

POSSESSION OF MOBILE IN EXAMINATION IS A UFM PRACTICE

Name of Student ----- Enrolment No. -----

Department -----

BENNETT UNIVERSITY, GREATER NOIDA

Supplementary Examination, FALL SEMESTER 2018-19

COURSE CODE: ECSE105L

MAX. DURATION: TWO HOURS

COURSE NAME: Computational Thinking & Programming

COURSE CREDIT:5

MAX. MARKS: 100

- Q.1 Select the correct answer (only one) 5*2=10
- i. Which line of code produces an error?
- a) "Heroine"+"2020"
 - b) '5'+6
 - c) 3+40.5
 - d) "70"+"eighty"
- ii. Select the output of the code:
- ```
>>> float("12" * int(input('Ener a number:')))
```
- Enter a number: 3
- a) "121212"
  - b) "36.0"
  - c) 121212.0
  - d) 36.0
- iii. Class members are accessed through which of the operator?
- a) %
  - b) :
  - c) \*
  - d) .
- Iv Which of the following statement/method is used to remove an item from a list by giving its value?
- a) pop( )
  - b) del
  - c) clear( )
  - d) remove( )
- v. Which slice operation will reverse the list L?
- a) L[-1::]
  - b) L[::-1]
  - c) L[: -1:]
  - d) None of these

Q.2 Make a flow chart for a program that prompts the user to enter 5 words. If the length of the word is less than 6 characters, it asks the user to enter again. If the length is more than 6 characters, it displays it on the screen. 10

Q.3 Complete the following Python code for recursive function to find the nth term in Fibonacci series 0,1,1,2,3,5,8.....: 10

```
def fib(n):
 if n==1:
 #write your code here
 elif n==2:
 #write your code here
 else:
 #write your code here
x=int(input())
print(fib(x))
```

5\*4=20

Q.4 Find the output of the following code and give a reason if error (one line):

|      |                                                                    |                                                                     |
|------|--------------------------------------------------------------------|---------------------------------------------------------------------|
| i.   | d={1:2, 3:4, 4:11, 5:6, 7:8}<br>print(d[d[3]])                     | ii. for i in range(10)<br>if not i%2==0:<br>print(i+1)              |
| iii. | sum=lambda x,y : x*2+y*3<br>print('Sum = ', sum(3,5))              |                                                                     |
| iv.  | str="Welcome to the world of Python!"<br>print(str[:10].find('t')) | v. list=['abc"def','ghi',[1,2,3]]<br>list[0:2]='xyz'<br>print(list) |

Q.5 Define a function rev\_sentence in Python to reverse a given sentence. Write a main program which should input a sentence from user and print its reverse using the defined function. For example:  
Input sentence: Best of luck!  
Reversed sentence: !kcul fo tseB 10

Q.6 Write a program in Python to open a new file 'f1.txt' for writing. Read any two sentences from user and write these to it. The program should read the sentences written in the file and print each sentence on a separate line. 10

Q.7 Write a program in Python which defines a class Student with data members as name, branch, roll\_no, CGPA. The member functions should include get\_data(), display\_data(). Derive a new class PGStudent from class Student and add data member-ThesisTitle. Update the two member functions to read and display this as well for objects of class PGStudent. 10

Q.8 Explain any two of the following with suitable examples: 20

- Operator overloading
- Functions join ( ) and split ( )
- Append mode in opening a file
- Use of pass statement