

MODEL QUESTION PAPER

MSC I SEM

BIOTECHNOLOGY

SECOND PAPER

BIOMOLECULES AND METABOLISM

TIME: 3 HRS

MAXIMUM MARKS: 85

MINIMUM MARKS: 29

Note: The question paper consists of two sections: A and B. attempt all the questions according to the given instructions.

Section A

Short Answer Type Questions

Note: Attempt all questions. Each question carries five marks (5 X 5 = 25)

Q1. Explain Stereoisomerism.

Or

Write differences between Homo and Hetero polysaccharides.

Q2. Explain DNA structure.

Or

Write a note on structure of RNA with its types.

Q3. Define ATP cycle.

Or

Give note on Krebs's cycle.

Q4. Explain Plant hormones.

Or

Write a short note on saturated and unsaturated fatty acid.

Q5. Describe Denovo pathway.

Or

Explain Salvage pathway.

Section B

Long Answer Type Questions

Note: Attempt all questions. Each question carries twelve marks (5 X 12 = 60)

Q6. Give a detail note on structure, classification and properties of carbohydrates.

Or

Describe Lipids with its structure, classification and properties.

Q7. Describe Amino acid classification with its functions.

Or

Write a essay on types of Protein structure.

Q8. Describe carbohydrate metabolism with its pathways.

Or

Write brief note on first and second law of Thermodynamics.

Q9. Describe lipid metabolism with biosynthesis and degradation of odd and even carbon number.

Or

Write note on Electron transport and oxidative phosphorylation

Q10. Describe Amino Acid metabolism with its common intermediates.

Or

Write an essay on regulation of metabolism with its inborn errors.