

OBJECTIVE QUESTIONS

-FPR20-GEN-DATABASE-
REGULAR-OBJ_25Jan21-
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Question 1

[3 marks]

Consider the table **saledetail** given below:

Table: saledetail

saleid	custid	custname	productid	amountpaid
S5001	C8001	Mary	P7001	4000
S5002	C8003	James	P7004	3500
S5003	C8002	Linda	P7001	5000
S5004	C8001	Mary	P7001	2000
S5005	C8004	Paul	P7002	2400
S5006	C8002	Linda	P7003	2250
S5007	C8003	James	P7003	2250
S5008	C8003	James	P7004	5250

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Query:

```
SELECT custid, custname, SUM(amountpaid) AS TOTALAMOUNT FROM saledetail  
GROUP BY custid, custname HAVING SUM(amountpaid) >=  
(SELECT MAX(SUM(amountpaid)) FROM saledetail WHERE custname NOT LIKE '%m%' GROUP BY custid);
```

What will be the output when the above query gets executed?

CUSTID	CUSTNAME	TOTALAMOUNT
C8002	Linda	7250

CUSTID	CUSTNAME	TOTALAMOUNT
C8003	James	11000

CUSTID	CUSTNAME	TOTALAMOUNT

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CUSTID CUSTNAME TOTALAMOUNT

C8003 James 11000



CUSTID CUSTNAME TOTALAMOUNT

C8001 Mary 6000



C8004 Paul 2400

C8002 Linda 7250

CUSTID CUSTNAME TOTALAMOUNT

C8002 Linda 7250



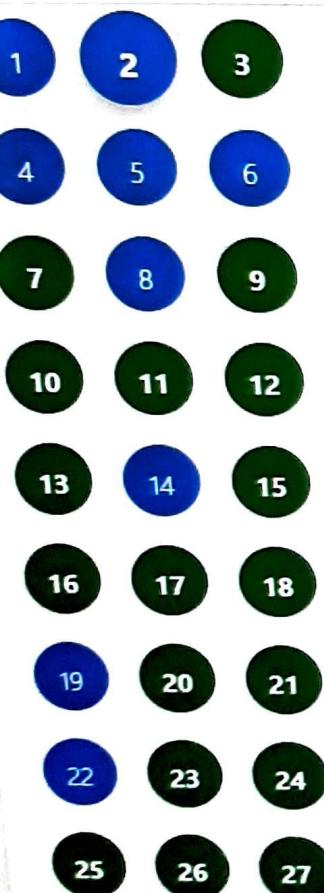
C8003 James 11000

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**Question 2**

[1 marks]

Consider the table **product** given below:

Table: product

productid	productname	manufacturedate	expirydate
P1001	Hairgro Shampoo	15-Jan-16	15-Jul-17
P1002	Jones Mixed Jam	25-Jan-16	25-Jul-16
P1003	SkinGlow Soap	20-Apr-16	25-Oct-16
P1004	Oleano Olive Oil	16-Mar-17	16-Sep-17
P1005	Sweet n Spice Sauce	25-Mar-17	20-Aug-17

Query:

SELECT * FROM product WHERE ADD_MONTHS(manufacturedate,6) >= expirydate;

How many row(s) will be fetched when the above query is executed?

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P1003	SkinGlow Soap	20-Apr-16	25-Oct-16
P1004	Oleano Olive Oil	16-Mar-17	16-Sep-17
P1005	Sweet n Spice Sauce	25-Mar-17	20-Aug-17

Query:

SELECT * FROM product WHERE ADD_MONTHS(manufacturedate,6) >= expirydate;

How many row(s) will be fetched when the above query is executed?

- 3
- 4
- 1
- 2

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Question 3

[1 marks]

Which of the following statements are TRUE with respect to Agile methodologies?

- (i) Ensures early return on investment (ROI)
- (ii) Risk mitigation and recovery through short deliveries
- (iii) High quality and productivity cannot be guaranteed due to frequent deliveries

Only (i) and (ii)

Only (iii)

Only (ii) and (iii)

(i), (ii) and (iii)

Reset

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OBJECTIVE QUESTIONS

Question 4

[3 marks]

Consider the tables **customer**, **vehicle** and **booking** given below having the information of the vehicles booked by the customers by paying initial booking amount.

Table: customer

customerid	name
C101	Richard
C102	Jason
C103	Xavier
C104	Albert

Table: vehicle

vehicleid	vehiclemodel
-----------	--------------

You're being proctored!



OBJECTIVE QUESTIONS

ABASE-
Jan21-**customerid name**

C101 Richard

C102 Jason

C103 Xavier

C104 Albert

Table: vehicle

vehicleid vehiclemodel

V101 Vespa

V102 Activa

V103 Gusto

V104 Maestro



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V103 Gusto

V104 Maestro

Table: booking

bookingid	customerid	vehicleid	bookingamount
B101	C101	V104	2000
B102	C102	V102	1500
B103	C103	V104	1000
B104	C102	V101	1400
B105	C101	V101	1000

Query:

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Query:

```
SELECT DISTINCT vehiclemodel, bookingid, bookingamount  
FROM vehicle v INNER JOIN booking b  
ON v.vehicleid = b.vehicleid AND bookingamount > 1000  
FULL OUTER JOIN customer c ON b.customerid = c.customerid;
```

How many rows will be fetched when the above query is executed?

- 2
- 3
- 4
- 5

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Question 5

[2 marks]



Consider the tables **customer** and **booking** given below:

Table: customer

custid	custname	custtype	rating
C1076	Jones	REGULAR	4
C1074	Felix	PRIVILEGED	4
C1065	jack	REGULAR	3
C1056	James	PRIVILEGED	4
C1055	jack	REGULAR	3

Table: booking

bookingid	custid	roomno	checkindate
7012	C1065	155	22-Sep-17

7012 C1065 155 22-Sep-17

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Table: booking

bookingid	custid	roomno	checkindate
7012	C1065	155	22-Sep-17
7016	C1056	176	20-Aug-17
7077	C1076	188	15-Sep-17
7054	C1065	176	20-Aug-17
7045	C1074	177	21-Aug-17

Constraint:

booking table custid column references the customer table custid column

Queries:

`DELETE FROM booking WHERE to_char (checkindate,'Mon') ='Aug' AND roomno=176;`

`DELETE FROM customer WHERE custtype='PRIVILEGED' AND rating=4;`

Which of the following statements will be TRUE after execution of the above DELETE

queries sequentially? [choose TWO correct options]

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| 27 | |

Constraint:

booking table custid column references the customer table custid column



Queries:

DELETE FROM booking WHERE to_char (checkindate,'Mon') ='Aug' AND roomno=176;

DELETE FROM customer WHERE custtype='PRIVILEGED' AND rating=4;

Which of the following statements will be TRUE after execution of the above DELETE

queries sequentially? [choose TWO correct options]

- All bookings have different custid's
- Exactly three rows in booking table
- All customers from same custtype
- All customers have same custname

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You're

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Question 6

[2 marks]

Consider the tables **employee** and **unit** given below:

Table: employee

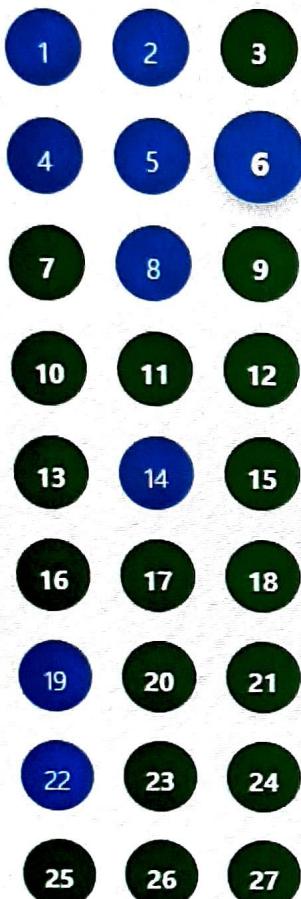
empid	empname	unitid	designation
101	John	503	SE
102	Mathew	502	TA
103	Eliza	501	SE
104	Steve	502	SSE
105	Alice	502	TA

Table: unit

unitid	unitname
501	ECS

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104	Steve	502	SSE
105	Alice	502	TA

Table: unit

unitid	unitname
501	ECS
502	ENG
503	FSM
504	IVS

Query:

```
SELECT unitname, COUNT(empname) empcount  
FROM employee e RIGHT JOIN unit u ON u.unitid = e.unitid  
AND designation = 'SE' GROUP BY unitname;
```

What will be the output when the above query is executed?

