

Exam. Code : 107203

Subject Code : 2094

BCA 3rd Semester

**COMPUTATIONAL PROBLEM SOLVING USING
PYTHON**

Paper—III

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) Rectify the error (if any) in the given statements.

```
>> str = "Hello Python"
```

```
>> str[6] = 'S'
```

5

2. (a) What are the advantages of the Python dictionary
type ? 5

(b) Write a program in input any number and print all factors of that number. 5

(c) What all can be possible output of the following code ?

```
def myfunc (x=None) :  
    result = " "  
    if x is None :  
        result = "No argument given"  
    elif x == 0:  
        result = "Zero"  
    elif 0 < x <= 3:  
        result = "x is between 0 and 3"  
    else:  
        result = "x is more than 3"  
    return result
```

 5

3. (a) Predict the output of the following program. Also state which concept of OOP is being implemented?

```
def sum(x, y, z) :  
    print "sum = ", x + y + z  
def sum(a, b) :  
    print "sum =", a+b  
sum(10, 20)  
sum(10, 20, 30)
```

 5

- (b) Define a class TravelPlan 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_ofbuses of type integer 10

4. (a) Write a Python program that accepts a word from the user and reverse it. 7
- (b) Write a Python program to convert month name to a number of days.

Expected Output :

List of months : January, February, March, April, May, June, July, August, September, October, November, December.

Input the name of Month : March

No. of days : 31 days 8

5. (a) Write a Python program to get the largest number from a list. 7
- (b) Write a Python program to print a specified list after removing the 0th, 4th and 5th elements.

Sample List : ['Red', 'Green', 'White', 'Black', 'Pink', 'Yellow']

Expected Output : ['Green', 'White', 'Black'] 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