 **INDIAN SCHOOL AL WADI AL KABIR**

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| **Class: XII** | **SUB: INFORMATICS PRACTICES** | **Date of Completion:****25/10/2023** |
| Worksheet : 06 | **TOPIC : SQL – Single Row Functions & Aggregate Functions** |  Note:  |

1. Create the table **Library** and insert the following records.

Table Name: **LIBRARY**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **BNO** | **BTITLE** | **BPUB** | **ISSUEDATE** | **PRICE** |
| 4002 | C++ | VIKAS PUB | 03-NOV-2002 | 485 |
| 4072 | JAVA | TATA MCGRAW HILL | 23-JUN-1997 | 750 |
| 3789 | VB | GALGOTIA PUB | 12-SEP-2004 | 400 |
| 4821 | ASP | TATA MCGRAW HILL | 17-MAY-2013 | 275 |
| 2901 | PERL | GALGOTIA PUB | 21-APR-2012 | 600 |
| 3285 | SQL | VIKAS PUB | 15-DEC-2005 | 180 |
| 5674 | NETWORK | HASSAN PUB | 04-JAN-1989 | 1250 |
| 7200 | OS | TATA MCGRAW HILL | 10-AUG-2008 | 370 |
| 1579 | LINUX | JEEVAN PUB | 23-SEP-2011 | 860 |
| 9278 | WINDOWS | GALGOTIA PUB | 18-OCT-2003 | 220 |
| 5729 | SYBASE | GALGOTIA PUB | 06-JAN-2012 | NULL |
| 8005 | MYSQL | VIKAS PUB | 28-MAR-1999 | 210 |
| 1058 | MS OFFICE | TATA MCGRAW HILL | 12-NOV-2001 | NULL |
| 1685 | INTRANET | VIKAS PUB | 15-MAR-2010 | 220 |

Write the following queries:

1. Display the first 3 characters of the book of TATA MCGRAW HILL publication.
2. Display the length of the book title whose Prize is not given.
3. Display last two characters of the Book Name Start with the title ‘M’.
4. Display the concatenated test of book title and Book publisher of Books end with the Letter ‘L’.
5. Display the 3 characters from 4th position in Publisher name of the Books in which the Book Name contains ‘IN’.

Write the Output of the following SQL Queries:

1. SELECT CONCAT(BTITLE, BPUB) FROM LIBRARY WHERE BTITLE LIKE “P%”;
2. SELECT INSTR(BTITLE,”S”) FROM LIBRARY WHERE PRICE BETWEEN 300 AND 600.
3. SELECT SUBSTR(BTILLE,2,2) FROM LIBRARY WHERE BPUB = “GALGOTIA PUB’;
4. SELECT LOWER(BPUB) FROM LIBRARY WHERE PRICE > 800;
5. SELECT DAY(ISSUEDATE) FROM LIBRARY WHERE PRICE < 250;
6. SELECT YEAR(ISSUEDATE) FROM LIBRARY WHERE BPUB IN (“VIKAS PUB”, “HASSAN PUB”);
7. SELECT MONTH(ISSUEDATE) FROM LIBRARY WHERE BTITLE LIKE “%ET%”;
8. SELECT MIN(ISSUEDATE), MAX(ISSUEDATE) FROM LIBRARY;
9. SELECT BPUB, MAX(PRICE) FROM LIBRARY GROUP BY BPUB;
10. SELECT BPUB, SUM(PRICE), AVG(PRICE) FROM LIBRARY GROUP BY BPUB;
11. SELECT COUNT(PRICE), COUNT(\*) FROM LIBRARY;

2. Write SQL Commands for (a) to (e) on the basis of table **FURNITURE**:

 Table : FURNITURE

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| NO | ITEMNAME | TYPE | DATEOFSTOCK | PRICE  | DISCOUNT |
| 1 | White Lotus | Double Bed | 2002-02-23 | 3000 | 25 |
| 2 | Pink feathers | Baby Cot | 2001-01-29 | 7000 | 20 |
| 3 | Dolphin | Baby Cot | 2002-02-19 | 9500 | 20 |
| 4 | Decent | Office Table | 2002-02-01 | 25000 | 30 |
| 5 | Comfort zone | Double Bed | 2001-02-12 | 25000 | 30 |
| 6 | Donald | Baby cot | 2002-02-24 | 6500 | 15 |
| 7 | Royal Finish | Office Table | 2002-02-20 | 18000 | 30 |
| 8 | Royal tiger | Sofa | 2002-02-22 | 31000 | 30 |
| 9 | Econo sitting | Sofa | 2001-12-13 | 9500 | 25 |
| 10 | Eating Paradise | Dinning Table | 2002-12-19 | 11500 | 25 |

1. SELECT LEFT(ITEMNAME,2) FROM FURNITURE WHERE TYPE=”SOFA”;
2. SELECT RIGHT(ITEMNAME,3) FROM FURNITURE WHERE PRICE > 20000;
3. SELECT SUBSTR(ITEMNAME, 4, 3) FROM FURNITURE WHERE DISCOUNT < 25;
4. SELECT CONCAT(ITEMNAME, “ \* “, TYPE) FROM FURNITURE WHERE YEAR(DATEOFSTOCK) = 2001;
5. SELECT INSTR(ITEMNAME, “IN”) FROM FURNITURE WHERE TYPE IN (“OFFICE TABLE”, “SOFA”);
6. SELECT LENGTH(ITEMNAME) FROM FURNITURE WHERE PRICE < 10000;
7. SELECT UPPER(ITEMNAME) FROM FURNITURE WHERE DATEOFSTOCK > “2002-02-20”;
8. SELECT LOWER(ITEMNAME) FROM FURNITURE WHERE PRICE BETWEEN 25000 AND 30000;
9. SELECT UPPER(MID(ITEMNAME, 5,2)) FROM FURNITURE WHERE TYPE IN (“DOUBLE BED”, “DININING TABLE”);
10. SELECT MAX(LENGTH(ITEMNAME)), LENGTH(MAX(ITEMNME)) FROM FURNITURE;

3) Consider a table **SALESMAN** with the following data:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| SNO | SNAME | SALARY | BONUS | DATEOFJOIN |
| A01 | Beena Mehta | 30000 | 45.23 | 29-10-2019 |
| A02 | K.L.Sahay | 50000 | 25.34 | 13-03-2018 |
| B03 | Nisha Thakkar | 30000 | 35.00 | 18-03-2017 |
| B04 | Leela Yadav | 80000 | NULL | 31-12-2018 |
| C05 | Gautam Gola | 20000 | NULL | 23-01-1989 |
| C06 | Trapti Garg | 70000 | 12.37 | 15-06-1987 |
| D07 | Neena Sharma | 50000 | 27.89 | 18-03-1999 |

Write SQL queries using SQL functions to perform the following operations:

a) Display salesman name and year of dateof join.

b) Display the position of occurrence of the string “ta” in salesman names.

c) Display only last four characters from salesman name.

d) Display the month name for the date of join of salesman.

e) Display the bonus rounded to nearest whole number of salesmen who joined in the

 month of march.

f) Display the first 3 characters of name combined with last 2 characters of sno of all salesmen