PT-2/HALF YEARLY EXAMINATION, 2022-23
INFORMATION TECHNOLOGY

Time - 7:15 AM to 10:20 AM   **Class - XII**   **M.M. : 60**

Date – 07.09.2022 (Wednesday)

Name of the student _____ Section _____

General Instructions:

- Please read the instructions carefully.
- This Question Paper consists of **24** questions in two sections – A & B.
- Section **A** has MCQ and Objective type questions.
- Section **B** contains Subjective type questions.
- Out of the given (6+18=24) questions, a candidate has to answer (6+11=17) questions.
- All questions of a particular section must be attempted in the correct order.

SECTION A – MCQ/OBJECTIVE TYPE QUESTIONS (30 MARKS):

o This section has 06 questions. Attempt all the questions.

SECTION B – SUBJECTIVE TYPE QUESTIONS (30 MARKS):

- This section contains 18 questions.
- A candidate has to do 11 questions.
- Do as per the instructions given.

SECTION - A

Q.1   Multiple Choice Questions (Employability Skills).   (1x4=4 Marks)

(i) Which of the following can be a barrier to active listening?

(a) Noisy environment   (b) Not maintaining an eye contact with the speaker

(c) Not being attentive   (d) All of the above

(ii) Ravi has feelings of emptiness, abandonment and suicide. What type of personality disorder is this?

(a) Borderline   (b) Dependent   (c) Avoidant   (d) Obsessive

(iii) Which of these sentences is/are in passive voice?

(a) They are watching a movie.   (b) The clock was repaired by Raju.

(c) He is sleeping in the room.   (d) My pet dog bit the postman.

(iv) Mona is helping her sister to overcome a personality disorder. What should she do?

(a) Talk to her sister   (b) Engage her in hobbies

(c) Help her build confidence   (d) All of the above

Q.2   Multiple Choice Questions (Subject Specific Skills).   (1x5=5 Marks)

(i) Which of the SQL statements is correct?

a) SELECT Username AND Password FROM Users

b) SELECT Username, Password FROM Users;

c) SELECT Username, Password WHERE Username = 'user1'

d) None of these

(ii) Which SQL keyword is used to retrieve only unique values?

    a) DISTINCTIVE   b) UNIQUE   c) DISTINCT   d) DIFFERENT

(iii) Which of the following SQL commands is used to retrieve data?

    a) DELETE   b) INSERT   c) SELECT   d) JOIN

(iv) Which SQL function is used to retrieve a maximum value?

    a) TOP()   b) MOST()   c) UPPER()   d) MAX()

(v) What does the following query do?

UPDATE EMPLOYEE SET SALARY = SALARY * 1.10;

a) It increases the salary of all the employees by 10%.

b) It decreases the salary of all the employees by 90%.

c) It increases the salary of all the employee by 110%.

d) None of the above.

Q.3 Objective type Questions (Subject Specific Skills).   (1x6=6 Marks)

(i) _____ is the National Portal of India, which provides a single window access to information and services being provided by the various Indian Government entities.

(ii) _____ are real time lectures, where users participate, may ask questions, and get their queries answered.

(iii) In the given query which keyword has to be inserted?

INSERT INTO EMPLOYEE _____ (1002, "KAUSAR", 2000);

(iv) Which command is used to change the structure of the table in SQL?

(v) _____ is an e-commerce application where the customer can purchase goods over the Internet.

(vi) Rita is creating a table SALESMAN with fields Salesmannumber, Name, TotalSales. She doesn't want the TotalSales column to be remain unfilled i.e. she wants to make entry in this field mandatory. Which constraint she should use at the time of creating SALESMAN table:

Q.4 Multiple Choice Questions (Subject Specific Skills).   (1x5=5 Marks)

i) Which of the following is a disadvantage of web based applications?

a. They do not need be installed.

b. They are available 24x7.

c. They are slow as compared to software based applications.

d. They offer cross platform compatibility.

ii) To run a Java program, the shortcut key used is:

a) Shift + F6   b) Shift + F5   c) Ctrl + F5   d) F6

iii) JVM means

a) Java Virtual Mode   b) Java Virtual Machine

c) Java Virtual Mechanics   d) Java Vital Machine

iv) Internet transactions are susceptible to frauds. Creating a strong password is vital. A strong password has:

a. 6-8 Alphanumeric characters   b. Special symbols

c. Both a and b   d. None of the above

v) DEITY stands for:

a. Department of Electrical and Information Technology

b. Department of Electronics and Information Technology

c. Department of Electronics and Informatics Technology

d. Department of Electrical and Informatics Technology

Q5.   Objective type Questions (Subject Specific Skills).   (1x5=5 Marks)

i) Java supports _____ primitive data types.

ii) _____ names can begin with either an alphabetic character, an underscore (_), or a dollar sign ($).

iii) _____ are special symbols in a programming language and perform certain specific operations.

iv) The _____ is used to execute a block of code matching one value out of many possible values.

v) There are some _____ words in Java that cannot be used as variable names.

Q6. Multiple Choice Questions(Subject Specific Skills).   (1x5=5 Marks)

i) public static void main(String[] args){

     if(1 < 2){

System.out.println("1 is less than 2");

     }

     else

System.out.println("2 is less than 1");

System.out.println("Hello Excellent");

     }

a) 1 is less than 2   b) 2 is less than 1 c) 1 is less than 2   d) Compilation Error

                                            Hello Excellent

ii) Which of the following statements is true?

