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| **Mid-Term Examinations – October 2021** | | | | | | | | | | |
| Programme | | | : | **BTech** | | Semester | | : | **Fall 2021-22** | |
| Course | | | : | **Introduction to Problem Solving and Programming** | | Code | | : | **CSE1021** | |
| Faculty | | | : | **Meenakshi Choudhary** | | Slot/ Class No. | | : | **C11+C12+C13/0093** | |
| Time | | | : | **1 ½ 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 <= n2 ; j++)  Print(“ “)  } | | | | | | | | **5** |
| 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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