

Total No. of Printed Pages : 4

Roll No.....

**BCA-02/DIT-06**  
**INTRODUCTION TO COMPUTER**  
**PROGRAMMING USING C**

Bachelor of Computer Applications (BCA-11/16/17)

Diploma in Information Technology (DIT-17)

2nd Semester, Examination-2020

Time Allowed : 2 Hours

Maximum Marks : 80

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**Note :** This paper is of Eighty (80) marks divided into Two (02) sections A and B. Attempt the question contained in these sections according to the detailed instructions given therein.

**Section-A**

(Long Answer Type Questions)

**Note :** Section-'A' contains Five (05) long answer type questions of Twenty (20) marks each. Learners are required to answer any two (02) questions only. (2×20=40)

1. Explain all looping control statements used in C program with examples. Write a C Program for generating the Fibonacci sequence up to 20.
2. What is meant by operator precedence? Describe the relative precedence of the arithmetic operators. Also explain associativity of operators with suitable examples.
3. What do you mean by the file streams? Distinguish between text mode and binary mode operation of a file. Write a program to copy the contents of one file to another file.
4. A library charges a fine for every book returned late. For first 5 days the fine is 5 rupees, for 6-10 days fine is ten (10) rupees and above 10 days fine is twenty-five (25) rupees. If you return the book after 30 days your membership will cancelled. Write a program to display the number of days the member is late to return the book and the fine with appropriate message.

5. What is the advantage of call by reference over call by value? Write a Program to add two numbers using call by reference.

### **Section-B**

(Short answer type questions)

Note: Section-B Contains Eight (08) short answer type questions of Ten (10) marks each. Learners are required to answer any four (04) questions only. (4×10=40)

1. What is the difference between logical and relational operator? Give an example.
2. What is meant by explicit type casting? When is it useful? Explain by suitable examples.
3. Distinguish between the following functions :
  - (a) getc and getchar
  - (b) gets and puts

4. Draw a flow-chart to find out smallest of n numbers.
5. What primary and derived data types are available in C?
6. Write a program to add matrices of 2 rows and 2 columns.
7. What is dynamic memory allocation? How will you perform it in C language?
8. What is difference between union and enumerated data types? Explain with help of examples.

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