



**COMMON PRE-BOARD EXAMINATION**  
**INFORMATION TECHNOLOGY-Code No. 802**  
**Class-XII-(2025-26)**



**SET: 3**

**Time allowed: 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. \_\_\_\_\_ involves a sender, who encodes and sends a message through a channel, and a receiver, who decodes the message and gives feedback. 1
- a) Listening
  - b) Communication
  - c) Speaking
  - d) Reading & Writing
- ii. The \_\_\_\_\_ set up by the Indian government, can be utilized to provide support activities like technology dissemination, training and awareness to the local youth and farmers for collection, storage and reuse of agro-waste. 1
- a) Farmer Vigyan Kendras
  - b) Krishi Vigyan Kendras
  - c) Indian Vigyan Kendras
  - d) None of the above
- iii. Suraj, a college student, always talks about his achievements and expects others to admire him. He feels he is more talented than his classmates and rarely appreciates others' success. When he doesn't get attention, he becomes angry or upset. He also shows little concern for others' feelings. Based on Ravi's behavior, which personality disorder is he most likely showing? 1
- a) Antisocial Personality Disorder
  - b) Borderline Personality Disorder
  - c) Narcissistic Personality Disorder
  - d) Avoidant Personality Disorder
- iv. Which of the following functions can be performed with the help of spreadsheets? 1
- (A) Maintaining records
  - (B) Creating videos
  - (C) Analyzing data
  - (D) Performing financial calculations
- Writing letters
- a) (A), (B)
  - b) (A), (C), (D)
  - c) (A), (C)
  - d) All of the above
- v. In your school computer lab, the shared server's temporary folder is getting filled with unnecessary files, causing the system to slow down. As a student, you know that only the system administrator has the right to delete files from the server. What would be the responsible actions you can take to help manage this issue? 1
- (A) Ask the lab in-charge or system administrator to increase the storage space
  - (B) Suggest ways to regularly clean or organize the files
  - (C) Delete important files randomly to make space
  - (D) Discuss the problem casually with friends
- a) (A), (B), (C)
  - b) (A), (B)
  - c) (A), (C), (D)
  - d) (A), (D)
- vi. \_\_\_\_\_ includes activities for which there is no apparent reward but one derives enjoyment and satisfaction in doing them. 1
- a) Intrinsic Motivation
  - b) Extrinsic Motivation

- c) Both a) and b)
- d) None of the above

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

- i. The \_\_\_\_\_ statement evaluates the test before executing the body of a loop. 1
  - a) goto
  - b) while loop
  - c) do-while loop
  - d) all of the above
- ii. What does DISNIC stand for? 1
  - a) District Information System for the National Informatics Centre
  - b) Data Integration System of National Information Centre
  - c) District Internet Service Network in Communication
  - d) Digital Information System for National Industrial Centre
- iii. Which SQL query will display all employees whose job title is either 'Manager', 'Analyst', or 'Clerk'? 1
  - a) SELECT \* FROM Employee WHERE Job\_Title = ('Manager', 'Analyst', 'Clerk');
  - b) SELECT \* FROM Employee WHERE Job\_Title IN ('Manager', 'Analyst', 'Clerk');
  - c) SELECT \* FROM Employee WHERE Job\_Title BETWEEN 'Manager' AND 'Clerk';
  - d) SELECT \* FROM Employee WHERE Job\_Title LIKE ('Manager', 'Analyst', 'Clerk');
- iv. \_\_\_\_\_ are restrictions on the values, stored in a database based on the requirements. 1
  - a) Method
  - b) Constraints
  - c) Properties
  - d) None of the above
- v. Write any two Data Manipulation Language (DML) commands. 1
- vi. What is Java Bytecode? 1
- vii. Buying and selling goods over the internet is called \_\_\_\_\_. 1

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

- i. In Java most common pre-built Java output methods are \_\_\_\_\_. 1
  - a) System.out.println();
  - b) Public class
  - c) Public static void main(String[] args)
  - d) None of the above
- ii. Which online portal provides official Indian school learning resources, including e-books, question papers, and journals for students and teachers? 1
  - a) Khan Academy
  - b) Udemy
  - c) Coursera
  - d) NCERT
- iii. Which of the following is not a primitive data type in Java? 1
  - a) int
  - b) boolean
  - c) String
  - d) double
- iv. The official government portal of India, which provides information and services to citizens, is called \_\_\_\_\_. 1

