



B.K. BIRLA CENTRE FOR EDUCATION

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

PRE BOARD 2 EXAM: 2025-26 INFORMATION TECHNOLOGY (802)

Class: XII (SUBJECT-5)

Date: 11-12-2025

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) What are the characteristics of an ideal message ?
 - (a) Clear
 - (b) Concise
 - (c) Accurate
 - (d) All of these
- (ii) Mona is helping her sister to overcome a personality disorder. What should she do ?
 - (a) Talk to her sister
 - (b) Engage her in hobbies
 - (c) Help her build confidence
 - (d) All of these
- (iii) is the feeling of being overwhelmed or unable to cope with mental or emotional pressure.
 - (a) Stress
 - (b) Positive attitude
 - (c) Self-management
 - (d) Motivation
- (iv) What kind of software are Adobe Spark and Keynote ?
 - (a) Documentation
 - (b) Presentation
 - (c) Spreadsheet
 - (d) DBMS
- (v) Sayed knows what business he wants to do but does not know what steps he has to take to get it running. The barrier stopping him is
 - (a) Building the right team
 - (b) lack of plan
 - (c) Risk taking
 - (d) None of these

- (vi) Neelima's children fall sick very often. They have a cold and cough every month. What should she do ?
(a) Grow organic food in the kitchen garden (b) Use air purifiers with HEPA filters
(c) Keep them inside the house all the time (d) Paint her house with non-VOC paint

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

(5 x 1 = 5)

- (i) The number of attributes in a relation is called its
(a) Degree (b) Attribute
(c) Cardinality (d) Domain
- (ii) What is Database ?
- (iii) The information about entities in the real world is stored in aformat within a database.
- (iv) 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.
- (v) command displays list of databases available in the current server.
(a) Show Databases (b) Show tables
(c) Create tables (d) Display tables
- (vi) What is the initial step in setting up a database system ?
(a) Executing the CREATE DATABASE command
(b) Designing the database schema
(c) Populating the database with data
(d) Configuring database permissions
- (vii) Which constraint ensures that a column cannot have NULL values ?
(a) Unique (b) Primary key
(c) Not null (d) Foreign key

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

(6 x 1 = 6)

- (i) What SQL command is used to display a list of all databases in a database management system ?
(a) Display databases; (b) List databases;
(c). Show databases; (d) View databases;
- (ii) command deletes one or more tuples from a table.
- (iii) In SQL, while applying condition on a group, instead of WHERE clause clause is used.
- (iv) Shopping online is a Task. It provides efficient search tools and filters that allow customers to easily locate products.
- (v) **State True or False :** Applying promo codes or discounts is one of the steps of online shopping.
- (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) Rebel

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

(5 x 1 = 5)

- (i) The first step in online shopping is to :
(a) Visit the website (b) Open your smartphone
(c) Use your debit card (d) None of these
- (ii) NICNET – A national satellite based computer network in India was launched in the year :

(a) 1986

(b) 1987

(c) 1990

(d) 1992

(iii) State True or False :

AWS, Azure and Google cloud are examples of weather forecasting system.

(iv) Before purchasing a product, you can go through the given by other customers and learn more about the quality of the product from their experiences.

(v) In online reservation your transactions are to you. Online reservation systems are secured.

(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) In Java, when is the condition of a “while” loop evaluated ?

- (a) Before each iteration of the loop
- (b) After each iteration of the loop
- (c) Only once before the first iteration of the loop
- (d) Only once after the last iteration of the loop

(ii) Which method / function is used to concatenate two strings in Java ?

- (a) Concat()
- (b) add()
- (c) join()
- (d) merge()

(iii) 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

(iv) Which of the following is a logical operator in Java ?

- (a) &&
- (b) ==
- (c) @
- (d) +

(v) The result of the Java expression below is a

(5>3) && (10<20)

(vi) State True or False :

A class cannot be declared as Private in Java.

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

(5 x 1 = 5)

(i) 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.

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

(iii) What is the process of extracting a substring from a larger string called ?

- (a) Slicing
- (b) Splitting
- (c) Trimming
- (d) Sub stringing

(iv) Which keyword is used to terminate a “while” loop prematurely in Java ?

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

(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 language can be used to interact with the DBMS ?

- (a) SQL
- (b) Java
- (c) C#
- (d) Ruby

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) Define : (a) active listening (b) Sentence
- Q. (8) What are personality disorders ? Write about 2 such personality disorders.
- Q. (9) Describe any two mathematical operators used in OpenOffice Calc.
- Q. (10) Rohan has a successful start-up company. According to him “Decision Making is considered to be one of the important entrepreneurial competency”. Do you agree with Rohan’s opinion ? Justify.
- Q. (11) Rohit noticed that plastic waste was a major issue in his school. He initiated a campaign encouraging students to carry reusable water bottles and lunch boxes. Which green skill is Rohit promoting through his initiative? Explain.

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

(3 x 2 = 6)

- Q. (12) What is RDBMS ? Write one advantage and one disadvantage of DBMS approach.
- Q. (13) Write SQL command to create the following table : (Table Name : Gadget)

Column Name	Datatype
G_ID	Char(4)
Description	Varchar(20)
Manufacture_Date	Date
Price	Decimal
Warranty	Int

- Q. (14) What is the difference between while and do-while loop in Java ? Explain with example.
- Q. (15) What are comments in Java programs and why are they important?
- Q. (16) Think and write about the database tables required for the following projects :
(a) Airlines (b) Hospital management system

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) What are the types of users in DBMS ? Explain in detail.

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

Q. (22) What are different types of loops used in Java ? Explain each with example.

Q.(23) Write a program in Java to take a string as input. You have to report whether the input is a string or a number.

Q. (24) Write a Java program to check whether a number entered by the user is even or odd. Also explain how the modulus (%) operator works in your program.

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