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```
SELECT unitname, COUNT(empname) empcount  
FROM employee e RIGHT JOIN unit u ON u.unitid = e.unitid  
AND designation = 'SE' GROUP BY unitname;
```

What will be the output when the above query is executed?

UNITNAME	EMPCOUNT
----------	----------

ECS	1
-----	---

ENG	3
-----	---

FSM	1
-----	---

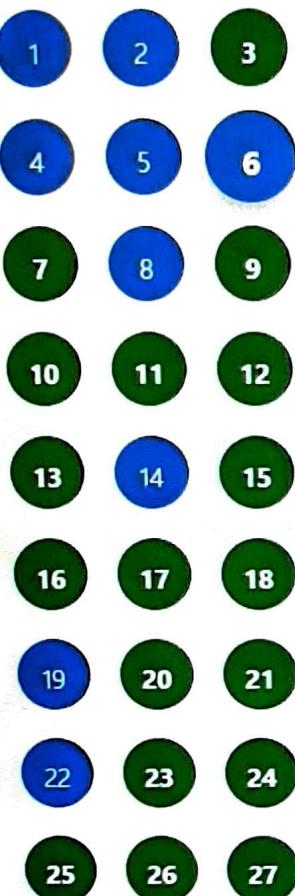
IVS	0
-----	---

UNITNAME	EMPCOUNT
----------	----------

ECS	1
-----	---

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UNITNAME EMPCOUNT

ECS 1

ENG 3

FSM 1

IVS 0

UNITNAME EMPCOUNT

ECS 1

ENG 3

FSM 1

UNITNAME EMPCOUNT

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UNITNAME EMPCOUNT

ECS 1

ENG 3

FSM 1

UNITNAME EMPCOUNT

ECS 1

ENG 0

FSM 1

IVS 0

UNITNAME EMPCOUNT

ECS 1

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UNITNAME EMPCOUNT

ECS 1

ENG 0

FSM 1

IVS 0

UNITNAME EMPCOUNT

ECS 1

FSM 1

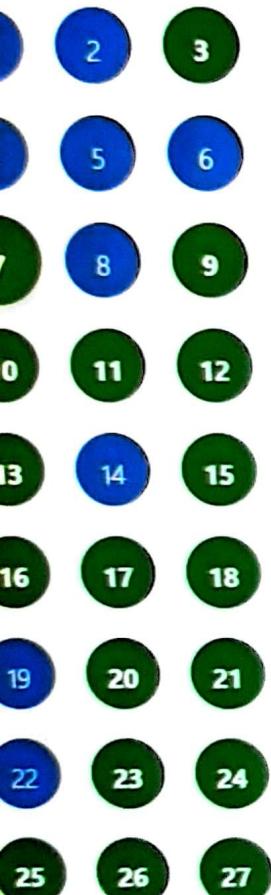
ENG 1

IVS 0

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Question 7

[2 marks]

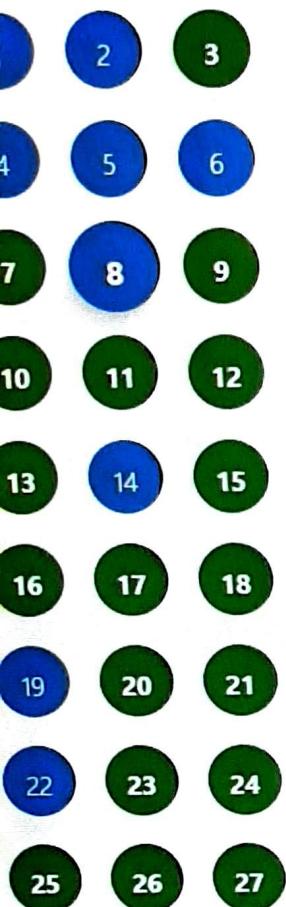
Which of the following security controls detects a network intrusion by observing deviations from the normal network traffic?

- ⚡ Packet filtering firewall
- Stateful Firewall
- Signature-based IDS
- Anomaly-based IDS

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Question 8

[2 marks]

Consider the tables **student**, **course** and **registration** given below:

Table: student

studentid	studentname	dob
S401	Maxwell	21-Jan-11
S402	Nancy	1-Jul-12
S403	Gabriel	20-Jan-10
S404	Jack	21-Jun-10

Table: course

courseid	coursename	noofdays
C401	Programming Fundamentals	7
C402	SQL Database	11

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courseid	coursename	noofdays
C401	Programming Fundamentals	7
C402	SQL Database	11
C403	Networking	5
C404	Software Engineering	5

Table: registration

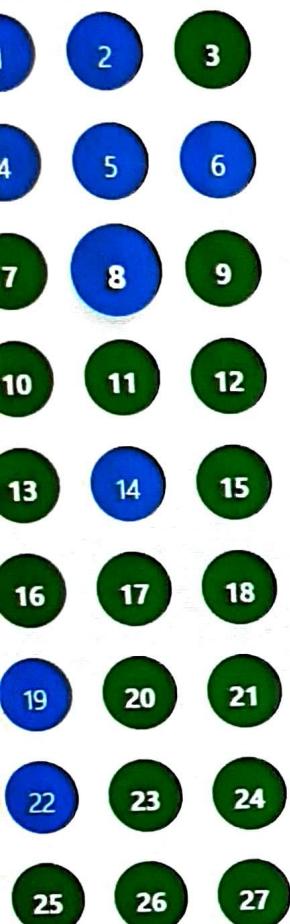
registerid	studentid	courseid	fees
R701	S401	C401	350
R702	S403	C403	200
R703	S401	C402	550
R704	S402	C404	250
R705	S404	C403	200

Query:

SELECT studentid, courseid, fees FROM registration r

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R705 S404 C403 200

Query:

SELECT studentid, courseid, fees FROM registration r

WHERE EXISTS (SELECT 1 FROM student s WHERE r.studentid = s.studentid AND studentname LIKE '%e%')

AND EXISTS (SELECT 1 FROM course c WHERE r.courseid = c.courseid AND noofdays > 5);

How many rows will be fetched when the above query is executed?

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Question 9

[1 marks]

Consider the table **customer** with attributes and indexes :

custid is the primary key of the customer table.

Table: customer

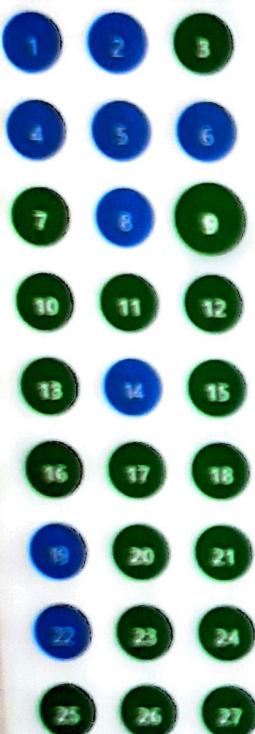
custid	custname	custtype	gender	dob
5001	Ridhima	Privileged	F	22-Nov-88
5002	Raghav	Regular	M	14-Jun-89
5003	Anooj	Privileged	M	21-Mar-88
5004	Jacob	Elite	M	11-Feb-89
5005	Ragini	Regular	F	30-Mar-88

IV1: custid

00:17:26

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IX1: custid

IX2: custname, gender

IX3: custtype, dob

Query:

select * from customer where gender in ('M', 'F') and dob like '19Mar' ;



Which of the following index will be used for the above query ?

- IX3
- Either IX2 or IX3
- No index will be used
- IX2

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Question 10

[2 marks]

Consider the relational schema along with the functional dependencies given below:

busdetails (busno, bustype, routeno, source, destination, busfare)

routeno \rightarrow source, destination

busno, routeno \rightarrow busfare, bustype, source, destination

busno \rightarrow bustype

What will be the resulting relational schema after converting to 3NF?

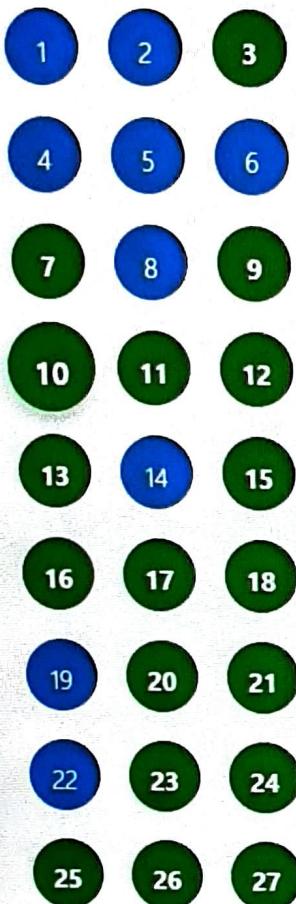
bus (busno, bustype, busfare)

route (routeno, source, destination)

bus (busno, bustype)

route (routeno, source, destination, busfare)

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What will be the resulting relational schema after converting to 3NF?

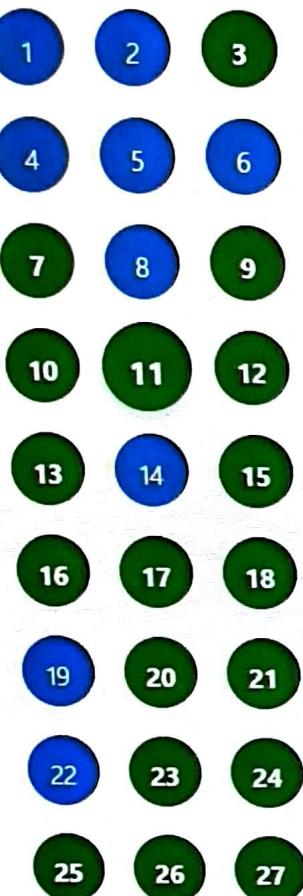
- bus (busno, bustype, busfare)
- route (routeno, source, destination)
- bus (busno, bustype)
- route (routeno, source, destination, busfare)
- bus (busno, bustype)
- route (routeno, source, destination)
- fare (busno, routeno, busfare)
- bus (busno, bustype)
- route (routeno, source, destination)
- fare (busno, busfare)

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**Question 11**

[1 marks]

An online apparel store is deployed on-premise. The traffic forecast for the apparel store application varies based on various parameters. Which of the following is a challenge faced by the solution?

- Under-utilization of on-premise servers reduces the return on investment
- On-premise servers may be overloaded with the traffic
- Limited scalability in the on-premise environment, leads to loss of business continuity
- All of the above

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Question 12

[2 marks]

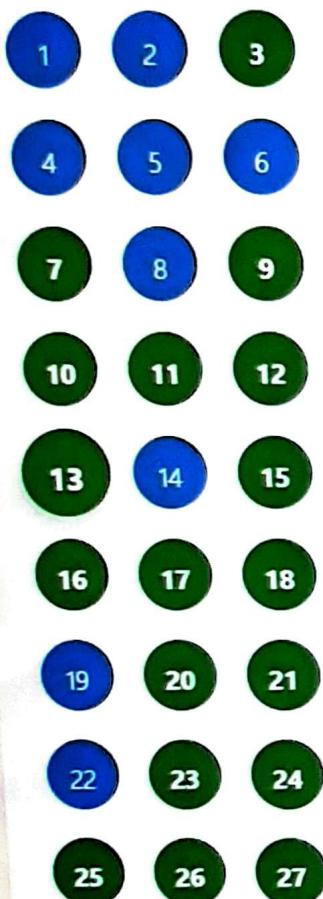
BuyAnytime, is a retail organization, managing infrastructure on-premise. They are looking to expand their infrastructure resources using a scalable IT solution.

