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SEAT No. :

**PB6**

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**F.E. (All Branches) (Insem)**  
**PROGRAMMING AND PROBLEM SOLVING**  
**(2019 Pattern) (Semester - II) (110005)**

*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 are different types of problems? Explain in brief. [3]  
b) Explain pseudo code with example. [4]  
c) Explain different arithmetic operator in python. [3]  
d) Explain any five features of python. [5]

OR

- Q2)** a) Explain top down design approach. [3]  
b) What are the characteristics of an algorithm? [4]  
c) Define a variable and identifier with suitable example. [3]  
d) Explain different data types in Python. [5]

- Q3)** a) Explain if.. else statement syntax with suitable example. [3]  
b) Differentiate between list and tuple data type. [4]  
c) Explain else statement used with while loop in python. [3]  
d) Write a program to find largest of three numbers. [5]

OR

- Q4)** a) Explain the use of continue statement in a loop with suitable example. [3]  
b) Write a short note on dictionary data type [4]  
c) Explain while loop with suitable example. [3]  
d) Write a program to find factorial of a number. [5]

