

Bachelor of Science (B.Sc.) Semester-I (C.B.S.) Examination**COMPUTER SCIENCE (PROGRAMMING IN “C”)****Compulsory Paper—1**

Time : Three Hours]

[Maximum Marks : 50

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

(2) Illustrate your answers with suitable diagrams wherever necessary.

EITHER

1. (A) Explain with example modular programming structure. 5
- (B) Write an algorithm and draw a flow chart to find out smallest of three numbers. 5

OR

- (C) What is flow charting ? Explain different symbols used in flow charting. 5
- (D) Write an algorithm and draw a flow chart to display Fibonacci series upto Nth term. 5

EITHER

2. (A) What is looping ? Explain in detail “for” and “while” loop. 5
- (B) Explain different data types supported by C-language. 5

OR

- (C) Explain switch statement with suitable example. 5
- (D) Write a program in C to find sum of even and odd numbers out of n inputted numbers. 5

EITHER

3. (A) What is an Array ? Explain one dimensional Array with a suitable example. 5
- (B) What is user defined function ? Explain components of function. 5

OR

- (C) What is recursion ? Write a program to find out factorial of a number using recursion. 5
- (D) What are string functions ? Write notes on :
 - (i) strcmp ()
 - (ii) strcat () 5

EITHER

4. (A) What is union ? Explain it with suitable example. 5
- (B) Explain various file modes for opening a file. 5

OR

- (C) What is pointer and address operator ? Write note on pointer variable. 5
- (D) State syntax and purpose of fopen() and fclose(). Illustrate their use giving suitable example. 5

5. Attempt **ALL** :

- (A) List various programming development tools. Define any one. 2½
- (B) Give syntax of break and continue statement. State their purpose and use. 2½
- (C) What is default argument ? Explain with suitable example. 2½
- (D) Give syntax and example of structure. 2½