Which of the following service is most appropriate?

- Google Compute Engine
- Amazon S3
- Salesforce CRM
- Any of the above

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**Question 13**

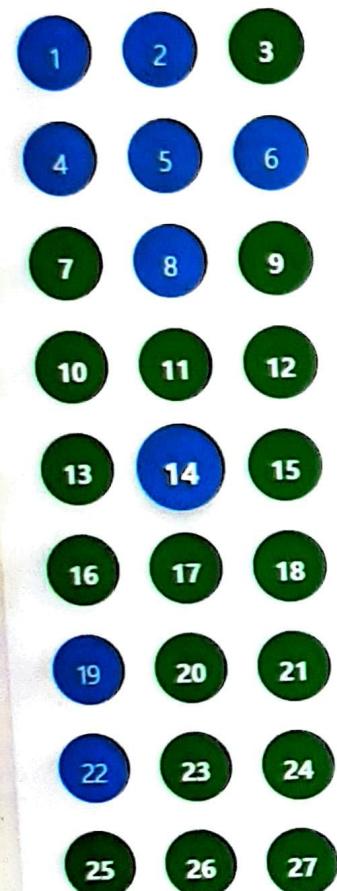
[1 marks]

Out of the following, what are the characteristics of Anomaly-based IDS? ? [Select 2 correct options]

- It models the normal usage of the network and creates a profile
- It doesn't detect novel attacks
- Anything unusual happening from the profile is not assumed to be an intrusion event
- Observes normal behavior of users to create a 'behavior profile'

[Reset](#)[Save](#)

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Question 14

[3 marks]

Consider the tables **student**, **book** and **allocation** given below:

Table: student

rollno	name
101	Warner
102	John
103	Sam
104	Rick

Table: book

isbn	bname
204	Database
694	Digitals

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isbn bname

204	Database
694	Digitals
306	Networking
406	Python

Table: allocation

aid	rollno	isbn
1	102	694
2	101	204
3	103	694
4	102	306
5	104	406

Which of the following two queries will give the same result?

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3 103 694

4 102 306

5 104 406

Which of the following two queries will give the same result?

SELECT name FROM student WHERE rollno IN (SELECT rollno FROM allocation a WHERE isbn IN (SELECT isbn FROM book WHERE bname NOT IN ('Digitals', 'Networking'))

GROUP BY rollno);

SELECT DISTINCT name FROM student s WHERE s.rollno IN (SELECT rollno FROM allocation a INNER JOIN book b ON b.isbn = a.isbn WHERE bname IN ('Digitals', 'Networking'));

SELECT s.name FROM student s, book b, allocation a WHERE s.rollno = a.rollno AND b.bname IN (SELECT bname FROM book) GROUP BY s.name;

SELECT name FROM student WHERE rollno IN (SELECT rollno FROM allocation a WHERE isbn IN (SELECT isbn FROM book WHERE bname IN ('Digitals', 'Networking'))) GROUP BY

rollno);

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**Question 15**

[2 marks]

SCENARIO:

Effort involved in a project which started on 15th Jan 2013 and ended on 1st Oct 2013 is 160 person days. During this period defects were identified by the users after deployment.

Note: KLOC stands for Kilo Lines Of Code

QUESTION:

NOTE : FILL IN THE BLANKS WITH NUMERIC VALUES ONLY :

For the above scenario, the Productivity figure of the project is LOC/person days.

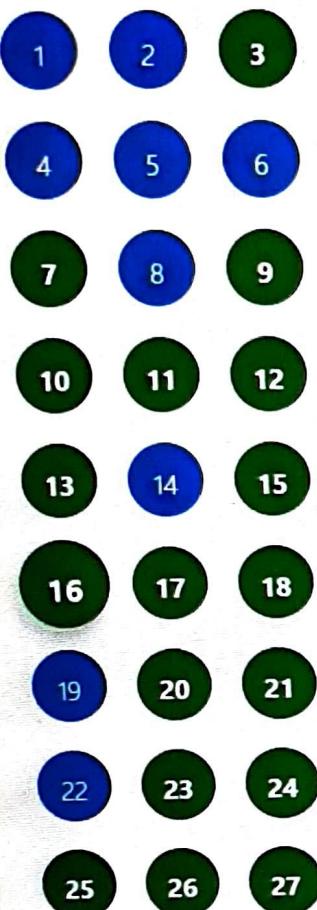
Enter Answer

25

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**Question 16**

[1 marks]

Consider the actual and desired table structure for the table **student** given below:

Actual table structure:

Column Name	Data type and Size	Constraint
studentid	CHAR(4)	NOT NULL
studname	VARCHAR2(10)	NOT NULL
dateofbirth	DATE	
address	CHAR(20)	

Desired table structure:

Column Name	Data type and Size	Constraint
studentid	CHAR(4)	NOT NULL
studname	VARCHAR2(10)	NOT NULL

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Desired table structure:

Column Name	Data type and Size	Constraint
studentid	CHAR(4)	NOT NULL
studname	VARCHAR2(10)	NOT NULL
address	VARCHAR2(20)	
age	NUMBER	

ALTER Statements:

- i. **ALTER TABLE** student **MODIFY** address **VARCHAR2(20)**;
- ii. **ALTER TABLE** student **DROP**(dateofbirth);
- iii. **ALTER TABLE** student **ADD** address **VARCHAR2(20)**;
- iv. **ALTER TABLE** student **ADD** age **NUMBER**;
- v. **ALTER TABLE** student **DROP** dateofbirth;

Identify the ALTER statements that will give the desired table structure:

OBJECTIVE QUESTIONS

AS-FPR20-GEN-DATABASE-
REGULAR-OBJ_25Jan21-
Section



ALTER Statements:

- i. **ALTER TABLE** student **MODIFY** address **VARCHAR2(20)**;
- ii. **ALTER TABLE** student **DROP**(dateofbirth);
- iii. **ALTER TABLE** student **ADD** address **VARCHAR2(20)**;
- iv. **ALTER TABLE** student **ADD** age **NUMBER**;
- v. **ALTER TABLE** student **DROP** dateofbirth;

Identify the ALTER statements that will give the desired table structure:

- i, ii and iv
 i, ii and v
 ii, iii and iv
 iii and v

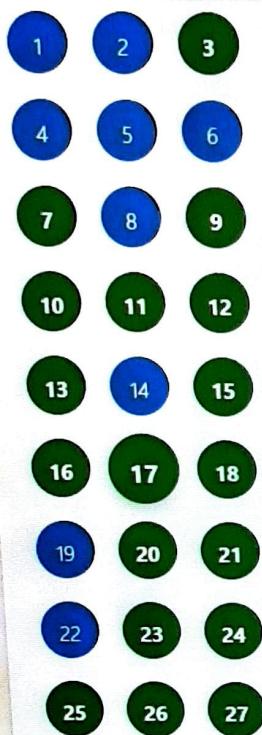
Reset

Save

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OBJECTIVE QUESTIONS

AS-FPR20-GEN-DATABASE-
REGULAR-OBJ_25Jan21-
Section



Question 17

[1 marks]

An organization is planning to migrate its E-commerce application to the cloud. It receives highly varying traffic. Which cloud

- Public Cloud
- Private Cloud
- Community Cloud
- Hybrid Cloud

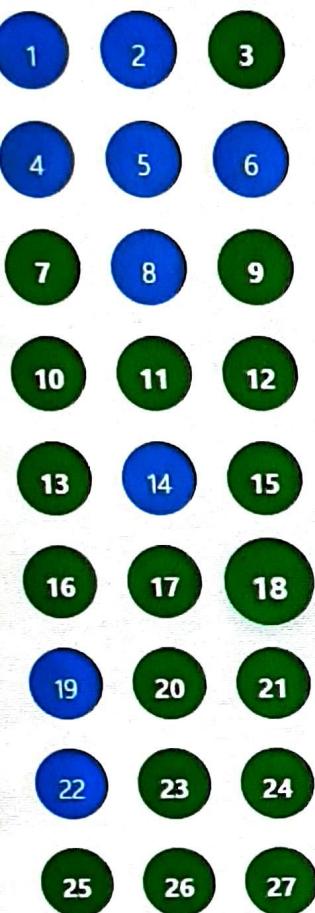
Reset

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OBJECTIVE QUESTIONS

S-FPR20-GEN-DATABASE-
REGULAR-OBJ_25Jan21-
Section

**Question 18**

[1 marks]

Consider the table **toys** given below:

Table: toys

toyid	toynname	quantityavailable	price
T601	Army Men	174	2700
T602	Finger Paint	150	3400
T603	Magic 8 ball	240	3200
T604	Legos	150	3000
T605	Weebles	174	3500
T606	Glow Stick	240	3200
T607	Barbie	174	2700
T608	Magna Doodle	129	2800

OBJECTIVE QUESTIONS

AS-FPR20-GEN-DATABASE-
REGULAR-OBJ_25Jan21-
Section

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- 26
- 27

	Item No.	Item Name	Price	Quantity Available
	T607	Barbie	174	2700
	T608	Magna Doodle	129	2800

Query:

