



B.K. BIRLA CENTRE FOR EDUCATION

SARALA BIRLA GROUP OF SCHOOLS
A CBSE DAY-CUM-BOYS' RESIDENTIAL SCHOOL

PRE BOARD-II EXAM: 2025-26 INFORMATION TECHNOLOGY (802)

SET-01/802

Class: XII (SUBJECT-4)

Date: 09-12-2025

Admission No. :

Time: 3 hrs.

Max Marks: 60

Roll No. :

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 has 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.

(4 x 1 = 4)

- (i) A _____ sentence shares straightforward information and always ends with a full stop.
- | | |
|-------------------------|---------------------------|
| a) Declarative sentence | b) Interrogative sentence |
| c) Imperative sentence | d) Exclamatory sentence |
- (ii) Which of the following statements is *incorrect* about physiological motives?
- | | |
|--|---|
| a) They arise from bodily needs such as hunger and thirst. | b) Psychological motives involve achievement and affiliation. |
| c) Physiological motives push behaviour to fulfil essential physical requirements. | d) They consist of emotional and mental traits. |
- (iii) Samaira invests her entire evening in solving mock tests because she wants to secure admission to her desired college. This situation reflects:
- | | |
|-------------------------|-------------------------|
| a) Intrinsic motivation | b) Extrinsic motivation |
| c) Inspiration | d) Self-management |
- (iv) _____ reorganizes selected data permanently, whereas filtering only hides unrelated entries without removing them.

- a) Charts
- b) Predefined functions
- c) Sorting
- d) Solver
- (v) Dhruv shifted all the loyal workers from his burnt factory to another unit to ensure their safety and job security. This shows his:
 - a) Confidence in himself
 - b) Proper supervision
 - c) Care for employees' well-being
 - d) Target planning
- (vi) A sentence that expresses strong feelings and typically ends with an exclamation mark is called a/an _____.
 - a) Declarative
 - b) Exclamatory
 - c) Imperative
 - d) Interrogative

Q. (2) Answer any 5 questions out of the given 7 questions

(5 x 1 = 5)

- (i) Which of the following is **NOT** considered a relational operator?
 - (a) >
 - (b) =
 - (c) +
 - (d) !=
- (ii) Java supports a fixed number of primitive data types. How many are there, and write any two.
- (iii) Which SQL command will show all employee names that include the letter 'a' anywhere in the Name field?
 - (a) SELECT Name FROM Employee WHERE Name LIKE "%a%";
 - (b) SELECT Name FROM Employee WHERE Name = "%a%";
 - (c) SELECT Name FROM Employee WHERE Name LIKE "a%";
 - (d) SELECT Name FROM Employee WHERE Name IN ("a", "%a");
- (iv) A minimum set of fields that uniquely identify a row in a table is known as a _____.
 - (a) Candidate Key
 - (b) Super Key
 - (c) Alternate Key
 - (d) Primary Attribute
- (v) What are aggregate functions?
- (vi) In SQL, while applying condition on a group, instead of WHERE clause clause is used.
- (vii) command displays list of databases available in the current server.

Q. (3) Answer any 6 questions out of the given 7 questions

(6 x 1 = 6)

- (i) Which constraint ensures that a column cannot have NULL values?
- (ii) Name any two aggregate functions used in SQL?
- (iii) Consider the table, Cars given below:

Table: Cars

MID	NAME	BRAND	CAPACITY	COLOR
H101	I20	HYUNDAI	5	WHITE
M012	XUV500	MAHINDRA	5	BLUE
H131	VERNA	HYUNDAI	5	BLUE

Identify the degree and cardinality of the table Vehicle.

- (iv) How can users improve the safety of their passwords when making online payments?
 - a) Using personal info like birthdate
 - b) Using a mix of letters, numbers, and symbols
 - c) Writing the password on paper
 - d) Sharing the password with friends
- (v) Consider the following table: PRODUCTS

ID	PNAME	PRICE
P001	PEN	50
P002	NOTEBOOK	120
P003	PENCIL	20

Identify the Primary key and Foreign key of the table ORDERS.

(vi) What kind of online courses does Khan Academy provide?

- (a) Free (b) Paid
- (c) Mobile wallets (d) Internet banking

(vii) What does the R in IRCTC stand for?

- (a) Robot (b) Rover
- (c) Railway (d) None of these

Q.(4) Answer any 5 questions out of the given 6 questions.

(5 x 1 = 5)

(i) Adrisa wanted to book her flight to attend an international conference on “Women and AI”. She needs to book her tickets using an online reservation system. Help her to follow the correct sequence of steps to do the same.

