

CSE 203

B.Tech. IIIrd SEMESTER EXAMINATION, 2024-25

B.TECH.

Python with Linux

(CSE)

AFFIX PRESCRIBED
RUBBER STAMP

Date (तिथि) : 24/12/2024

Paper ID
(To be filled in the
OMR Sheet)

2126

अनुक्रमांक (अंकों में) :

Roll No. (In Figures) :

2	4	1	4	7	5	0	0	1	0	0	2	1		
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अनुक्रमांक (शब्दों में) :

Roll No. (In Words) :

Time : 1:30 Hrs.

समय : 1:30 घण्टे

Max. Marks : 75

अधिकतम अंक : 75

नोट : पुस्तिका में 50 प्रश्न दिये गये हैं, सभी प्रश्न करने होंगे। प्रत्येक प्रश्न 1.5 अंक का होगा।

Important Instructions :

1. The candidate will write his/her Roll Number only at the places provided for, i.e. on the cover page and on the OMR answer sheet at the end and nowhere else.
2. Immediately on receipt of the question booklet, the candidate should check up the booklet and ensure that it contains all the pages and that no question is missing. If the candidate finds any discrepancy in the question booklet, he/she should report the invigilator within 10 minutes of the issue of this booklet and a fresh question booklet without any discrepancy be obtained.

महत्वपूर्ण निर्देश :

1. अभ्यर्थी अपने अनुक्रमांक केवल उन्हीं स्थानों पर लिखेंगे जो इसके लिए दिये गये हैं, अर्थात् प्रश्न पुस्तिका के मुख्य पृष्ठ तथा साथ दिये गये ओ०एम०आर० उत्तर पत्र पर, तथा अन्यत्र कहीं नहीं लिखेंगे।
2. प्रश्न पुस्तिका मिलते ही अभ्यर्थी को जाँच करके सुनिश्चित कर लेना चाहिए कि इस पुस्तिका में पूरे पृष्ठ हैं और कोई प्रश्न छूटा तो नहीं है। यदि कोई विसंगति है तो प्रश्न पुस्तिका मिलने के 10 मिनट के भीतर ही कक्ष परिप्रेक्षक को सूचित करना चाहिए और बिना त्रुटि की दूसरी प्रश्न पुस्तिका प्राप्त कर लेना चाहिए।

1. These are the top English movies by their revenues arranged in ascending order. This means the last movie on the list (Avatar) made most money. Which python statement can help you find out the top 3 movies by their revenues ?

```
Movies = ["Jurassic World", "Spider-man", "Titanic", "Avengers-Endgame", "Avatar"]
```

- ☒ (A) Movies [-3:0]
(B) Movies [-2:0]
(C) Movies [-4:0]
(D) None of the above
2. What is the output of the python code given below ?

```
For l in 'Skill Basics':
```

```
    If l == 'i':
```

```
        Continue
```

```
    Print (l, end = '')
```

- (A) Skill Basics
(B) Skill Basics
☒ (C) Skill Bascs
(D) None of the above
3. What will be the output of following range () function ?

```
For n in range (1, -6, -2) :
```

```
    Print (n, end = ' , ')
```

- (A) 0, -1, -2, -3
(B) 1, -2, -4, -6
(C) 1, -1, -2, -4
☒ (D) 1, -1, -3, -5

4. Every element in transaction array is a tuple where the first element is a credit card transaction id and the second one is a code that indicates if that transaction is a fraud. Code 'f' means fraud and other codes are valid transactions. What is the purpose of count variable in this case ?

Count = 0

Transactions = [(456, 'f'), (457, 'n'), (458, 'w'), (459, 'f')]

For transaction in transactions :

 If transaction [1] != 'f':

 Count += 1

- (A) Keep a count of all non- fraud transactions
(B) Keep a count of all fraud transactions
(C) Invalid syntax
(D) None of the above
5. Which of the following methods is known as a constructor in python classes?
- (A) Class Name()
(B) ~ Class Name()
(C) __init__()
(D) __Class Name__()
6. In python, 'self' is used to represent :
- (A) A person
(B) Instance of class
(C) Method of class
(D) None of these
7. Which is the correct variable name in python ?
- (A) 2nd -variable
(B) Firstvariable
(C) Third -variable
(D) Last \$ variable

8. What will happen when you run this code ?

```
Person-info = ("Bob Gupta", 52, "1 free street, Mumbai")
```

```
Person-info [1] = 54
```

- (A) You will get an error because tuples are immutable
- (B) It will assign 54 value to second element
- (C) It will assign 54 value to first element
- (D) Bob Gupta is replace by 54

