



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.
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Q. No.	<u>SECTION A: OBJECTIVE TYPE QUESTION</u>	Marks
Q. 1	Answer any 4 out of the given 6 questions on Employability Skills (1 x 4 = 4 marks)	
i.	_____ is one of the most important attitudes of an entrepreneur, which is defined as the ability to continue to do something, even when it is difficult.	1
	a) Decisiveness	
	b) Interpersonal skills	
	c) Perseverance	
	d) Taking Initiative	

- ii. It makes a person happier, and helps build and maintain relationships. It even increases one's chances of success. Choose the answer from the following: 1
- Greed
 - Positive attitude
 - Jealousy
 - Procrastination
- iii. In a steel factory, a lot of utensils are being made. The manager finds a number of defective pieces, which have to be discarded. How can the person minimise the waste? 1
- Give it to kabaadiwala or scrap dealer.
 - Dump it in a landfill site.
 - Send it back to the production line to be melted.
 - Sell it in market.
- iv. Which of these sentences is/are in passive voice? 1
- They are watching a movie.
 - The clock was repaired by Sunil.
 - He is sleeping in the room.
 - My pet dog bit the postman.
- v. Agarwal has a spreadsheet with a list of 400 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? What would Mr. Agarwal do? He will: 1
- use password
 - sort the data
 - apply filter
 - format data
- vi. Sukesh has feelings of emptiness, abandonment and suicide. What type of personality disorder is this? 1
- Borderline
 - Dependent
 - Avoidant
 - Obsessive

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

- i. _____ command is used to add or delete an attribute from a table. 1
- Update
 - Alter
 - Create
 - Modify
- ii. IRTC online portal for booking train tickets stands for: 1
- Indian Railway Controlling and Transport Corporation
 - International Railway Catering and Tourism Corporation
 - Indian Railway Catering and Tourism Corporation
 - International Railway Controlling and Transport Corporation

- vi. String myString = "Community Festival";
 System.out.println(myString.indexOf("F"));
 What will be the output?
 a) 9
 b) 10
 c) 11
 d) 12

- vii. Consider the table **COACH**:

CID	CNAME	CITY	SALARY
101	Sunaina	Mumbai	90000
102	Anamika	Delhi	80000
103	Deepti	Indore	82000
104	Meena	Delhi	78000
105	Richard	Mumbai	95000
106	Merlin	Chennai	69000

Write the MySQL query to display the name and salary of the coach(s) from Delhi.

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

- i. Which of the following constraints specifies that the value of every attribute in each tuple must be from the domain of that attribute?
 a) Key Constraint
 b) Domain Constraint
 c) Null Value Constraint
 d) Entity Integrity Constraint
- ii. What is the need of JVM?
 a) It writes Java programs automatically.
 b) It converts Java bytecode into machine code for execution.
 c) It stores Java source code permanently.
 d) It designs graphical user interfaces in Java.
- iii. What do you mean by degree of a relation?
 a) A column in a relation.
 b) Total number of rows in a relation.
 c) Total number of columns in a relation.
 d) A row in a relation.
- iv. This website provide high quality online courses for free, in collaboration with various universities across the globe. Which is this website?
 a) coursera.org
 b) khan academy
 c) w3schools.org
 d) cbse.nic.in

- v. State TRUE or FALSE: 1
In the requirement definition phase we identify the problem statement for which the web application is to be developed.
- vi. Which of the following is used to compare two String values in Java for equality? 1
a) equals()
b) =
c) concat()
d) charAt()

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

- i. What is the need of comments in a Java program? 1
- ii. How many primitive datatypes are there in Java? 1
a) 7
b) 6
c) 8
d) 9
- iii. A _____ in java is a group of related classes. 1
- iv. A _____ is a task that is undertaken to create a unique product, service, or result. 1
a) design
b) program
c) data
d) project
- v. Which keyword is used to delete a table from the database in MySQL? 1
a) DROP
b) DELETE
c) REMOVE
d) ALTER
- vi. Which command is used to access the database "Exam" in MySQL? 1

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

- i. Identify the operator from the following that performs pattern searching in MYSQL. 1
a) EXISTS operator
b) BETWEEN operator
c) LIKE operator
d) DISTINCT operator
- ii. What is the difference between the following two java statements? 1
a) int x = 50 ; b) Integer y = new Integer(50);

