

**B.Tech. (CSE) 2nd Semester G-Scheme**

**Examination, May-2019**

**PROGRAMMING FOR PROBLEM SOLVING**

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

*Time allowed : 3 hours] [Maximum marks : 75*

*Note : Attempt five questions in all selecting at least one question from each section. Question No. 1 is compulsory.*

1. (a) Explain Data Types used in 'C'.
- (b) What do you mean by Storage classes ?
- (c) What are loops used in 'C' programming ?
- (d) What do you mean by Character Arrays and Strings ?
- (e) Define Union.
- (f) What is Dynamic Memory Allocation ?

6×2.5=15

**Section-A**

2. Explain various Data types used in 'C' programming. 15
3. (a) Explain type conversions used in 'C' with an example. 7
- (b) Explain Arithmetic expressions used in 'C' programming. 8

**Section-B**

4. Explain various conditional and Branching statements used in 'C' programming. 15
5. Explain various types of loops used in 'C' programming. 15

**Section-C**

6. What are Arrays ? Explain parameter passing in functions with an example. 15
7. (a) Explain Call by Reference with an example. 8
- (b) Write a program to generate Fibonacci series using 'C'. 7

**Section-D**

8. Define Pointers. Explain use of pointers in Self-Referential structures. 15
9. Write short notes on the following : 2×7.5=15
  - (a) Dynamic Memory Allocation
  - (b) File Handling