

BCM SCHOOL BASANT AVENUE DUGRI ROAD LUDHIANA

CLASS XII : INFORMATICS PRACTICES (065)

ASSIGNMENT SOLUTION

1.	<p>If column “salary” contains the data set (45000, 5000, 55000, 45000, 55000), what will be the output after the execution of the given query? SELECT AVG (DISTINCT salary) FROM employee; (A) 38500 (B) 40000 (C) 41000 (D) 35000 Ans : (D) 35000</p>	1
2.	<p>The correct SQL from below to find the temperature in increasing order of all cities. (A) SELECT city FROM weather order by temperature; (B) SELECT city, temperature FROM weather; (C) SELECT city, temperature FROM weather ORDER BY temperature; (D) SELECT city, temperature FROM weather ORDER BY city ; Ans : (D) SELECT city, temperature FROM weather ORDER BY city ;</p>	1
3.	<p>Where and Having clauses can be used interchangeably in SELECT queries? (A) True (B) False (C) Only in views (D) With order by ANS : (B) False</p>	1
4.	<p>In SQL, this function returns the time at which the function executes: (A) SYSDATE (B) NOW (C) CURRENT (D) TIME ANS : (A) SYSDATE</p>	1
5.	<p>What is the output of following : Select Round(19999.299,-1); (A) 199999.3 (B) 20000.299 (C) 2000 (D) 20000 ANS : (iv) 1 mark for correct answer</p>	1
6.	<p>Which one of the following is a string function? (A) COUNT() (B) SUBSTR() (C) MOD() (D) MAX() ANS : Answer (ii) SUBSTR(), 1 mark for correct answer</p>	1
7.	<p>Which one of the following functions is used to count the no. of rows from the given table in MySQL? (A) COUNT(*)</p>	1

	<p>(B) CARDINALITY() (c) COUNT(Column name) (D) All the above</p> <p>Answer: (i) COUNT(*), 1 mark for correct answer</p>	
8.	<p>Which one of the following is an output for SQL statement given below: SELECT DAYNAME ('2022-12-07');</p> <p>(A) MONDAY (B) WEDNESDAY (C) SATURDAY (D) FRIDAY</p> <p>ANS : WEDNESDAY, 1 mark for the correct answer</p>	1
9.	<p>If column “salary” of table employee contains the data set (2000,500, 4300,2000, 500) , what will be the output after execution of the following query. SELECT COUNT(DISTINCT SALARY) FROM EMPLOYEE ;</p> <p>(A) 5 (B) 0 (C) 3 (D) 1</p> <p>ANS : (C) 3</p>	1
10.	<p>Consider the string “Preboard Exam 2023”. Which among the following SQL command will gives the last 4 characters of the string as output?</p> <p>(i). SELECT right(“Preboard Exam 2023”,4); (ii). SELECT left(“Preboard Exam 2023”,4); (iii). SELECT substr(“Preboard Exam 2023”,14,4); (iv). SELECT substr(“Preboard Exam 2023”,15,4)</p> <p>(A) option (i) (B) option (i) and (iii) (C) option (i) and (iv) (D) option (ii)</p> <p>ANS : (C) option (i) and (iv)</p>	1
PART-B		
11.	<p>Neelam, a database administrator needs to display Class wise total number of students of ‘XI’ and ‘XII’ house. She is encountering an error while executing the following query:</p> <p style="text-align: center;"><i>SELECT CLASS, COUNT (*) FROM STUDENT ORDER BY CLASS HAVING CLASS= 'XI' OR CLASS= 'XII';</i></p> <p>Help her in identifying the reason of the error and write the correct query by suggesting the possible correction (s).</p> <p>ANS : The problem with the given SQL query is that ORDER BY is used whereas GROUP BY must be used. To correct the error, GROUP BY clause should be used. Corrected Query: (2) Page 2 of 4 KVS – Regional Office AGRA Session 2022-23 SELECT CLASS, COUNT (*) FROM STUDENT GROUP BY CLASS HAVING CLASS='XI' OR CLASS= 'XII'; 1 Mark for error identification 1 Mark for writing correct query</p>	2
12.	<p>What is the purpose of GROUP BY clause in SQL? Explain with the help of suitable example.</p>	2
PART-C		

13. Write outputs for SQL queries (i) to (iii) which are based on the given table GAME

3

GID	NAME	DATEOFGAME	UNDER	WINNER
1	JUDO	2022-10-17	17	RAMESH
2	BADMINTON	2022-5-18	14	KIRTI
3	JUDO	2022-8-18	19	KAMAL
4	TAEKWONDO	2021-7-20	14	SADIQ
5	CHESS	2021-5-6	17	ALANKAR

i) Select name, under, winner from GAME where month(dateofgame)>7;

ii) Select lcase(mid(winner,2,3)) from GAME where NAME like “%O”;

iii) Select mod(under, month(dateofgame)) from GAME where NAME=”JUDO”;

