

Roll No. ....

**R**  
**630**

Annual Examination, 2016

**B. Sc. I**

MICROBIOLOGY

**Paper II**

[ Biochemistry and Immunology ]

TIME — 3 Hours )

( M. M. — 50

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*NOTE : All questions are compulsory.*

*Section 'A'*

(5 × 2 = 10)

*NOTE : Very short answer type questions i.e., one/two line answer.*

1. What is monosaccharide ?
2. Write difference between DNA and RNA.
3. What is enzyme ?
4. Define metabolism.
5. What is Antibody ?

P. T. O.

(2)

Section 'B'

(5 × 3 = 15)

**NOTE :** Short answer type questions with the word limit 75-100. Two questions are to be set from each unit and they attempt one question from each unit.

Unit—I

1. Explain ribose and deoxyribose sugar.

Or

Write structure of purine and pyrimidine.

Unit—II

2. Write short note on mucopolysaccharide.

Or

Explain structure of starch.

Unit—III

3. Explain classification of enzyme according to IUB system.

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(3)

Or

What is isoenzyme ?

Unit—IV

4. Give a brief account on  $\beta$  oxidation of fatty acid.

Or

Give a brief account on glycolysis pathway.

Unit—V

5. Write chemical nature of antigen.

Or

Describe basic structure of antibody.

Section 'C'

(5 × 5 = 25)

**NOTE :** Long answer type questions with the word limit 150-200. Two questions are to be set from each unit and the student will attempt one question from each unit.

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(4)

Unit—I

1. Write structure and property of Disaccharide.

Or

Explain general account of lipid.

Unit—II

2. Write note on nucleic acid.

Or

Write note on protein.

Unit—III

3. Describe extracellular enzyme and their role.

Or

Write note on enzyme inhibition.

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(5)

Unit—IV

4. Give a detail account on TCA cycle.

Or

Explain oxidation of fatty acid.

Unit—V

5. Write an essay on the various phenomena to innate immunity.

Or

Write note on Antigen-Antibody interaction.

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