

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]