```
SELECT DISTINCT price, quantityavailable FROM toys  
WHERE quantityavailable > 150 AND price BETWEEN 2500 AND 3500;
```

How many rows will be fetched when the above query is executed?

- 2
- 4
- 3
- 5

Reset

Save

OBJECTIVE QUESTIONS

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- 32
- 33

Table: dietplan

planid	customerid	weight	target
P101	C101	70	50
P102	C102	90	70
P103	C103	110	80
P104	C106	80	50
P105	C105	90	70

Query:

```
SELECT customerid FROM customer WHERE customername LIKE '%e%'
```

```
UNION
```

```
SELECT planid FROM dietplan WHERE weight BETWEEN 90 AND 100;
```

How many row(s) will be fetched when the above query gets executed?

OBJECTIVE QUESTIONS



Query:

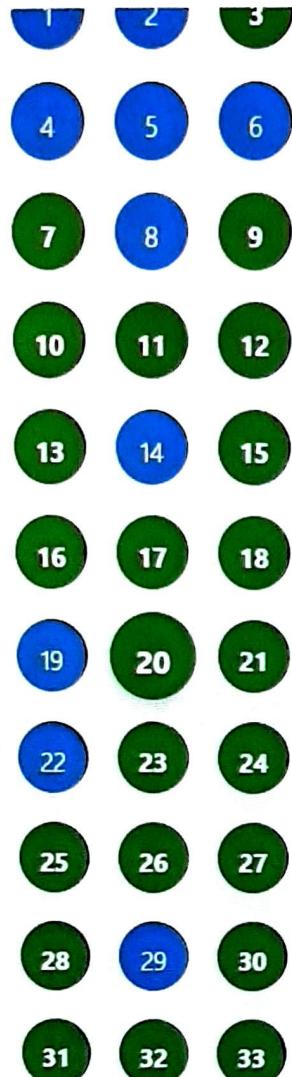
```
SELECT customerid FROM customer WHERE customername LIKE '%e%'  
UNION  
SELECT planid FROM dietplan WHERE weight BETWEEN 90 AND 100;
```



How many row(s) will be fetched when the above query gets executed?

- 1
- 3
- 4
- 2

ResetSave

**Question 20**

[1 marks]

Consider the table **patient** given below:

Table: patient



patientid	patientname	city
P201	Beth	New York
P202	Adam	Chicago
P203	Keith	Boston
P204	Lisa	New York
P205	Vanessa	San Francisco
P206	Jessica	Los Angeles

Query:

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- 27**
- 28**
- 29**
- 30**
- 31**
- 32**
- 33**

P203 Keith Boston

P204 Lisa New York

P205 Vanessa San Francisco

P206 Jessica Los Angeles

Query:

SELECT * FROM patient WHERE patientname LIKE '%a%' AND city LIKE '%o';

How many row(s) will be fetched when the above query is executed?

0

3

2

1



Question 21

[1 marks]

Consider the create statement for the table **customer** given below:

```
CREATE TABLE customer(  
    custid INTEGER PRIMARY KEY,  
    custname VARCHAR2(25) UNIQUE,  
    custtype VARCHAR2(8),  
    regdate DATE DEFAULT '01-NOV-2017',  
    gender CHAR(1) CHECK (GENDER IN('M','F')));
```

Robert executed the following SQL statements sequentially on the existing **customer** table.

```
INSERT INTO customer(regdate,gender,custid,custtype) VALUES(NULL,'F',876,'Elite');  
INSERT INTO customer(gender,custtype,custid) VALUES('M','Privileged',996);  
INSERT INTO customer VALUES(992,'Maria','Regular',NULL,'f');  
INSERT INTO customer VALUES(996,'Gabriel','Regular','23-SEP-18','M');  
INSERT INTO customer(custname,gender,custtype,custid) VALUES('Peter',NULL,'Elite',986);  
INSERT INTO customer(gender,custtype,custid) VALUES('M','Elite',996);  
COMMIT
```

- ←
- | | | |
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| 28 | 29 | 30 |
| 31 | 32 | 33 |

```
INSERT INTO customer(gender,custtype,custid) VALUES('M','Privileged',996);
INSERT INTO customer VALUES(992,'Maria','Regular',NULL,'f');
INSERT INTO customer VALUES(996,'Gabriel','Regular','23-SEP-18','M');
INSERT INTO customer(custname,gender,custtype,custid) VALUES('Peter',NULL,'Elite',986);
INSERT INTO customer(gender,custtype,custid) VALUES('M','Elite',996);
COMMIT;
```

```
SELECT * FROM customer;
```



How many rows will be fetched when the above **SELECT** query is executed?

- 4
- 3
- 2
- 5

OBJECTIVE QUESTIONS

Question 22

[1 marks]

Consider the tables **customer** and **purchase** given below. In **purchase** table, **custid** column references the **customer** table **custid** column. Tables and sample data is as given

Table: customer

custid	custname	gender
1005	Jack	M
1007	Tom	M
1009	Jerry	M
1010	Mark	M

Table: purchase

purchaseid	custid	bill
------------	--------	------

OBJECTIVE QUESTIONS

Table: purchase

purchaseid	custid	bill
7001	1005	1500
7002	1007	2700

Tom executed the below SQL statements sequentially on the existing table.

```
INSERT INTO purchase(purchaseid, custid, bill) VALUES(7003,1009,1500);
INSERT INTO purchase(purchaseid, bill) VALUES(7004, 1500);
INSERT INTO purchase(purchaseid, custid, bill) VALUES(7005, 1001, 1500);
COMMIT;
```

```
SELECT * FROM purchase;
```

What will be the number of rows fetched by the SELECT query?



2

4

OBJECTIVE QUESTIONS

Tom executed the below SQL statements sequentially on the existing table.

```
INSERT INTO purchase(purchaseid, custid, bill) VALUES(7003,1009,1500);
INSERT INTO purchase(purchaseid, bill) VALUES(7004, 1500);
INSERT INTO purchase(purchaseid, custid, bill) VALUES(7005, 1001, 1500);
COMMIT;
```

```
SELECT * FROM purchase;
```

What will be the number of rows fetched by the SELECT query?

- 2
- 4
- 5
- 3

Reset

Save



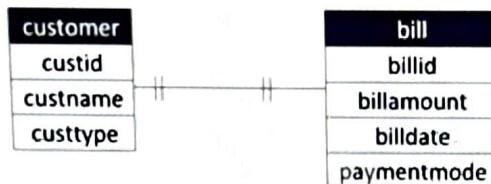
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Question 23

[1 marks]

Consider the tables **customer** and **bill** with 1:1 relationship given below.

custid is the primary key of customer table and billid is the primary key of bill table.



After converting the above ER Diagram to table schema, foreign key will be added to which of the table given above?

- Only customer
- Only bill
- Either customer or bill
- No foreign key exists

OBJECTIVE QUESTIONS

Question 24

[2 marks]

Consider the table **booksale** given below:

Table: booksale

saleid	bookid	bookname	price	studentid
SA1	B1	Python	500	S1
SA2	B2	Networking	350	S3
SA3	B3	DBMS	400	S2
SA4	B2	Networking	350	S2
SA5	B1	Python	500	S1
SA6	B3	DBMS	400	S1

Query:

```
SELECT bookid, bookname, studentid FROM booksale WHERE bookname LIKE '%o%' GROUP BY bookid, bookname, studentid;
```

OBJECTIVE QUESTIONS

Ques:

What will be the output when the above query is executed?

```
SELECT bookid, bookname, studentid FROM booksale WHERE bookname LIKE '%o%' GROUP BY bookid, bookname, studentid;
```

What will be the output when the above query is executed?

BOOKID BOOKNAME

B2 Networking

B3 DBMS

BOOKID BOOKNAME STUDENTID

B1 B2 Networking S3

B3 DBMS S2

B1 Python S1

B1 Python NULL

BOOKID BOOKNAME STUDENTID

B2 Networking S3

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OBJECTIVE QUESTIONS

B1 Python S1

B1 Python NULL

BOOKID **BOOKNAME** **STUDENTID**

B2 Networking S3

B1 Python S1

B2 Networking S2

BOOKID **BOOKNAME** **STUDENTID**

B2 Networking S3

B1 Python S1

BOOKID **BOOKNAME** **STUDENTID**

B2 Networking S3

B3 DBMS S2

OBJECTIVE QUESTIONS



B1 Python S1

B2 Networking S2

BOOKID **BOOKNAME** **STUDENTID**

B2 Networking S3

B1 Python S1

BOOKID **BOOKNAME** **STUDENTID**

B2 Networking S3

B3 DBMS S2

B1 Python S1

Reset

Save

OBJECTIVE QUESTIONS

Question 25

[1 marks]

Consider a mongodb collection **book** given below:

```
> db.book.find();
```

```
{ "_id" :1001, "Bookname": "Head First Python", "Category" : "Educational", "Rating" : 4}
{ "_id" :1002, "Bookname": "To Kill a Mocking Bird", "Category" : "Fiction", "Rating" : 3}
{ "_id" :1003, "Bookname": "Banaras, City of Light", "Category" : "Travel", "Rating" :4}
{ "_id" :1004, "Bookname": "A Guide to Goa", "Category" : "Travel", "Rating" : 3}
{ "_id" :1005, "Bookname": "Head First SQL" , "Category" : "Educational", "Rating" : 5}
{ "_id" :1006, "Bookname": "Java Sharp", "Category" : "Educational", "Rating" : 3}
```

Tim executed the following mongodb statements:

