



**University of Engineering & Management, Kolkata**

**Odd Semester Examination, February, 2021**

**Course: B. Tech**

**Semester: 1<sup>st</sup>**

**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 - 6**

1. Write a C program to read a sentence input and capitalize each word of the sentence. The maximum length of the sentence is user given. Do not use "string.h".
2. 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 maximum and minimum of the numbers stored in the array.
3. Write the function definition of the following function declaration in C programming language. Use this function to reverse a user given string. Here, 's' is formal arguments to accept the address of the string passed to it. Do not use "string.h". you may declare any other function if required.

`char* strrev(char* s);`

4. Write a C program to print the following pattern up to 'n' lines.

```
A
B C
D E F
.....
```