

**TKN/KS/16/5951**

**Bachelor of Computer Applications (B.C.A) Semester-I**  
**(CBS) Examination**  
**"C" PROGRAMMING**  
**Paper—II**

Time—Three Hours]

[Maximum Marks—50

- N.B.:**— (1) **All** questions are compulsory and carry equal marks.
- (2) Use either ANSI 'C' or Turbo 'C' for program writing
- (3) Draw neat and labelled diagrams wherever necessary.

**EITHER**

1. (a) Explain the following terms :
- (i) Sequence 5
- (ii) Selection 5
- (b) Define Pseudocode ? Explain programming structure giving suitable example. 5

**OR**

- (c) Write an Algorithm to find the roots of quadratic equation. 5
- (d) What is flowchart ? Explain the limitations of flowchart; also discuss algorithm. 5

**EITHER**

2. (a) What is data type ? Explain any four data types with suitable example. 5
- (b) What is operator ? Explain relational operator with example. 5

**OR**

- (c) What are library functions ? Explain with example any two library functions. 5
- (d) Write a program in C to print the following

```

1
1  2
1  2  3
1  2  3  4
1  2  3  4  5

```

5

**EITHER**

3. (a) What is an Array ? Write a program in 'C' to insert an element in one dimensional array. 5
- (b) What is recursive function ? Explain with example. 5

**OR**

- (c) How would you define and initialize two dimensional array ? Explain with example addition of two dimensional array. 5
- (d) What is function ? Explain with example function with argument and function without argument. 5

**EITHER**

4. (a) What is structure ? Differentiate structure and union. 5
- (b) List file modes. Describe various file mode operations. 5

**OR**

- (c) What is pointer ? Discuss with example void pointer. 5
- (d) What are command line arguments ? Explain with example. 5

5. (a) What is Iteration programming structure ? Explain in brief. 2½
- (b) What is 'nested if' ? Explain with suitable example. 2½
- (c) What is storage class ? Explain 'auto' storage class. 2½
- (d) Explain fprintf( ) and fscanf( ) with suitable example. 2½