



ST. MARGARET SR. SEC. SCHOOL
D-Block, Prashant Vihar, Rohini, Delhi - 110085
SAMPLE PAPER 2023-24
SUBJECT: COMPUTER SCIENCE (083)
CLASS: XI

Time: 3Hrs

M.M: 70

General Instructions:

- Please check this question paper contains 35 questions.
- The paper is divided into 5 Sections- A, B, C, D and E.
- Section A, consists of 18 questions (1 to 18). Each question carries 1 Mark.
- Section B, consists of 7 questions (19 to 25). Each question carries 2 Marks.
- Section C, consists of 5 questions (26 to 30). Each question carries 3 Marks.
- Section D, consists of 2 questions (31 to 32). Each question carries 4 Marks.
- Section E, consists of 3 questions (33 to 35). Each question carries 5 Marks.

Section –A

1. The physical components of computer system are known as _____
 - a) Software
 - b) Hardware
 - c) Humanware
 - d) Drivers
2. 8 bits makes _____
 - a) 1 Byte
 - b) 1 KB
 - c) 1 MB
 - d) 1 Nibble
3. Which of the following is not a logical gate?
 - a) AND
 - b) OR
 - c) NOT
 - d) NONE
4. When python was developed?
 - a) 1990
 - b) 1991
 - c) 1992
 - d) 1993
5. To run python program which of the following key is used?
 - a) Ctrl + F5
 - b) Alt + F5
 - c) Ctrl + F9
 - d) F5
6. Which of the following is not a python tokens?
 - a) Keyword
 - b) Literals
 - c) List
 - d) Operators

7. What will be the output of the following code segment?

```
a,b=5,6  
b,a=a,b  
print(a,"+",b)
```

- a) 5 + 6
- b) 6 + 5
- c) 11
- d) None

8. Kriza wants to divide a number and store the result without decimal places into an integer variable. Suggest her an appropriate operator from the following:

- a) /
- b) %
- c) //
- d) Both a) & b)

9. What will be the output of following code:

```
if True:  
    print("true")  
else:  
    print("false")
```

- a) True
- b) False
- c) true
- d) false

10. Dhyana wants to terminates the while loop at the end of program. Suggest her a suitable keyword from the following:

- a) terminate
- b) break
- c) continue
- d) stop

11. Observe the given code and select an appropriate output:

```
a='hello'  
b=str(30)  
print(a+b)
```

- a) h
- b) hello
- c) 30
- d) hello30

12. Rudra wants to access a second last list element of list object L. Help him to select an appropriate option to accomplish his task.

- a) L[2]
- b) L[-2]
- c) L[len(L)-2]
- d) L-2

13. Consider these statements:

```
a=56,78,32,12
```

```
print(type(a))
```

What will be the output?

- a) <class 'int'>
- b) <class 'tuple'>
- c) <class 'list'>
- d) <class 'str'>

14. Observe the given declarations:

- i. d={}
- ii. d=dict()
- iii. d=Dict()
- iv. d=dict.fromkeys()

Which of the following are correct ways to create an empty dictionary?

- a) i and ii
- b) i,ii and iv
- c) i,iii and iv
- d) i and iii

15. Jay forgot to sign off from his email account on his laptop. Later, his classmate Rishi started using the same computer. He is now logged in as Jay. He sends inflammatory email messages to few of his classmates using Jay's email account. Rishi's activity is an example of which of the following cybercrime? Justify your answer.

- a) Hacking
- b) Identity theft
- c) Cyber bullying
- d) Plagiarism

16. Which act protects against cybercrime in India?

- a) Indian IT Act
- b) India Computer Security Act
- c) Indian Cyber Law
- d) Indian Data Security Law

17 and 18 are ASSERTION AND REASONING based questions. Mark the correct choice as

- (A) Both (A) and (R) are true and (R) is the correct explanation (A)
- (B) Both (A) and (R) are true and R is not the correct explanation (A)
- (C) (A) is True but (R) is False
- (D) (A) is false but (R) is True

17. Assertion(A): Data submitted online intentionally known as active digital foot print.

Reasoning(R): Active digital footprints includes emails, replies, comments or posts made on different websites or apps.

