

M.Sc. (Bio-Informatics) First Semester
MBIN-8005: Computer Programming and Concepts of Computing

Time allowed: 3 Hours

Max. Marks: 60

NOTE: Attempt five questions in all, including Question No. I which is compulsory and selecting two questions from each Unit.

x-x-x

I. (Compulsory Question)

- a. What are bits and bytes? What is their significance in Computer systems? (6×2=12)
- b. Define Machine level language. How is it different from High level language?
- c. What are identifiers? Write any three important rules for creating identifiers.
- d. Explain simple if..else statement with the help of diagram.
- e. What are loops? Give example of any loop of your choice
- f. What are structures? How are these different from arrays?

UNIT – I

- II.** a. What is a computer? Explain different categories of computers along with their features and examples. (8, 4)
- b. Write short note on ASCII codes.
- III.** a. What is an algorithm? What are characteristics of an algorithm? Write an algorithm to find whether a number is prime or not. (6, 6)
- b. Explain basic input and output statements available in C along with their syntax and example.
- IV.** Differentiate between the following taking suitable examples: (4×3 = 12)
- BCD and EBCDIC codes
 - Constants and Variables
 - Identifiers and Keywords

(2)

UNIT – II

- V. a. What is switch statement? Explain its syntax taking an example. Also explain how is it different from if..else..if statement. (8, 4)
- b. What are unions? Explain taking a suitable example.
- VI. Compare and contrast: (4×3)
- i. Break and Continue
 - ii. While and do..while loops
 - iii. Call by Value and Call by Reference
- VII. a. What are arrays? Explain different types of arrays along with their structures and examples. (6, 6)
- b. Write a program to insert an element in an array at given location.

x-x-x