R16

SET - 1

I B. Tech I Semester Supplementary Examinations, December - 2021
COMPUTER PROGRAMMING
(Com to ECE, Aero E, Auto E, Bio-Tech. Chem. E, CE, CSE, IT, EIE, EEE, ME, Metal E, Min E, PChem. E, PE, ECom. E)

Time: 3 hours   Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B)**
2. Answering the question in **Part-A** is Compulsory
3. Answer any **FOUR** Questions from **Part-B**
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PART –A

1. a) What is the purpose of ROM in a computer? (2M)

    b) Why is typecasting necessary in C? (2M)

    c) Explain the reasons to use '*default*' case in the 'C' switch statement. (2M)

    d) Which storage class is used for faster execution? (2M)

    e) Differentiate between the Scope and Lifetime of a variable. (2M)

    f) Write about different file opening modes in C. (2M)

    g) Can a structure can point to itself? (2M)

PART –B

2. a) What is the difference between machine language, assembly language, and high level language in computers? (7M)

    b) Explain the procedure for creating and executing a C program. (7M)

3. a) Write a C program to illustrate the importance of Pre-increment and Post-increment operators. (7M)

    b) Explain in detail the prototype of 'main' function with a sample program. (7M)

4. a) Write a C program to illustrate counter-controlled and condition-controlled loops. (7M)

    b) Write a C program to find all factors of a number (7M)

5. a) Explain about the importance of 'static' storage class with a sample C program. (7M)

    b) Write a C program to generate Fibonacci series using recursive functions. (7M)

6. a) Explain the memory representation of one and two dimensional arrays in C with neat diagrams. (7M)

    b) Write a C program to sort a set of strings in alphabetical order using pointers. (7M)

7. a) Why do we need to create self-referential structures in C programming? Explain with an example program. (7M)

    b) Write a C program to find the occurrence of a given word in a text file. (7M)