

Roll No. ....

**3011**

**B. Tech. 1st Semester (CSE)  
Examination – December, 2022**

**PROGRAMMING FOR PROBLEM SOLVING**

**Paper : ESC-CSE-101-G**

*Time : Three hours ]*

*[ Maximum Marks : 75*

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*Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.*

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*Note :* Attempt *five* questions in all, selecting *one* question from each Unit. Question No. 1 *compulsory*. All questions carry equal marks.

1. (a) Explain different data type used in "C".
- (b) Explain Syntax error and logical error.
- (c) Discuss with example the 'go to' statement.
- (d) Define union.
- (e) Define function.
- (f) Iterative Statement.

$2.5 \times 6 = 15$

## UNIT – I

2. (a) Explain type conversion used in 'C' with an example. 7
- (b) Write short note on following :  $4 \times 2 = 8$
- (i) Keywords
- (ii) Algorithms
3. What are Storage Classes ? Explain in detail. 15

## UNIT – II

4. (a) What are Preprocessors ? Explain in detail. 7
- (b) What is Branching ? Explain the branching statement available in C. 8
5. Explain various type of loops used in 'C' programming. 15

## UNIT – III

6. (a) Define Recursive function. Write a program to find factorial of a number using recursion. 8
- (b) Write a program for matrix multiplication using array data type. 7
7. (a) Explain call by value with an example. 8
- (b) What is Array ? Explain parameter passing in function with an example. 7

## UNIT – IV

8. What is Structure ? Differentiate between Structure and Union. Explain with suitable example. 15
9. (a) What is File handling ? Explain different file operation in 'C' language using syntax. 8
- (b) Explain pointers with giving an suitable example. 7
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