Reg. No.:

Name :



Mid-Term Examinations – October 2021

| Programme | BTech | Semester | : | Fall 2021-22 |
|-----------|---------------------------------------|-----------------|---|------------------|
| Course | : Introduction to Problem Solving and | Code | : | CSE1021 |
| | Programming | | | CSE1021 |
| Faculty | : Meenakshi Choudhary | Slot/ Class No. | : | C11+C12+C13/0093 |
| Time | : 1 ¹ / ₂ hours | Max. Marks | : | 50 |

Answer all the Questions

| Q.No. | Sub. Sec. | Question Description | Marks |
|-------|--------------|--|-------|
| 1 | | What do you understand by the frequency count? How it is used to find the time complexity of an algorithm. Explain by taking a suitable example. | 2+8 |
| 2 | (a) | Describe various asymptotic notations with graphical illustration. | 5 |
| | (b) | Analyze the time complexity of the following code. | |
| | | For(i = 1; i <= n; i++) | |
| | | { | |
| | | For($j = 1; j \le n^2; j + +$) | 5 |
| | | Print(" ") | |
| | | } | |
| 3 | | Write a program to print following pattern using function in python. | |
| | | * * | |
| | | * * * | 10 |
| | | * * * * | |
| | | | |
| 4 | | Describe various types of function arguments using suitable python code. | 10 |
| 5 | | Write a python program to print Fibonacci series using function with required arguments and while loop. | 10 |

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