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**INDIAN SCHOOL MUSCAT  
FIRST PRE BOARD EXAMINATION 2023  
INFORMATION TECHNOLOGY- CODE - 802**



CLASS : XII  
DATE: 06-12-2023

TIME ALLOTTED : 3 HRS.  
MAXIMUM MARKS: 60

**GENERAL INSTRUCTIONS:**

1. Please read the instructions carefully.
2. This Question Paper consists of **24 questions** in two sections – Section A & Section B.
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. **Out of the given (6 + 18 ) 24 questions, a candidate has to answer (6 + 11 ) 17 questions in the allotted (maximum) time of 3 hours.**
5. All questions of a particular section must be attempted in the correct order.
6. **SECTION A - OBJECTIVE TYPE QUESTIONS (30 MARKS):**
  - i. This section has 06 questions.
  - ii. There is no negative marking.
  - iii. Do as per the instructions given.
  - iv. Marks allotted are mentioned against each question/part.
7. **SECTION B – SUBJECTIVE TYPE QUESTIONS (30 MARKS):**
  - i. This section contains 18 questions.
  - ii. A candidate has to do 11 questions.
  - iii. Do as per the instructions given.
  - iv. Marks allotted are mentioned against each question/part.

**SECTION A: OBJECTIVE TYPE QUESTIONS**

**Q.1 Answer any 4 out of the given 6 questions on Employability Skills (1 x 4 = 4 marks)**

- i. Mr. Vikas believe that he is more important than others. He lack empathy for other people and tend to exaggerate his own achievements. He is having \_\_\_\_\_ type of personality disorder. 1
- ii. \_\_\_\_\_ either create a new market for their services or provide a service in an existing market. 1
- iii. \_\_\_\_\_ is the file extension of LibreOffice Calc. 1
- iv. "Green Skills" are primarily focused on \_\_\_\_\_. 1
- v. \_\_\_\_\_ are individuals, who love interacting with people around and are, generally, talkative. 1

vi. \_\_\_\_\_ connect one word with another to show the relationship between them. 1

**Q.2 Answer any 5 out of the given 7 questions (1 x 5 = 5 marks)**

i. What do you mean by a project in web application? 1

ii. \_\_\_\_\_ are real time online lectures, where users participate in the lecture, may ask questions and get their queries answered. 1

iii. Choose the correct MySQL command to display 30% of salary as increment. 1  
a. select salary + 0.3 as increment from company;  
b. select salary \* 0.3 as increment from company;  
c. select salary \* 0.3 rename as increment from company;  
d. select salary + salary \* 0.3 increment from company;

iv. They are the people who determines the requirements of the end users and then develops specifications to meet these requirements. 1  
a. Application programmers  
b. System analysts  
c. End users  
d. Database Administrators

v. What is byte code? 1

vi. \_\_\_\_\_ is a special method that every Java application must have. 1

vii. A group of statements which get executed based on a condition in java is called \_\_\_\_\_. 1

**Q.3 Answer any 6 out of the given 7 questions (1 x 6 = 6 marks)**

i. What is NeGP? 1

ii. for loop is an example of \_\_\_\_\_ control loop. 1

iii. The main purpose of this constraint is to restrict the values of an attribute within a range. Name the constraint. 1

iv. A \_\_\_\_\_ in object oriented programming is a blueprint or prototype that defines the variables and the methods common to all Java objects of a certain kind. 1

v. \_\_\_\_\_ clause is used to sort values of a column in a table in MySQL. 1

vi. Which of the following is not a characteristic of a project? 1  
a. Project has a beginning and an end.  
b. The extent of the project is defined.  
c. Project has no boundaries.  
d. Project requires finite resources

vii. Name one front end and one Back-end application to create Web Applications. 1

**Q.4 Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**

- i. State TRUE or FALSE: 1  
sort() method in java is used to arrange an array of integers in ascending order.
- ii. The number of attributes in a relation is called the \_\_\_\_\_ of a relation. 1
- iii. Mention any one advantage of a web based application. 1
- iv. Mr. Zaheer wants to purchase a product online. Help Mr. Zaheer in choosing the correct order of steps to be followed. 1
  - A. Provide his details (Or login into his bank account)
  - B. Add items in shopping cart
  - C. Choose payment option (Make payment if not cash on delivery)
  - D. Select Buy option
  - a. C, D, B, A
  - b. B, D, C, A
  - c. D, B, C, A
  - d. A, C, B, D
- v. Simi wants to input the price of shoes as 999.99 .What should be the data type and size of the column price in the table? 1
- vi. Predict the output: 1  
int[] Amount = {200, 78, 325, 456, 812};  
System.out.println(Amount[4]);

**Q.5 Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**

- i. A \_\_\_\_\_ in java is a group of related classes. 1
  - a. Method
  - b. Package
  - c. Constructor
  - d. Variable
- ii. Once the database “Cargo” is created, you can access the database “Cargo” on the server by using \_\_\_\_\_ command. 1
- iii. Write MySQL statement that selects all items with a price between 250 and 500 from ITEM table. 1
- iv. Identify the symbols used in java to write multiline comments. 1
  - a. / /
  - b. \$\* \*\$
  - c. /\* \*/
  - d. /@ @ /

