

3012

**B.Tech. 2nd Semester G-Scheme (Common for All
Branches except CSE, ECE, IT, CS & IT)**

Examination, May-2019

PROGRAMMING FOR PROBLEM SOLVING

Paper-ESC-CSE-102-G

Time allowed : 3 hours]

[Maximum marks : 75

Note : Attempt five questions in all. Question No. 1 is compulsory and attempt one question from each unit.

1. (a) Define Computer.
(b) What are the basic operations of computers ?
(c) Difference between RAM and ROM ?
(d) What is the difference between Printf and Scanf ?
(e) Define Cache Memory.
(f) Explain Arithmetic expression and their Precedence. $6 \times 2.5 = 15$

Unit-I

2. Explain the components of computer system along with its block diagram. Also explain Primary and Secondary memory. 15
3. (a) Explain the different operations on number system with example. 10

(b) Convert the following : 5

(i) $(AF)_{16} = ?$ Decimal

(ii) $(28)_8 = ?$ Decimal

Unit-II

4. Enlist and explain all the data types in C language with syntax. 15

5. (a) Explain flowchart/ Pseudocode with example. 8

(b) Explain basic input and output functions and statements. 7

Unit-III

6. Explain conditional statements with syntax. 15

7. (a) Explain Decision making statements with Pseudocodes. 10

(b) Distinguish between while and do while loop. 5

Unit-IV

8. Explain the Call by Value and Call by Reference method in detail. 15

9. (a) Write a program in 'C' to find factorial of a number. 10

(b) Define Character arrays and strings. 5