

UG-391

BCA-02

**B.C.A. DEGREE EXAMINATION –
JUNE 2019.**

First Year

C PROGRAMMING AND DATA STRUCTURE

Time : 3 hours

Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Explain the structure of C program with an example.
2. What are looping control statements in C? Give example each.
3. Write a C program to find the factorial of a given number.
4. Write note on application of stacks.
5. Discuss briefly on BFS and DFS.
6. What are tree traversals in binary trees?
7. Explain briefly on buffering.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Give discussion on types of operators in C.
9. Explain the following :
 - (a) Storage classes in C
 - (b) Types of arrays in C
10. What are file manipulation to handle files in C? Give an example program.
11. Discuss the pointer implementation of circular linked list.
12. Discuss the following :
 - (a) Minimal spanning tree
 - (b) Graph representations
13. Explain the different file organizations with suitable example.
14. Discuss about the quick sort and heap sort with suitable example.
