

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
B.Tech. Summer 2018 - 19 Examination

Semester: 4
Subject Code: 03105255
Subject Name: Python Programming

Date:06/05/2019
Time:02:00pm to 04:30pm
Total Marks: 60

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 Objective Type Questions - (All are compulsory) (Each of one mark)**(15)**

1. Python function cannot return multiple values.

- a) True
- b) False

2. What will be the output of following code?

```
city = "Vadodara"  
city[0] = city[7] = "V"  
city[7] = "1"  
print(city)
```

- a) VadodarV
- b) Vadodara
- c) Vadodar l
- d) Error

3. Consider following code for creating class in python. Which of the following variable(s) cannot be accessed outside the class?

```
class Demo:  
    def __init__(self):  
        self.__a__ = 10  
        self.__b = 20  
        self.__c__ = 30
```

- a) __a__
- b) __b
- c) __c__
- d) all of the above

4. When else part of try-except-else will be executed?

- a) When exception is raised
- b) When no exception is raised
- c) When exception is raised in except block of try-except structure
- d) All of the above

5. How many times print statement will be executed for the following code?

```
for i in range(10):  
    for j in range(i):  
        print(i * j)
```

- a) 100
- b) 20
- c) 10
- d) 45

6. What is Duck typing philosophy in Python?

7. How to comment specific line in Python program?

8. What will be the output of following code?

```
t = (1, 2, 3, (4, ), [ 5, 6 ] )  
t[4][0] = 7  
print(t)
```

9. What will be the output of following code?

```
tuple = { }  
tuple[(1,2,4)] = 8
```

```
tuple[(4,2,1)] = 10
```

```
tuple[(1,2)] = 12
```

```
_sum = 0
```

```
for k in tuple:
```

```
    _sum += tuple[k]
```

```
print(len(tuple) + _sum)
```

10. What will be the output of the following program?

```
print(hex(10))
```

a) 0xa

b) 0xb

c) 0x10

d) 10

11. _____ keyword is used to create anonymous functions in Python.

12. _____ function of “os” module is used to check the current working directory in Python.

13. Write down the missing regular expression in compile method to produce the following output:

```
import re
```

```
p = re.compile(_____)
```

```
print(p.findall("I met him once at 11 A.M. on 4th July 1886"))
```

output:

```
['11', '4', '1886']
```

14. Dictionary key must be immutable.

a) True

b) False

15. How to create empty set in Python?

Q.2 Answer the following questions. (Attempt any three) (15)

A) Differentiate append() and extend() method of list data type with example.

B) Find the sum of all even numbers from 1 to 100 without using for and while loop.

C) Write a program to read a word from the user and print number of letters, vowels and percentage of vowel in the word using dictionary.

Example :

Word – “hello”, vowels – 2, percentage – 40%

D) Explain the concept of constructor and destructor in Python with example.

Q.3 A) Write a Python program that overloads + operator, to add two objects of a class. (07)

B) Create a Python program to read a text file and do following: (08)

1. Print no. of lines

2. Print no. of unique words

3. Store each word with its occurrence in dictionary

OR

B) Write a python program to append the data to an existing file “python_ex.py”. Read the content to be appended from the user. Again, reopen the file and read the content of the same file. Use regular expression to remove all the single line comments from the file. (08)

Q.4 A) Write a program to demonstrate usage of one try block with multiple except block and else clause. (07)

OR

A) Explain Positional, Default and keyword parameters with example. (07)

B) Explain control structures in Python. (08)