

Class: XII
POST MID TERM EXAM 2025-26
Subject: INFORMATION TECHNOLOGY
SET -B

Time Allowed : 3 Hrs

Max. 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

Multiple Choice Questions on Employability Skills

(1 x 4 = 4 marks)

Q1 Answer any 4 out of the given 6 questions on Employability Skills (1 x4=4)

- i "Green Skills" are primarily focused on _____ 1
- ii CNG stands for _____. 1
- iii Which of the following is not true for Physiological motivation? 1
 - a) Physiological motivation is based on the physical needs to satisfy hunger for thirst.
 - b) Psychological motivations can be guided by need for achievement and need for affiliation.
 - c) Physiological motivation directs the behaviour towards satisfying specific bodily needs.
 - d) Physiological motivation are made up of emotional, behavioral and mental set of characteristics.
- iv _____ is feeling extremely nervous and worried because you believe that other people do not like you or are trying to harm you. 1
- v The shortcut key for printing the spreadsheet file is _____. 1
- vi Which function is used to add multiple numbers in a spreadsheet. 1

Q2 Answer any 5 out of the given 7 questions

(1 x 5 = 5 marks)

- i _____ is a special method that every Java application must have. 1
- ii The size of boolean data type is _____ bit. 1
- iii Differentiate between the following statements
System.out.println("Hello World");
System.out.print("Hello World"); 1
- iv _____ are real time lectures, where users participate in the lecture, may ask questions and get their queries answered. 1
- v Define the scope of the application. 1
- vi Define the term Information. 1
- vii Which SQL keyword is used to display the data based on certain pattern? 1
 - a) LIKE b) IN c) BETWEEN d) RANGE

Q3 Answer any 6 out of the given 7 questions**(1 x6=6)**

- i Finding of Bugs and Fixing them happens in _____ phase 1
a) Design
b) Testing
c) Implementation
d) Requirement Definition
- ii A single pass through the loop is called an _____. 1
- iii Which of the following is not a relational operator . 1
a) !=
b) <=
c) =
d) ==
- iv _____ keyword in Select clause in SQL removes all the duplicate values 1
from the result of the query.
a) ALL
b) DISTINCT
c) ORDER BY
d) UNIQUE
- v Consider the following table Product and write the appropriate command to 1
change the datatype of column P_id from char(20) to varchar(20).

P_id	P_name	Price	Qty
P111	Keyboard	650	50
P123	Mouse	250	10

- vi Solve the following 1
int m=20;
int n= 30;
What will be the value of m%=n;
- vii What will the following expression return to the if statement? 1
int a=20;
int b=40;
if ((a >10) && (b<40))

Q4 Answer any 5 out of the given 6 questions**(1 x 5 = 5 marks)**

- i Mention any one key characteristic of a project. 1

- ii Mr Sagar wants to purchase a product online. Help Mr Sagar 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
- iii Which function of the wrapper class converts a string into its integer value. 1
- iv NeGD stands for _____ 1
- v Ramesh has joined a company . He is responsible for application programs to interact with the database. These programs are written in high level languages and SQL to interact with the database. What kind of role as a user he play in a company? 1
- vi Why is there a need for a user id and a password in online reservation? 1

Q5 Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)

- i Write a MySQL statement that selects all products with a price between 10 and 20 from the product table. 1
- ii State True or False 1
 The data connectivity is established between the Front-End interface and Back-End Database in the implementation phase.
- iii A _____ in java is a group of related classes. 1
 a) Method
 b) Package
 c) Constructor
 d) Variable
- iv An attribute A of datatype varchar(20) has the value “Keshav”.The attribute B of datatype char(20) has value ”Meenakshi”. How many characters are occupied in attribute A and attribute B? 1
 a) 20,6
 b) 6,20
 c) 9,6
 d) 6,9

- v The _____ method of Array class is used to arrange the Array of integers in ascending order. 1
- vi What are the various operations that need to be performed on a database 1
- Defining the database
 - Sharing the database
 - Manipulating the database
 - All of the above

Q6 Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)

- i _____ is not an aggregate function 1
- Sum()
 - Count()
 - Round()
 - Avg()
- ii This portal is a one point source to access all Indian Government websites at all levels and from all sectors. Name the portal. 1
- iii Name the keyword used to create an object in java. 1
- iv Consider the following table Employee 1

Eid	Ename	Last_name	Esalary
E111	Ramesh	Kumar	40000
E112	Suresh	Kumar	60000

Write the Sql query to find the total salary of all the Employees.