- v. Which of the following services are included in telephone banking? 1
- (A) Automatic balance voice out and last five transactions inquiry
  - (B) Inquiry for all term deposit accounts
  - (C) Direct cash withdrawal
  - (D) Utility bill payments

Choose the correct option:

- a) (A), (B) and (C) only
  - b) (A), (B) and (D) only
  - c) (B), (C) and (D) only
  - d) All (A), (B), (C) and (D)
- vi. Consider the following tables – EMPLOYEES and DEPARTMENTS: 1
- Table: EMPLOYEES

EMP_ID	EMP_NAME	DEPT_ID	AGE	CITY
201	John	D001	28	Muscat
202	Joel	D002	30	Sohar
203	Jency	D001	26	Nizwa
204	Jereme	D003	32	Salalah

Table: DEPARTMENTS

DEPT_ID	DEPT_NAME	SUBJECT	LOCATION
D001	Computer	CSE	Muscat
D002	Science	IT	Sohar
D003	Commerce	DS	Nizwa

Identify the Primary Key and Foreign Key of the table EMPLOYEES.

- vii. Consider a table named Employee with the columns Emp\_ID, Emp\_Name, Job\_Title, Department, Joining\_Year, Age. The table contains nine rows of data. What is the degree and cardinality of the Employee table? 1

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

- i. State TRUE or FALSE 1
- A constructor has the same name as the class and does not have a return type.
- ii. \_\_\_\_\_ organize collection of data as a collection of relations where each relation corresponds to a table of values. 1
- a) Data method
  - b) Data system
  - c) Database
  - d) None of the above
- iii. Which of the following is not true for Online Education? 1
- a) The student can access study materials and recorded lectures online.
  - b) Once a course is enrolled, the student cannot ask questions or interact with the teacher.
  - c) The student can submit assignments and take quizzes online.
  - d) The student can choose courses and track their progress through the online platform.
- iv. A Class XII IT student is designing an Online Library Management System for their school. First, they gather information about the types of books, user roles, and functionalities needed. They also note the preferred features for searching, borrowing, and returning books. In which phase of the web application project is this information gathering and feature identification done? 1
- v. Which of the following will display the total number of rows and the lowest value of the column Fee from the table COACH? 1
- a) SELECT COUNT(), LEAST(FEE) FROM COACH;
  - b) SELECT COUNT(FEE), MIN(FEE) FROM COACH;
  - c) SELECT TOTAL(FEE), MINIMUM(FEE) FROM COACH;
  - d) SELECT COUNT(), LOW(FEE) FROM COACH;

- vi. Predict the output: 1  
 System.out.print("Waiting\_For");  
 System.out.println("Board\_Exam");
- Q. 5 Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**
- i. Write a short note on the *if* statement in Java and its syntax. 1
- ii. \_\_\_\_\_ is the SQL command that can be used to retrieve specific records or information from one or more tables in a database based on given conditions. 1
- iii. Which SQL command would you use if you need to modify the existing structure of a table by adding a new column named "Age" with data type INTEGER to the table Teacher without deleting or altering the existing data? 1
- iv. The \_\_\_\_\_ is used to execute a block of code matching one value out of many possible values. 1  
 a) if statement  
 b) switch Statement  
 c) for Statement  
 d) None of the above
- v. Which access modifier in Java is used to make a data member or a method member of a class visible only within the class? 1  
 a) private  
 b) Public  
 c) protected  
 d) default
- vi. State True or False. 1  
 An online ticket booking system stores booking details in a database so that tickets can be retrieved later.
- Q. 6 Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**
- i. What are the naming rules we have to follow to declare a variable. 1  
 a) Variable names can begin with either an alphabetic character, Underscore or a dollar sign.  
 b) Space is not allowed in variable names  
 c) Reserved words cannot be used as a variable name  
 d) All of the above
- ii. The \_\_\_\_\_ is used to execute a block of code at least once and then repeatedly as long as a specified condition is true. 1
- iii. Mention any two common payment methods used for online education platforms. 1
- iv. \_\_\_\_\_ is a language that is used to manage data stored in a RDBMS. 1  
 a) DDL  
 b) DML  
 c) SQL  
 d) None of the above
- v. Which of the following is not a TCL (Transaction Control Language) command? 1  
 a) COMMIT  
 b) ROLLBACK  
 c) SAVEPOINT  
 d) DELETE
- vi. What is a web-based application? 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** How can we set goals in daily life? 2  
**Q.8** What do you mean by interpersonal skills? 2  
**Q.9** Explain the MINTS rule of capitalization with examples for each letter. 2  
**Q.10** Write any two features of spreadsheets application. 2  
**Q.11** What is meant by a green job? 2

