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POSSESSION OF MOBILE IN EXAMINATION IS UFM PRACTICE

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

BENNETT UNIVERSITY, GREATER NOIDA
Supplementary Examination, July 2019

COURSE CODE: **ECSE105L** MAX. DURATION: **TWO HOUR**
COURSE NAME: **Computational Thinking Using Programming**
COURSE CREDIT: **5** MAX. MARKS: **50**

Note:

- All the questions are compulsory.
- Please write precisely and neatly. Please make clear diagram wherever required.

Question 1. Multiple choice question **6*1= 6 Mark**

1.1 Left shift and right shift operator woks on which data type?

a. Int
b. Float
c. Both int and float
d. None of above

1.2 Which line of code will through error

L1. str='CSE EXAM'
L2. lst = ['h', 'e','l','l','o']
L3. str[0]='d'
L4. lst[0]='d'

a. line 1
b. line 2
c. line 3
d. line 4
e. program will not through any error

1.3 What will be the output of the following line of code?

```
my_list = ['p','r','o','b','e']
print(my_list[:4])
```

a. [,'r','o','b']
b. [,'r','o']
c. ['p','r','o','b','e']
d. No output

1.4 What is the result of following expression?
120%10*211+168<<3 and 44

a. 21
b. 44
c. 4
d. None of above

1.5 Which of following is right to left associative

a. * (Multiply)
b. // (Integer division)
c. ** (Power)
d. % (Mod)

1.6 Which operation you n perform with file if you open as : fp=open('hello.txt','a+')

a. Read only
b. write only
c. Append only
d. Read and append Both
e. None of above

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Question 2. Write a short note with suitable examples: **[3*3 = 9 Marks]**

(a) Set

(b) Class and Object

(c) Difference between tuple and list

Question 3. Find the output of the following peace of code. If you find error in code then point out which line and give justification. **[3*2 = 6 Marks]**

A.

```
X = {1, 2, 3, 4, 5}
Y = {4, 5, 6, 7, 8}
print(X | Y)
print(X - Y)
```

B.

```
lst1=[3,4,5,6,7]
lst2=lst1
lst3=lst1[:]
lst2[2]=20
print(lst1)
print(lst2)
print(lst3)
```

C.

```
dicti = {1: 'apple', 2: 'ball', 3: 'Hello'}
dicti[4]="1234"
print(dicti)
dicti = {1: 'apple', 2: 'ball', 3: 'ball', 3: 'abc'}
print(dicti)
```

Question 4. Define a recursive function to calculate the Binomial coefficient C(n,k). The formula is:

$C(n, k) = C(n-1, k-1) + C(n-1, k)$

$C(n, 0) = C(n, n) = 1$

For example, if input is C(5,2), output should be 10. **10 Marks**

Question 5. Write a program to create class "Person" with name and age attributes and show method to show the details. Create three objects of this class and show their details. **10 Marks**

Question 6. Write a program in Python to print prime numbers between 'n' and 'm' using function. Where 'n' and 'm' are given by user. **9 Marks**