18. Assertion(A): Python lists allows to modify their elements by indexes easily.

Reasoning(R): Python lists are mutable.

Section B

19. Write equivalent ASCII code for the following:

a) CAB

c) FUN

b) Dad

d) ego

20. Draw logical circuit for the following equation:

a) $AB' + C'$

b) $P'Q' + R$

21. What do you mean by tokens? List out python tokens.

22. Consider the following string mySubject:

```
mySubject = "Computer Science"
```

What will be the output of:

a) `print(mySubject[:3])`

c) `print(mySubject[::-1])`

b) `print(mySubject[-5:-1])`

d) `print(mySubject*2)`

OR

Differentiate between `append()` and `extend()` methods with example.

23. Create a dictionary to assign day number as key and day name as value.

24. List any four benefits of e-waste management.

OR

Mention any four net etiquettes.

25. Differentiate between copyright and plagiarism.

Section C

26. Draw the basic architecture of computer system. Explain memory unit in detail.

27. Explain the numeric data types used in python with example.

OR

Explain the following string operations in detail with example.

- a) String Concatenation
- b) String Replication
- c) Membership

28. Find the output of the given code:

```
l = [6 , 3 , 8 , 10 , 4 , 6 , 7]
print( '@', l[3] - l[2])

for i in range (len(l)-1,-1,-2) :

    print( '@',l[i],end=" ")
```

OR

What will be the output of the following code?

```
tuple1 = (11, 22, 33, 44, 55 ,66)

list1 =list(tuple1)

new_list = []

for i in list1:

    if i%2==0:

        new_list.append(i)

new_tuple = tuple(new_list)

print(new_tuple)
```

29. What are the characteristics of dictionary?

30. Pranjal has downloaded an image from internet and used it in his PowerPoint presentation. But the owner of image does not permit the free uses of it.

- a) What do you mean by IPR?
- b) Which type of violation of IPR has been done by Pranjal here?
- c) Can he use this image legally? Explain how?

Section D

31. Write an algorithm and flow chart to find the square of given number.

OR

Write a program to print the following pattern up to n terms:

```
1
1 2
1 2 3
1 2 3 4
```

32. Write a program to accept n number of elements and add them into a list. Find the maximum and minimum values and print them.

OR

Write a program to create a dictionary as follows:

```
d={'empno':123,'ename':'Smit','salary':45000}
```

Print the names of employees who earns more than 20000 salary.

33. Prakash has created a group on whatsapp to share the study material. But his friend Jahan is posting rumours in the group.

- Which term is used for the task done by Jahan?
- Write any three safety measures Prakash has to follow for this situation.
- What do you mean by cyberstalking?
- What do you mean by cyberbullying?
- Which government portal helps to control cybercrime in India?

Section E

34. Observe the code given below and write answer of the following questions:

```
a,b=0,1
n=_____ # Statement 1
if_____: #Statement 2
    print("Please enter a positive number")
elif_____: #Statement 3
    print("You have entered 0")
else:
    _____ #Statement 4
    c = a+b
    a = b
    b = c
print(b)
```

- i. Write input statement to accept n number of terms – Statement 1
- ii. Write if condition to check whether input is positive number or not - Statement 2
- iii. Write if condition to check whether input is 0 or not - Statement 3

OR (For iii Only)

Write for loop for to iterate the values up to n terms

35. Dhruvin is learning python modules. Help him to complete the given partial code:

```
import _____ # Statement 1
TEXT="Class XI"
COUNT= _____ # Statement 2
C=9
while TEXT[C]!='L':
    print(TEXT[C]+TEXT[COUNT]+'*',)
    COUNT=COUNT+1
    C=C-1
```

- (i) Write the name of module required to be imported – Statement 1
- (ii) Write the random function to generate random number between 0 and 3 – Statement 2
- (iii) Write the possible output for the given code
- (iv) What are the minimum and maximum values can be generated from this module