

[SPDBT-104]
M.Sc. DEGREE EXAMINATION

Biotechnology
I YEAR

ENZYMOLGY AND METABOLISM
(Effective from the admitted batch 2009-10)

Time: 3 Hours

Max.Marks: 70

Instructions: All parts of the unit must be answered in one place only.
Figures in the right hand margin indicate marks allotted.

1. Answer any **Four** of the following: (4x5 = 20)
- a) Classification of Enzymes
 - b) Iso enzymes
 - c) Regulation of Glycogen Metabolism
 - d) Transamination
 - e) Phenyl Ketonuria
 - f) Ketone Bodies formation
 - g) Lesch-nyhan syndrome

Answer one question from each unit.
Each question carried 10 marks:

UNIT-I

2. a) Describe the effects of different factors on enzyme activity 10

OR

- b) Describe Michaelis-Menten equation and write the significance of K_m 10

UNIT-II

3. a) Explain competitive and un-competitive enzyme inhibitions with Line weaver-Burk plots 10

OR

- b) Describe the different methods of immobilization of enzymes 10

UNIT-III

4. a) Describe TCA cycle and its regulation 10

OR

- b) Describe HMP shunt and its significance 10

UNIT-IV

5. a) Describe how Ammonia is converted to urea and its regulation 10

OR

- b) Describe the β -oxidation of Fatty acids 10

UNIT-V

6. a) Describe the catabolism of Purine Nucleotides 10

OR

- b) Write the formation of deoxy ribonucleotides and its regulation 10

[01/IY/210]