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SET	A
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**INDIAN SCHOOL MUSCAT
HALF YEARLY EXAMINATION 2023
INFORMATION TECHNOLOGY (802)
ANSWER KEY**



CLASS : XII
DATE: 26.09,2023

TIME ALLOTTED : 3 HRS.
MAXIMUM MARKS: 60

GENERAL INSTRUCTIONS:

1. Read the Questions carefully and write the answer.
2. All Questions of a Particular section must be attempted in the correct order.

SECTION – A		
1.	_____ command displays all the tables in the current database. SHOW TABLES;	1
2.	Identify the error and rewrite the query: Select * from Item arrange by price; SELECT * FROM Item order by price;	1
3.	The _____ command is used to view the structure and description of a table. DESC	1
4.	Database can be removed by using _____ command. DROP	1
5.	RDBMS packages are widely used as _____ (Front end / Back end) BACK END	1
6.	_____ symbol replaces a single character while matching a pattern with LIKE key word. (under score)	1
7.	In MySQL _____ constraint does not allow duplicate value and null value. (Primary key)	1
8.	Define Cardinality. Number of rows	1
9.	Define Referential Integrity. Referential integrity is a term used in database design to describe the relationship between two tables. It is important because it ensures that all data in a database remains consistent and up to date. It helps to prevent incorrect records from being added, deleted, or modified.	1
10.	Create Table is _____ - command. DDL	1
11.	Write the command which is used to add a new record to the table. Insert	1
12.	What do you understand by the Term “Unique Key”? It Is used to identify the records uniquely. No null value allowed.	1
13.	What is the use of ALTER command in MySQL? Used to change the structure of the table	1
14.	Define Cartesian Product. Simply matches all the rows of the first table with all the rows of the second table	1
15.	Full form of DDL is _____ data definition language	1
16.	if ((percentage >= 40)&& (percentage < 60)) {System.out.println("PASSED with II Division");}	

	Consider the above statement, && will check for both the conditions to be : (a) True	
17.	Define Byte code. Bytecode in Java is a set of instructions for the Java Virtual Machine.	1
18.	Which if the following is not a Keyword in JAVA? Break, While , Display	1
19.	What do you mean by on line shopping? Give any one web site name. is a form of electronic commerce which allows consumers to directly buy goods or services from a seller over the Internet using a web 1/ 2mark any one valid web site name ½ mark	1
20.	Write any two e-governance web site names. India.gov.in ,igod.gov.in goindirectory.nic.in or any valid web site	1
21.	Write any one benefits of online learning. Any one valid benefit – 1mark	1
22.	Define Design Phase of the Web application. The focus if how the application is to be designed. This consists of (a) a map of the web application site (b) Database (Design the application database).	1
23.	What do you understand by the term “Front end”. A front end is the graphical user interface of a computer that makes it easier to use.	1
	Answer any 2 out of 3 Questions	
24.	Write a Java program to assign any week day number from the user and display the corresponding day name. (use switch... case) Assign the day number and using proper syntax for printing the result 1+1	2
25.	Explain any two relational and Logical Operator of JAVA with an example. >, >=, <, <=, =, != explanation with an example of any 2 1+1	2
26.	What is a method? What is the significance of main() method? A method is a group of statements written to perform specific task 1 mark Main is a special method every java application must have. When you run a program the statements in the main method are the first to be executed. 1 mark	2
	Answer any 2 out of 3 Questions	
27.	Define e-Governance and write any one advantage of e-Governance. e-governance, government services are made available to citizens through IT. 1 mark more efficiency, enhanced services to better serve citizens, better accessibility of public services, more transparency and accountability of government or any valid advantage 1 mark	2
28.	What are the precautions to be taken while performing Online Transactions? Any two valid precautions 1+1 =2 marks	2
29.	Define the term web application and give any one the benefits of online learning. A web application (web app) is an application program that is stored on a remote server and delivered over the internet through a browser interface. 1 mark Any one benefit 1 mark Any one valid benefit 1 mark	2
	Answer any 4 out of 5 Questions	
30.	What is the difference between DDL and DML? Explain with an example. DDL(Data Definition Language) in this category all the commands are based on table structure. (alter create drop) 1 mark	2

