

15063(OR)

M.Sc., DEGREE EXAMINATION, OCTOBER/NOVEMBER 2015

FIRST SEMESTER

Microbiology

Paper III – BIOLOGICAL CHEMISTRY

(2014-16 Batch)

Time: Three hours

Max. Marks: 75

(No additional sheet will be supplied)

PART A- (5 x 3 =15 marks)

Answer any FIVE questions.

Each question carries 3 marks.

Each answer should not exceed 1 page

1. Mutarotation
2. Iodine number
3. Non Protein peptides
4. Cot Value
5. Steric hindrance in catalytic activity
6. Oxidoreductases
7. Entropy
8. Bioluminescence

PART B - (4 x 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

Each answer should not exceed 6 pages

9. Give a detailed account on structure and function of polysaccharides.
- OR**
10. Outline the classification of lipids. Give an account on structure and functions of steroids.
- OR**
11. Elaborate on structural organization of proteins. Add a note on structure and functional relationship in proteins.
- OR**
12. Explain in detail on structural and functional variations in different forms of DNA
 13. Derive Michaelis and Menten equation. Explain its significance
- OR**
14. Explain in brief about the mechanism of action of RNase and Lysozyme.
 15. Give a detailed account on high energy compounds.
- OR**
16. Briefly describe electron carriers of mitochondria. Add a note on chemiosmotic theory.