Total No. of Questions : 8]

SEAT No. :

P4937

[Total No. of Pages : 3

[5667]-1008

F.E. (Semester - I)

PROGRAMMING & PROBLEM SOLVING

(2019 Pattern)

Time : 3 Hours] *[Max. Marks : 70*

Instructions to the candidates :

1) ***Solve Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.***
2) ***Neat diagrams must be drawn wherever necessary.***
3) ***Assume suitable data wherever necessary.***

Q1) a) What is function? Explain code reuse. Explain with example Docstring. **[6]**

b) Explain Lambda function with example. **[6]**

c) Write python program using function to find greatest of three numbers by passing numbers as argument. **[6]**

OR

Q2) a) Differentiate between Local & Global variable. Write a python program to demonstrate difference between local and global variable. **[6]**

b) Explain keyword arguments in python. Write a python program to demonstrate keyword arguments. **[6]**

c) Write python program using function to find whether number is odd or even. **[6]**

Q3) a) Explain following string methods with example. **[6]**

i) Rindex

ii) Z fill

iii) Split

b) Write a python program to display tables from 1 to 10 using formatting character. **[6]**

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c) What will be the output of following statement S = “Welcome to Python”. **[5]**

i) Print (s[1:9])

ii) Print (s[:6])

iii) Print (s[4:])

iv) Print (s[1: –1])

v) Print (“Come” not in str)

OR

Q4) a) Explain following string methods with example : **[6]**

i) Join

ii) Enumerate

iii) 1 strip

b) Write python, program to find whether a given character is present in a string or not. In case it is present print the index at which it is present. Do not use built in string method. **[6]**

c) Write a python program to check whether a given string starts with specified character. **[5]**

Q5) a) Define programming paradigm. List programming paradigms. Explain any one. **[6]**

b) Justify the statement “Inheritance helps to make reusable code”. **[6]**

c) Write a python program that uses class to store exam number and marks of four subjects. Use list to store the marks of four subjects. **[6]**

OR

Q6) a) Explain following Terms : **[6]**

i) Data Abstraction & Encapsulation

ii) Polymorphism

b) With the help of an example explain the significance of the inif ( ) method. **[6]**

c) Write a python program to create class car with two attributes name & cost. Create two objects and display information. **[6]**

Q7) a) Write a python program that reads data from one file and write into another file and line by line. **[6]**

b) What is directory? List any four directory methods and explain any two of them. **[6]**

c) Why do we need files? Explain relative and absolute path in files. **[5]**

OR

Q8) a) Write a python program that counts the number of tabs and new line characters in a file. **[6]**

b) Write a python program to display current directory, create directory and remove created directory. **[6]**

c) Differentiate between text and binary files. Explain any 4 access modes used in python. **[5]**

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