	DML(Data Manipulation Language) in this category all the commands are based on table values (select insert and delete) 1 mark																										
31.	Write a Query to display all the table names from MASTERMIND database. Use mastermind; 1 mark Show tables; 1 mark	2																									
32.	Identify the error in the following query Select name,marks from student where name LIKE “h%”; 1mark Select * from emp where deptno IS null; 1 mark	2																									
33.	a) Number of attributes in a table is called_____ of a table. Columns b) To avoid repetition in the result of a SELECT Query_____ Clause is used. Distinct	1+1=2																									
34.	a) State the role of a DBA (Database Administrator) A Database Administrator (DBA) is an individual or person responsible for controlling, maintaining, coordinating, and operating a database management system. Managing, securing, and taking care of the database systems is a prime responsibility. b) Write a Command to delete all the records from EMP table. Delete from emp;	1+1=2																									
	Answer any 2 out of 3 Questions																										
35.	<div>Table: Employee</div> <table><tr><th>Empno</th><th>Ename</th><th>Deptno</th><th>Sal</th><th>Comm</th></tr><tr><td>1234</td><td>Gargi</td><td>10</td><td>35000</td><td>Null</td></tr><tr><td>5423</td><td>Hari</td><td>20</td><td>40000</td><td>200</td></tr><tr><td>3123</td><td>Kathir</td><td>10</td><td>30000</td><td>100</td></tr><tr><td>7654</td><td>Jaya</td><td>30</td><td>25000</td><td>250</td></tr></table> <div>a) Write a Query to increase the salary of all the employees by 10 those who are all from department number 10. Update employee set sal=sal+10 where deptno=10; 1 mark</div> <div>b) Write a Query to list out all the employee names and their salary whose commission is not yet fixed. Select ename,sal from employee where comm is null; 1mark</div> <div>c) Write a Query to display all the employee details whose name ends with the character ‘a’. Select * from employee where eaname like”%a”;</div>	Empno	Ename	Deptno	Sal	Comm	1234	Gargi	10	35000	Null	5423	Hari	20	40000	200	3123	Kathir	10	30000	100	7654	Jaya	30	25000	250	1+1+1
Empno	Ename	Deptno	Sal	Comm																							
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36.	a) What are the advantages of Online Reservation System? Explain any 2. Any two advantages 1+1 = 2 mark b) Name the first e-governance site in INDIA. NICNET (1987) 1 mark	2 1																									
37.	a) Define Entry Level Loop 1 mark b) Write a JAVA code to print all the even numbers from 45 to 100(use for loop). int i; 1/2 for (i=45;i<=100;i++) 1/2 { if(i%2==0) 1/2 System.out.println(i); 1/2 }	1 2																									

Answer any 3 out of 5 Questions		
38.	<p>How Having Clause is different from Where Clause? Explain with an example. Having : used to specify the condition along with GROUP by 1 mark Select deptno,count(*) from emp group by deptno having count(*)>1; 1 mark (any valid example) Where clause is used to specify the condition along with select ,delete update commands ` 1 mark Select * from emp where deptno=10; 1 mark (any valid example)</p>	4
39.	<p>(a)What is the purpose of comments in Java Program? How are comments displayed in Java? Comments are used in code by programmers to document their programs- to provide explanatory notes to other people who read the code. (// - used to single line /* and */ used for multiline)1 +! (b) Define compiler. Why is it needed? Explanation 1 mark Use 1 mark</p>	2 2
40.	Explain Entry Level loop with an example 2 mark Explain Exit level loop with an example.2 mark	2+2=4
41.	<p>What is selection structure? What are the selection structures provided in java? Valid explanation of selection statement and explanation of if else and switch... case 2+1+1</p>	2+2
42.	<p>What is the difference between ALTER and UPDATE command in mysql? Explain with an example. Alter is used to change the structure of the table Alter table emp add esal int(3) 1+1 (any valid example) Update is used to change the table values Update emp set sal=sal+100 (1 +1) (any valid example)</p>	2+2
****END OF THE QUESTION PAPER****		

