DELHI PUBLIC SCHOOL, JAMMU
Sample questions for Term Exam (2019-20)
(as per the pattern of CBSE sample paper)
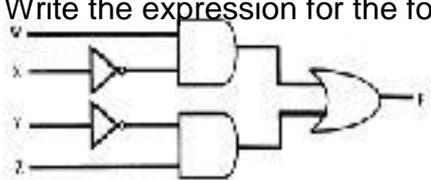
Computer Science(083)
CLASS -XI

Section-A

1. (a) What does a cross platform language mean?   1

   (b) Which of the following are valid and invalid strings in python?   2
       (i) "python" (ii) 'python' (iii) "python' (iv) {python}

   (c) What are Identifiers?   1

   (d) What is the difference between == and =? Explain with example   2

   (e) What are mutable and immutable data types? Give two examples of each   2

   (f) What is None literal in python?   1

2. a) Rewrite the following code fragment using for loop: 2

```
num=20
while(num > 0):
    count += 1
    sum += num
    num -= 2
    if(count == 10):
        print(sum//count)
        break
```

   b) Consider the following Python program: 2

```
N=int(input("Enter N:")
i=1
sum=0
while(i<n):
    if(i%2==0):
        sum = sum+i
    i=i+1
print(sum)
```
       What will be the output when the input value is (i) 5   (ii) 0

   c) Write a Python program to read an integer and find its reverse.   3
   Note: if user enter 1234 than the output should be 4321.

d) Write a program in python to calculate and print roots of a quadratic equation: $ax^2 + bx + c = 0$ 3
Note: the program should take values of a, b, c and print if the roots are real, imaginary or equal.

e) Write a program in Python to print the sum of the following series: 4
$s = 1 + x + x^2 + x^3 + \ldots + x^n$

3 (a) Differentiate between a syntax error and a semantic error with example.   2

(b) Which arithmetic operator(s) can be used with strings?   1

(c) Find the output of the following code: 3
x= "hello world"
print (x[: 2], x[: -2], x[-2 :])
print (x[6], x[2 : 4])
print (x[2 : -3], x[-4 : -2])

4 a) Write the name of the function used to calculate the length of list and tuples?   1

b) Write a program to find maximum element in the list entered by the user.   2

c) Write a program in python to create a dictionary containing names of competition winner students as keys and number of medals as values.   3

Section-B

5 a) What is the difference between RAM and ROM?   1

b) What is a language processor? Write the name of two language processors.   2

c) How many possible code groups can be formed by ASCII code (ASCII is a 7 bit code) ?   1

d) Convert the following: 2

    (i)$(4A)_{16}=($_____$)_2$
    (ii) $(106)_{10}=($_____$)_8$

e) Name any two basic logic gates.   1

f) Write the expression for the following logic circuit: 2

g) What are the advantages of cloud computing?   1

Section-C

6 a) What is the difference between degree and cardinality of table? Explain with example.   2

b) 1. Write SQL command for (i) to (vii) on the basis of the table SPORTS   6

Table: SPORTS

Studno	Class	Name	Game1	Grade1	Game2	Grade2
10	7	Sameer	Cricket	B	Swimming	A
11	8	Sujit	Tennis	A	Skating	C
12	7	Kamal	Swimming	B	Football	B
13	7	Venna	Tennis	C	Tennis	A
14	9	Archana	Basketball	A	Cricket	A
15	10	Arpit	Cricket	A	Atheletics	C

(a) Display the names of the students who have grade 'C' in either Game1 or Game2 .

(b) Display the names of students getting grade 'A' in Cricket.

(c) Display the games taken up by the students, whose name starts with 'A'.

(d) Add a new column named 'Marks' of int type in the sports table.

(e) Insert a new row in the table with the following data (16, 10, "Mohan", "Cricket", "B", "Tennis", "A")

(f) Delete the row from the student table whose Studno is 12.

c)   Differentiate between delete and drop command with example.   2

d)   Write SQL command to create the following table STUDENT with constraints.   2

Field Name	Type	Width	Constraints
Rollno	int		Primary key
Stud_Name	varchar	25	
DOB	date		
Subject	varchar	24	
Marks	int		

e)   What is an equi join in SQL?   1

f)   What is the use of indexes in databases?   2

Section-D

7 a)   What is cyber stalking?   1

b)   What do you understand by identity theft?   1

c)   How is phishing different from pharming?   2

d)   Explain the terms spyware and malware.   2

e)   What is cybercrime? How can you report it?   2

f)   What is eavesdropping?   2