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VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN
(An Autonomous Institution)
I-B.Tech.-I-Semester Regular Examinations, February-2025
Programming for Problem Solving
(CSE)

Time: 3 Hours

Max. Marks: 60

(Answer All Questions)

Note: Question paper consists of Part-A & Part-B.

- **Part-A** for 10M, ii) **Part-B** for 50marks
- **Part A** is compulsory, consists of 10 sub questions from all units carrying equal marks.
- **Part-B** consists of **10 questions** (numbered from 2 to 11) carrying **10marks** each. From each unit there are 2 questions and the students should answer one of them. Hence the student should answer **5 questions** from **Part-B**.

PART-A

(10Marks)

- 1 a. Define algorithm and how it is different from a flow chart. 1M
- 1 b. Explain switch case syntax. 1M
- 1 c. Define array. Give example for 1D array. 1M
- 1 d. List the applications of pointers. 1M
- 1 e. Write syntax for fseek(). 1M
- 1 f. Name few preprocessor directives. 1M
- 1 g. Define function. 1M
- 1 h. What are the disadvantages of recursion. 1M
- 1 i. How binary search is effective than linear search. 1M
- 1 j. Explain time complexity of bubble sort. 1M

PART-B

(50Marks)

- 2 a Explain different types of operators used in C 5M
- 2 b Write a program to print prime numbers up to a given number 'n' 5M

OR

- 3 a Explain data types in C with examples. 5M
- 3 b Write a c program for ternary operator. 5M

- 4 a Demonstrate one dimensional array with a program. 5M
- 4 b Explain various string handling function. 5M

OR

- 5 a Explain about enumeration types with a program. 5M
- 5 b Write a program for multiplication of two matrices. 5M

6 a Write a program to copy content of one to another file. **5M**

6 b Discuss the significance of preprocessor commands. **5M**

OR

7 a Write a C Program to merge the content of two files in to a third file. **5M**

7 b Explain the different types of files used in C. **5M**

8 a Explain parameter passing techniques. **5M**

8 b Define recursion and write a program to print factorial of given number using recursion **5M**

OR

9 a Explain importance of dynamic memory access functions. **5M**

9 b How to pass pointer to a function. Explain with a program. **5M**

10 a Write an algorithm for binary search. **5M**

10 b Write a c program for bubble sort. **5M**

OR

11 a Apply linear search on the data {22,11,66,99,55,88}. **5M**

11 b Compare various sorting techniques. **5M**

*****VMTW*****