



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 - 5

1. A one-dimensional array of numbers contains all numbers between 1 and 100 in a jumbled order. The length of the array is 100. One of the numbers is missing and in place of that one number is repeated. Write a C program to find the missing number and the number that is repeated twice. Use a single array in your program.
2. Write the function definition of the following function declaration in C programming language. Use this function to calculate the length of a user given String. Here, 's' is formal arguments to accept the address of the string passed to it.

`int strlen(char* s);`

3. Write a C program to declare a two-dimensional integer array of size 2×3. Read user given numbers to store in the array. Now print the sum of the row wise maximum of the numbers stored in the array.
4. Write a C program to declare a matrix of size 2×3. Read user given numbers to store in the matrix. Now find the transpose of the matrix.