Sl.No. M19282a

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VINAYAKA MISSION'S RESEARCH FOUNDATION, SALEM
(Deemed to be University)

B.Sc (ALLIED HEALTH SCIENCES) DEGREE EXAMINATION – August 2018

FIRST YEAR

BIOCHEMISTRY

Three Hours Maximum: 75 marks

I. Choose the Best Answer. **(10 X 1 =10)**

1. The carbon atoms involved in the osazone formation
(a) 1 and 2 (b) 2 and 3 (c) 3 and 4 (d) 5 and 6.
2. The hormone that lowers cAMP concentration in liver cells is
(a) Glucagon (b) Insulin (c) Epinephrine (d) Thyroxine.
3. The connecting link between HMP shunt and lipid synthesis is
(a) Ribose (b) NADPH (c) Sedoheptulose 7-phosphate (d) NADH.
4. The imino acid found in protein structure
(a) Arginine (b) Proline (c) Histidine (d) Lysine.
5. The amino acid that does not participate in transamination
(a) Lysine (b) Glutamate (c) Alanine (d) Tryptophan.
6. The following substance(s) is (are) ketogenic
(a) Fatty acids (b) Leucine (c) Lysine (d) All of them.
7. The following coenzyme is a nucleotide
(a) FAD (b) NAD+ (c) CoASH (d) All of them.
8. The nitrogen atoms in the purine ring are obtained from
(a) Glycine (b) Glutamine (c) Aspartate (d) All of them.
9. Pepsin is an example for the class of enzymes namely
(a) Oxidoreductases (b) Transferases (c) Hydrolases (d) Ligases.
10. The following substance(s) is(are) involved in the regulation of plasma calcium level
(a) Calcitriol (b) Parathyroid hormone (c) Calcitonin (d) All of them.

II. Write Short Answers on any FIVE of the following. (5 x 5 = 25)

11. Cell and cell organelles.
12. Give an account on homopolysaccharides and hetropolysaccharides.
13. Write an account of essential amino acids, zwitterion and peptide bonds.
14. Discuss about sterols cholesterol.
15. Write a short notes of transfer RNA and structure.
16. Vitamin K in carboxylation.
17. Phosphorus.

III. Write Short Essays on any TWO of the following. (2 x 10 = 20)

18. Describe the structure and functions of mucopolysaccharides.
19. Write an account of classification of lipids with suitable examples.
20. Write briefly on the trace elements and their metabolism in the body.

IV. Write Essays on any ONE of the following. (1 x 20 = 20)

21. Write an account of urea cycle and it's important.
22. Write an account of folic acid involvement in one carbon metabolism.

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