```
db.book.update({_id: 1002},{$set:{Rating: 4, Category:"Advanced Fiction"}});
db.book.remove({Rating:{ $lt : 4 }});
```

How many documents will be retained in the collection book after executing the above operations?

OBJECTIVE QUESTIONS

```
{ "_id" :1005, "Bookname": "Head First SQL" , "Category" : "Educational", "Rating" : 5}  
{ "_id" :1006, "Bookname": "Java Sharp", "Category" : "Educational", "Rating" : 3}
```

Tim executed the following mongodb statements:

```
db.book.update({_id: 1002},{$set:{Rating: 4, Category:"Advanced Fiction"}});
db.book.remove({Rating:{ $lt : 4 }});
```

How many documents will be retained in the collection book after executing the above operations?

- 2
- 6
- 5
- 4

Reset

Save

OBJECTIVE QUESTIONS

Question 26

[2 marks]

Consider the table structure for the table **mobiledetail** given below:

Table: mobiledetail

Column Name	Data Type and Size	Constraints
modelno	VARCHAR2(5)	PRIMARY KEY
brand	VARCHAR2(20)	
manufacturedate	DATE	DEFAULT SYSDATE
sensor	CHAR(3)	CHECK (sensor IN ('Yes', 'No'))
price	INTEGER	

Which of the following queries will execute successfully?

[Choose 2 correct answers]

OBJECTIVE QUESTIONS

brand	VARCHAR2(20)	
manufacturedate	DATE	DEFAULT SYSDATE
sensor	CHAR(3)	CHECK (sensor IN ('Yes', 'No'))
price	INTEGER	

Which of the following queries will execute successfully?

[Choose 2 correct answers]



- INSERT INTO mobiledetail (modelno, price) VALUES (M1001, 10000);
- INSERT INTO mobiledetail VALUES ('M1002', 'Nokia', '25-Aug-1993', 'Yes', 10000);
- INSERT INTO mobiledetail (modelno, brand, manufacturedate, sensor, price) VALUES ('M1003', 'Motog', 'Yes', '25-Aug-1993', 12000);
- INSERT INTO mobiledetail(brand, sensor, price, modelno) VALUES ('Motog', 'Yes', 12000, 'M1004');

Reset

Save

OBJECTIVE QUESTIONS

Question 27

[1 marks]

Consider the following **student** table :

Table: student

studentcode	studentname	subject	marks
S01	Louise	OOP	55
S02	Sarath	OOP	75
S03	Clara	DS	78
S04	Danielle	DS	86
S05	Mattea	SE	63
S06	David	SE	71



Maria writes the following query to get the details of students sorted by subject and then sub sorted by marks.

```
SELECT studentname, subject, marks FROM student ORDER BY subject, marks;
```

OBJECTIVE QUESTIONS

S04	Danielle	DS	86
S05	Mattea	SE	63
S06	David	SE	71

Maria writes the following query to get the details of students sorted by subject and then sub sorted by marks.

