

16P/210/4

Question Booklet No.....

(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)

(2016)

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 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 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.

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

[No. of Printed Pages : 24+2]

No. of Questions : 150**Time : 2 Hours****Full Marks : 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.**
 - (2) If more than one alternative answers seem to be approximate to the correct answer, choose the closest one.

1. Which of the following has highest redox potential in the respiratory chain?
(1) Ubiquinone (2) FAD (3) NAD^+ (4) O_2
2. Pyrimidines are also found in which of the following apart from nucleic acids?
(1) Theophylline 2) NAD^+ (3) Theobromine (4) Thiamine
3. Which of the following is not a macromolecule composed of many subunits?
(1) Proteome (2) Proteins
(3) Polysaccharides (4) ~~DNA~~

4. S-Adenosylmethionine is required for the synthesis of
(1) bile salts (2) melanin (3) epinephrine (4) serotonin
5. Puromycin inhibits translation by
(1) causing misreading of mRNA
(2) acting as tyrosyl tRNA analogue
(3) preventing binding of aa-tRNA to A site
(4) None of the above
6. Richest source of linoleic acid is
(1) sunflower oil (2) soyabean oil (3) safflower oil (4) corn oil
7. Maximum content of endogenous triacylglycerols is seen in
(1) chylomicrons (2) VLDL (3) LDL (4) HDL
8. Kynurenine is formed from
(1) glycine (2) tryptophan (3) tyrosine (4) phenylalanine
9. Enzyme activity measured in beriberi is
(1) carboxylase (2) transaminase (3) deaminase (4) transketolase
10. Insulin inhibits all of the following enzymes, *except*
(1) glucose 6-phosphatase (2) pyruvate carboxylase
(3) phosphofructokinase (4) fructose 1,6-bisphosphatase

11. Golgi body is involved in
(1) protein synthesis (2) drug metabolism
(3) protein packaging (4) protein degradation
12. Which of the following is also known as cane sugar?
(1) Glucose (2) Fructose (3) Maltose (4) Sucrose
13. Which of the following sugar is utilized by spermatozoa in seminal fluid?
(1) Glucose (2) Fructose (3) Sucrose (4) Mannose
14. Rancidity of butter is prevented by the addition of
(1) vitamin A (2) vitamin D (3) vitamin E (4) folic acid
15. Phospholipids are important cellular components because
(1) they have both polar and non-polar groups
(2) they have glycerol
(3) they can form bilayers in water
(4) they combine covalently with proteins
16. The repeating disaccharide unit in cellulose is
(1) dextrin (2) dextrose (3) maltose (4) cellobiose
17. The triglycerides present in plasma lipoproteins are hydrolyzed by
(1) pancreatic lipase (2) lipoprotein lipase
(3) lingual lipase (4) adipokinetic lipase

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- 18.** Prostaglandin synthesis is increased by activating phospholipases by
(1) indomethacin (2) glucocorticoids
(3) aspirin (4) angiotensin II
- 19.** The phosphoprotein present in milk is
(1) avidin (2) casein (3) ovalbumin (4) ovoglobulin
- 20.** Glutathione is a
(1) dipeptide (2) tripeptide (3) oligopeptide (4) polypeptide
- 21.** The protein present in hair is
(1) keratin (2) elastin (3) prolamine (4) gliadin
- 22.** Which of the following is not an essential fatty acid?
(1) Oleic acid (2) Linoleic acid
(3) Linolenic acid (4) Arachidonic acid
- 23.** Enoyl-CoA isomerase is needed for the complete β -oxidation of
(1) unsaturated fatty acids with *trans* double bonds
(2) saturated fatty acids
(3) odd chain fatty acids
(4) unsaturated fatty acids with *cis* double bonds

- 24.** Which of the following is true for all transposons?
- (1) They confer resistance to antibiotics
 - (2) They create a double-stranded break in the donor DNA after moving to new site
 - (3) They encode transposases
 - (4) They have terminal repeats that are homologous to sequences on their target site
- 25.** Serpentine receptors
- (1) are located on the plasma membrane
 - (2) act in the nucleus
 - (3) are ion channels
 - (4) have single transmembrane domain
- 26.** Maximum damage to DNA is caused by
- (1) α -rays
 - (2) β -rays
 - (3) UV rays
 - (4) γ -rays
- 27.** Mechanism of action of orlistat is
- (1) stimulation of BMR
 - (2) inhibition of gastric and pancreatic lipase
 - (3) inhibition of appetite centre
 - (4) inducing satiety
- 28.** Sakaguchi test is used for the detection of
- (1) tyrosine
 - (2) proline
 - (3) arginine
 - (4) histidine
- (178)

