

Code: 9A23301

R09

B.Tech II Year I Semester (R09) Supplementary Examinations June 2017

BIOCHEMISTRY

(Biotechnology)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions

All questions carry equal marks

- 1 Describe the structure and functions of mucopolysaccharides.
- 2 (a) Briefly discuss the various factors affecting enzyme activity.
(b) Explain the following:
 - (i) Lock and key model.
 - (ii) Induced fit theory.
- 3 (a) Bring out the salient features of Embden-Meyerhof pathway.
(b) Give an account on the regulation of citric acid cycle.
- 4 Give a brief account on the following:
 - (a) ATP-ADP cycle.
 - (b) Redox potential.
 - (c) Cytochromes.
- 5 (a) Define nitrogen balance. What are the factors influencing nitrogen balance?
(b) Give an account on simple proteins.
- 6 What is transamination? Bring out its importance and describe the mechanism involved in it.
- 7 Explain the different stages of cholesterol biosynthesis.
- 8 Give an account on synthesis and degradation of pyrimidines.
