PM SHRI KV NO 2 JHANSI CANTT

PERIODIC TEST-II 2024-25

SUB- INFORMATICS PRACTICES(065)

CLASS-XI

TIME: 1:30 Hrs MM :40

General Instructions:

- This question paper contains 24 questions.
- All questions are compulsory.
- The paper is divided into 4 Sections- A, B ,C and D. .
- In case of MCQ, text of the correct answer should also be written.

SECTION A		
Q1.i	Write the command to create a new database "XI B Commerce" .	**1**
ii	In a Student table, out of Roll Number, Name, Address which column can be set as Primary key and why?	**1**
iii	State True/False A software that manages and maintains a database is called DBMS	**1**
iv	..... refers to rows of a table in DBMS.	**1**
v	Which of the following will you use in the following query to display the unique values of the column dept_name? SELECT _____ dept_name FROM Company; (a)All (b) From (c) Distinct (d) Name	**1**
vi	What is the full form of RDBMS ?	**1**
vii	Full form of DML is .....?	**1**
viii	Which of the following is a DDL command? (a) SELECT (b) ALTER (c) INSERT (d) UPDATE	**1**
ix	Which command is used to creating tables in MySQL ?	**1**
x	The___ clause of SELECT query allows us to select only those rows in the result that satisfy a specified condition. (a) where (b) from (c) having (d) like	**1**
xi	Which of the following queries contains an error ? (a) Select * from emp where empid=10003; (b) Select empid from emp where empid=10006; (c) Select empid from emp; (d) Select empid where empid=10009 and lastname= 'GUPTA';	**1**
xii	Full form of DML is	**1**
xiii	What is the significance of the DATE data type in MySQL?	**1**
	Q-xiv and Q-x v 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	**1**

c) A is True but R is False
d) A is false but R is True

xiv | Assertion (A): - The Keyword Like can be used in a Where Clause to refer to a range of values. Reasoning (R):- Where clause is used to apply the conditions in SQL Command. | 1

SECTION B

Q2.i | Consider the following table namely Employee : | 2

Employee_id	Name	Salary
1001	Misha	6000
1009	Khushi	4500
1018	Jaspreet	7000

Which of the names will be displayed by the below given query ?

SELECT name from Employee WHERE employee_id>1009;

(a) Misha, Khushi (b) Khushi, Japneet (c) Japneet (d)Misha, Japneet

ii | Write the SQL Command to create table student with the studentid,class,section,gender,name,dob and marks as attributes where the studentid is primary key . | 2

iii | Define the terms :
i.Primary Key ii.Candidate Key | 2

iv | How does the INT data type differ from the BIGINT data type in MySQL? | 2

v | What is the difference between unique and primary key constraints ? | 2

SECTION C

Q3.i | What is a database system ? What is its need ? | 3

ii | A Watch Store is considering maintaining their inventory using SQL to store the data. One table is given below with its structure: | 3

Table: Watches

Watch_ID	Watch_Name	Type	Qty_Store
W001	High Time	Unisex	100
W002	Life Time	Ladies	150
W003	Wave	Gents	200
W004	High Fashion	Unisex	250
W005	Golden Time	Gents	150

i) Identify the attribute best suitable to be declared as a primary key.
ii)Write a SQL command to display all the details of those watches whose type is Unisex.
iii)Write a SQL command to display the name of watches whose quantity is greater than 150..

Iii | **Write the SQL Command for the following Statements.** | 3

	i. Create a Database "XICommerce" in MySQL. ii. Create a Table FeePayment with the following description. StudentUBI_ID – Type -Integer (Primary Key), StudentName - Type -Character size 20, PaymentDate - Type- Date	
iv	*Write SQL queries for (i) to (iii), which are based on the following table PARTICIPANTS:* **PNO** | **EVENT** | **SNAME** | **CLASS** | **DOB** *P1* | *DEBATE* | *SANYAM* | *12* | *2001-12-25* *P2* | *DEBATE* | *SHRUTI* | *10* | *2003-11-10* *P3* | *DEBATE* | *MEHER* | *12* | *2001-11-10* *P4* | *QUIZ* | *SAKSHI* | *11* | *2002-10-12* *P5* | *QUIZ* | *RITESH* | *12* | *2001-10-12* *P6* | *QUIZ* | *RAHUL* | *10* | *2003-10-12* *P7* | *CROSSWORD* | *AMEER* | *11* | *2002-05-09* *P8* | *CROSSWORD* | *MINAKSHI* | *12* | *2001-05-09* **i)** Display the Name amd class of students participate in "DEBATE" Event. ii) Display the Event of student Shruti . iii) Display the Name and event of Students of class 11 and 12.	3
	SECTION D	
Q4	Consider the following ***student*** table and write the SQL commands for (i to ii)and output for (iii to iv). **Rollno** | **First_name** | **Last_name** | **Gender** | **Stream** 1 | Akash | Singh | boy | Science 2 | Deepak | Sarkar | boy | Commerce 3 | Gajendra | Kumar | boy | NULL 4 | Girija | Bardwaj | girl | Science i Write the SQL Command to display the records of Science stream students. ii.Write the SQL Command to display the records of Girls students. iii. Select * from student where stream is null; iv. Select Rollno,first_name where gender = 'girl'	**4**

THE END

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Class-XI B PT-II EXAM SUB-IP(065)

Type of questions	Marks per Question	Total no of Questions	Total Marks
SA I	1	1(14)	14
SA II	2	2(5)	10
LA-I	3	3(4)	12
LA-ii	4	4(1)	04

