

Roll No.

3012

**B. Tech. 1st Semester (Common For All
Branches Except CSE, ECE, IT, CS & IT
& EEE)**

Examination – March, 2021

PROGRAMMING FOR PROBLEM SOLVING

Paper : ESC-CSE-102-G

Time : Three Hours]

[Maximum Marks : 75

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.

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

1. Write short note on the following :

15

- (a) Number system
- (b) Header files
- (c) Looping
- (d) 2-D Array

UNIT – I

2. Describe the functional units of computers. 15
3. Calculate the following : 15
- (i) $(11001.1101)_2$ Binary to Decimal
 - (ii) $(0.8125)_{10}$ Decimal to Binary
 - (iii) $(35.216)_8$ Octal to Binary

UNIT – II

4. Explain the following : 15
- (i) Programming
 - (ii) Flow Chart
5. Define 'C' Language and explain the following : 15
- (i) Basic Input and Output functions
 - (ii) Syntax and Logical errors in compilation

UNIT – III

6. Give a complete description about conditional statements. 15
7. What do you mean by Iteration and Loops ? Explain. 15

UNIT – IV

8. Describe the following : 15
- (i) Parameters passing in functions
 - (ii) Character arrays and things
9. Define Recursion and explain the statement "Recursion, as a different way of solving problems." 15