- 29.** Cutaneous hypersensitivity is not a feature of
(1) variegate porphyria (2) congenital erythropoietic porphyria
(3) hereditary coproporphyria (4) acute intermittent porphyria
- 30.** Fructosamine is formed by non-enzymatic glycosylation of
(1) albumin (2) haemoglobin (3) myoglobin (4) immunoglobulins
- 31.** Highest percentage of modified bases are present in
(1) mRNA (2) tRNA (3) snRNA (4) rRNA
- 32.** Citrate buffer inhibits glycolysis by inhibiting
(1) phosphofructokinase (2) enolase
(3) pyruvate kinase (4) phosphoglycerate kinase
- 33.** In gene cloning largest fragment can be incorporated in
(1) bacteriophage (2) cosmid
(3) plasmid (4) retrovirus
- 34.** Aneuploidy is due to
(1) insertion (2) translocation
(3) non-disjunction at meiosis (4) deletion
- 35.** Components of biological membranes include all, *except*
(1) phospholipids (2) triacylglycerols
(3) cholesterol (4) glycolipids

- 36.** Glycosaminoglycan responsible for maintenance of corneal transparency is
- | | |
|---------------------|--------------------------|
| (1) keratan sulfate | (2) chondroitin sulphate |
| (3) heparin | (4) hyaluronic acid |
- 37.** Fatty acid accumulated in Refsum's disease is
- | | |
|----------------------|-------------------|
| (1) stearic acid | (2) phytanic acid |
| (3) arachidonic acid | (4) linoleic acid |
- 38.** Phospholipid involved in blood clotting is
- | | |
|-----------------|-----------------------|
| (1) plasmalogen | (2) lecithin |
| (3) cephalin | (4) None of the above |
- 39.** Hyperextensibility of skin and joints is seen in
- | | |
|-----------------------------|----------------------------|
| (1) Pendred syndrome | (2) Lesch-Nyhan syndrome |
| (3) Osteogenesis imperfecta | (4) Ehlers-Danlos syndrome |
- 40.** Amino acid sequence in a protein is determined by
- | | |
|--------------------------|-----------------------|
| (1) Biuret reagent | (2) Edman's reagent |
| (3) Seliwanoff's reagent | (4) Barfoed's reagent |
- 41.** Sticky foot structures are
- | | |
|----------------------------|------------------------------|
| (1) N-linked glycoproteins | (2) GPI-linked glycoproteins |
| (3) O-linked glycoproteins | (4) S-linked glycoproteins |

42. Which of the following is the Golgi marker enzyme?

- | | |
|---------------------------|------------------------------|
| (1) ATP synthase | (2) Hexokinase |
| (3) Galactosyltransferase | (4) Restriction endonuclease |

43. All of the following are channel formers, *except*

- (1) adriamycin (2) gramicidin (3) valinomycin (4) amelogenin

44. The ring structure present in proline is

- (1) cyclopentanoperhydrophenanthrene
(2) imidazole
(3) indole
(4) pyrrolidine

45. Pauly's test is answered by

- | | |
|--------------|--------------------------|
| (1) cysteine | (2) histidine |
| (3) proline | (4) aromatic amino acids |

46. Secondary structure of proteins is preserved by all of the following, *except*

- | | |
|--------------------|--------------------------|
| (1) covalent bonds | (2) hydrogen bonds |
| (3) ionic bonds | (4) van der Waals forces |

47. Aldehyde test is negative for

- | | | | |
|-----------------|-------------|-------------|------------|
| (1) haemoglobin | (2) gelatin | (3) albumin | (4) casein |
|-----------------|-------------|-------------|------------|

48. Glutamine synthetase is a

- | | |
|--------------------|---------------|
| (1) oxidoreductase | (2) ligase |
| (3) lyase | (4) hydrolase |

49. Which of the following enzymes requires calcium for its activity?

- | | |
|------------------------|----------------------|
| (1) Lysyl oxidase | (2) Xanthine oxidase |
| (3) Carbonic anhydrase | (4) Lipase |