```
SELECT studentname, subject, marks FROM student ORDER BY subject, marks;
```

Which of the following STUDENTNAME appears in the third record of the output?

- Clara
- Danielle
- Louise
- Sarath

Reset

Save

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Question 28

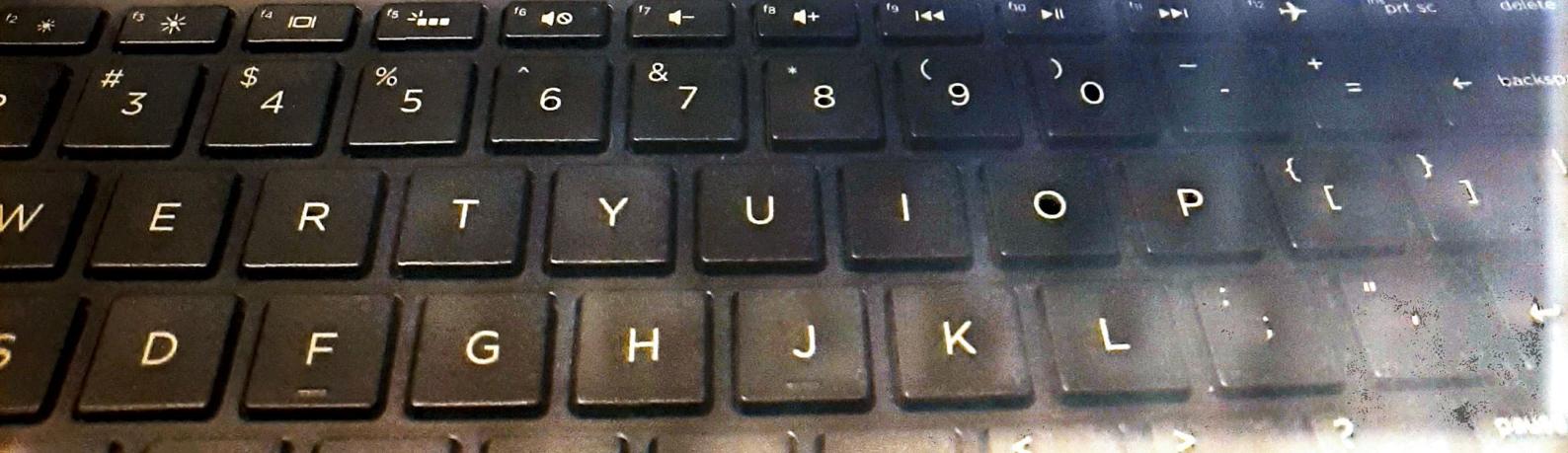
[1 marks]

A confidentiality breach in which of the following case is most risky?

- Breach in a healthcare database
- Theft of passwords to a video game portal
- Breach in a database that stores weather and climate data
- Breach in a database that stores news articles

ResetSave

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Question 29

[2 marks]

Consider the table **product** given below:

Table: product

prodid	pdesc	category	price	orderdate	deliverydate
P101	T-Shirts	Dress	300	1-May-14	12-May-14
P102	Volley Ball	sports	650	21-Aug-14	30-Aug-14
P103	Cricket Bat	Sports	500	6-Jun-14	18-Jun-14
P104	Jeans	dress	600	13-Apr-14	22-Apr-14

Expected Result:

PDESC	CATEGORY
volley ball	sports

OBJECTIVE QUESTIONS

P104 Jeans dress 600 13-Apr-14 22-Apr-14

Expected Result:

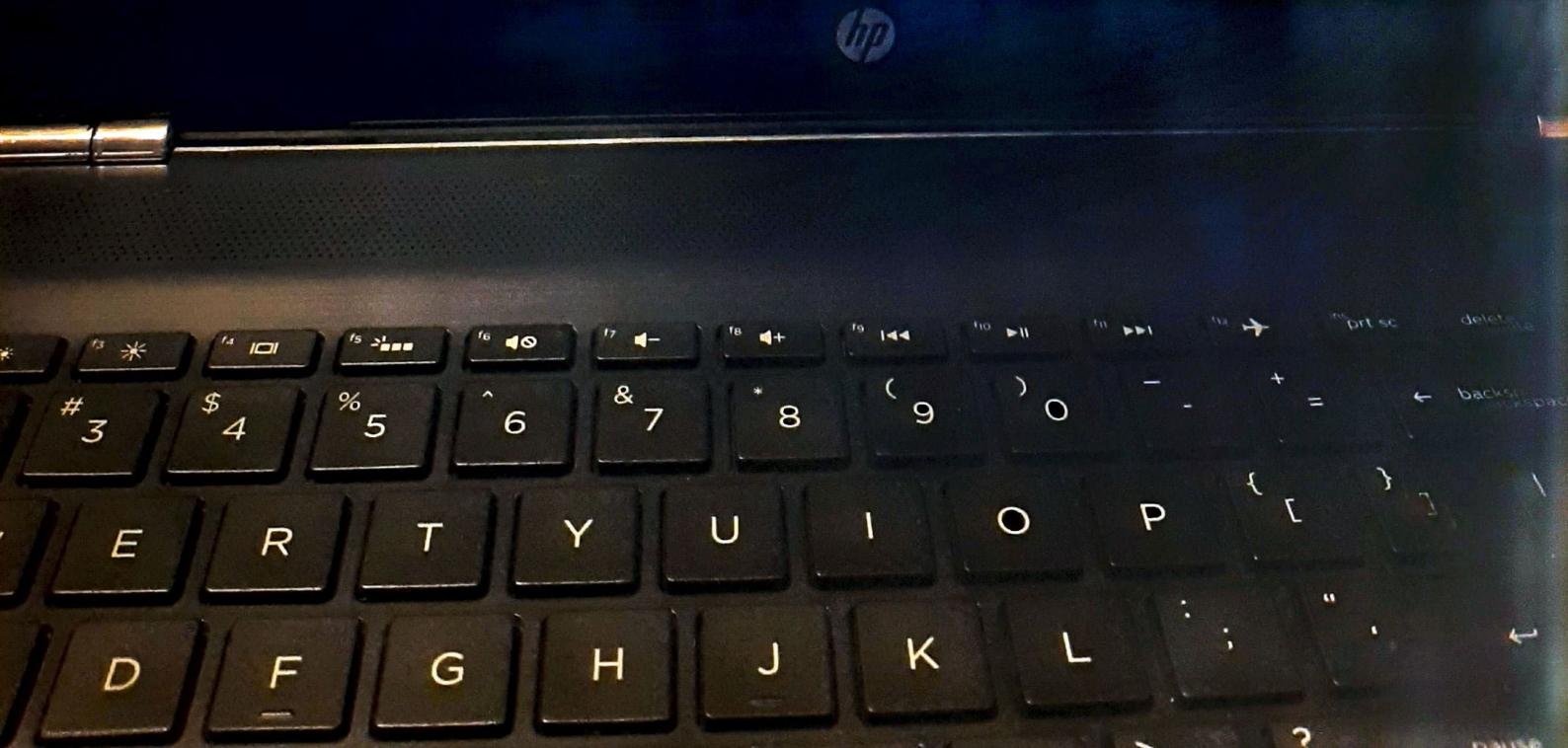
PDESC	CATEGORY
volley ball	sports
jeans	dress

Which of the following queries are CORRECT to get the above expected result?

[Choose two correct answers]

- SELECT LOWER(pdesc) PDESC, MIN(category) CATEGORY FROM product WHERE SUBSTR(orderdate,1,2) > 10 GROUP BY LOWER(pdesc);**
