6. a) Explain the basic mechanism of respiration.  
b) What are antimalarial drugs? Explain their mode of action.

UNIT-IV
7. a) Describe the physiology of thyroid glands and the associated disorders. 
b) What is Diabetes mellitus and what are the drugs used for treatment of diabetes? Explain their mode of action.

OR
8. Describe the functional physiology of the renal system.

UNIT-V

OR
10. a) Write notes on primary and secondary immune response. 
b) What are the drugs used for the treatment of AIDS? Explain their targets on HIV.

[01/IS/209]
[EPRBT 101]
M.Tech. DEGREE EXAMINATION

Biotechnology
I SEMESTER

MOLECULAR PHYSIOLOGY, PATHOLOGY & PHARMACOLOGY
(Effective from the admitted batch 2009-10)

Time: 3 Hours Max.Marks: 60

Instructions: Each Unit carries 12 marks.
Answer all units choosing one question from each unit.
All parts of the unit must be answered in one place only.
Figures in the right hand margin indicate marks allotted.

UNIT-I

1. Describe the physiology of central nervous system. 12

OR

2. a) What is action potential? How is it generated in a modulated nerve fibre? 6
   b) Write notes on Parkinson’s disease and the drugs used for the disease. 6

UNIT-II

3. Describe the physiology of skeletal muscle and the events associated with its contraction and relaxation. 12

OR

4. Write about the functional physiology of the stomach and the small intestine. 12

UNIT-III

5. a) Give an account of cardiac cycle. 6
   b) Write notes on diseases related to rhythmicity and the drugs used for them. 6
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