

**I B. Tech I Semester Supplementary Examinations, August/Sep - 2022****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

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- 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) List the features of an interpreter. (2M)
- b) What are format modifiers? Write the importance of the same. (2M)
- c) Write the syntax of "nested if" (2M)
- d) Write the advantages of pointers. (2M)
- e) How do you initialize a two-dimensional array? Give an example. (2M)
- f) What is the Dangling pointer? (2M)
- g) Write the purpose of *typedef* with a suitable example. (2M)

**PART -B**

2. a) Compare the features of Procedural and Object-Oriented Languages (7M)
- b) Write the features of Low-level languages. (7M)
3. a) List and explain the relational and logical operators with examples. (7M)
- b) Discuss various explicit and implicit type conversions with examples. (7M)
4. a) Compare the working of while and do-while loop with suitable examples. (7M)
- b) Write a C program to print the reverse of a given number. (7M)
5. a) Write a C program to print the first n even numbers using call by reference. (7M)
- b) Compare and contrast the features of Recursion and Iteration with suitable examples. (7M)
6. a) Write a C program to pass an array as a parameter to a function that computes the transpose of the matrix. (7M)
- b) What are the various Library Functions available to support strings? Explain the same with an example. (7M)
7. a) Explain the features of self-referential structures with a suitable program. (7M)
- b) What are the various Dynamic memory management functions available in C? Explain. (7M)