- iii. In Hospital databases are mainly used for: 1
- Storing information about patients such as their personal details, health records etc.
 - Storing information about patient subscription plans.
 - Storing only hardware device specifications.
 - Storing temporary files of patient internet browsing.
- iv. Identify the valid variable name in Java from the following: 1
- int
 - \$net pay
 - Max_num
 - 25cent
- v. On executing DELETE command, if you get an error “foreign key constraint”, what does it imply? 1
- Foreign key is not defined
 - Table is empty
 - Connectivity issue
 - Data is present in the other table
- vi. Aneesh has booked a railway ticket using an online ticketing website. When he reached to catch the train he found that he left the ticket at his hotel. What should he do? 1
- He can't board the train.
 - He should book a new ticket at station.
 - He should go back and get the ticket.
 - He can download the e-ticket from the website.

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** List any two features of a presentation software? 2
- Q.8** Rini is a vegetable seller, who sells only organic vegetables. 2
- Is Rini an Entrepreneur or a waged employee?
 - What is the difference between an entrepreneur and a waged employee?
- Q.9** What is an adjective? Give an example 2
- Q.10** Suhail constantly talks about his achievements, expects admiration from everyone around him, and becomes angry when criticized. He believes he is more important than others and often disregards their feelings. 2
- Which personality disorder he has and how does it reflect self-management?
- Q.11** Priya noticed that old computers, broken mobile phones, and used batteries were being dumped behind her school building along with other waste materials. She initiated a campaign to collect these E-waste separately so that useful parts (like circuit boards, batteries, and screens) can be reused or refurbished. 2

Which green skill is Priya promoting through her initiative?

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

- Q.12** List any two ways in which database application is used in the Banking Sector. 2
- Q.13** What are infinite loops in Java? Explain with an example. 2
- Q.14** Give the output of the following code segment: 2
- ```
int n = 8;
for (int j = 1; j <= n; j = j + 2)
{
 System.out.print(j * j + " ");
}
```
- Q.15** Explain primary key with suitable example. 2
- Q.16** Mr. Sunil has mistakenly entered “A positive” instead of “A negative” in ‘bloodgroup’ field of table ‘EMP’ for EID =125. Help him to write the correct SQL command to make the desired changes in the table. 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 used in MySQL. 3
- Q.18** Sayed is the owner of Genz Fashion Company that deals in garments. He wants to make a Database Application for his company. Suggest any 6 possible entities that can be used in the database for his website. 3
- Q.19** Aniket is creating a Java program to calculate the volume of a Cuboid. He writes the following code: 3
- ```
class Cuboid {
    int length ;
    int width ;
    int height ;
    int calculateVolume(){
        return length * width* height ;
    }
    public static void main(String[] args) {
        Cuboid c1= new Cuboid();
        c1.length = 15;
        c1.width = 10;
        c1.height = 10;
        System.out.println("Volume:" + c1.calculateVolume());
    }
}
```
- a) What does the method calculateVolume() do in this program?
b) How is the object of the class created?
c) What will be the output of the program?

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

- Q.20** a) What is an array in Java? 1+2+1
b) Write a Java program to create an integer array of five elements and display the array elements using a for loop.
c) What will happen if the program tries to access an array element using index that is out of range?

- Q.21** Consider the given table GARMENTS: 4

GCODE	GNAME	SIZE	COLOUR	PRIZE
110	T-Shirt	XL	Red	1400
111	Jeans	L	Blue	1600
112	Skirt	M	Black	1100
113	Ladies Jacket	XL	Blue	4000
114	Trousers	L	Brown	1500
115	Ladies Top	L	Pink	1200

Write SQL commands for the following:

- a) To display names of those garments that are available in 'XL' size.
b) To change the colour of garment with code 114 to 'Orange'
c) To display the names of garments its size and price in descending order of the price.
d) To remove the column 'COLOUR' from the table GARMENTS.
- Q.22** Consider the statement: 4
String name = "**Argentina Won**";
Write a single line Java code using String methods to perform the following:
a) Convert the name to upper case.
b) To find the index of 'W' in the string.
c) Check whether the name contains "**Win**" in it or not
d) Add a new string "**World Cup 2022**" at the end of original string.

- Q.23** Shinod wants to join an online course in Python. He also want to pay the fee for the online course through their website. 4
a) Name any one website he should browse to join the course.
b) Give any one benefit of online courses to Shinod.
c) What are the precautions to be followed while performing the online transactions?
d) Give any one advantage to the institute providing the online transaction.

- Q.24** What is the need of a constructor in OOP? Explain all features of a constructor. 2+2