INDIAN SCHOOL MUSCAT

NAME OF THE EXAMINATION	SECOND PERIODIC TEST	CLASS: XII
DATE OF EXAMINATION	26-05-2022	SUBJECT: INFORMATION TECHNOLOGY
TYPE: DESCRIPTIVE	MARKING SCHEME	Total Marks: 20

SET	Q.NO	VALUE POINTS	MARK
A	1	Suppose it required to sort the result of a query based on some attributes. This can be achieved by using the clause – ORDER BY followed by the attributes which needs to be sorted. (By default the order is ascending) For ascending order the keyword ASC and for descending order the keyword DESC is used. By default the order is ascending. **Query:** To list the names of teachers in alphabetical order. SELECT First_Name, Last_Name FROM Teacher ORDER BY First_Name, Last_Name**;**	1+1=2
A	2	i) DESC Employee ; ii) SELECT DISTINCT DEPT FROM Employee ; iii) ALTER TABLE Employee ADD Bonus decimal(8,2) ; iv) UPDATE Employee SET Bonus = Salary *(20.0/100.0) ; v) SELECT Name FROM Employee where Salary BETWEEN 20000 AND 50000 ; vi) SELECT Name FROM Employee WHERE Name LIKE "A%" ; vii) ALTER TABLE Employee MODIFY Dept char(12) ; viii) DELETE FROM Employee WHERE Dept ="Sales" ;	8 x 1 = 8
A	3	Explanation of any 2 Aggregate function- COUNT(),SUM(),MIN(),MAX(),AVG()	1+1=2
A	4	In SQL, duplicate tuples can appear more than once in a table and in the result of a query. However if the requirement is to list distinct values of an attribute then this can be done by using the keyword – 'DISTINCT'.	2

		For example, following query will list all the Department numbers corresponding to departments having male teachers. SELECT DISTINCT Dept_No FROM Teacher WHERE GENDER ='M';	
A	5	INSERT INTO SPORTS VALUES("S001", "Cricket", "Vijay" ,10) ;	2
A	6	Sometimes it is required to match part of the string. This is called as string pattern matching. We can use 'LIKE' keyword along with two more reserved characters - %(percent) and _ (underscore) for specifying different number of characters. % replaces zero or more number of random characters and _ replaces a single character. Some examples: **Query:** To retrieve names of all the teachers starting from letter 'S'. SELECT First_Name FROM Teacher WHERE First_Name LIKE "S%";	1+1 =2
A	7	Grouping based on an attribute can be done in SQL. For such grouping, GROUP BY clause is added in the SQL query. For example, we have to find the number of teachers teaching in each Department. Thus we have to group the result based on the Departments and for each Department we have to count number of teachers who teach in that Department. This query is written by using GROUP BY clause and aggregate function as shown below: SELECT Dept_No, COUNT(*) AS "No_of_Teachers" FROM Teacher GROUP BY Dept_No;	1+1=2