Term End External Examination 1st Semester (Session-Feb 2025)
Subject: Multidisciplinary Course
Course No and Title: BCH124I/ Basic Concepts of Biochemistry
Time: 1.15 hours Max Marks:50 Min. Marks:20

Section A: Objective Type Questions

Q1. Choose the appropriate Answer: (4x1.5=06)

i. Which among the following is an imino acid
A Glycine **B** Valine
C Proline **D** Serine

ii. Glucose is
A Aldo Pentose **B** Aldo Hexose
C Keto Pentose **D** Keto Hexose

iii. In higher order organisms the chromosome number in the progeny is maintained by
A Mitosis **B** Meiosis
C Amitosis **D** None

iv. The ribosomes present in eukaryotic mitochondria are
A 80S **B** 20S
C 90S **D** 70S

Section-B: Descriptive Type Questions (Short Type)

Q2: Answer all the Questions (4 x 4 =16)

i. What are essential amino acids and what is their importance?
ii. Elaborate the structure of nucleotides?
iii. Mitochondrion is called as the power house of the cell, Why?
iv. Write a short note on mitosis and meiosis?

Section – C: Descriptive Type Questions (Medium Type)

Answer all the questions: (2 x 7=14)

Q3. What are carbohydrates and write a detailed account on their classification?

OR

Discuss various types of RNA along with their role in the biological system?

Q4. Explain in details the cell wall structure in prokaryotic and eukaryotic cells?

OR

Differentiate between prokaryotic and eukaryotic cells with suitable examples?

Section – D: Descriptive Type Questions (Long Type)

Answer any one of the following: (1 x 14=15)

Q5. What are lipids and how are lipids classified. Discuss in detail with special focus on currently accepted classification model?

Q6. Which is the currently accepted structural model of cell membrane. Draw a well labelled diagram and explain in detail?