

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

Note :—(1) **All** questions are compulsory and carry equal marks.
(2) Draw neat and labelled diagrams wherever necessary.

EITHER

1. (a) What is an algorithm ? Write an algorithm to find largest of three numbers. 5
- (b) Write a short note on selection and iteration logic. 5

OR

- (c) Draw a flowchart to find the roots of a quadratic equation. 5
- (d) Write a short note on pseudocode. 5

EITHER

2. (a) Explain the various relational and logical operators in C. 5
- (b) Write a program in C to find the factorial of a number. 5

OR

- (c) What is looping ? Explain do-while loop. 5
- (d) Explain switch statement. Write its syntax with an example. 5

EITHER

3. (a) What is two dimensional array ? Write a program to search an element in two dimensional array. 5
- (b) Write a short note on storage classes. 5

OR

- (c) Write a program in C to check whether the entered string is a palindrome or not. 5
- (d) Differentiate between call by value and call by reference. 5

EITHER

4. (a) What is a structure ? Write a program to illustrate the access of structure members. 5
- (b) Explain pointer arithmetic in C. 5

OR

- (c) Write a short note on Union. 5
- (d) What is sequential access ? Differentiate between sequential access and random access. 5

5. Attempt **all** :

- (a) Write a short note on sequential logic. 2½
- (b) Explain type def with an example. 2½
- (c) Write a short note on recursion. 2½
- (d) Write statements to open and close a file in C. 2½