

Code: 9A 23301

R9

B.Tech II Year I Semester (R09) Supplementary Examinations, May 2012

BIOCHEMISTRY

(Bio Technology)

Time: 3 hours

Max Marks: 70

Answer any FIVE questions

All questions carry equal marks

- 1 (a) Describe the structure and properties of monosaccharides.
(b) Give an account of the structure and functions of glycoprotein, glucosamino glycans and lectins.
- 2 (a) Write a note on nomenclature and functions of enzyme.
(b) What is K_M ? Give an account on Michaelis-Menten enzymes and allosteric enzymes.
- 3 (a) Outline the steps involved in HMP path way.
(b) Write the sequence of reactions in glycolytic pathway.
- 4 (a) What is oxidative phosphorylation? Write the events associated with respiratory chain.
(b) Write a note on aerobic and anaerobic respiration.
- 5 (a) Outline the classification and properties of amino acids.
(b) Give an account of nitrogen cycle and nitrogen balance.
- 6 Explain the shikimate pathway for the production of aromatic amino acids.
- 7 (a) Give an account of the biosynthesis of fatty acids.
(b) Metabolism of triglycerols and cholesterol.
- 8 Give an account of the biosynthesis and degradation of Nucleic acids
