



University of Engineering & Management, Kolkata
Odd Semester End Term Practical Examination, January, 2022

Programme Name: B.Tech in Computer Science

Semester: 5th

Paper Name: IT Workshop

Paper Code: PCCCS 592

Full Marks: 80

Time: 3 hours

SET - II

Attempt all questions. Each question carries 20 marks.

Q. No. 1. Write a python program to construct the following pattern using nested for loop:

```
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
```

Q. No. 2. Create a MATLAB Script to convert an input temperature from degrees Fahrenheit to an output temperature in kelvin. Also use a *subplot* to convert the output in centigrade domain as well.

Q. No. 3. Write a Python program to create, concatenate and print a string and accessing the substring from the same string. (Take user input for string values)

Q. No. 4. Create a MATLAB Script to plot the values of $\sin(x)$ and $\cos(x)$ for a predefined interval of 2π for the range of $[0 \ 50]$ in *linspace* domain. Use a variable name for *plot* function and the line color value range is $[0 \ 0.53 \ 0.53]$. *LineWidth*, *MarkerEdgeColor*, *MarkerSize*, *MarkerFaceColor* etc. functions can be used for line specifications. Also use the *hold on* for two different curve of $\sin(x)$ and $\cos(x)$.

*****END*****