## 22616

## 22223

## 3 Hours / 70 Marks Seat No. <br> $\square$

Instructions - (1) All Questions are Compulsory.
(2) Answer each next main Question on a new page.
(3) Illustrate your answers with neat sketches wherever necessary.
(4) Figures to the right indicate full marks.
(5) Assume suitable data, if necessary.
(6) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. Attempt any FIVE of the following: $\mathbf{1 0}$
a) List features of Python.
b) Describe membership operators in python.
c) Write down the output of the following Python code >>>indices=['zero','one','two','three','four','five']
i) >>>indices[:4]
ii) >>>indices[:-2]
d) Describe any two data conversion function.
e) With neat example explain default constructor concept in Python.
f) Describe mkdir() function.
g) Describe Multiline comment in python.
2. Attempt any THREE of the following: 12
a) Describe Keyword "continue" with example.
b) Explain creating Dictionary and accessing Dictionary Elements with example.
c) Explain any four Python's Built-in Function with example.
d) Write a Python program to find the factorial of a number provided by the user.
3. Attempt any THREE of the following:
a) Write a python program to input any two tuples and interchange the tuple variables.
b) Explain Bitwise operator in Python with appropriate example.
c) With neat example differentiate between readline() and readlines() functions in file-handling.
d) Describe 'Self' Parameter with example.

## 4. Attempt any THREE of the following: <br> 12

a) Differentiate between list and Tuple.
b) Explain any four file modes in Python.
c) Write a program to show user defined exception in Python.
d) Explain Module and its use in Python.
5. Attempt any TWO of the following: $\mathbf{1 2}$
a) Write a Python Program to check if a string is palindrome or not.
b) Write a Python program to calculate sum of digit of given number using function.
c) Write a Python Program to accept values from user in a list and find the largest number and smallest number in a list.
6. Attempt any TWO of the following: 12
a) Explain any six set function with example.
b) Design a class student with data members : name, roll no., department, mobile no. Create suitable methods for reading and printing student information.
c) With suitable example explain inheritance in Python.

