

Bachelor of Science (B.Sc. I.T.) Semester-I (C.B.S.) Examination

PROGRAMMING METHODOLOGY IN "C"

Paper—II

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 algorithm ? Discuss its characteristics. Write an algorithm to find if a given number is positive, negative or zero. 5
- (b) Explain iterative programming structure in detail with example. 5

OR

- (c) What is Pseudo code ? Explain its use. 5
- (d) Draw a flowchart to find whether the given no. is even or odd. 5

EITHER

2. (a) Write a program to find the sum of digits of a number. 5
- (b) Define Identifier. What are the rules for declaring an identifier ? 5

OR

- (c) Explain use of break and continue statement in looping statement with example. 5
- (d) What do you mean by exit control loop ? Which loop is exit control loop in C programming ? Explain example. 5

EITHER

3. (a) What is the need of array ? Write a program to search an element in a given array of 50 elements. 5
- (b) What is recursive function ? Explain with example. 5

OR

- (c) Write a program to insert an element in one dimensional array. 5
- (d) What is function ? Explain call by reference with example. 5

EITHER

4. (a) Discuss structure and union. Explain memory allocation of structure and union. 5
- (b) What is pointer ? Explain pointer to pointer with example. 5

OR

- (c) What are the different file modes in which files can be opened ? 5
- (d) Explain the following functions :
 - (i) fseek()
 - (ii) fget()
 - (iii) ftell()
 - (iv) fwrite()
 - (v) rewind()

5. Attempt all :

- (a) Explain sequence logic with example. 2½
- (b) Explain the use of sizeof() operator. 2½
- (c) What are the data types supported by C ? 2½
- (d) What do you mean by default argument ? 2½