Chapter	VSA(1)	SQ-(2)	SQ-2(3)	LQ(4 M)	Total (Q)M
Ch-8 Database Concepts	1(8)	2(2)	3(2)	-	18M(12Q)
Ch-9 SQL	1(6)	2(3)	3(2)	4(1)	22M(12 Q)
	14M(14 Q)	10M(5Q)	12M(4Q)	4M(1Q)	40M(24Q)

MARKING SCHEME		
Q1.a	**Ans-** Create database XI Commerce;	1 marks for correct answer
b	RollNumber can be set as Primary Key as two students cannot have a same roll number.	1 Marks for correct answer
©	True	1 Marks for correct answer
(d)	Record/Tuples	1 Marks for correct answer

(e)	(c) Distinct	1 Marks for correct answer
(f)	Relational Data Base Management System	1 Marks for correct output
(g)	Data Manipulation language(DDL)	1 Marks for correct answer
(h)	Answer: b) ALTER	1 Marks for correct answer
(i)	Create table command	1 Marks for correct answer
(j)	Answer:a) where	1 Marks for correct answer
(k)	**Ans-True**	1 Marks for any correct answer
(l)	Answer: d) Select empid where empid=10009 and lastname= 'GUPTA';	1 Marks for correct answer
(m)	Answer: The `DATE` data type in MySQL is used to store dates in the format 'YYYY-MM-DD'. It allows for the efficient storage and retrieval of date values.	1 Marks for correct answer
(xiv)	d	1 Marks for correct answer
(xv)	Answer: The assertion is incorrect, but the reason is correct.	1 Marks for correct answer

SECTION B

Q2.a	Answer: c) Japneet	1 for definition and 01 for any one advantage
B	**mysql>Create table STUDENT(Studentid integer Not NULL Primary key ,class Integer Not Null,section char(1) ,gender char(1) Not null,dob date, marks float);**	
.c	MySQL is a relational database management system based on SQL – Structured Query Language. The application is used for a wide range of purposes, including data warehousing, e-commerce, and logging applications. The most common use for mySQL however, is for the purpose of **a web database**.	1 Marks for each correct output

D	Both `INT` and `BIGINT` are integer data types in MySQL, but `BIGINT` can store larger integer values compared to `INT`. `BIGINT` has a larger storage size and can accommodate a wider range of values	1 Marks for each correct answer
e.	**PrimaryKey:** Primary Key is a set of attributes (or attribute) which uniquely identify the tuples in relation or table. The primary key is a minimal super key, so **there is one and only one primary key in any relationship**. For example, Student{ID, F_name, M_name, L_name, Age} Here only **ID** can be primary key because the name, age and address can be same, but ID can't be same. **CandidateKey:** A candidate key is a set of attributes (or attribute) which uniquely identify the tuples in relation or table. As we know that Primary key is a minimal super key, so there is one and only one primary key in any relationship but there is more than one candidate key can take place. Candidate key's attributes can contain a NULL value which opposes to the primary key. For example, Student{ID, First_name, Last_name, Age} Here we can see the two candidate keys **ID** and **{First_name, Last_name, DOB}**. So here, there are present more than one candidate keys, which can uniquely identify a tuple in a relation.	1 Marks for each correct explanation
f	**Key Differences Between Primary key and Unique key:** 1.Primary key will not accept NULL values whereas Unique key can accept NULL values. 2.A table can have only one primary key whereas there can be multiple unique key on a table.	1 Marks for each correcr difference
SECTION C		

<table>
<tr>
<td>3.a</td>
<td>i.DBMS-Data base Management System
ii.MySQL-Free and open source software
iii.Data Dictionary-

A data dictionary contains metadata i.e data about the database. The data dictionary is very important as it contains information such as what is in the database, who is allowed to access it, where is the database physically stored etc.

The users of the database normally don't interact with the data dictionary, it is only handled by the database administrators.

The data dictionary in general contains information about the following –

● Names of all the database tables and their schemas.
● Details about all the tables in the database, such as their owners, their security constraints, when they were created etc.
● Physical information about the tables such as where they are stored and how.
● Table constraints such as primary key attributes, foreign key information etc.
● Information about the database views that are visible.

This is a data dictionary describing a table that contains employee details.

<table>
<tr><th>Field Name</th><th>Data Type</th><th>Field Size for display</th><th>Description</th><th>Example</th></tr>
<tr><td>Employee Number</td><td>Integer</td><td>10</td><td>Unique ID of each employee</td><td>1645000001</td></tr>
<tr><td>Name</td><td>Text</td><td>20</td><td>Name of the employee</td><td>David Heston</td></tr>
<tr><td>Date of Birth</td><td>Date/Time</td><td>10</td><td>DOB of Employee</td><td>08/03/1995</td></tr>
<tr><td>Phone Number</td><td>Integer</td><td>10</td><td>Phone number of employee</td><td>6583648648</td></tr>
</table>
</td>
<td>1 Marks for each correct definitioin</td>
</tr>
<tr>
<td>b</td>
<td>1.Primary key constraints
2.check constraints
3.default constraints</td>
<td>1 Marks for each correct answer</td>
</tr>
</table>

C	i. mysql>>create Database XICommerce; ii. mysql>>create table FeePayment(StudentUBI_ID Integer Primary Key, StudentName varchar(20), PaymentDate date); iii. mysql>>select * from Feepayment;	1 Marks for each correct SQl Commands
D	i.Degree of Relation- Total No of attributes of relations is called degree of Relation. ii.Cardinality of Relation- Total No of rows of relations is called Cardinality of Relation iii.Tuple- Rows of realtions are called Tuples or records of relation.	