

**3011**

**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

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**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

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