



B.K. BIRLA CENTRE FOR EDUCATION

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

PRE BOARD 1 EXAM : 2025-26 INFORMATION TECHNOLOGY (802)

Class: XII (SUBJECT-5)

Date: 07-11-2025

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) Speaking, listening, reading and writing are the parts of, which help us to understand others.
- | | |
|-------------------|----------------------|
| (a) Communication | (b) Active listening |
| (c) Interview | (d) None of these |
- (ii) Ravi has feelings of emptiness, abandonment and suicide. What type of personality disorder is this ?
- | | |
|----------------|---------------|
| (a) Borderline | (b) Dependent |
| (c) Avoidant | (d) Obsessive |
- (iii) Self management is also called
- | | |
|------------------|-------------------|
| (a) Self Control | (b) Personality |
| (c) Stress | (d) None of these |
- (iv) Mr Gupta has a spreadsheet with a list of 500 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 Gupta do ? He will :
- | | |
|------------------|-------------------|
| (a) Apply filter | (b) sort the data |
| (c) use password | (d) format data |

- (v) Anuja buys bulbs for her business from Noida. She learns that bulbs are cheaper in Faridabad. So, she decides to start buying bulbs from there.
- (a) Makes decisions (b) Divides income
(c) Takes risk (d) None of these
- (vi) includes visiting fragile, pristine and undisturbed areas of nature.
- (a) Nature tourism (b) Environment tourism
(c) Eco-tourism (d) None of these

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

- (i) What is one of the advantages of using a tabular format for storing data in a database ?
- (a) It allows easy storage, retrieval and data manipulation.
(b) It increases data complexity.
(c) It makes data extraction difficult.
(d) It prevents interaction with applications.
- (ii) What is Data ?
- (iii) What role does SQL play in a database system ?
- (a) Ensures data uniqueness and consistency
(b) Provides security for data in transit
(c) Enables easy data retrieval and querying
(d) Allows data backup and recovery
- (iv) command displays list of databases available in the current server.
- (a) Show Databases (b) Show tables
(c) Create tables (d) Display tables
- (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) The information about entities in the real world is stored in a format within a database.
- (ii) Name any two aggregate functions used in SQL ?
- (iii) Consider the table, Vehicle given below:

Table: VEHICLE

MID	NAME	BRAND	CAPACITY	COLOR
H101	I20	HYUNDAI	5	WHITE
M012	XUV500	MAHINDRA	5	BLUE
T107	INNOVA	TOYOTA	7	SILVER
H131	VERNA	HYUNDAI	5	BLUE
M010	CELERIO	MARUTI	5	RED
R100	DUSTER	RENAULT	7	WHITE

Identify the degree and cardinality of the table Vehicle.

- (iv) What is the full form of IRCTC ?
- (v) Consider the following tables : ORDERS and PRODUCTS
- Table : ORDERS

ORDERNO	DATE	ID	QTY
1001	12-01-2022	P001	180
1002	31-12-2022	P002	175

1003	20-01-2023	P001	125
1004	25-12-2023	P003	190
1005	20-11-2023	P002	155
1006	15-11-2022	P001	130

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) Credit card bills as well as Internet and Cable bills can be paid :
 (a) Online (b) Offline
 (c) Both (a) and (b) (d) None of these

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

(5 x 1 = 5)

- (i) Unit, integration and user acceptance are all forms of :
 (a) Frontend development (b) Backend development
 (c) Integration (d) Testing
- (ii) In which phase of the web application creation is design of the application created ?
 (a) Requirement Definition (b) Implementation
 (c) Design (d) Testing
- (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 :**
 Applying promo code or discounts is one of the steps of online shopping.
- (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 statement is used to terminate a “For” loop prematurely in Java ?

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

(5 x 1 = 5)

- (i) **State True or False :**
 A class cannot be declared as Private in Java.
- (ii) What is the use of the main() method in a Java program?
- (iii) The result of the Java expression below is a
 (5>3) && (8<9)
- (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) In Java, what is the purpose of the “if” statement ?
 (a) To declare a variable
 (b) To repeat a block of code until a condition is met
 (c) To execute a block of code conditionally based on a Boolean expression
 (d) To perform arithmetic operations
 (ii) The wrapper class of the primitive type int in Java is
 (iii) Which method / function is used to concatenate two strings in Java ?
 (iv) What is the result of the following code snippet ?
 String str = “Hello”;
 System.out.println(str.indexOf(‘1’));
 (a) 1 (b) 2 (c) 3 (d) -1
 (v) In java, why is it necessary to initialize variables before usage ?
 (a) To ensure that the variable holds a specific value throughout its lifecycle.
 (b) To prevent memory leaks in the program
 (c) To allow the compiler to allocate the appropriate amount of memory for the variable
 (d) To optimize the performance of the program by reducing memory consumption
 (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)** Explain any four elements of communication cycle.
Q. (8) What is Goal Setting ? Explain with the help of SMART acronym.
Q. (9) How can you insert an image in a slide in Impress ?
Q. (10) Explain any four qualities of an entrepreneur.
Q. (11) Define a Green job. Explain any two benefits of a green job.

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

(3 x 2 = 6)

- Q.(12)** Name and explain four database operations.
Q.(13) Take the below table as an example. (Table Name : Employee)

Employee_num	HRA	DA	Gross	PF Contribution
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Write an SQL query to display for the following :

- (a) Employee_num, HRA and Gross for all the employees.
 (b) Employee_num, DA and PF Contribution for employees whose DA is 7000 or more.
Q.(14) Give the output of the following code segment of Java-
 int Num=4;
 int Fact=1;
 for (int i=1;i<=Num;i++)

```

{
Fact*=i;
System.out.println(Fact);
}

```

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

```

int number= = 1;
while (number <= 5);
{
System.out.print("Square of " + number);
System.out.println(" = " , number*number);
Number+=1;
}

```

Q.(16) Mention and explain any two areas where DBMS and programming are used.

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

(2 x 3 = 6)

Q.(17) A school has a database called Student. It has columns such as Roll num, Name, Father's name, Marks in Pre-Final, Marks in Final. Describe the table and its data types.

Q.(18) Convert the following Java code from for loop to while loop without changing the logic.

```

int X=4,Y=3;
int Pow=1;
for (int i=1;i<=Y;i++)
Pow*=X;
System.out.println(Pow);

```

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) Primary key (b) Unique key (c) Foreign key (d) Candidate key

Q.(21) Describe the following online course websites :

(a) Coursera (b) Udacity (c) Khan academy (d) Udemy

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

Q.(23) Write a program in Java for the following :

(a) Print the multiplication table up to 10 for the integer entered on input.

(b) In case the input is string, for example "abcdef", then print :

```

a
ab
abc
abcd

```

Print only first four, or as many as the string length, if shorter than four in length.

Q.(24) Write a program in Java to take a string as input. You have to report whether the input is a string or a number.

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