

6. What is the output of the following?

```
x = 'abcd'
```

```
for i in range(len(x)):
```

```
    i.upper()
```

```
print (x)
```

a) a b c d

b) 0 1 2 3

c) error

d) none of the mentioned

7. Which of the following is not valid in hexa decimal number system?

a. 3

c. 7

b. 6

d. 19

8. Evaluate the following expression:

$15.0 / 4 + (8 + 3.0)$

a. 15

c. 14

b. 14.75

d. 11.5

9. A tuple is declared as

$T = (12, 25, 46, 39, 28)$

What will be the value of $\max(T)$?

a. 28

c. 12

b. 46

d. 39

10. Name the python module for floor() function ?

a. Random()

c. String()

b. Math()

i. d) Json()

11. Which of the following is valid identifier?

ii.

a. None

c) 0_None

b. #None

d) none

12. Which of the following will run without errors ?

- a) round(45.8)
- b) round(6352.898,2,5)
- c) round()
- e) round(7463.123,2,1)

13. What is answer of this expression, $22 \% 3$ is?

- a) 7
- b) 1
- c) 0
- d) 5

14. Which of the following is an invalid statement?

- a) `abc = 1,000,000`
- b) `a b c = 1000 2000 3000`
- c) `a,b,c = 1000, 2000, 3000`
- d) `a_b_c = 1,000,000`

15. Which of the following is invalid?

- a) `_a = 1`
- b) `__a = 1`
- c) `__str__ = 1`
- d) none of the mentioned

16. Which of the following is valid identifier?

- a) `a3_`
- b) `for`
- c) `lamda`
- d) `@gum`

i. Q17 and Q18 are ASSERTION and REASONING based questions. Mark the correct choice as

- (a) Both A and R are true and R is the correct explanation for A
- (b) Both A and R are true and R is not the correct explanation for A
- (c) A is True but R is False

(d) A is false but R is True

17. **Assertion (A):** Numeric literals are immutable.

Reason(R): They cannot be modified once created.

18. **Assertion (A):** The “while loop is called an entry –controlled loop.

Reason(R): It first executes the body of the loop and then goes to the “else” block.

Section B

19. Convert the following numbers accordingly:

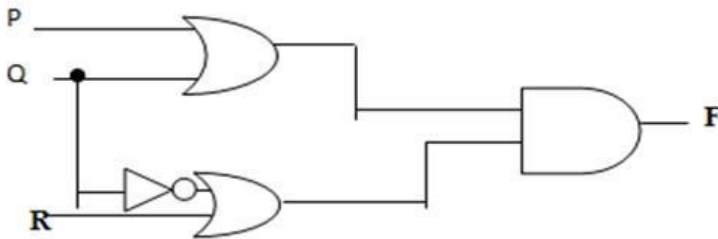
- i. Convert $(10110.0101)_2$ into decimal number
- ii. Convert $(325)_{10}$ into octal number.

20. Write a program to find the factorial of a given number.

OR

Write a program on a Fibonacci series.

21. Write the equivalent Boolean Expression for the following Logic Circuit



22. Suggest appropriate functions for the following tasks –

- (a) To check whether the string contains digits.
- (b) To find the occurrence a string within another string.
- (c) To convert the first letter of a string to upper case.
- (d) To convert all the letters of a string to upper case.
- (f) To check whether all the letters of the string are in capital letters.
- (g) to remove all the white spaces from the beginning of a string.

23. Write the full form of the following:

- a. APU
- b. EPROM
- c. UTF
- d. ASCII

24. Identify error in the following code. Rewrite the corrected code after removing errors and underline the corrections:

```
x="hello world"
y 2.3
Print (type(x))
print (type(y))
```

25. What will be the output of following:

```
y=5
for i in range(1,3):
    for j in range(0,i):
        z=i+j-1
        if(z%2)==0:
            y=y+z
        elif(z%3)==0:
            y=y+z-2
        print("y=",y)
```

OR

ii. What do you mean by Control Statements? Explain in short.

Section C

26. Write an algorithm to compute volume of sphere.

OR

Draw a flow chart to compute radius of circle.

27. Predict the output of the following code:

```
L=[ ]
L1=[ ]
L2=[ ]
for i in range(6,10):
    L.append(i)
for i in range(10,4,-2):
    L1.append(i)
for i in range(len(L1)):
    L2.append(L[i]+L1[i])
    L2.append(len(L)-len(L1))
print(L2)
```

28. What do you mean by comments? How many types of comments supported by python?

Explain each type of comments in detail.

OR

What do you mean by flow of control? Explain its types in brief.

29. Predict the Output:

```
i. a, b, c = 10,20,30
ii. p, q, r = c - 5, a + 3, b - 4
iii. print('a, b, c:', a, b, c, end = ' ')
iv. print("p, q, r:", p, q, r)
```

Section D

30. Write a program to generate the following series.

1 2 3

1 2

1

OR

Write a program in Python to calculate the factorial of number 6.

31. Write the most appropriate method to perform the following tasks:

Consider the string `s1="Green Revolution"`.

Write statements in python to implement the following:

(a) To replace all the occurrences of letter 'a' in the string with "*".

(b) To display the starting index for the substring 'vo'.

(c) To remove 'Gre' from the left of the string.

(d) To repeat the string 3 times.

(e) To display 'tion' from the string.

32. What is cyber bullying and cyber stalking? What is the role of firewall?

OR

What is private browsing? Why is it considered a better way of browsing the internet?

Section E

33. Create a list that contains the names of 5 students of your class: Write Python codes

- i). Ask the user to input one name and append it to the list.
- ii). Ask user to input a number. Print the name that has the number as index
(Generate error message if the number provided is more than last index value).
- iii). Ask the user to type a name. Check whether that name is in the list. If exist, delete the name, otherwise append it at the end of the list.
- iv). Create a copy of the list in reverse order and print the new list
- v) Write the function name to sort the list.

34. Find and write the output of the following Python code :

```
x= [1, 2, [3, "KVS", 4], "KV"]
print(x[0])
print(x[2])
print(x[-1])
print(x[0:1])
print(2 in x)
print(x[0]==8)
print(len(x))
x.extend([12,32,4])
print(len(x))
```

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