- v Define the term Class in Java. 1
- vi _____ creates and provides quality, innovative online learning opportunities to anyone who wants to improve the technology, literacy and math skills needed to be successful in both work and life. 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.

- Q7 What are the essential components of effective written communication? 2

- | | | |
|-----|---|---|
| Q8 | Write down the steps to protect your spreadsheet in Calc? | 2 |
| Q9 | Explain the different stages of active listening ? | 2 |
| Q10 | How has Green Jobs helped in water conservation? | 2 |
| Q11 | Define the term Startups. | 2 |

Answer any 3 out of the given 5 questions

(2 x 3 = 6 marks)

- | | | |
|-----|--|---|
| Q12 | Explain Drop table with Cascade command in My SQL. | 2 |
| Q13 | Explain any two operations performed on database. | 2 |
| Q14 | The following code has some error(s). Rewrite the correct code underlining all the corrections. Also categorize the loop as Entry / Exit Control Loop.
<pre>int j; j = 10; do; j = j-2; System.out.displayln(j); }while j >= 2</pre> | 2 |
| Q15 | What will be the value of n after the execution of the following selection statement :
<pre>int n=0; if (6>7 5>4) {n=5;} else n=7;</pre> | 2 |
| Q16 | There is an insulation between programs and data in a database. Comment. | 2 |

Answer any 2 out of the given 3 questions

(3 x 2 = 6 marks)

- | | | |
|-----|--|---|
| Q17 | Explain the application of Database management systems in banking. | 3 |
| Q18 | The following code has some error(s). Rewrite the correct code, underlining all the corrections.
<pre>Int x,y x=10; For (x=20, x<10; x--) y = y-2; System.out.displayln(y); };</pre> | 3 |

Q19 Consider the following table

2+1

Department

DeptID	Dname
101	Hindi
102	Maths
103	Science

Teacher

Tid	Tname	Tdept
1	Sunita	101
2	Shama	101
3	Gita	103

- Write the SQL query to find the number of teachers teaching in each Department.
- Differentiate between Group by and having clause

Answer any 3 out of the given 5 questions

(4 x 3 = 12 marks)

Q20 a) What is an exception?

4

b) Explain each of the following terms in exception handling

- try
- catch
- finally

Q21 Online shopping is playing a vital role in making our country a digital country. Write any two situations when online shopping can be more beneficial as compared to traditional offline shopping. Also discuss any two main precautions to be taken while shopping online.

4

Q22 a) What are Arrays? Give an example.

1+3

b) Write Java code to do the following:

- Create an array Marks that stores values 78,65,85,91,82
- To print all the values of the array Marks using a loop.
- Display the average stored in the array Marks.

Q23 Write a method Disp_sal() in Java to display Net Salary on the basis of Basic Salary, Allowance and Deductions to be passed as arguments of type double. (Net Salary = Basic Salary + Allowance - Deductions). If the Net Salary is more than 50,000, an additional 2000 bonus is added. Also display Net Salary.

4

Q24 Consider the following table Faculty and write SQL statements
Table Faculty

4

F_ID	F_Name	L_Name	Hire_date	Salary
102	Amit	Mishra	1998-10-12	10000
103	Nitin	Vyas	1994-12-24	8000
104	Rakshit	Soni	2001-05-18	14000
105	Rashmi	Malhotra	2004-09-11	11000
106	Sulekha	Srivastava	2006-06-05	10000

- i) To display the details of those Faculty members whose salary is in the range of 8000 to 12000.
- ii) To display the details of Faculty members who have joined after 1998.
- iii) Find the maximum and the minimum salary.
- iv) Display details of those faculty members whose names start with S.