ANS : i) name under winner
 judo 17 RAMESH
 judo 19 KAMAL

ii) lcase(mid(winner,2,3))
 ame
 ama
 adi

iii) mod(under, month(dateofgame))
 7
 3

1 mark for each correct output

14. **TABLE NAME : PHARMADB**

3

DrugID	DrugName	Manufacture Date	Price	PharmacyName	Location
5476	Amlodipine	2019-02-11	100.97	Rx Pharmacy	Delhi
2345	Paracetamol	2011-05-07	150.25	Raj Medicos	Haryana
1236	NebiStar	2021-06-02	160.27	MyChemist	Delhi
6512	VitaPlus	2019-03-01	150.81	MyChemist	Goa
5631	Levocitrezine	2018-04-12	110.23	RxPharmacy	Mumbai

Based on the above table “PHARMADB”, Write outputs for SQL commands to i to iii:

i. SELECT SUBSTR(DrugName ,5,4) FROM PHARMADB WHERE PRICE>160;

ii. SELECT DRUGNAME FROM PHARMADB WHERE DAY(ManufactureDate)>10;

iii. SELECT ROUND (Price, -1) FROM PURCHASE WHERE Location= ‘Delhi’

ANS :

i. Star

ii. Amlodipine
 Levocitrezine

iii. 100
 200

1 mark for each correct output

15. Based on table STOCK given here, write suitable SQL queries for the following:

3

STOCKID	NAME	COMPANY	TYPE	DOPURCHASE	Quantity
1	Photoshop	Adobe	SW	5-Oct-2022	1
2	Windows 10	Microsoft	SW	15-Apr-2021	5
3	Mother Board	ASUS	HW	8-Sep-2022	5
4	Office 2007	Microsoft	SW	8-Jul-2022	2
5	Hard Disk	Seagate	HW	6-Feb-2021	10
6	Azure	Microsoft	SW	17-Jul-2022	6
7	CD ROM	Seagate	HW	31-Jul-2021	5
8	Reader	Adobe	SW	28-Aug-2022	2

- i) Display company wise highest Quantity available
- ii) Display year wise lowest Quantity available
- iii) Display total number of Software and Hardware type stock

OR

Explain the difference between WHERE CLAUSE and HAVING CLAUSE in detail with the help of suitable example.

ANS :

- i) select COMPANY, MAX(Quantity) from STOCK group by COMPANY;
- ii) select YEAR(DOPURCHASE), MIN(Quantity) from STOCK group by year(DOPURCHASE);
- iii) select TYPE, count(TYPE) from STOCK group by TYPE

1 mark for each correct statement

OR

WHERE CLAUSE : Definition 1 marks + example ½ marks
HAVING CLAUSE : Definition 1 marks + example ½ marks

PART-D

16. Write suitable SQL query for the following:

5

- i) Display 4 characters extracted from 3rd character onwards from string 'IMPOSSIBLE'.
- ii) Display the position of occurrence of string 'GO' in the string "LET's GO to GOA".
- iii) Round off the value 257.75 to nearest ten rupees.
- iv) Display the remainder of 18 divided by 5.
- v) Remove all the leading and trailing spaces from a column passwd of the table 'USER'.

OR

Explain the following SQL functions using suitable examples.

- i) MONTHNAME()
- ii) SUBSTRING()
- iii) LTRIM()
- iv) ROUND()
- v) RIGHT()

ANS : i) select mid('IMPOSSIBLE', 3, 4);
ii) select INSTR("LET's GO to GOA", "GO");
iii) select round(257.75, -1);
iv) select mod(18, 5);

v) select trim(passwd) from USER;
1 mark for each correct query

OR

5 x ½ mark for each correct explanation

5 x ½ mark for each correct example

PART-E

17. Harsh, a movie information collector has designed a database for Indian movies. Help him by writing answers of the following questions based on the given table
MOVIE :

(1+
1+
2)

movieID	Name	Rating	Production	Collection	DORelease
201	Nadiya Ke Par	A+	Rajshree	400	15-Aug-1989
202	Hum Aapke Hain Kaun	A+	Dharma	1500	4-May-1992
203	Veer Zara	A	Yashraj	1100	25-Oct-2004
204	Chandni	A+	Yashraj	2000	8-Nov-1989
205	Om Shanti Om	A	Red Chillies	2007	14-Nov-2007

- (i) Write a query to display movie name and production – both in upper case
- (ii) Write a query to display all details of movies released in year 1989
- (iii) Write a query to count production wise total number of movies

OR (Option for part iii only)

Write a query to count rating wise total number of movies

ANS :

- i) Select upper(name), upper(production) from movie;
deduct ½ marks, if upper() is not used properly means separately
- ii) Select * from movie where year(DORelease)=1989;
1 mark for each correct query.
- iii) Select production, count(name) from movie group by production;

OR

Select Rating, count(name) from movie group by rating;
2 marks for correct query