

SAMPLE PAPER -1

INFORMATICS PRACTICES(065)

TERM - 2

Maximum Marks: 35

Time: 2 hours

General Instructions

1. The question paper is divided into 3 sections – A, B and C
2. Section A, consists of 7 questions (1-7). Each question carries 2 marks.
3. Section B, consists of 3 questions (8-10). Each question carries 3 marks.
4. Section C, consists of 3 questions (11-13). Each question carries 4 marks.
5. Internal choices have been given for question numbers – 1 , 3, 8 and 12.

Section –A

Each question carries 2 marks

Q1. Mr. Lal owns a factory which manufactures automobile spare parts. Suggest him the advantages of having a web page for his factory. (2)

OR

Sahil, a Class X student, has just started understanding the basics of Internet and web technologies. He is a bit confused in between the terms “World Wide Web” and “Internet”. Help him in understanding both the terms with the help of suitable examples of each.

Q2.

(i) Which of the following entries is different from others? Why? (1)

Safari , Chrome, Netscape , Facebook

(ii) Name any two popular chat application / software. (1)

Q3. Predict the output of the following queries: (2)

i. Select Round(153.669,2);

ii. Select Concat(“It”, “was”, “Great”);

OR

Briefly explain the purpose of the following SQL functions:

i. Round()

ii. Concat()

Q4. Navya has just created a website for her company and now need to host it. Briefly discuss the role of web pages in a website. (2)

Q5. Are Count(*) and Count(column-name) the same function? Why/why not? (2)

Q6. Aryan, a database administrator, has grouped records of a table with the help of group by clause. He needs to further filter groups of records generated through group by clause.

Help Aryan in deciding out of 'where' clause and 'having' clause. (2)

Q7. Mr. Som, a HR Manager in a multinational company "Star-X world" has created the following table to store the records of employees: (2)

Table: Emp

Eid	EName	Department	DOB	DOJ
Star1	Ivan	Sales	1994-08-28	2020-02-14
Star2	Melinda	IT	1997-10-15	2021-11-19
Star3	Raj	Accounts	1998-10-02	2019-04-02
Star4	Michael	Sales	2000-02-17	2020-05-01
Star5	Sajal	IT	2001-12-05	2018-06-13
Star6	John	Accounts	1995-01-03	2019-07-15
Star7	Julia	Sales	1985-11-13	2020-08-19

He has written following queries:

- Select min(month(DOB)) from emp;
- Select ENAME from emp where year(DOJ)=2020;

Predict the output.

SECTION – B

Each question carries 3 marks

Q8. Predict the output of the following queries: (3)

I. SELECT RIGHT('EXAMS@CBSE2022.NIC.IN',6);

II. SELECT SUBSTR('EXAMS@CBSE2022.NIC.IN',7,4);

III. SELECT LEFT('EXAMS@CBSE2022.NIC.IN',5);

OR

Ms.Seema is working on a MySQL table named 'Sales' having following structure:

Column Name	Data Type	Size	Constraints
Orderid	Integer	4	Primary Key

Pname	Varchar	20	Not Null
Quantity	Integer	5	Not Null
Rate	Integer	5	Not Null
Discount	Integer	3	Null
City	Varchar	20	Null

She need to perform following task on the table:

- To fetch last 2 characters from the Orderid column.
- To display the values of Pname column in lower case.
- To display 3 characters from 3rd place from the column city.

Suggest suitable SQL function for the same. Also write the query to achieve the desired task.

Q9. Reena is working with functions of MySQL. Explain her following: (3)

- What is the purpose of now () function?
- How many parameters does it accept?
- What is the general format of its return type?

Q10.

- Gopi Krishna is using a table Employee. It has the following columns : (1)

Code, Name, Salary, Dept_code

He wants to display maximum salary department wise. He wrote the following command:

SELECT Deptcode, Max(Salary) FROM Employee;

But he did not get the desired result. Rewrite the above query with necessary changes to help him get the desired output.