9. Consider the python code

```
Count = 0
```

```
sum= 0
```

```
while count <=10:
```

```
    sum = sum+ count
```

```
    count = count +1
```

```
print (sum)
```

- (A) 56
- (B) 55
- (C) 54
- (D) 57

10. Consider the python code given below :

```
>>> list (range(1,6))
```

- (A) [1,2,3,4,5,]
- (B) [1,2,3,4,5,6]
- (C) [2,3,4,5,6]
- (D) [2,3,4,5,]

11. Consider the following python code

```
def area_circle (pi = 3.14, radius = 1):
```

```
    area = pi * radius * radius
```

```
    print (area)
```

```
area_circle (radius = 5)
```

its output will be _____

- ☒ (A) 78.5
- ☐ (B) 3.14
- ☐ (C) 31.4
- ☐ (D) None of these

12. Consider the following python code

```
a=20
```

```
def display ( ) :
```

```
    global a
```

```
    a=30
```

```
    print (a)
```

```
print (a)
```

o/p will be -

- ☒ (A) 30,30
- ☐ (B) 20,30
- ☐ (C) 20,20
- ☐ (D) None of these

$$\begin{array}{r} 25 \\ 2 \\ 3.14 \\ \times 25 \\ \hline 1570 \\ 6280 \\ \hline 78.50 \end{array}$$

13. Consider the code given below

Def minimum (a, b) :

if a < b:

return a

elif b < a:

return b

else :

return "Equal"

print (minimum (100,85))

o/p will be-

- ☒ (A) 85
(B) 100
(C) Equal
(D) Syntax error

14. Consider the python code given below :

def compute (num)

return num * num, num * num * num

s, c = compute (4)

print (s)

print (c)

its output will be _____

- ☒ (A) 16,64
(B) 16
(C) 64
(D) 64,16

15. Consider the python code given below

```
str1= "Hello"
```

```
str2= "Hello"
```

```
if (id (str1)== id (str2)) :
```

```
    print ("Same")
```

```
else :
```

```
    print ("Not same")
```

its output will be -

- ☒ (A) Same
(B) Not same
(C) 15698
(D) Syntax Error
16. Consider the python code given below :

```
>>>S = "IIT- BOMBAY"
```

```
>>> S [0: len (S) : 2]
```

Its output will be -

- (A) 'IIT-'
(B) '-BOMB'
(C) '-MBAY'
☒ (D) 'ITBMA'

17. Consider the python code given below

```
>>> l = [10,20,30,40,50]
```

```
>>> (max(l) - min(l)) * len(l)
```

its output will be -

- (A) 50
(B) 40
☒ (C) 200
(D) 100

(50 - 10) * 5
40 * 5

18. Consider the python code given below

```
>>> l = [10,20,30,40,50,60,70]
>>> del l [2:5]
>>> l
```

Its output will be -

- (A) [10,20,30,40]
- (B) [20,30,40,50]
- ☒ (C) [10,20,60,70]
- (D) [40,50,60,70]

19. Consider the python code given below

class Rectangle :

length = 10

width = 20

How many data abstractions and method abstractions are available in the class -

- (A) (2,2)
- (B) (0,2)
- ☒ (C) (2,0)
- (D) None of the above

20. Consider the python code given below

```
>>> S1 = {1,2,3,4}
>>> S2 = {2,4,5,6}
>>> S1.difference(S2)
```

Its output will be

- (A) {1,2,4}
- (B) {5,6}
- ☒ (C) {1,3}
- (D) None of the above

A-B

21. The keyword 'pass' when used inside a class it represents -

- (A) An empty class
- (B) Points to current object
- (C) Represents method abstraction
- (D) None of the above

22. A class is an/a _____ of attributes and methods.

- (A) Abstraction
- (B) Encapsulation
- (C) Inheritance
- (D) None of the above

23. Consider the python code

```
>>> 1&3
```

Its output is -

- (A) 0
- (B) 1
- (C) 3
- (D) 5

0001
0011
01
TechRepo

24. Consider the python code

```
>>> 3/5
```

Its output is -

- (A) 3
- (B) 7
- (C) 5
- (D) 1

0010
0101

111

25. A variable defined outside a function is referred to as -

- (A) Local variable
- (B) Global variable
- (C) Only variable
- (D) None of the above

26. Which of the following function headers is correct -

- (A) def Demo (P, Q = 10)
- (B) def Demo (P = 10, Q=10)
- (C) def Demo (P = 10, Q)
- (D) Both (A) and (B)

27. 'break' statement _____ :

- (A) Terminate the loop
- (B) Moves the control out of the block
- (C) Is same as continue
- (D) None of the above

28. Consider the following python code

```
>>> x= ['two',5, ['one',2]]
```

```
>>> print (len (x))
```

Output of this code is :