50. Papain is a

- | | |
|-----------------------|---------------------|
| (1) carboxyl protease | (2) metalloprotease |
| (3) cysteine protease | (4) serine protease |

51. Competitive inhibitor of thymidylate synthase is

- | | |
|----------------------|-----------------------|
| (1) 6-mercaptopurine | (2) 5-fluorouracil |
| (3) methotrexate | (4) None of the above |

52. Which of the following enzymes is active in its phosphorylated form?

- | | |
|----------------------------|-----------------------|
| (1) Glycogen synthase | (2) Pyruvate kinase |
| (3) Glycogen phosphorylase | (4) HMG-CoA reductase |

53. The heteropolysaccharide in which uronic acid is not present is

- | | |
|--------------------------|-----------------------|
| (1) keratan sulphate | (2) dermatan sulphate |
| (3) chondroitin sulphate | (4) heparin |

- 54.** Molecular weight of a protein can be determined by using
(1) native PAGE (2) SDS-PAGE
(3) isoelectric focusing (4) dansyl chloride
- 55.** Which of the following glucose transporters is present in testis?
(1) GLUT 1 (2) GLUT 5 (3) GLUT 3 (4) GLUT 7
- 56.** Which of the following enzymes is not required for pyruvate dehydrogenase?
(1) TPP (2) NADP (3) FAD (4) None of these
- 57.** Glycogen storage disease type O occurs due to deficiency of
(1) glycogen phosphorylase (2) phosphofructokinase
(3) glycogen synthase (4) transglucosidase
- 58.** Pentoses in the human body are obtained from
(1) glycolysis (2) Krebs' cycle (3) HMP shunt (4) Cahill cycle
- 59.** Best biomarker for thyroid disorders is
(1) FT 3 (2) TSH (3) FT4 (4) rT3
- 60.** All of the following parameters are elevated in chronic renal failure, *except*
(1) urea (2) sodium (3) potassium (4) phosphorus

61. Deficiency of pantothenic acid leads to
(1) scurvy (2) beriberi
(3) burning feet syndrome (4) rickets
62. Gastrectomized patient is likely to suffer from deficiency of
(1) vitamin A (2) vitamin C (3) vitamin B₁ (4) vitamin B₁₂
63. Active form of vitamin D is
(1) cholecalciferol (2) ergosterol
(3) calcitriol (4) lanosterol
64. Consumption of raw eggs can cause deficiency of
(1) calcium (2) lipoic acid (3) vitamin C (4) biotin
65. Overlapping DNA segments are repeatedly cloned in
(1) chromosomal walking (2) chromosomal jumping
(3) FISH (4) linkage study
66. What percentage of human genome encodes proteins?
(1) 1-1.5% (2) 10-15% (3) 70-80% (4) >90%
67. Tyrosine residues are iodinated at which positions in thyroxine?
(1) 1 and 3 (2) 3 and 5 (3) 5 and 7 (4) 3 and 7

68. Anticodon region is found in

- (1) tRNA (2) rRNA (3) mRNA (4) snRNA

69. TSH is a

- (1) carbohydrate (2) steroid (3) glycoprotein (4) peptide.

70. Reverse transcriptase is also known as

- (1) DNA dependent DNA polymerase
(2) RNA dependent DNA polymerase
(3) DNA dependent RNA polymerase
(4) RNA dependent RNA polymerase

71. Amanitin inhibits

- (1) ATP synthesis (2) mRNA synthesis
(3) DNA synthesis (4) glycoprotein synthesis

