

Semester : 1 (Old)  
Course No. : BS-CT-113

Academic Year: 2019-2020  
Title: Computer Programming and  
Data Structures

Credits : 3(1+2)

Day & Date : 28-12-2019 SAT

Time : 10.00 to 12.00 hrs

Total Marks: 40

- Note:**
1. Solve **ANY EIGHT** questions from SECTION "A".
  2. All questions from SECTION "B" are compulsory.
  3. All questions carry equal marks.
  4. Draw neat diagrams wherever necessary.

### SECTION "A"

- Q.1 Explain the character set and variables.
- Q.2 State and explain Arithmetic and logical operations in C language.
- Q.3 Write a program to check even and odd numbers.
- Q.4 Explain with syntax and flow diagram:  
a) if...else  
b) for()
- Q.5 State and explain input and output functions.
- Q.6 Write a program to find the largest of three given numbers A,B,C.
- Q.7 State and Explain string in C with their functions.
- Q.8 Explain the terms:  
a) Array  
b) Stack
- Q.9 Explain Link list with its type in details.
- Q.10 Explain the Structures and Unions in C.

### SECTION "B"

- Q.11 Fill in the blanks
- 1) C language was implemented at the \_\_\_\_\_ Laboratories.
  - 2) \_\_\_\_\_ variables are defined outside the function.
  - 3) The \_\_\_\_\_ is header file for using input functions.
  - 4) To print the string through printf() statement \_\_\_\_\_ format code is used.
- Q.12 State True or False.
1. Comment statement is used only at top of the program.
  2. Stack is Last-in-First-out.
  3. Reading a single character can be done using the function getchar().
  4. Do....While loop is guaranteed to execute at least one time.