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

P6 **[Total No. of Pages : 2**

FE/INSEM/APR-6
F.E. (Semester - II)
110005 : PROGRAMMING AND PROBLEM SOLVING
(2019 Pattern)

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

Instructions to the candidates :

1) ***Solve Q.1 or Q.2, Q.3 or Q.4.***
2) ***Neat diagrams must be drawn wherever necessary.***

Q1) a) What is a problem? Explain six problem solving steps. **[4]**

b) List down types of operators in Python. Explain relational operators. **[5]**

c) Explain flow-chart and algorithm with example. **[6]**

OR

Q2) a) Explain following terms with suitable examples. **[4]**

i) Comment

ii) Reserve Words

b) Write a program to swap two numbers. **[5]**

c) Explain any six features of Python programming. **[6]**

Q3) a) Describe the following terms with examples (any two) : **[4]**

i) break

ii) continue

iii) pass

iv) range

b) Write a program to test whether a number entered by the user is positive, negative or zero. **[5]**

c) Explain following selection/decision making statements in Python **[6]**

i) if statement

ii) if....else statement

iii) if..else..else statement

P.T.O.

OR

Q4) a) Explain for loop with flow chart. **[4]**

b) What is a list? Explain any three operations of list. **[5]**

c) Write a program to generate a Fibonacci series of 'n' numbers. **[6]**