- The SQL SELECT provides clauses for sorting data and for summarizing results. Write the names of clauses for these. (2)

Section C

Each question carries 4 marks

Q11. Carefully observe the following table named Graduate given below: (4)

SID	Name	Subject	Marks	Div
1	Karan	Physics	68	1
2	Divakar	Computers	68	1
3	Divya	Chemistry	62	2
4	Arun	Physics	63	1
5	Sabina	Mathematics	70	1

6	John	Chemistry	55	2
7	Robert	Physics	64	1
8	Rubina	Mathematics	68	1
9	Vikas	Computers	62	1
10	Mohan	Mathematics	57	2

Write SQL queries for the following:

- To display the records in decreasing order of Name.
- To display subject and subject wise total Div of Students from Graduate table.
- To display the Subject and its average Marks of table Graduate.
- To display subject and subject wise highest mark of student from Graduate table.

Q12. Satyam, a database analyst has created the following table: (4)

Table Teacher:

TID	Name	Age	Department	DOJ	Salary	Sex
1	Karan	34	Computer	10/01/97	12000	M
2	Divya	31	History	24/03/98	20000	F
3	Divyank	32	Maths	12/12/96	30000	M
4	Aruna	35	History	01/07/99	40000	F
5	Sabir	42	Maths	05/09/97	25000	M
6	John	50	History	27/06/98	30000	M
7	Robert	44	Computer	25/02/97	21000	M
8	Rubina	33	Maths	31/07/97	20000	F

- Select COUNT(distinct department) from Teacher;
- Select Max(salary) + Min(salary) Teacher Where Sex = 'F';
- Select AVG(Salary) from Teacher Where DOJ < '12/07/96';
- Select Concat(Name,Department) from Teacher Where Department = 'Computer';

Help him in predicting the output of the above given queries.

OR

Based on the above given table named 'Teacher', Satyam has executed following queries:

Select Department, Max(Salary) from Teacher where Department = 'Maths';

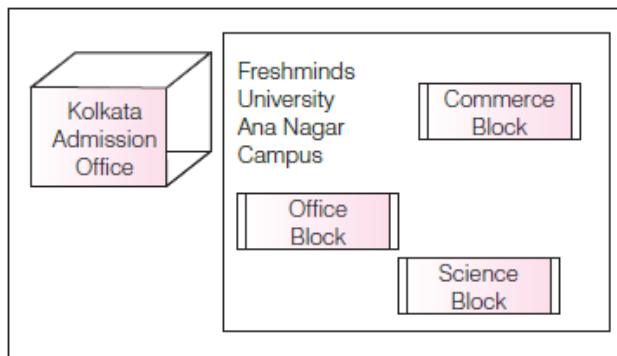
Select Department, Max(Salary) from Teacher Group By Department ;

Predict the output of the above given queries.

Also give proper justifications of the output generated through each query.

Q13. Freshminds University of India is starting its first campus in Ana Nagar of South India with its centre admission office in Kolkata. The university has three major blocks comprising of Office block, Science block and Commerce block is in 5 km area campus.

As a network expert, you need to suggest the network plan as per (i) to (iv) to the authorities keeping in mind the distance and other given parameters. (4)



Expected number of computers to be installed at various locations in the university are as follows:

Office Block	10
Science Block	140
Commerce Block	30
Kolkata Admission Office	8

Expected wire distance between various locations

Office Block to Science Block	90 m
Office Block to Commerce Block	80 m
Science Block to Commerce Block	15 m
Kolkata Admission Office to Ana Nagar Campus	450 km

(i) Suggest the authorities, the cable layout amongst various blocks inside university campus for connecting the blocks.

(ii) Suggest the most suitable place (i.e. block) to house the server for this university with a suitable reason.

(iii) Suggest an efficient device form the following to be installed in each of the block to connect all the computers.

(a) Modem (b) Switch (c) Gateway

(iv) University is planning to connect its campus in Kolkata which is more than 100 km. Which type of network will be formed?

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