Register Number.....

B.TECH. DEGREE EXAMINATIONS: NOVEMBER 2009

Fifth Semester

BIOTECHNOLOGY

U07BT502 Biochemistry

Time: Three Hours **Maximum Marks: 100**

Answer ALL the Questions:-

PART A (10 x 1 =10 Marks)

1. The optimum pH for an enzyme

A.7.0 B.4.5 C.5.6 D.6.9

2. Myocardial infraction is associated with

A. chest B. nose C.lungs D.oesophagus

3. Extra hepatic tissues involved in blood glucose homeostasis

A. neuron B. kidney C.liver D.pancreas

4. Phospopholipids are major components

A. cell membranes B.cell lipids C.micelles D.cell wall

5. Sphingolipids are composed of

A. fatty acids B.lipid proteins C.cholesterol D.membranes

6. Colopase enhances the activity of

A. panbreatic lipase B.pancreatic protease

C.pancreatic proteins D.membranes

7. Beta pleated sheets are present in

A. super structures B. secondary structure

C.primary structure D.tertiary structure

8. Methotrexate is an analog of

A. uric acid B.folic acid C.malic acid D.salicylic acid

9. Hyperphosphataemia can cause inhibition of 1 alpha hydrolase in

A. lungs B.kidney C.heart D.pancrease

10. Iodine is essential for management of

A.pititary hormones B.thyroid harmone C.lymph nodes D.lymphoid organs

PART B (10 x 2 = 20 Marks)

11. Name some non polar amino acids.

12. Define peptides.

13. Name the enzymes responsible for transamination process.

14. What are non essential amino acids?

15. Give some requirements of dietary proteins.

16. Draw the structure of tertiary t-RNA?

17. What is the role of lecithin?

18. Write the significance of contractile proteins.

19. Give some properties of passive transports.

20. Name some antagonists used as drugs.

PART C (5 x 14 =70 Marks)

21. a) Discuss the synthesis of DOPA and auxins.

(OR)

b) Explain the regulation of allosteric enzymes.

22. a) What are chaperons and its mechanisms in detail.

(OR)

b) How protein targeting influences signal sequencing in the biological systems illustrate with an example?

23. a) Explain in detail the biosynthesis of fatty acids.

(OR)

b) Discuss elaborately the sequential regulation of cholesterol synthesis in living system.

24. a) Describe in detail the mechanisms of microtubules and its role in organelle movements.

(OR)

b) Write the mechanism of action of actin and myosin in detail.

25. a) Discuss the structure of bilipid layer structure of membrane in detail.

(OR)

b) Explain the mechanism of neurotransmitters with suitable diagrams.

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