

Std. 11

Time : 3 hrs.

11-9-2015

Half Yearly Examination in INFORMATICS PRACTICE

M. Marks

: 70

1. Write any two differences between:-

- [10] a) / and % operator  
b) PRIMARY KEY and UNIQUE CONSTRAINT  
c) Delete command and Drop table command  
d) Round ( ) and Truncate ( )  
e) Relational operator and Logical operator.

2. Correct the errors in the given SQL statements

[5]

- a) Select empno and empname from emp where empno is 45;  
b) delete \* from emp where empno =NULL;  
c) Select \* from emp where ename like "E%" and like "R";  
d) Select empno from emp order by empno ASCE where empno>1;  
e) Alter emp add [SALARY FLOAT(5,1)];  
f) Insert in emp value(1, "ROHIT");

3. Name the function used for

[4]

- a) Date and time at which the function executes.  
b) Sign of number  
c) Remainder of two numbers  
d) A substring starting from specified position  
e) Number of characters in a string  
f) Removing leading and trailing blank spaces from the string  
g) Character for each ASCII code  
h) Joining the strings

4. Write queries for the following using functions

[8]

- a) Display 'MR. OBAMA' into lowercase.  
b) Display 4 characters from 3<sup>rd</sup> left character onwards from string 'ABCDEF';  
c) Remove leading spaces of the string ' RDBMS'.  
d) Display the position of string 'LE' in the field JOB of table emp.  
e) To extract 2 digit year from a string 'USS/23/67/09'. The last two characters tell the year.  
f) To extract a substring from string 'Quadratically' which should be 6 characters long and start from 5<sup>th</sup> character of string.  
g) To display current date on your system.  
h) Display name of weekday.

5. a) Which comparison operator is used for following

- i) Patterns ii) Null values iii) Ranges iv) list of values

[2]

- b) Which keyword eliminates the duplicate data from a query result? [½]
- c) Which keyword returns duplicate output rows in a query result? [½]
- d) Define the terms a) Constraint b) Function. [2]
- e) Sharmila wants to make the database named 'COMPANY' active and display the names of all the tables in it. Write MySQL commands for it. [2]
- f) Name the SQL commands used to: [2]
  - i. Physically delete a table student from the database.
  - ii. Display the structure of a table.
- g) Write one similarity between UNIQUE and PRIMARY KEY constraints. [1]

6. a) Write the output of the following commands. [4]
- i. Select concat(concat('INFORM', 'ATICS'), 'PRACTICES');
  - ii. Select substr('ABCDEFGH', -5, 4);
  - iii. Select INSTR('CORPORATE FLOOR', 'OR');
  - iv. Select ucasing('abc123ARST');
  - v. Select SGN(-15);
  - vi. Select power(4, 3);
  - vii. Select INSTR(SUBSTR('INFORMATICS PRACTICES' 3, 2), 'O');
  - viii. Select DAYOFWEEK(NOW());
- b) The Doc\_name Column of table Hospital is given below:

The Doc\_name Column of a table Hospital is given below :

Doc_name
Avinash
Hariharan
Vinayak
Deepak
Sanjeev

Based on the information, find the output of the following queries:

- i. SELECT doc\_name FROM Hospital WHERE doc\_name like '%v'; [1]
  - ii. SELECT doc\_name FROM Hospital WHERE doc\_name like '%e%'; [1]
7. a) Write one similarity and one difference between CHAR and VARCHAR data types. [2]
- b) Consider the following table named "GARMENT". Write command of SQL for (i) to (iv) and output for (v) to (vii).

Table: GARMENT

GCODE	GNAME	Size	Colour	PRICE
111	TShirt	XL	Red	1400.00
112	Jeans	L	Blue	1600.00
113	Skirt	M	Black	1100.00

114	Ladies Jacket	XL	Blue	4000.00
115	Trousers	L	Brown	1500.00
116	Ladies Top	L	Pink	1200.00

- i. To display names of those garments that are available in 'XL' size [1]
- ii. To display codes and names of those garments that have their names starting with 'Ladies'. [1]
- iii. To display garment names, codes and prices of those garments that have price in the range 1000.00 to 1500.00 (both 1000.00 and 1500.00 inclusive). [1]
- iv. To change the colour of garment with code as 116 to "Orange". [1]
- v. SELECT GNAME FROM GARMENT WHERE GCODE IN (111, 116) [1]
- vi. SELECT RIGHT(Colour, 2) FROM GARMENT WHERE GCODE=111; [1]
- vii. SELECT GNAME FROM GARMENT WHERE SIZE IN ('M', 'L') AND PRICE>1100; [1]

8. a) Write MySQL command to create the table DEPARTMENT with given constraints. [3]

COLUMN_NAME	DATATYPE(SIZE)	CONSTRAINT
DepartmentID	Int(4)	Primary Key
DepName	Varchar(50)	Not Null
ManagerID	Char(4)	
Location	Varchar(30)	UNIQUE

- b) Write MySQL command to create the table STUDENT with given constraint. [3]

COLUMNNAME	DATATYPE	SIZE	CONSTRAINT
RNO	Int	4	Primary
Name	Varchar	20	Not Null
Class	Varchar	10	
Marks	Float	10, 2	Check (marks greater than 80 but less than 100)
Grade	Varchar	1	Default with the value A

9. Consider a table Empl as given below: [12]

Empno	Ename	Job	Mgr	Hiredate	Sal	Comm	deptno
8369	SMITH	CLERK	8902	1990-12-18	800.00	NULL	20
8499	ANYA	SALESMAN	8698	1991-02-20	1600.00	300.00	30
8521	SETH	SALESMAN	8698	1991-02-22	1250.00	500.00	30
8566	MAHADEVAN	NANAGER	8839	1991-04-02	2985.00	NULL	20
8654	MOMIN	SALESMAN	8698	1991-09-82	1250.00	1400.00	30
8698	BINA	MANAGER	8839	1991-05-01	2850.00	NULL	30
8882	SHIVANSH	MANAGER	8839	1991-06-09	2400.00	NULL	10
8888	SCOTT	ANALYST	8566	1992-12-09	3000.00	NULL	20
8839	AMIT	PRESIDENT	NULL	1991-11-18	5000.00	NULL	10
8844	KULDEEP	SALESMAN	8698	1991-09-08	1500.00	0.00	30

- a) Display all the records (all columns) from table empl.

- b) Display EmpNo and EName of all employees from table empl.
- c) List all department numbers in table empl.
- d) List all unique department numbers in table empl.
- e) Write a query to display the name, job, title and salary of employee who do not have Mgr.
- f) Write a query to display the name of employee whose name contains 'A' as third alphabet.
- g) Write a query to display the name of employee who is having 'L' as any alphabet of the name.
- h) Write a query to display EName and Sal of employees whose salary is greater than or equal to 2200 from table empl.
- i) Write a query to display details of employees who are not getting commission from table empl.
- j) Write a query to display employee name and salary of those employee who don't have there salary in the range of 2500 to 4000.
- k) Write a query to display the name of employee whose name contains 'T' as first alphabet.
- l) Write a query to display the name of employee whose name contains 'M' as first alphabet and 'L' as the third alphabet.

-x-x-x-x-x-x-