

2123

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. 1 which is compulsory and selecting atleast one question from each Unit.

X-X-X

Q1) Attempt all parts:

(8 * 1½ = 12)

- Differentiate between constant and variable. Give example.
- Name different classifications of computers with respect to size.
- Name different types of number systems.
- Give working of switch-case statement.
- What do you understand by recursion? Give example.
- What is the use of address operator in a program?
- How is one dimensional array represented in memory?
- What do you understand by character set of a language?

UNIT-I

- Q2) a) Give block structure of a computer system. Discuss various components. (6)
 b) Convert the following: (6)
- $(20.50)_{10} \rightarrow (?)_2$
 - $(254)_8 \rightarrow (?)_{10}$
 - $(1100010)_2 \rightarrow (?)_{16}$

- Q3) a) Discuss different types of programming languages. (6)
 b) What are various data types in C programming language? (6)

UNIT-II

- Q4) a) Discuss and differentiate if-else and nested if statements with the help of suitable example code. (6)
 b) Write a program to insert an element in a sorted array. (6)
- Q5) a) How to define, declare and call a function? Give example code. (6)
 b) What are nested structures? Give an example program to explain the concept. (6)

UNIT-III

- Q6) a) How to declare, initialize and use a pointer with an array? Give example code. (6)
 b) Write a program to store text, character by character in a data file. Now read the text character by character and print on the screen. (6)
- Q7) a) How to use pointer array in a program? Exhibit with the help of an example program. (6)
 b) How to read and write a record in a file? Give example code. (6)

X-X-X