

**TDC Odd Semester Exam., 2020
held in July, 2021**

COMPUTER APPLICATION
(Honours)

(1st Semester)

Course No. : BCAC-102

(Programming with C)

Full Marks : 35

Pass Marks : 12

Time : 2 hours

*The figures in the margin indicate full marks
for the questions*

Answer **five** questions, selecting **one** from each Unit

UNIT—I

1. (a) Explain the concept of variables and constants and data type in C. 1+1+3=5
- (b) Temperature of a city in Fahrenheit degree is entered through the keyboard. Write a program to convert and print the temperature in centigrade degree. 2

2. (a) Write historical development of C. 3
- (b) Write a program that print the even numbers from 1 to 100. 4

UNIT—II

3. (a) What is user-defined function? How is it different from C library function? 3
- (b) A 5-digit positive integer is entered through keyboard. Write the function to calculate sum of digits of the 5-digit number using recursion. 4
4. (a) Explain various storage class variables. 4
- (b) Write a C program to test whether a given year is leap year or not. 3

UNIT—III

5. (a) Define pointer. Explain the purpose of indirection operator with the help of an example. 2+2=4
- (b) With the help of a program, explain how pointers can be used to pass a one-dimensional array to a function. 3

(3)

6. (a) What are the reasons to use an array of pointer to store string? 3
- (b) Write a program to read and print second integer from each line. 4

UNIT—IV

7. Define structure. Explain it with the help of an example. State the differences between structure and array. 7
8. (a) Define union. Explain it with the help of an example. State the differences between structure and union. 5
- (b) What is the keyword that is used in C to create a structure? 2

UNIT—V

9. (a) Give the utilities of the C language functions fopen(), fclose(), fprintf(), fscanf() and fseek(). 5
- (b) What is the difference between the following two include directives? 2
- # include "conio.h"
include <conio.h>

(4)

10. (a) Write a C program to append the contents of one file at the end of the other. 5
- (b) Write a note on command line parameters. 2
