University of Engineering & Management, Kolkata

Odd Semester Examination, February, 2021

Course: B. Tech Semester: 1st

Paper Name: Computer Programming and Problem Solving using Python and C - I

Paper Code: ESC181

Full Marks: 100 **Time: 3 Hours**

Instructions:

1. Students need to answer all questions of the allotted Set.
2. The answers should be written in white papers (preferably A4, but not mandatory).
3. The First page of the answer script must have Students Name, Section, Class Roll, Enrolment Number and Registration Number written at the top.
4. Subsequent pages must have Section and Roll Number written at the top.
5. The entire answer script is needed to be scanned and a single PDF file should be submitted.
6. The file name should be "Section_Roll.pdf" (e.g. A_100.pdf)

Set - 14

1. Write a C program to find the n^{th} term of the following sequence of numbers where 'n' is user given: 1, 3, 3, 5, 6, 7, 9, 9….
2. Write a C program to take a 2x3 matrix input from user. Now, take another number input from user and replace all elements which are below this number in the matrix by '0'.
3. Write a C program to take a string input from user and count the number of digits. Assume that the maximum length of string is 10.
4. A strict integer array is a fixed size array. If user attempts to store more elements than the array can actually accommodate then the array will start storing the new elements from the beginning. Suppose an array has size 10, then if user attempts to store 11^{th} element, it will be stored in 1^{st} position and so on. Write a C program to create a strict array of size 10. Read user given numbers to store in the array. User will decide the total number of inputs.