Reg. No.:

Name   :

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TERM END EXAMINATIONS (TEE) – December 2021- January 2022			
Programme	: B.Tech.– BCY, BHI,BAI,BMR	Semester	: Fall 2021-22
Course Name	: Introduction to Problem Solving and Programming	Course Code	: CSE1021
Faculty Name	: Lokesh Malviya	Slot / Class No	: E11+E12+E13/0086
Time	: 1½ hours	Max. Marks	: 50

Answer ALL the Questions

Q.No.		Question Description	Marks

PART - A (30 Marks)

1 (a) Explain characteristics of an algorithm. Write an algorithm to find whether a number is prime or not with flowchart. — 10

OR

(b) What is function? Explain various types of arguments used in function using python program. — 10

2 (a) Explain various types of base conversion and write a program to convert decimal number "142" in binary, octal, and hexadecimal — 10

OR

(b) Define the For loop in python with range function. Write a program to use of For loop with break, continue and pass statements. — 10

3 (a) What is prime factor? Write a program to find prime factor with use of function. — 10

OR

(b) Explain different methods for generation of pseudo random number with python program. — 10

PART - B (20 Marks)

4 Describe the efficiency of algorithms in term Time and Space Complexity with suitable example. — 10

5 Write a program for the following array techniques:- — 10
   1. To find kth smallest element with output
   2. Partitioning an array with output

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