72. Nucleic acids show strongest absorption at wavelength

- (1) 260 nm (2) 480 nm (3) 360 nm (4) 220 nm

73. Biological half-life of catecholamines is

- (1) 10-30 seconds (2) 1-3 days
(3) 10-30 minutes (4) 1-3 weeks

74. Synacthen's test is used for the diagnosis of
- | | |
|----------------------------|-----------------------|
| (1) adrenogenital syndrome | (2) Addison's disease |
| (3) pheochromocytoma | (4) Down's syndrome |
75. Human insulin gene is located on
- | | |
|-------------------|-------------------|
| (1) chromosome 8 | (2) chromosome 6 |
| (3) chromosome 21 | (4) chromosome 11 |
76. Insulin increases the activity of all of the following enzymes, *except*
- | | |
|------------------------------|-----------------------|
| (1) acetyl CoA carboxylase | (2) glycogen synthase |
| (3) hormone sensitive lipase | (4) HMG CoA reductase |
77. Metachromatic leukodystrophy is due to deficiency of
- | | |
|-------------------|----------------------|
| (1) ceramidase | (2) sphingomyelinase |
| (3) arylsulfatase | (4) hexosaminidase |
78. Which of the following anti-cancer drugs is a purine analogue?
- | | |
|-----------------|----------------------|
| (1) Mitomycin C | (2) 6-Mercaptopurine |
| (3) Vinblastine | (4) Cyclophosphamide |
79. Which of the following is a tumor suppressor gene?
- | | | | |
|--------|---------|---------|---------|
| (1) Rb | (2) Erb | (3) Ras | (4) Abl |
|--------|---------|---------|---------|

- 80.** Which of the following purine is present in tea?
- (1) 1,3,7-Trimethylxanthine (2) 1,3-Dimethylxanthine
(3) 3,7-Dimethylxanthine (4) Methylxanthine
- 81.** All of the following are the end products of pyrimidine catabolism, *except*
- (1) CO_2 (2) β -alanine
(3) ammonia (4) γ -amino isobutyrate
- 82.** Which of the following statements does not hold true for prokaryotic translation?
- (1) The initiation tRNA carries N-formylated methionine
(2) Initiation sequence is kozak sequence
(3) Three initiation factors are required
(4) Prokaryotic mRNAs are polycistronic
- 83.** In prokaryotes, the sequence present at promoter site is
- (1) Hogness box (2) GC box (3) CAAT box (4) Pribnow box
- 84.** In hemolytic jaundice, urine bilirubin is
- (1) usually present (2) very high
(3) usually absent (4) very low
- 85.** Carnitine is synthesized from
- (1) threonine (2) lysine (3) alanine (4) taurine

- 86.** Synthesis of Apo B—48 by the intestinal cells is an example of
(1) mRNA editing (2) methylation
(3) splicing (4) hydroxylation
- 87.** The most commonly used prokaryotic host cell in genetic engineering is
(1) *E. coli* (2) insect cells (3) *Aspergillus* (4) *H. influenza*
- 88.** Cystic fibrosis is due to defect in
(1) deletion of one nucleotide (2) deletion of three nucleotides
(3) insertion of one nucleotide (4) trinucleotide expansion
- 89.** DNA is a very stable molecule because of
(1) presence of OH group at 2' position
(2) absence of OH group at 2' position
(3) presence of OH group at 4' position
(4) absence of OH group at 4' position
- 90.** The enzyme responsible for mitochondrial DNA synthesis is
(1) alpha polymerase (2) delta polymerase
(3) beta polymerase (4) gamma polymerase
- 91.** The most processive DNA polymerase is
(1) DNA polymerase I (2) DNA polymerase II
(3) DNA polymerase III (4) DNA gyrase

- 92.** All of the following diseases are associated with defective DNA repair, except
(1) ataxia telangiectasia (2) Werner syndrome
(3) cystic fibrosis (4) xeroderma pigmentosum
- 93.** Multiple codons can decode the same amino acid. This characteristic of genetic code is called
(1) universality (2) degeneracy (3) unambiguity (4) specificity
- 94.** Embryonic haemoglobin is composed of
(1) alpha and beta chains (2) alpha and gamma chains
(3) alpha and delta chains (4) epsilon and zeta chains
- 95.** Digitalis is detoxified by
(1) oxidation (2) methylation (3) hydrolysis (4) reduction
- 96.** Most common cause of hypercalcemia is
(1) hyperparathyroidism (2) malignancy
(3) pheochromocytoma (4) use of thiazide diuretics
- 97.** Which of the following stimulates the production of progesterone by corpus luteum?
(1) FSH (2) Oestrogen (3) LH (4) Prolactin
- 98.** Symptoms of methylmalonic acidemia are almost identical to
(1) OPC poisoning (2) ethylene glycol poisoning
(3) methanol poisoning (4) celphos poisoning

