- (1) Sphingomyelin (2) Ganglioside GM2
(3) Glucocerebroside (4) Galactocerebroside
144. The antibody class that can cross the placental barrier to protect the fetus is :
- (1) IgA (2) IgE (3) IgG (4) IgM
145. All of the following enzymes are catalyzing the irreversible reactions of glycolysis *except* :
- (1) Hexokinase (2) Phosphofructokinase
(3) Phosphoglycerate kinase (4) Pyruvate kinase
146. Rate limiting enzyme of urea cycle is :
- (1) Carbamoyl phosphate synthetase I
(2) Carbamoyl phosphate synthetase II
(3) Ornathine transcarbamoylase
(4) Argininosuccinate synthase
147. Carcinogenicity with radiant energy is to cause damage to :
- (1) RNA (2) DNA (3) mRNA (4) tRNA
148. The renal glutaminase activity is enhanced by :
- (1) Acidosis (2) Alkalosis (3) Oxidases (4) Phosphatases
149. Respiration is directly linked with the buffer systems of :
- (1) Bicarbonate (2) Phosphate (3) Protein (4) Hemoglobin
150. The pathogenic bacteria are killed by :
- (1) Chlorine (2) Fluorine (3) Bromine (4) Iodine

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 ले 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 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 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 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।