B.K. BIRLA CENTRE FOR EDUCATION

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

PRE BOARD 3 EXAM : 2025-26
INFORMATION TECHNOLOGY (802)

Class: XII (SUBJECT-5)   **Time : 3 hrs.**
Date: 17-01-2026   **Max Marks: 60**
Admission No. : …..……………   **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) The ………………. is a face to face meeting and discussion between two or more people for a specific purpose.
   (a) Interview   (b) Message
   (c) Object   (d) None of these

(ii) Self management is also called ……….
   (a) Self control   (b) Personality
   (c) Stress   (d) None of these

(iii) 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

(iv) The intersection point between a row and column is called ………………
   (a) Row   (b) Column
   (c) Table   (d) Cell

(v) The ability to work with others …………………
   (a) Organisation skills   (b) Interpersonal skills
   (c) Initiative   (d) None of these

(vi) A teacher who taes up the role of sensitising young minds and creates acceptance amongst them to contribute in protecting the environment is …………………
    (a) Counsellor   (b) Geography teacher
    (c) Environmental education teacher   (d) None of these

Q.(2) Answer any 5 questions out of the given 7 questions.   **(5 x 1 = 5)**
    (i) What is the primary purpose of a database.
        (a) To represent a mini real world   (b) To create complex applications
        (c) To replace real world data   (d) To organize data in a random format
    (ii) What is DBMS ?
    (iii) The columns in a database table represent the ……………. or properties of the entiies.
    (iv) 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
    (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) …………………. method of a string class returns the count of characters present in a string.
        (a) indexOf()   (b) indexAt()
        (c) length()   (d) isEmpty()

Q.(3) Answer any 6 questions out of the given 7 questions   **(6 x 1 = 6)**
    (i) What SQL command is used to display the tables within a specific database ?
        (a) Show database_name;   (b) Display database_name;
        (b) Show tables from database_name;   (d) List tables database_name;
    (ii) The command ………………… databases; will show all the databases.
    (iii) To change the contents of a table in the database, you may use ……………….. command.
    (iv) …………………. system allows you to compare prices also.
    (v) **State True or False :** AWS, Azure and Google Cloud are examples of weather forecasting systems.
    (vi) The T in IRCTC stands for …………………..
    (vii) Unit, integration and user acceptance are all forms of :
        (a) Frontend development   (b) Backend development
        (c) Integration   (d) Testing

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) In which phase of the web application creation is design of the application created ?
        (a) Requirement definition   (b) Implementation
        (c) Design   (d) Testing
    (iii) **State True or False :**
        Stanford University offers a wide range of undergraduate and graduate level courses for free through its OpenCourseWare platform.

(iv) Shopping online is a ………………. task. It provides efficient search tools and filters that allow customers to easily locate products.

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

(vi) Which method / function is used to concatenate two strings in Java ?
(a) Concat()
(b) add()
(c) join()
(d) merge()

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

(i) Which method is used to find the length of an array in Java ?
(a) arraySize()
(b) size()
(c). length()
(d) getSize()

(ii) What is the correct way to access the third element of an array named "numbers" in Java ?
(a) numbers[2]
(b) numbers[3]
(c) numbers(2)
(d) numbers.get(3)

(iii) What happens if the condition of a "for" loop in Java is initially false ?
(a) The loop executes indefinitely
(b) The loop code block is skipped entirely
(c) The loop code block executes at least once.
(d) An exception is thrown.

(iv) What is the process of reversing the elements of an array called ?
(a) Reordering
(b) Shuffling
(c) Swapping
(d) Reversing

(v) What is the result of the expression (5>3) && (10<20) in Java ?
(a) True
(b) False
(c) Error
(d) Null

(vi) State True or False :
The below lines declare a class with the name ABC.
Public class ABC {
                }

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

(i) What is an array in Java ?
(a) A collection of elements with different data types
(b) A data structure that stores elements of the same data type sequentially.
(c) A mathematical function used for sorting elements.
(d) A loop construct used for iteration.

(ii) What is the size of a Boolean variable in java ?

(iii) What is the process of extracting a substring from a larger string called ?
(a) Slicing
(b) Splitting
(c). Trimming
(d) Substringing

(iv) 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

(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 in DBMS?
(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 / components of communication cycle.
Q. (8) What is Goal setting ? Explain with the help of SMART acronym.
Q. (9) Differentiate between Max() and Min() functions with respect to OpenOffice calc.
Q. (10) Explain any four qualities of an entrepreneur.
Q. (11) Define a Green job. Mention a few benefits of a green job.

Answer any 3 out of the given 5 questions on Subject Specific Skills.   **(3 x 2 = 6)**
Q.(12) What are the types of users in DBMS ? Explain.
Q.(13) What is the difference in retrieve a particular record and retrieving all the records from a database using select statement in SQL.
Q.(14) What are the best practices for naming variables in Java ?
Q.(15) Explain Switch case used in Java. Give syntax and example also.
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) Write SQL command to create the following table :
    Table : Gadget

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

Write a query for the following :
    (a) To display details of all the products
    (b) To display details of products whose price is more than 10000.
Q.(18) Write a program in Java to take three integers and display the integers in increasing order.
Q.(19) What is the way in which DBMS and programming is useful in the application of education, telecommunications and hotels.?

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 aggregate functions used in SQL :
    (a) SUM   (b) MAX   (c) MIN   (d) AVG
Q.(21) Describe the following online course websites :
    (a) Coursera   (b) Udacity   (c) Khan academy   (d) Udemy
Q.(22) What are different types of loops used in Java ? Explain each with example.
Q.(23) Write a program in Java to take two strings as input and report their lengths.
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 ************