99. Ratio of amount of nitrogen retained to the nitrogen absorbed is called
(1) biological value (2) caloric value
(3) net protein utilization (4) protein efficiency ratio
100. Glucose tolerance factor contains
(1) molybdenum (2) magnesium (3) selenium (4) chromium
101. All of the following decrease iron absorption, *except*
(1) phytates (2) gastric HCl
(3) ascorbic acid (4) calcium
102. Slow reacting substance of anaphylaxis contains all of the following leukotrienes, *except*
(1) LTC₄ (2) LTB₄ (3) LTD₄ (4) LTE₄
103. The major antibody present in colostrum is
(1) IgM (2) IgG (3) IgA (4) IgE
104. Sphingolipids contain all of the following, *except*
(1) phosphate (2) glycerol
(3) oligosaccharide (4) sphingosine
105. Vitamin E functions as an antioxidant due to
(1) its association with the cell membrane
(2) isoprenoid chain
(3) aromatic ring structure
(4) its hydrophobic nature

106. Glycosidic linkage present in cellulose is

- (1) α -1,2 (2) β -1,4 (3) β -1,2 (4) α -1,4

107. The level of which of the following hormones falls in the blood after a meal?

- (1) Insulin (2) PYY [3 – 36] (3) Ghrelin (4) Lipase

108. The number of ATP produced during oxidation of stearic acid is

- (1) 129 (2) 141 (3) 131 (4) 120

109. Which of the following enzymes is used in ELISA?

- (1) Aspartate transaminase (2) Alkaline phosphatase
(3) Alanine transaminase (4) Asparaginase

110. All are polyamines, *except*

- (1) putrescine (2) spermine
(3) S-adenosylmethionine (4) spermidine

111. All of the following are substrates of gluconeogenesis, *except*

- (1) alanine (2) acetyl-CoA
(3) propionic acid (4) glycine

112. The type of DNA found in guanine and cytosine rich regions is

- (1) B-DNA (2) A-DNA (3) Z-DNA (4) C-DNA

113. Gene for major histocompatibility complex is located on
(1) short arm of chromosome 6 (2) long arm of chromosome 6
(3) long arm of chromosome 11 (4) short arm of chromosome 8
114. Fidelity of translation depends on
(1) DNA polymerase (2) RNA polymerase
(3) aminoacyl tRNA synthetase (4) peptidyl transferase
115. Which of the following enzymes is not regulated by calmodulin?
(1) Guanylate cyclase (2) Pyruvate carboxylase
(3) Pyruvate kinase (4) Hexokinase
116. Increased level of which amino acid is associated with high risk of myocardial infarction?
(1) Ornithine (2) Homocysteine (3) Cystein (4) Methionine
117. Cytochrome P-450 enzymes are located in
(1) cell membrane (2) smooth endoplasmic reticulum
(3) nucleus (4) Golgi complex
118. All of the following are derivatives of isopentenyl pyrophosphate, *except*
(1) carotenoids (2) vitamin E (3) dolichol (4) vitamin B
119. AUG, the initiation codon, also codes for
(1) methionine (2) phenylalanine (3) leucine (4) valine

- 120.** DNA glycosylases are involved in
- (1) base excision repair
 - (2) nucleotide excision repair
 - (3) mismatch repair
 - (4) direct repair
- 121.** The amino acid that transports ammonia from skeletal muscle to liver is
- (1) glutamate
 - (2) valine
 - (3) alanine
 - (4) lysine
- 122.** Beta pleats and beta bends are examples of
- (1) primary structure
 - (2) tertiary structure
 - (3) secondary structure
 - (4) quaternary structure
- 123.** All of the following electron carriers are components of electron transport chain, except
- (1) FMN
 - (2) FAD
 - (3) NAD^+
 - (4) NADP^+
- 124.** The iron in haem is linked to the globin through
- (1) arginine
 - (2) lysine
 - (3) histidine
 - (4) glycine
- 125.** Creatinuria is related with the deficiency of
- (1) vitamin A
 - (2) vitamin E
 - (3) vitamin K
 - (4) thiamine
- 126.** Sulpha drugs interfere with bacterial synthesis of
- (1) vitamin D
 - (2) vitamin E
 - (3) folic acid
 - (4) lipoic acid