- SELECT LOWER(pdesc) PDESC, MAX(category) CATEGORY FROM product WHERE TO_CHAR(orderdate,'MON') = 'APR' GROUP BY LOWER(pdesc);**

You're being proctored!



[Choose two correct answers]

SELECT LOWER(pdesc) PDESC, MIN(category) CATEGORY FROM product

WHERE SUBSTR(orderdate,1,2) > 10 GROUP BY LOWER(pdesc);

SELECT LOWER(pdesc) PDESC, MAX(category) CATEGORY FROM product

WHERE TO_CHAR(orderdate,'MON') = 'APR' GROUP BY LOWER(pdesc);

SELECT LOWER(pdesc) PDESC, MIN(category) CATEGORY FROM product

WHERE TO_CHAR(orderdate,'MON') = 'APR' GROUP BY LOWER(pdesc);

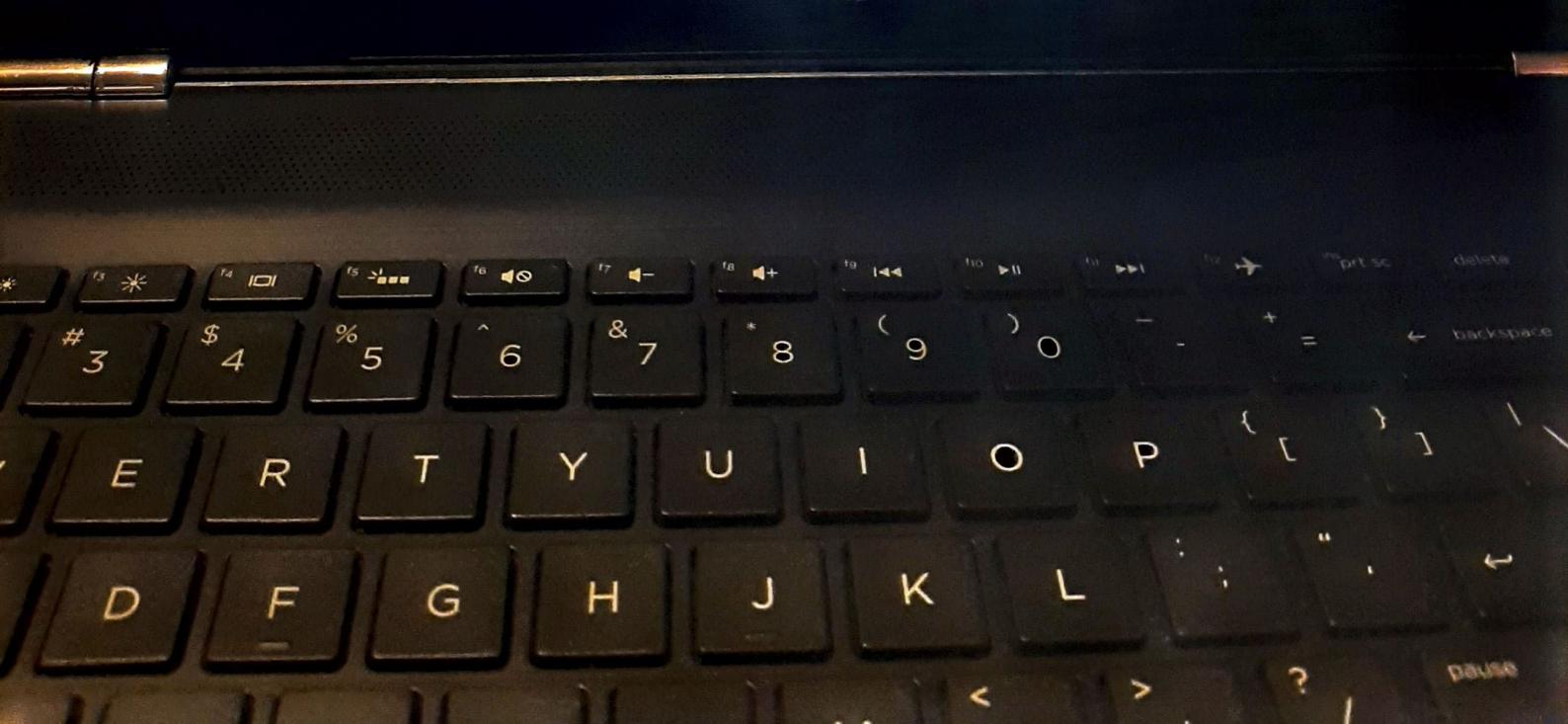
SELECT LOWER(pdesc) PDESC, MAX(category) CATEGORY FROM product

**WHERE TO_CHAR(orderdate,'MON') = 'AUG' OR TO_CHAR(orderdate,'MON') = 'APR'
GROUP BY LOWER(pdesc);**

Reset

Save

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Question 30

[2 marks]

Consider the table **purchase** given below:

Table: purchase

purchaseid	customerid	compid	discount	purchasedate	paymentmode	billamount
P101	C101	COM101	8	5-Jun-16	CASH	34951
P102	C106	COM107	10	7-Mar-16	CARD	46195
P103	C102	COM105	7	8-Jul-16	CARD	35796
P104	C103	COM106	5	8-Oct-16	CARD	34057
P105	C103	COM106	10	10-Oct-16	CASH	32265
P106	C104	COM102	6	11-Jul-16	CASH	40232
P107	C105	COM103	5	15-Jul-16	CARD	54997
P108	C106	COM105	8	7-Mar-16	CASH	25411

OBJECTIVE QUESTIONS

P104	C103	COM106	5	8-Oct-16	CARD	34057
P105	C103	COM106	10	10-Oct-16	CASH	32265
P106	C104	COM102	6	11-Jul-16	CASH	40232
P107	C105	COM103	5	15-Jul-16	CARD	54997
P108	C106	COM105	8	7-Mar-16	CASH	35411

Query:

