ALLEN CAREER INSTITUTE KOTA (RAJASTHAN)

ALL INDIA MOCK TEST
(Academic Session : 2021 - 2022)

Board Pattern
TERM-II
TEST-2

CLASS XII - CBSE

COMPUTER SCIENCE (SOLUTIONS)

SECTION-A

1. Insertion technically means PUSH.

Deletion technically means POP.

2. (a) Bus topology

(b) Star topology

3. A relation is a table having atomic values, unique and unordered rows and columns,. The relational model represent data and relationship among data by a collection of tables known as relation, each of which has a number of columns with unique names .

4. DDL – Data Definition Language

DML – Data Manipulation Language

Any two out of INSERT, DELETE, UPDATE

5. (a)

COUNT(*)	City
2	Mumbai
2	Delhi
2	Moscow

(b)

MAX(DOB)	MIN(DOB)
08-12-1995	
07-05-1993	

6. **(i)** ORDER BY

(ii) SHOW CHARACTER SET

7. (a) Cardinality : 4

Degree : 5

(b) Cardinality : 7

Degree : 6

OR

Degree : 10 (No. of columns)

Cardinality : 10 – 3 = 7 (no. of rows)

SECTION-B

8. (i) Creating an Empty Stack : An empty stack can be created by using the following code

st = [ ] or st = list( ) #Here st is an empty stack

(ii) Adding an element to a Stack : We can add element in a stack by using append( ) function as shown below

st.append(5)

Here element '5' is added into a stack named 'st'

(iii) Deleting elements from the stack : We can delete elements from the stack as shown below :

st.pop( )

OR

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Displaying all elements of the stack : We can display all elements in stack as shown below :

```
L = len(st)
for i in range(L-1, -1, -1) : #As we have to display elements in reverse order
    print(st[i])
if (st == [ ]) :
    print("stack is empty")
```

9.
```
import mysql.connector as mydb
conn= mydb.connect(host="localhost", user="root", passwd="1234")
cur=conn.cursor()
cur.execute("INSERT INTO student values(10,'Ashok',26);")
cur.commit()
```

10.
```
import mysql. connector as ctor
dbcon = ctor. connect(host = "localhost", user = "learner", passwd = "fast",
database = "items")
cursor = dbcon. cursor()
sqll ="DELETE FROM category WHERE name= '%s' "
datal = ( ' Stockable', )
cursor.execute(sqll, datal)
dbcon . commit() # commit the changes
print( "Rows affected: ". cursor. rowcount)
dbcon.close( )
```

SECTION-C

11. (i) SELECT * FROM STORE ORDER BY LASTBUY ;

(ii) SELECT ItemNo, Item FROM STORE WHERE Rate >15 ;

(iii) SELECT * FROM STORE WHERE Scode = 22 OR Qty > 110 ;

(iv) SELECT MIN(Rate) FROM STORE GROUP BY Scode ;

12. **(i)** **Two uses of Internet are as follows :**

(a) Internet is used for communication and information sharing.

(b) Business use the Internet to provide access to complex databases.

(ii)

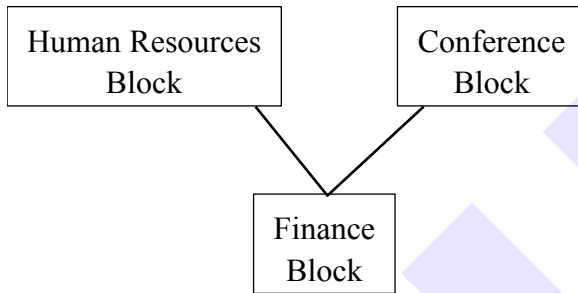| Internet	Intranet
Access by an individual with dial-up access.	Access by only authorised employees.
Information on Internet could be general, public and advertisement	Information on Intranet could be specific, corporate and proprietary.

OR

(i)

Packet switching	Message switching
• There is a tight upper limit on the block size. A fixed size of packet is specified.	• In message switching, there is no upper limit.
• All the packets are stored in main memory in switching office.	• In message switching, packets are stored on disk. This increases the performance as access time is reduced.

(ii)

Twisted Pair cable	Co-axial Cable
(i) Their bandwidth is not as high as coaxial cables.	(i) It has high bandwidth.
(ii) A twisted pair consists of two copper wires twisted around each other (each has its own insulation around it) like a double helix.	(ii) A coaxial cable consists of a copper wire core covered by an insulating material and a layer of conducting material over that.

13. (i) TTC should install its server in finance block as it is having maximum number of computers.

(ii)

The layout is based on minimum cable length required, which is 120 metres in the above case.

(iii) Satellite Link

(iv) Switch