

B.Sc. IT 3rd Semester

INTRODUCTION TO PYTHON

Paper—I

Time Allowed—3 Hours] [Maximum Marks—75

Note :— (1) Attempt any **five** questions.

(2) Use of Non-Programmable, Non-storage Calculator is permitted.

1. (a) Name Python Data Types. 5

(b) Write the output for the following code :

```
x = 10
```

```
y = 20
```

```
if (x > y):
```

```
print x + y
```

```
else :
```

```
print x - y
```

 5

(c) Explain with code the use of Escape Sequence in Python 5

2. (a) What is use of *Dictionary* data type in Python ? 5(b) Using Python code examples explain use of various *if* and *if-then-else* statements. 10

3. (a) Explain basic Object Oriented Programming concepts using Python code constructs. 10
- (b) Define a class Travel Plan in Python with the following descriptions :
- Private Members :
- Plan Code of type long
- Place of type character array (string)
- Number_of_travellers of type integer
- Number_of_buses of type integer. 5
4. (a) Write a Python program to highlight use of for loops. 8
- (b) Write python code to explain use of *Break* and *Continue* keywords in Loops. 7
5. (a) Write a Python program to get the largest number from a list. 7
- (b) Write a Python program that accepts a word from the user and reverse it. 8
6. (a) Write a note on using Files in Python. 5
- (b) Write a Python program to count the frequency of words in a file. 10
7. Using Python code highlight use Python Modules and Top Down Design. 15
8. Using Python code highlight use Python API for querying Database Tables. 15