



Reg. No. :

Name :

Fourth Semester M.Sc. Degree Examination, July 2018

Branch : HOME SCIENCE

X D : Food and Nutrition

Paper – XIII : HS 241 D – Biochemistry

(2013 Admn. Onwards)

Time : 3 Hours

Max. Marks : 75

PART – I

All questions carry equal marks. No answer should exceed four pages.

1. a) Discuss the metabolism of carbohydrates with reference to glycolysis and TCA cycle.

OR

- b) Explain the principles and applications of paper chromatography.

2. a) Explain the structure of proteins and the general pathways for the metabolism of amino acids.

OR

- b) Write an essay on Polyacrylamide Gel Electrophoresis. (15×2=30 Marks)

PART – II

All questions carry equal marks. No answer should exceed two pages.

3. a) Explain the use of radioactive isotopes in biological investigations.

OR

- b) Discuss the biosynthesis and breakdown of purine nucleotides.

4. a) Discuss the intermediary metabolism between nutrients.

OR

- b) Explain the metabolism of lipids with reference to biosynthesis of fatty acids and cholesterol. (10×2=20 Marks)

P.T.O.



PART – III

5. Write **any five** of the following each **not** exceeding **one** page

- a) Principle of Colorimetry
- b) Immunoelectrophoresis
- c) Synthesis of Haemoglobin
- d) Glycogenesis and Glycogenolysis
- e) Mucopolysaccharides
- f) Urea cycle
- g) Oral Glucose Tolerance Test.

(5×5=25 Marks)

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