

Exam. Code : 107201

Subject Code : 1667

Bachelor of Computer Application (BCA) 1st Sem.
(Batch 2021-24)

INTRODUCTION TO PROGRAMMING-C

Paper-I

Time Allowed—3 Hours] [Maximum Marks—75

Note :- Attempt FIVE questions in all selecting at least ONE question from each section. The fifth question may be attempted from any section. All questions carry equal marks.

SECTION-A

1. Write short notes on the following :

- (a) Character set
- (b) Constant
- (c) Symbolic constant
- (d) Reserve words
- (e) Identifiers. 5×3=15

2. Explain the following types of operators :

- (a) Relational
- (b) Logical
- (c) Arithmetic. 3×5=15

SECTION-B

- 3. What are the different types of loops available in C ? Explain giving suitable examples. 15
- 4. Write a program to find i^{th} smallest and j^{th} largest number in a list of n numbers. 15

SECTION-C

- 5. (a) Define recursion. What are the conditions for implementing recursion ? 7.5
(b) Write a recursive function to generate i^{th} term of Fibonacci series. 7.5
- 6. Write a program to multiply two matrices and store the result in third matrix. 15

SECTION-D

- 7. Define the following :
 - (a) User defined data type
 - (b) Structure
 - (c) Union
 - (d) Structure and pointers
 - (e) Self-referencing structure. 5×3=15
- 8. Define pointer. How pointer to functions is used ? Explain giving example. 15