- v. State TRUE or FALSE:  
In Requirement Definition Phase we identify the problem statement for which the web application is to be developed. 1
- vi. A program is interactive if it is able to take input from the user and respond accordingly. Which prebuilt java class has to be used for it? 1

**Q.6 Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**

- i. \_\_\_\_\_ is an aggregate function in MySQL. 1
  - a. Total()
  - b. Countif()
  - c. Round()
  - d. Avg()
- ii. Give one benefit of online reservation. 1
- iii. This portal is a one point source to access all Indian Government websites at all levels and from all sectors. Name the portal. 1
- iv. Ms. Prapthi wants to arrange names of employees in alphabetical order in the employee table. Give the MySQL command to create a sorted list. 1
- v. Which of the following is a valid variable declaration? 1
  - a. my\_note\_1
  - b. 1st\_note
  - c. my note1
  - d. %mynote1
- vi. \_\_\_\_\_ Wrapper Class is used for the primitive data type int. 1

**SECTION B: SUBJECTIVE TYPE QUESTIONS**

**Answer any 3 out of the given 5 questions on Employability Skills (2 x 3 = 6 marks)**

**Answer each question in 20 – 30 words.**

- Q.7 What are the benefits of “Green Jobs”? 2
- Q.8 What are the two types of motivation? Explain each. 2
- Q.9 What are the essential components of effective written communication? 2
- Q.10 Write down the steps to protect your spreadsheet in Calc. 2
- Q.11 What are the two major functions performed by an Entrepreneur? 2

**Answer any 3 out of the given 5 questions (2 x 3 = 6 marks)**

- Q.12 A School is making database of its teachers and students. Teacher table includes teacher\_code , teacher\_name, dept. Give details of Student table along with its schema. 1 + 1

Q.13 Explain any two advantages of using a database. 2

Q.14 Find error and rewrite the correct code: 2  
j = = 0;  
while (j< 10) {  
System.out.println(j)  
j++ ;

Q.15 Give the output of the following code segment- 2  
public class Main {  
public static void main(String[] args) {  
int day = 7;  
switch (day) {  
case 6:  
System.out.println("Green colour");  
break;  
case 7:  
System.out.println("Blue colour");  
default:  
System.out.println("White colour");  
}  
}  
}

Q.16 Explain Drop table with Cascade command in My SQL. 2

**Answer any 2 out of the given 3 questions (3 x 2 = 6 marks)**

Q.17 Explain the application of database management systems in government sector. 3

Q.18 a. Vinod wants to display the details of staff whose name starts from K. Find errors in given MySQL command and write the correct statement. 1+2  
Select \* from staff where name = \*K;

b. Classify them into DDL or DML commands:  
Select, Create, Update, Alter

Q.19 Complete the code in JAVA using a loop to print " happy" 10 times: 1+1+1  
\_\_\_\_\_ (int i = 0 ; i < 10 ; \_\_\_\_\_ )  
{  
\_\_\_\_\_ ("happy");  
}

**Answer any 3 out of the given 5 questions (4 x 3 = 12 marks)**

Q.20 a. What is an exception in java? 1+3

b. Explain each of the following terms in exception handling:  
i. try  
ii. catch  
iii. finally

Q.21 a. Name two e-commerce websites. 1+1+2  
b. Creating a strong password is vital. A strong password has:  
i. Only numbers ii. 6-8 Alphanumeric characters  
iii. Special symbols iv. Both ii and iii

c. What are the advantages in online learning?

Q.22 a. Name the user defined method in the code given below. Also predict the output 2+2  
static int myFunction(int y)  
{ return ( 10 + y); }

```
public static void main(String[] args) {  
    System.out.println(myFunction(25));  
}
```

b. What is the difference between object and class in java?

Q.23 a. Write a single line Java code using String methods to perform the following tasks 3+1  
String msg = "FAREWELL XII";  
i. Convert the characters to small letters.  
ii. Find the total length of string.  
iii. Add a word "Sianora" at the end of original string.

b. What is the purpose of a constructor?

Q.24 Consider the following tables and write MySQL Commands: 4

Table name: **SHOP**

| ShopId | ShopName       | Location  | NoOfEmployee | Dateofopening | OwnerId |
|--------|----------------|-----------|--------------|---------------|---------|
| Sh100  | AbbA           | Chennai   | 45           | 2001-02-10    | C180    |
| Sh101  | Life style     | Bangalore | 60           | 2010-03-12    | B125    |
| Sh102  | Libra          | Chennai   | 30           | 2004-04-22    | C122    |
| Sh103  | Folklore vibes | Delhi     | 55           | 2015-05-16    | D104    |

Table name : **PROPRIETOR**

| Prid | Prname        |
|------|---------------|
| C180 | Amit Sharma   |
| B125 | Sooraj Kumar  |
| C122 | Divya Prakash |
| D104 | Sushant Patil |

- To display all details from shop in the ascending order of No of employees.
- To display Shop names, Location and Date of Opening of shops that were opened after 2004-01-01.
- To display the number of employees present in each location.
- To display Shop Name and Proprietor Name(Prname) of shops in Bangalore.

\*\*\*\*END OF THE QUESTION PAPER\*\*\*\*