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

- Q.12** Give short notes on Data Definition Language. 2  
**Q.13** An IT company MyDream Ltd. maintains an SQL database for its products. The table PRODUCTS has the following structure: 2

Product_id	Name	Price	Category
101	Laptop	55000	Electronics
102	Chair	2500	Furniture
103	Keyboard	1200	Electronics
104	Notebook	50	Stationery
105	Mouse	800	Electronics

- a) Write an SQL query to display all products whose Name start with F.  
b) Write an SQL query to increase the Price of all products in the table by 5%
- Q.14** State the two different ways by which a thread can be created in Java for achieving multitasking. 2
- Q.15** Give the output of the following code: 1+1
- ```
class XII_IT {  
    public static void main(String[] args) {  
        int a = 9;  
        System.out.println("a mod 7 = " + a % 7);  
        System.out.println("a div 7 = " + a / 7);  
    }  
}
```
- Q.16** Write any two uses of database applications in the Government Sector. 2

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

- Q.17** Explain the use of any three aggregate functions in SQL. 3  
**Q.18** Consider the following statement: 3  
String mystring = " 2025 BOARD EXAM";  
Write a single line of Java code using String methods to perform each of the following operations:  
a) Append the string "ALL THE BEST" at the end of mystring.  
b) Convert mystring to lowercase.  
c) Check whether mystring ends with the word "EXAM".

- Q.19** a) Define Referential Integrity. 1+2  
 b) Consider the EMPLOYEE table and do the following:

| EID | ENAME       | DOJ        | DEPT      | SALARY |
|-----|-------------|------------|-----------|--------|
| 701 | Neha Sharma | 2018-04-15 | HR        | 520000 |
| 702 | Rajesh      | 2012-11-20 | Finance   | 480000 |
| 703 | Divya       | 2019-07-10 | Marketing | 450000 |
| 704 | Mohan       | 2010-03-05 | IT        | 600000 |

DOJ- Date of Joining

- (i) To display the maximum SALARY of employees who joined after '2015-01-01'.  
 (ii) To display all the employee names in descending order of their SALARY.

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

- Q.20** Consider the table: MEDICAL\_OPTIONS 1+1+1+1

| Course ID | Course Name   | Duration | Fee    |
|-----------|---------------|----------|--------|
| 301       | MBBS          | 5 Years  | 750000 |
| 302       | BDS           | 4 Years  | 600000 |
| 303       | B.Pharmacy    | 4 Years  | 550000 |
| 304       | Nursing       | 3 Years  | 400000 |
| 305       | Physiotherapy | 4 Years  | 500000 |

- a) Display the details of courses whose Fee lies between ₹5,00,000 and ₹7,00,000.  
 b) Display all the course details for the programs BDS and Nursing.  
 c) Display the unique Duration values offered in the MEDICAL\_OPTIONS table.  
 d) Add a new column named University (data type VARCHAR(50)) to the MEDICAL\_OPTIONS table.

- Q.21** a) Describe how Database Management Applications can be used in the Hotel sector. 2+2  
 b) 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.

- Q.22** a) Explain data members and member methods with the help of an example. 2+2  
 b) Write the Java statements for the following tasks related to array creation:  
 (i) Create an array named Marks that stores the values 40, 50, 60, 70, and 80.  
 (ii) Display all the elements of the Marks array using a loop.

- Q.23** a) The following code has some error(s). Rewrite the correct code underlining all the corrections. 2+2

```

Int x, y;
x = 5;
y = 50;
While (x <= 8) {
    y = y - 6;
    x++;
}
system.out.displayln(y);

```

- b) Write a user defined method that returns product of two numbers.

- Q.24** Differentiate between Entry controlled loop and Exit controlled loop with an example. 4