Total No. of Questions : 4] **SEAT No. :**

P1274 **[Total No. of Pages : 2**

OCT/FE/Insem-7
F.E. (Semester - I)
PROGRAMMING AND PROBLEM SOLVING
(2019 Pattern)

Time : 1 Hour] ***[Max. Marks : 30***

Instructions to the candidates:

1) ***Solve Q1 or Q2, Q3 or Q4.***
2) ***Neat Diagrams must be drawn wherever necessary.***

Q1) a) What are identifiers? List the rules to name an identifier. **[3]**

b) Explain different data types supported by Python. **[5]**

c) What is a problem? List down steps in problem solving. **[4]**

d) Write an Algorithm to find sum of 'n' natural numbers. **[3]**

OR

Q2) a) Explain the use of Indentation in Python. **[3]**

b) What is an operator? Enlist various types of operators. **[5]**

c) What is modularization? Explain top down design approach. **[4]**

d) Write an algorithm to swap two numbers. **[3]**

Q3) a) Explain selection/conditional statements in Python. **[4]**

b) Explain while loop with flowchart. **[3]**

c) Write a program in Python to find whether gives is even or odd. **[3]**

d) What is difference between 'break' and 'continue' statement in Python? Explain with example. **[5]**

OR

P.T.O.

Q4) a) What is dictionary? How to add and remove elements in dictionary? **[4]**

b) What is a list? Explain accessing and removing of elements from list with example. **[3]**

c) Explain for loop with flowchart. **[3]**

d) Write a program to print the following pattern. **[5]**