

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]**

P.T.O.

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) lstrip
- 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]
