Mid-Term Examinations – November 2021

Programme	:	**B.TECH**	Semester	:	**Fall 2021-22**
Course	:	**Introduction to Problem Solving and Programming**	Code	:	**CSE1021**
Faculty	:	**Lokesh Malviya**	Slot/ Class No.	:	**E11+E12+E13/0086**
Time	:	**1 ½ hours**	Max. Marks	:	**50**

Answer all the Questions

Q.No.	Sub. Sec.	Question Description	Marks
1	(a)	Explicate top down design using Divide-and-conquer algorithm.	**5**
	(b)	How to represent an Algorithm? Draw a flowchart and write algorithm to find out the biggest of the three numbers.	**5**
2		Define Time and Space Complexity and how to calculate it for any algorithm with suitable example.	**10**
3	(a)	Define python value and data-types. What are the functions for type checking and to convert one data type to other?	**5**
	(b)	What is function? Write a function to perform arithmetic operations.	**5**
4		Write the following about module:- i) How to create a module? ii) What is import keyword and how to use it? iii) What is use of from keyword with suitable program?	**10**
5		Describe use of conditional statements in python with example.	**10**

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