```
SELECT p1.customerid, p1.compid FROM purchase p1 INNER JOIN purchase p2  
ON TO_CHAR(p1.purchasedate,'MON') = TO_CHAR(p2.purchasedate,'MON')  
AND p1.customerid = p2.customerid AND p1.purchaseid <> p2.purchaseid;
```

How many rows will be fetched in the output when the above query is executed?

3

4

Query:

```
SELECT p1.customerid, p1.compid FROM purchase p1 INNER JOIN purchase p2  
ON TO_CHAR(p1.purchaseDate,'MON') = TO_CHAR(p2.purchaseDate,'MON')  
AND p1.customerid = p2.customerid AND p1.purchaseid <> p2.purchaseid;
```

How many rows will be fetched in the output when the above query is executed?

3

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Reset

Save

Question 31

[1 marks]

Consider the table **customer** given below:

Table: customer

custid	custname	custtype	rating
C1001	Jones	REGULAR	4.5
C1002	Felix	PRIVILEGED	4
C1003	Jack	PRIVILEGED	4.5
C1004	James	REGULAR	4
C1005	Jack	PRIVILEGED	4.5

Query:

SELECT DISTINCT custname, custtype FROM customer WHERE rating =

~~SELECT MAX(rating) FROM customer WHERE custtype = 'PRIVILEGED';~~

OBJECTIVE QUESTIONS

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33

C1004 James REGULAR 4

C1005 Jack PRIVILEGED 4.5

Query:

SELECT DISTINCT custname, custtype FROM customer WHERE rating =
SELECT MAX(rating) FROM customer WHERE custtype = 'PRIVILEGED');

Which of the following will be the output of the above query?



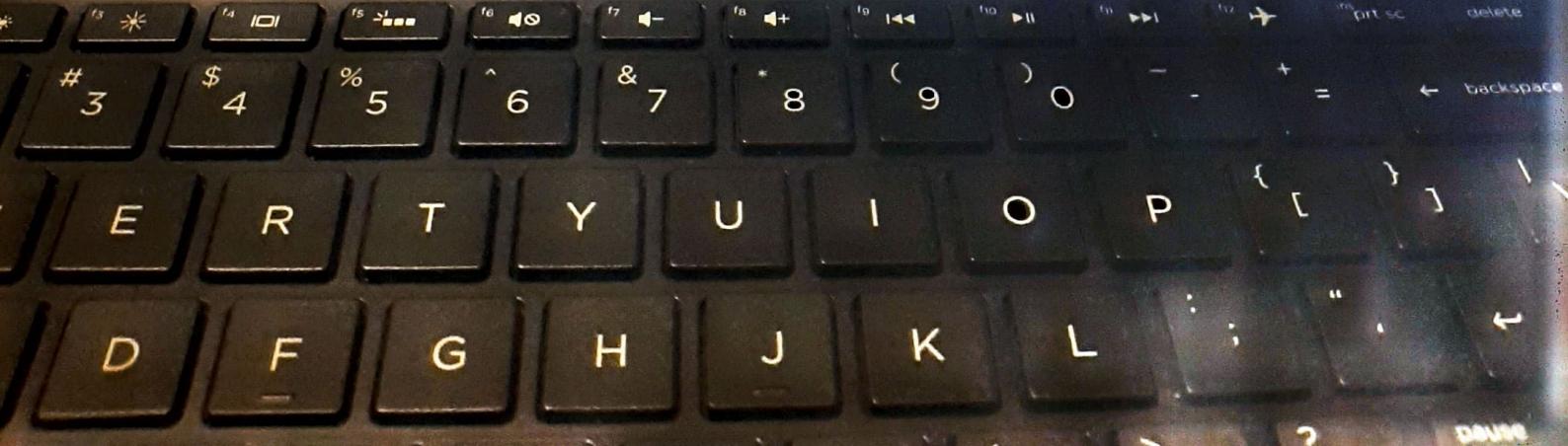
CUSTNAME	CUSTTYPE
Felix	PRIVILEGED

Jones REGULAR

CUSTNAME	CUSTTYPE
Jones	REGULAR

Jones REGULAR

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OBJECTIVE QUESTIONS

5 Felix PRIVILEGED

6 Jones REGULAR

9 CUSTNAME CUSTTYPE

12 Jones REGULAR

15 Felix PRIVILEGED

18 Jack PRIVILEGED

21 CUSTNAME CUSTTYPE

24 Jack PRIVILEGED

27 Jones REGULAR

30 CUSTNAME CUSTTYPE

33 Jones REGULAR

Jack PRIVILEGED

OBJECTIVE QUESTIONS

Felix PRIVILEGED

Jack PRIVILEGED

CUSTNAME CUSTTYPE

Jack PRIVILEGED

Jones REGULAR

CUSTNAME CUSTTYPE

Jones REGULAR

Jack PRIVILEGED

Jack PRIVILEGED

Reset

Save

Question 32

[1 marks]

QUESTION:

The test team is carrying out performance testing for a web based Travel Management System, for the following requirement:

"The system shall support access for 100 Travel agents and 100000 Travelers **at any time**"

Which of the following is the testing needed for the above requirement?

- Load Testing
- Endurance Testing
- Functional Testing
- Regression Testing

Reset

Save

Question 33

[1 marks]

Consider the table **student** given below:

Table: student

studentid is the primary key of this table.

studentid	studentname	course	fees
S501	Alex	Advanced Python	2000
S502	Maria	Software Engineering	3000
S503	George	Wireless Network	2500
S504	Robert	Project Based Learning	4000

The following transaction logic is executed on the student table:

```
BEGIN
UPDATE student SET fees=3000 WHERE studentid = 'S503';
UPDATE student SET fees=5000 WHERE studentid = 'S504';
COMMIT;
```

OBJECTIVE QUESTIONS

S501	Alex	Advanced Python	2000
S502	Maria	Software Engineering	3000
S503	George	Wireless Network	2500
S504	Robert	Project Based Learning	4000

The following transaction logic is executed on the student table:

BEGIN

UPDATE student SET fees=3000 WHERE studentid = 'S503';

UPDATE student SET fees=5000 WHERE studentid = 'S504';

COMMIT;

ROLLBACK;

DELETE FROM student WHERE fees = 3000;

COMMIT;

END;

How many row(s) will be present in student table after executing the above statements?

1

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30
33

BEGIN

```
UPDATE student SET fees=3000 WHERE studentid = 'S503';
UPDATE student SET fees=5000 WHERE studentid = 'S504';
COMMIT;
ROLLBACK;
DELETE FROM student WHERE fees = 3000;
COMMIT;
END;
```

How many row(s) will be present in student table after executing the above statements?

1

4

3

2

Reset

Save

You're being proctored!

