

Code: 9A23301

**R09**

B.Tech II Year I Semester (R09) Supplementary Examinations, May 2013

**BIOCHEMISTRY**

(Biotechnology)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

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- 1 Write notes on:
  - (a) Cellulose.
  - (b) Glycogen.
  - (c) Starch.
- 2
  - (a) Write notes on nomenclature and functions of enzymes.
  - (b) Explain how substrate concentration affects enzyme activity and Michalis - Menten equation.
- 3 Describe the steps involved in glycolysis.
- 4 Write notes on:
  - (a) Respiratory chain.
  - (b) Anaerobic respiration.
- 5
  - (a) Give an account of primary and secondary structures of protein.
  - (b) Describe the steps involved in urea cycle.
- 6 Outline the steps involved in the glutamate pathway.
- 7
  - (a) Give an account of the structure and functions of cholesterol.
  - (b) Describe the steps involved in the fatty acid synthesis.
- 8
  - (a) Explain the structure of purines and pyrimidines.
  - (b) Degradation of nucleic acids.

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