- A. Make the payment
- B. Open the online reservation website
- C. Choose the dates of travel
- D. Browse and search for the required information

- a) B, D, C, A b) A, B, C, D
- c) A, D, C, B d) B, A, D, C

(ii) The _____ aggregate function in SQL is used to find the average values of a numeric column:

- (a) Average() (b) Avg()
- (c) Mean() (d) Mid()

(iii) NICNET – A national satellite based computer network in India was launched in the year :

- (a) 1986 (b) 1987 (c) 1990 (d) 1992

(iv) **State True or False :**

The customer can select the goods to be purchased and store them in their online shopping basket. (True)

(v) The first step in online shopping is to :

- (a) Visit the websites (b) Open your smartphone
- (c) Use your debit card (d) None of these

(vi) Which Java statement is used to stop a loop before it finishes all its iterations?

- (a) break (b) exit (c) continue (d) stop

Q. (5) Answer any 5 questions out of the given 6 questions

(5 x 1 = 5)

(i) **State True or False :**

Fixing of all the application bugs and fixing them is part of the Testing Phase of the project.

(ii) Aparna wanted to remove the table PERSONAL permanently from the database SCHOOL.

Write the command to help her do the same.

(iii) A named constraints in a table can be easily deleted or updated using the _____ command.

(iv) Differentiate between the following two java statements:

char Alpha= “A” ; //Statement #1

String Name= “Ajay”; //Statement #2

(v) What happens if the condition specified in an “if” statement evaluates to false ?

- (a) The program terminates
- (b) The code block associated with the “if” statement is skipped.
- (c) The code block associated with the “if” statement is executed
- (d) An exception is thrown.

(vi) A Java compiler instead of translating Java code to machine language code, translates it into

Q. (6) Answer any 5 questions out of the given 6 questions

(5 x 1 = 5)

(i) What will be the result of the following code?

```
String s = "JAVA";
```

```
System.out.println(s.length());
```

- (a) 3 (b) 4 (c) 5 (d) Error

(ii) The wrapper class of the primitive type char in Java is

(iii) Which keyword is used to prevent a method from being overridden in Java?

- (a) static (b) final (c) private (d) protected

(iv) What is the result of the following code snippet ?

```
String str = "Hello";
```

```
System.out.println(str.indexOf('l'));
```

- (a) 1 (b) 2 (c) 3 (d) -1

(v) Which Java loop checks the condition **after** executing the loop body at least once?

- (a) for (b) while (c) do-while (d) None of these

(vi) What property of a table is avoided with the use of primary key ?

- (a) Data inconsistency (b) Data privacy breach
(c) Data redundancy (d) Online data search

SECTION B: SUBJECTIVE TYPE QUESTIONS

Answer any 3 out of the given 5 questions on Employability Skills.

(3 x 2 = 6)

Answer each question in 20-30 words.

Q. (7) What is Active Listening?

Q. (8) Explain Positive Attitude.

Q. (9) Differentiate between workbook and worksheet?

Q. (10) Explain any two qualities of an entrepreneur.

Q. (11) Write two ways to reduce greenhouse gases.

Answer any 3 out of the given 5 questions on Subject Specific Skills.

(3 x 2 = 6)

Q. (12) What are the benefit of naming a constraint?

Q. (13) Write the SQL command to create an employee table

Employee_num Char(4)	HRA int	DA int	Gross decimal	PF Contribution int
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Q. (14) Give the output of the following code segment of Java-

```
int x = 1;
while (x <= 5)
{
    System.out.print(x + " ");
    x += 2;
}
```

Q. (15) Rewrite the following code after correcting the syntax errors, underline each correction made:

```
int sum = 0;
for (int i = 1; i <= 4; i++)
{
    sum = sum + i;
```

}

System.out.println(sum);

Q.(16) What are comments in Java programs and why are they important?

Answer any 2 out of the given 3 questions on Subject Specific Skills.

(2 x 3 = 6)

Q. (17) Explain the following aggregate functions with examples.

(a) SUM (b) MAX (c) AVG

Q. (18) Consider the following string variable :

String str1 = "Hello";

String str2 = "morning";

Write the code statements in Java :

(a) To convert the first letter of a string variable "str1" into uppercase.

(b) To convert combined length of string str1 and str2.

(c) To display str1 and str2 after joining them.

Q. (19) What is the way in which DBMS and programming is useful in the application of banking, e-commerce and payroll management systems ?

Answer any 3 out of the given 5 questions on Subject Specific Skills.

(3 x 4 = 12)

Q. (20) Write short notes on the following :

(a) End User (b) DB Administrator (c) Application Programmer (d) System Analyst

Q. (21) Write and explain any four precautions that you must take while performing online transaction.

Q. (22) Write a program in Java to take two strings as input and report their lengths.

Q. (23) What is the use of ResultSet data type in Java with database?

Q. (24) Write a program in Java to print the table of 8.

***** ALL THE BEST *****