

F-1640

Sub. Code

7BCA1C1

B.C.A. DEGREE EXAMINATION, APRIL 2019

First Semester

Computer Application

C AND DATA STRUCTURE

(CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define variable.
2. What are increment and decrement operators?
3. Define one-dimensional arrays.
4. How to compare two strings?
5. What is meant by nesting of function?
6. How to define a structure?
7. How will you declare a pointer variable?
8. What are the uses of `getc()` and `putc()` functions?
9. What are the data structure operations?
10. Define Queue.

Part B**(5 × 5 = 25)**

Answer **all** questions, choosing either (a) or (b).

11. (a) Discuss the different data types in C.

Or

- (b) Discuss about operators in C.

12. (a) How will you read strings from terminal? Explain.

Or

- (b) Write a program that would sort a list of names in alphabetical order.

13. (a) Discuss about recursion with example.

Or

- (b) Explain arrays of structures.

14. (a) Explain the accessing a variable through its pointer.

Or

- (b) Write about file opening modes.

15. (a) Explain the classification of data structures.

Or

- (b) Write an algorithm for insertion into linked list.

Part C $(3 \times 10 = 30)$

Answer any **three** questions.

16. Discuss about looping statements in C.
 17. Write a program to find the difference of two matrices.
 18. Explain the different categories of functions.
 19. Write a program using pointers to compute the sum of all elements stored in an array.
 20. Discuss about stack as ADT.
-