

Code: R7212301

R07

B.Tech II Year I Semester (R07) Supplementary Examinations, May 2013

BIOCHEMISTRY

(Biotechnology)

Time: 3 hours

Max. Marks: 80

Answer any FIVE questions
All questions carry equal marks

- 1 Write the structures and properties of the following that are commonly found in DNA and RNA:
 - (a) Pyrimidine bases
 - (b) Pyrimidine nucleosides
 - (c) Pyrimidine nucleotides
- 2 Describe the structural and functional characteristics of LDH isozymes.
- 3 Give an account of biological oxidation and energy transfer in a living system.
- 4 What are the symptoms of hyper ammonia? How is ammonia detoxified in biological system?
- 5 Explain the relationship between glyoxylate and citric acid cycle.
- 6
 - (a) What is invert sugar? Discuss its properties.
 - (b) Explain in detail about the conformations of pyranose and furanose ring structures.
- 7
 - (a) How the fatty acids are useful for the living systems?
 - (b) Write the structures of the following classes of naturally occurring acids:
 - (i) Saturated fatty acids.
 - (ii) Mono unsaturated fatty acids.
 - (iii) Poly unsaturated fatty acids.
- 8 Write the kinetics of single-substrate enzyme catalyzed reactions.