1. for every 'if' there should be an 'else'.

2. for every 'else' there should be an 'if'.

3. 'if' block can exist without an 'else'

4. 'if' condition can be used inside another 'if' condition.

a) Only 2, 3 and 4 are true   b) All of the statements are true.

c) Only 2 and 3 are true   d) Only 3 is true.

iii) Which of the following is an invalid variable name?

a) my_string_1   b) 1st_string   c) mystring1   d) _mystring1

iv) public static void main(String[] args){

int india_score = 300, pakistan_score = 290;

    if(india_score>pakistan_score)

System.out.println("India Wins");

    else

System.out.println("Pakistan Wins");

   }

a) India Wins   b) Pakistan Wins   c) Both a and b   d) None of these

v) public static void main(String[] args){

int marks = 30;

if(marks > 70){

System.out.println("Distinction");}

    if(marks > 35){

System.out.println("Pass");}

    else{

System.out.println("Better luck next time");}

  }

a) Distinction   b) Pass   c) Better luck next time   d) None of these

SECTION - B

Answer <u>ANY 3</u> out of the given 5 questions on Employability Skills.   **(2x3=6 marks)**

Q.7   What will you do to select an entire worksheet in a spreadsheet?

Q.8   Mr Gupta has a spreadsheet with a list of 500 items in his shop. A customer comes and asks for a particular item. How should he arrange the data so that he can find that item fast?

Q.9   What is the default alignment of numbers in a cell?

Q.10   How many types of data are there in Spreadsheet? Name them.

Q.11   Differentiate between Row and Column in Spreadsheet.

Answer <u>ANY 3 </u>out of the given 5 questions.   **(2 x 3 = 6 marks)**

Q.12   Write a SQL query to update the Salary (fieldname: Salary) of teacher in Teacher table with Teacher_ID=101 to Rs. 55000.

Q.13   Differentiate between = and = = operator in JAVA.

Q.14   Consider the "Sales" table in mysql:

Ecode	Ename	Address	dojoin	Amount	Area
100	Amit	Delhi	2017/09/29	5000.90	East
101	Sushant	Gurgaon	2018/01/01	7000.75	East
102	Priya	Noida	2018/04/25	3450.45	West
103	Mohit	Delhi	2018/11/03	6000.50	North
104	Priyanshi	Delhi	2019/12/15	8000.62	North

a) To display the employee name and amount for east area.

b) Write a sql query to display the name of the oldest employee first then second oldest and so on.

Q.15   Predict the output:

public static void main(String[] args){

    if(1 > 2) {

System.out.println(" 1 is greater than 2"); }

    else

System.out.println(" 2 is greater than 1");

    }

Q.16   Differentiate between Alter Table Command and Update Command.

Answer <u>ANY 2 </u>out of the given 3 questions.   **(3x2=6 marks).**

Q.17   Predict the output. Explain the use of default keyword.

public static void main(String[]args) {

int num=40;

switch(num) {

case 5: System.out.println("FIVE"); break;

case 35+5: System.out.println("SIX"); break;

case 20+30: System.out.println("SEVEN"); }}

Q.18   Answer parts a), b), c) on the basis of the structure table JOB.

Name of Column	Type
Job_ID	Integer(4)
Job_des	Varchar(30)
Alloc_on	Date
Due_on	Date
Emp_id	Integer(4)

a) Create a table Job with the specification given above.

b) Identify the primary key.

c) Insert 2 records into the table JOB.

Q.19 Differentiate between if-else and switch statement?

Answer <u>ANY 3</u> out of the given 5 questions. (4 x 3 = 12 marks)

Q.20 Answer the questions based on the following table, GRADUATE:

S.No.	NAME	STIPEND	SUBJECT	AVERAGE	DIVISION
1	Karan	400	Physics	68	1
2	Divakar	450	Computer Sc	68	1
3	Divya	300	Chemistry	62	2
4	Arun	350	Physics	63	1
5	Sabina	500	Mathematics	70	1
6	John	400	Chemistry	55	2
7	Robert	250	Physics	64	1
8	Rubina	450	Mathematics	68	1
9	Vikas	500	Computer Sc	62	1
10	Mohan	300	Mathematics	57	2

Predict the output:

a) SELECT MIN(AVERAGE) FROM GRADUATE WHERE SUBJECT = "PHYSICS";

b) SELECT SUM(STIPEND) FROM GRADUATE WHERE DIVISION = 2;

c) SELECT AVG(STIPEND) FROM GRADUATE WHERE AVERAGE >=65;

d) SELECT COUNT(DISTINCT SUBJECT) FROM GRADUATE;

Q.21 Write a JAVA program to calculate percentage of Rakesh.

Mark_obtained= 300, Total_Marks=400

Q.22 What are the different Phases in a Web Application Project? Explain.

Q.23 Write a Java program to accept Day No (1 – 7) and display the Day Name using Switch Case Statement.

Q.24 Consider a table EMPL and write the SQL commands:

DeptNo	Name	Location
10	RAM	DELHI
20	ANJAN	BOMBAY
30	RISHI	RAIGARH
40	ZACK	BILASPUR

a) Display all the records from the table EMPL.

b) List the details of employee who have five letter names.

c) Add a column Salary in the table EMPL.

d) Write a query to display the name of employee who is having N as the last alphabet.