- (A) 4
- (B) 3
- (C) Syntax Error
- (D) None of the above

Key
value

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

```
x=['Red',3]
```

```
x.extend('Green')
```

- (A) ['Red',3, 'Green']
- (B) ['Red',3,'G', 'r', 'e', 'e', n']
- (C) Syntax Error
- (D) None of the above

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

```
x = [3, 'Roses', 2, 'chocolate']
```

```
x.remove(3)
```

```
print(x)
```

- (A) ['Roses', 2, 'chocolate']
- (B) [3, 'Roses', 2]
- (C) Syntax Error
- (D) None of the above

31. Consider the python code

```
>>> p = 'Python'
```

```
>>> L=list(p)
```

```
>>> L
```

Output will be

- (A) 'Python'
- (B) ['P', 'y', 't', 'h', 'o', 'n']
- (C) Syntax Error
- (D) None of these

32. If a function does not return any value, then by default which type of value is returned by the function ?
- (A) int
(B) str
(C) Double
(D) None
33. Consider the python code
- ```
>>> 3^5
```
- Its output is -
- (A) 6  
(B) 3  
(C) 5  
(D) 81
34. Consider the python code
- ```
>>> 4 << 2
```
- Its output is
- (A) 8
(B) 16
(C) 0
(D) None of the above
35. Consider the python code
- ```
>>> 4 >> 2
```
- Its output is
- (A) 1  
(B) 8  
(C) 16  
(D) None of the above

36. There are \_\_\_\_\_ bitwise operator in python.

~~(A)~~ 5

(B) 6

(C) 7

~~(D)~~ 4

8 | ^ ~

37. Consider the python code given below

```
>>> S1 = {1,2,3,4}
```

```
>>> S2 = {3,4,5,6}
```

```
>>> S1^S2
```

Its Output will be -

(A) {1,2,3,4}

(B) {3,4,5,6}

(C) {1,2,5,6}

(D) Syntax Error

38. \_\_\_\_\_ is used to check if the object code contains errors.

(A) Jython

(B) Python virtual machine

(C) Stack less

(D) PyPy

39. The standard implementation of python is usually called \_\_\_\_\_.

(A) Jython

(B) Stack less

~~(C)~~ CPython

(D) PyPy

40. In method overloading -

- ☒ (A) There is one method with multiple arguments
- (B) There is only three methods with same name and same number of arguments
- (C) There is only three methods with same name and multiple number of arguments
- (D) Python does not support method overloading

41. Consider the following

```
>>> 0x20
```

$$2 \times 16^1 + 0 \times 16^0$$

Output will be -

- (A) 31
  - (B) 33
  - ☒ (C) 32
  - (D) 34
42. Consider the following code

```
>>> int(12.456)
```

Output of this code is \_\_\_\_\_

- ☒ (A) 12
- (B) 2
- (C) 1
- (D) 124

43. Consider the following code

```
>>> 3.7e1
```

It's output will be \_\_\_\_\_ :

- (A) 0.37
- ☒ (B) 37
- (C) 0.3
- (D) 370

44. Consider the following code

```
>>> O o12
```

It's output is :

$$1 \times 8^1 + 2 \times 8^0$$

$$8 + 2$$

(A) 10

(B) 11

(C) 12

(D) 144

45. Consider the following code

```
>>> P = 20
```

```
>>> Q = 30
```

```
>>> P, Q = Q, P
```

```
>>> P
```

It's output will be \_\_\_\_\_ :

(A) 30

(B) 20

(C) True

(D) Invalid Syntax

46. Consider the following code

```
>>> math.log(12.496)
```

Here base of logarithm is \_\_\_\_\_ :

(A) e

(B) 10

(C) 2

(D) None of these

47. Consider the following code

```
>>> pow(2,3)
```

It's output will be :

(A) Invalid Syntax

(B) 9

(C) 8

(D) None of the above

48. Consider the following syntax

```
>>> 2 ** 3
```

It's output will be -

- (A) 8
- (B) 9
- (C) 6
- (D) None of the above

49. Consider the following code

```
>>> B = 4 + (5 * (4/2) + (4 + 3))
```

```
>>> B
```

It's output is \_\_\_\_\_ :

- (A) 22.0
- (B) 21.0
- (C) 20.0
- (D) None of the above

$4 + (5 * 2 + 7)$   
 $4 + (10 + 7)$   
 $4 + 17$   
21

50. Consider the code given below

```
>>> a = True + True
```

```
>>> a
```

It's output will be :

- (A) 2
- (B) 1
- (C) 0
- (D) None of the above

D

\*\*\*\*\*