

15082(OR)

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

Biotechnology
Paper II – BIOMOLECULES

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. Purines and Pyrimidines
2. Ribose Puckering
3. Vanderwal forces
4. Ionic bonds
5. Peptides bonding
6. Essential amino acids
7. Tanins
8. Terpenes

PART B - (4 x 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

Each answer should not exceed 6 pages

9. Write notes on the types and chemistry of nucleic acids.
(OR)
10. Give an account of the structural polymorphism of DNA and RNA types.
11. Describe the definition and classification of carbohydrates.
(OR)
12. Give an account of the structure and functions of starch and cellulose.
13. Write an essay on the structure, classification and chemical reactions of amino acids.
(OR)
14. Give an account of the structure and functions of pituitary gland.
15. What are secondary metabolites? Describe the structure and biological functions of cytochromes.
(OR)
16. Give an account of the structure and functions of microbial toxins and antibiotics.