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SECTION - A		
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2.	In MySQL_____ constraint does not allow duplicate value and null value. (Primary key)	1
3.	Define Cardinality. (Number of rows in a table)	1
4.	Define Referential Integrity. Referential integrity is a term used in database design to describe the relationship between two tables. It is important because it ensures that all data in a database remains consistent and up to date. It helps to prevent incorrect records from being added, deleted, or modified.	1
5.	Create Table is _____ - command. DDL	1
6.	Write the command which is used to add a new record to the table. INSERT	1
7.	What do you understand by the Term "Unique Key"? used to identify the records uniquely null values allowed. It can be used many time in the table.	1
8.	What is the use of ALTER command in MySQL? Change the structure of the table	1
9.	Define Cartesian Product. Simply matches all the rows of the first table with all the rows of the second table.	1
10.	Full form of DDL is _____ data definition language	1
11.	_____ command displays all the databases from MySQL. Show databases	1
12.	Identify the error and rewrite the query: Select * from Item Where Price=NULL select * from item where price is null;	1
13.	The _____ command is used to view the structure and description of a table. DESC table	1
14.	Database can be removed by using _____ command. DROP	1
15.	RDBMS packages are widely used as _____ (Back end)	1
16.	if ((percentage >= 40)&& (percentage < 60))	

	<pre>{System.out.println("PASSED with II Division");}</pre> <p>Consider the above statement, && will check for both the conditions to be :</p> <p>(a) True</p>	
17.	Write any two e-governance web site names. India.gov.in ,igod.gov.in goidirectory.nic.in or any valid web site	1
18.	Write any one benefits of online learning. Any one valid benefit – 1mark	1
19.	Define Design Phase of the Web application. The focus if how the application is to be designed. This consists of (a) a map of the web application site (b) Database (Design the application database).	1
20.	What do you understand by the term “Front end”. A front end is the graphical user interface of a computer that makes it easier to use.	1
21.	Define Byte code. Bytecode in Java is a set of instructions for the Java Virtual Machine.	1
22.	Which if the following is not a Keyword in JAVA? Break, While , Display	1
23.	What do you mean by on line shopping? Give any one web site name. is a form of electronic commerce which allows consumers to directly buy goods or services from a seller over the Internet using a web 1/ 2mark any one valid web site name ½ mark	1
	Answer any 2 out of 3 Questions	
24.	What is a method? What is the significance of main() method? A method is a group of statements written to perform specific task 1 mark Main is a special method every java application must have. When you run a program the statements in the main method are the first to be executed. 1 mark	2
25.	>,>=,<,<=,=,!= explanation with an example of any 2 1+1	2
26.	Write a Java program to assign any character from the user and display the corresponding character is VOWEL or Not. (use switch... case) Assign any character ½ mark use switch .. case and print the result 1 ½ marks	2
	Answer any 2 out of 3 Questions	
27.	Define the term web application and give any one the benefits of online learning. A web application (web app) is an application program that is stored on a remote server and delivered over the internet through a browser interface. 1 mark Any one benefit 1 mark Any one valid benefit 1 mark	2
28.	Define e-Governance and write any one advantage of e-Governance. Definition 1 mark any one advantage 1 mark	2
29.	What are the precautions to be taken while performing Online Transactions? Any two valid precautions 1+1 =2 marks	2
	Answer any 4 out of 5 Questions	
30.	a) Number of attributes in a table is called _____ of a table. columns b) To avoid repetition in the result of a SELECT Query _____ Clause is used. DISTINCT	1+1=2
31.) State the role of a DBA (Database Administrator) A Database Administrator (DBA) is an individual or person responsible for controlling, maintaining, coordinating, and	1+1=2

	operating a database management system. Managing, securing, and taking care of the database systems is a prime responsibility. b) Write a Command to delete all the records from EMP table. Delete from emp;																										
32.	Identify the error in the following query a) Select name, marks from student table where name="h%"; Select name ,marks from the student where name like "h%"; b) Delete * from emp; Delete from emp; 1+1 mark	2																									
33.	Write a Query to display all the table names from EMPLOYEE database. Use employee; Show tables;	2																									
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36.	a) Define Iteration. Repeating the process again and again based on a condition ex: for while b) Write a JAVA code to print all the even numbers from 45 to 100(use for loop). Using for loop 1 mark Display the result with if condition 1 mark	1 2																									
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