

Bachelor of Science (B.Sc.) Semester—I Examination**COMPUTER SCIENCE (Programming in “C”)****Optional Paper—1**

Time : Three Hours]

[Maximum Marks : 50

N.B. :— (1) All questions are compulsory and carry equal marks.

(2) Draw neat and labelled diagrams wherever necessary.

EITHER

1. (A) What is flowchart ? Explain different symbols used in flowcharts. Draw a flowchart to find out factorial of a given number (n!). 5
- (B) Design a flowchart to find that given number is even or odd. 5

OR

- (C) Explain sequence, selection and iteration logic with suitable example. 5
- (D) Write an algorithm to print Fibonacci series (0, 1, 1, 2, 3, 5, 8, ...). 5

EITHER

2. (A) What is a Constant ? Explain different types of Constants. Define symbolic constant. 5
- (B) Write a program in C to accept number and check whether it is prime or unprime. 5

OR

- (C) Explain Switch statement with suitable example. How does it differ from If statement ? 5
- (D) Write a program in C to print the factorial of a given number. 5

EITHER

3. (A) Explain string handling functions strlen () and strcat () with example. 5
- (B) Write a program in C to find largest element from one Dimensional Array. 5

OR

- (C) Explain different storage classes used in C. 5
- (D) Write a program in C to sort an Array using sequential sorting method. 5

EITHER

4. (A) What is a Pointer ? Explain Pointer Arithmetic with example. 5
- (B) Explain Random Access commands rewind () and fseek () with suitable example. 5

OR

- (C) What is a Structure ? How it differs from union ? 5
- (D) Explain command line arguments with suitable example. 5

5. (A) Draw a flowchart to check if the given number is +ve, -ve or zero. 2½
- (B) What is a Variable ? Write rules to declare Variable. 2½
- (C) What are the different types of user defined functions ? 2½
- (D) Explain different File Modes. 2½