



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



SET: 2

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. Ravi often feels a deep sense of emptiness and has a constant fear that people close to him will leave him. He struggles to maintain stable relationships and frequently experiences sudden mood changes. 1
- Which of the following personality disorders best fits Ravi's symptoms?
- a) Borderline Personality Disorder
 - b) Dependent Personality Disorder
 - c) Avoidant Personality Disorder
 - d) Obsessive-Compulsive Personality Disorder
- iv. Riya, a Class XII IT student, maintains an Excel sheet containing details of 500 books in her school library. To make the list more organized and to view all books in alphabetical order by their titles, she decides to rearrange the data systematically. 1
- What should Riya do to arrange the records in a proper sequence?
- a) Apply filters
 - b) Sort the data
 - c) Use a password
 - d) Format the data
- 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. DEITY Stands for _____. 1
a) Department of Electric and Information Technology
b) Department of Electric and Indian Technology
c) Department of Electronics and Information Technology
d) None of the above
- 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 a method in Java? 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. The ability of a computer to perform the same set of actions again and again is called _____. 1
a) Looping
b) Actioning
c) Performing
d) None of the above
- iv. _____ portal is a one-point source to access all Indian Government websites at all levels and from all sectors. 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	Jiya	D002	30	Sohar
203	Jinu	D001	26	Nizwa
204	Jins	D003	32	Salalah

Table: DEPARTMENTS

DEPT_ID	DEPT_NAME	SUBJECT	LOCATION
D001	Computer	CS	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 Student with the columns Student_ID, Name, Course, Department, Year, and Age. The table contains seven rows of data. What is the degree and cardinality of the student table? 1

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

- i. State TRUE or FALSE 1
Public data members of a class can be accessed directly from outside the class.
- ii. Which SQL command is used to delete a table from the database? 1
a) REMOVE TABLE TableName;
b) DELETE TABLE TableName;
c) DROP TABLE TableName;
d) ERASE TABLE TableName;
- 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. One of the students from Class XII IT is developing a School Portal where students can check their attendance and marks online. First, they create the web pages (frontend) and set up the database (backend). Later, they connect the web pages to the database so that data can be stored and retrieved. 1
In which phase of the web application project is this frontend-backend connectivity done?
- 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("CPE");
 System.out.println("Term-I");
- Q. 5 Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**
- i. What is Java IDE? 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
 In the Design Phase of the web application development process, the problem statement is identified for which the application will be developed.
- 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. Private data members of a class cannot be accessed outside the class; however, you can give controlled access to data members outside the class through _____ and _____. 1
- iii. What is a web-based application? 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 DDL command? 1
 a) DROP
 b) ALTER
 c) CREATE
 d) UPDATE
- vi. Mention any two common payment methods used for online education platforms. 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** To create a digital presentation, suggest the names of any two popular presentation software. 2
- Q.11** Explain the importance of green jobs in reducing the emission of greenhouse gases. 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 TechMart 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 contains the letter 't'.
b) Write an SQL query to increase the Price of all products in the table by 15%
- 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 = 16;
 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 = " My Success My Dream";
- Write a single line of Java code using String methods to perform each of the following operations:
- a) Convert mystring to uppercase.
- b) Check whether mystring contains the word "Success".
- c) Append the string "All the Best" at the end of mystring.

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

| TID | TNAME      | DOA        | DEPT     | PAY    |
|-----|------------|------------|----------|--------|
| 501 | Asha Kumar | 2015-06-12 | Computer | 480000 |
| 502 | Meera      | 2013-08-25 | English  | 350000 |
| 503 | Ravi       | 2016-02-19 | Science  | 420000 |
| 504 | Karan      | 2011-11-05 | Computer | 510000 |
| 505 | Pooja      | 2014-03-28 | Maths    | 390000 |
| 506 | Arun       | 2010-09-17 | English  | 310000 |

DOA-Date of Appointment

- (i) To display the minimum PAY of teachers whose Date of Appointment is after '2012-01-01'.  
 (ii) To display all the teacher names in ascending order of their PAY.

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

- Q.20** Consider the ENGINEERING\_OPTIONS table and do the following. 1+1+1+1

| Course_ID | Course_Name            | Duration | Fee    |
|-----------|------------------------|----------|--------|
| 201       | Computer Engineering   | 4 Years  | 260000 |
| 202       | Mechanical Engineering | 4 Years  | 240000 |
| 203       | Civil Engineering      | 4 Years  | 230000 |
| 204       | Electrical Engineering | 4 Years  | 250000 |

- a) Increase the fee of “Computer Engineering” to ₹2,70,000 in the ENGINEERING\_OPTIONS table.  
 b) Display the details of courses whose names are either “Civil Engineering” or “Electrical Engineering.”  
 c) List all courses in ascending order of their fee.  
 d) Display the distinct duration values available in the ENGINEERING\_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** Differentiate between Entry controlled loop and Exit controlled loop with an example. 4

- 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** 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.