- 127.** Selenium poisoning can be treated with the administration of
(1) benzylamine (2) P-bromobenzene
(3) P-nitrobenzaldehyde (4) dithiopropanol
- 128.** The two nitrogens in urea are derived from
(1) ammonia and glutamine (2) glutamine and glutamic acid
(3) glutamine and alanine (4) glutamine and aspartic acid
- 129.** β -oxidation of odd-chain length of fatty acids produces
(1) succinyl-CoA (2) malonyl-CoA
(3) propionyl-CoA (4) acetyl-CoA
- 130.** Which of the following marks proteins for destruction?
(1) Clathsin (2) Chaperone (3) Laminin (4) Ubiquitin
- 131.** Isoenzyme fraction of LDH elevated in myocardial infarction is
(1) LDH 1 (2) LDH 2 (3) LDH 3 (4) LDH 5
- 132.** Inhibition of succinate dehydrogenase by malonate is an example of
(1) competitive inhibition (2) non-competitive inhibition
(3) uncompetitive inhibition (4) allosteric inhibition
- 133.** All of the following are essential amino acids, *except*
(1) leucine (2) threonine (3) phenylalanine (4) tyrosine

- 134.** Amylin is secreted by pancreatic cells type
- (1) alpha (2) beta
(3) gamma (4) pancreatic polypeptide
- 135.** Which of the following fatty acids belongs to w-3 series?
- (1) Linoleic acid (2) Arachidonic acid
(3) Linolenic acid (4) Oleic acid
- 136.** Acute hemolytic episodes after administration of anti-malarial drugs are seen due to deficiency of
- (1) glucose-6-phosphatase
(2) glycogen synthase
(3) glucose-6-phosphate dehydrogenase
(4) glycogen phosphorylase
- 137.** Main apoprotein present in chylomicron is
- (1) apo B-48 (2) apo a (3) apo B-100 (4) apo A-II
- 138.** All of the following are constituents of renal calculi, *except*
- (1) calcium (2) xanthine (3) cholesterol (4) uric acid
- 139.** Carbon atoms that are involved in osazone formation are
- (1) 1 and 2 (2) 5 and 6 (3) 1 and 3 (4) 1 and 6

- 140.** γ -glutamyl transpeptidase levels are more specific for diagnosis of
- (1) viral hepatitis
 - (2) alcoholic liver disease
 - (3) myocardial infarction
 - (4) Wilson's disease
- 141.** Which of the following hormones does not act at the level of transcription?
- (1) Cortisol
 - (2) Calcitonin
 - (3) Calcitriol
 - (4) Aldosterone
- 142.** Transamination of alanine leads to the formation of
- (1) pyruvate
 - (2) phenyl pyruvate
 - (3) oxaloacetate
 - (4) aspartate
- 143.** Hypolipidemic agents act on
- (1) HMG CoA synthetase
 - (2) HMG CoA reductase
 - (3) HMG CoA mutase
 - (4) HMG CoA hydratase
- 144.** Which of the following is a lipotropic factor?
- (1) Insulin
 - (2) HDL
 - (3) Carnitine
 - (4) Choline
- 145.** Which of the following enzymes fits in the class of hydrolases?
- (1) Hexokinase
 - (2) Chymotrypsin
 - (3) Glycogen phosphorylase
 - (4) Triose-phosphate isomerase

146. Cytochromes are

- (1) iron-porphyrin proteins
- (2) riboflavin-containing nucleotides
- (3) metal-containing flavoproteins
- (4) pyrimidine nucleotides

147. The accepted hypothesis for DNA replication is

- (1) conservative theory
- (2) semi-conservative theory
- (3) dispersive theory
- (4) evolutionary theory

148. What is the main source of natural fluoride?

- (1) Mushroom
- (2) Potatoes
- (3) Meat
- (4) Water

149. Which of the following amino acids is the major precursor for synthesis of porphyrins in mammals?

- (1) Alanine
- (2) Glycine
- (3) Glutamate
- (4) Asparagine

150. CA 19-9 is a marker of

- (1) Hodgkin's disease
- (2) pancreatic cancer
- (3) prostate cancer
- (4) ovarian cancer

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. रफ़ कार्य के लिये प्रश्न-पुस्तिका के मुखपृष्ठ के अन्दर वाले पृष्ठ तथा अंतिम पृष्ठ का प्रयोग करें।
12. परीक्षा के उपरान्त केवल ओ०एम०आर० 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, भागी होगा/होगी।