S.No.M22328 Course Code :
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VINAYAKA MISSION'S RESEARCH FOUNDATION, SALEM
B.Sc(ALLIED HEALTH SCIENCES) &M.Sc(INTEGRATED PROGRAMS IN CARDIAC TECHNOLOGY) DEGREE EXAMINATIONS - February 2020
First Year
BIOCHEMISTRY

Three Hours Maximum: 75 marks

SECTION - A

I. Choose the Best Answer : (10 x 1 = 10)

1. One of the following is not an aldose
   (a) Glucose (b) Galactose (c) Mannose (d) Fructose
2. The hormone that lowers cAMP concentration in liver cells is
   (a) Glucagon (b) Insulin (c) Epinephrine (d) Thyroxine
3. The amino acid required for the formation of glutathione
   (a) Glycine (b) Cysteine (c) Glutamate (d) All of them
4. The amino acid that does not participate in transamination
   (a) Lysine (b) Glutamate (c) Alanine (d) Tryptophan
5. Hormone sensitive lipase activity is inhibited by the hormone
   (a) Epinephrine (b) Insulin (c) Thyroxine (d) Glucocorticoids
6. The backbone of nucleic acid structure is constructed by
   (a) Peptide bonds (b) Glycosidic bonds
   (c) Phosphodiester bridges (d) All of them
7. Pepsin is an example for the class of enzymes namely
   (a) Oxidoreductases (b) Transferases (c) Hydrolases (d) Ligases
8. J-Glutamyl transpeptidase activity in serum is elevated in
   (a) Pancreatitis (b) Muscular dystrophy
   (c) Myocardial infarction (d) Alcoholism
9. The following element is involved in wound healing
   (a) Calcium (b) Sodium (c) Zinc (d) Magnesium
10. Pick up element that prevents the development of dental caries
    (a) Fluorine (b) Calcium (c) Phosphorus (d) Sodium

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

11. Write about the properties of monosaccharide and disaccharides
12. Write short notes on Polysaccharides and glycosides
13. Write short notes on plasma proteins types and function

(p.t.o.)

14. Write an account of essential fatty acids
15. Write a short notes Simple lipid triacylglycerols
16. Write a importance of DNA denaturation
17. Wilson's disease

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

18. Give an account of the structural configuration of monosaccharides, with special reference to glucose
19. Write an account of classification of lipids with suitable examples
20. Discuss the biochemical functions of vitamin C. Add a note on the therapeutic use of megadoses of this vitamin.
21. Write an essay on the iron metabolism in the body

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

22. Write an account of classification of amino acids and properties of amino acids
23. Classify vitamins and briefly discuss their functions and deficiency disorders

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