



B.K. BIRLA CENTRE FOR EDUCATION

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



TERM 1 EXAMINATION (2026-27)
INFORMATION TECHNOLOGY (802)
SET - 2

Class: XII (SUBJECT-5)

Date:

Admission No.

Time : 3 hrs.

Max Marks: 60

Roll No. :

General Instructions:

1. Please read the instructions carefully.
2. This Question Paper consists of 23 questions in two sections: Section A & Section B.
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. All questions of a particular section must be attempted in the correct order.
5. **SECTION A - OBJECTIVE TYPE QUESTIONS (30 MARKS):**
 - i. This section has 05 questions.
 - ii. Marks allotted are mentioned against each question/part.
 - iii. There is no negative marking.
 - iv. Do as per the instructions given.
6. **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 person who begins the process of communication by sending a message is called the

.....

- (a) Receiver (b) Sender (c) Channel (d) Feedback

(ii) Which of the following is an example of non-verbal communication?

- (a) A telephone call (b) A hand-written letter
(c) Facial expressions and gestures (d) An e-mail

(iii) In the acronym 'SMART' used to set goals, the letter 'A' implies

- (a) Attractive (b) Achievable (c) Available (d) Advanced

(iv) Which personality trait is characterised by an inflated sense of self-importance and a need for admiration?

- (a) Paranoid (b) Schizoid (c) Narcissistic (d) Avoidant

(v) The rectangular box formed at the intersection of a row and a column in a spreadsheet is called a

.....

- (a) Range (b) Cell (c) Table (d) Worksheet

(vi) Which feature of a spreadsheet is used to display only those rows that satisfy a given condition?

- (a) Sorting (b) Filtering (c) Formatting (d) Merging

Q.(2) Answer any 8 out of the given 10 questions: (8 x 1 = 8)

(i) Which of the following is a major disadvantage of a traditional file system?

- (a) Data redundancy (b) Data security

- (c) Data sharing (d) Data backup
- (ii) A table in a relational database is also known as a
 (a) Tuple (b) Relation (c) Domain (d) Attribute
- (iii) The number of tuples present in a relation is called its
 (a) Degree (b) Cardinality (c) Domain (d) Attribute
- (iv) Which key is used to establish a relationship between two tables of a database?
 (a) Primary key (b) Candidate key (c) Foreign key (d) Alternate key
- (v) The set of all possible values that an attribute can take is called its
 (a) Degree (b) Tuple (c) Domain (d) Relation
- (vi) Which of the following is an advantage of using a DBMS?
 (a) Increase in data redundancy (b) Reduction in data inconsistency
 (c) Loss of data security (d) Difficulty in retrieving data
- (vii) Who is responsible for designing, managing and maintaining the database of an organisation?
 (a) Programmer (b) Database Administrator
 (c) End user (d) Network Administrator
- (viii) Which of the following is an example of DBMS software?
 (a) MySQL (b) Photoshop
 (c) Notepad (d) VLC Media Player
- (ix) Raw, unprocessed facts and figures are known as
 (a) Information (b) Data (c) Report (d) Record
- (x) State whether the following statement is True or False:
 A primary key of a table can contain a NULL value.

Q.(3) Answer any 5 out of the given 6 questions: (5 x 1 = 5)

- (i) Which SQL command is used to display the list of all the tables present in a database?
 (a) SHOW DATABASES; (b) SHOW TABLES;
 (c) DISPLAY TABLES; (d) LIST TABLES;
- (ii) Which of the following aggregate functions returns the number of rows in a table?
 (a) SUM() (b) COUNT() (c) MAX() (d) AVG()
- (iii) Which SQL statement is used to retrieve data from one or more tables of a database?
 (a) INSERT (b) UPDATE (c) SELECT (d) ALTER
- (iv) Which of the following statements is true about using the RESTRICT option while dropping a column in SQL?
 (a) The column is dropped even if it is referenced in other tables.
 (b) The column cannot be dropped if it is being referenced in other tables.
 (c) The column is renamed instead of being dropped.
 (d) The column is dropped along with all the dependent objects automatically.
- (v) Which SQL command is used to remove a table along with its structure from a database?
 (a) DELETE (b) DROP (c) TRUNCATE (d) REMOVE
- (vi) Fill in the blank: The clause is used with the SELECT statement to group the rows on the basis of the value of a column.
 (a) ORDER BY (b) WHERE (c) GROUP BY (d) HAVING

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

- (i) Which of the following is an example of an online reservation system?
 (a) www.ircct.co.in (b) www.w3schools.com
 (c) www.mysql.com (d) www.netbeans.org
- (ii) Which of the following best describes webinars?
 (a) Pre-recorded video courses
 (b) Text-based documents
 (c) Real-time lectures with opportunities to ask questions
 (d) Interactive games for learning
- (iii) What is a major benefit of online learning?
 (a) It only teaches how to use software.

- (b) It allows learners to study at their own location, time and pace.
- (c) It discriminates between students on the basis of age, caste and qualification.
- (d) It is available only in regional languages.
- (iv) In the Requirement Definition Phase of a web application project, defining the scope involves:
 - (a) Designing the user interface
 - (b) Listing the features, goals and project limitations
 - (c) Writing and testing the code
 - (d) Deploying and managing the website
- (v) Which of the following correctly matches the website with its main focus?
 - (a) w3schools.com – Humanities and Social Science courses
 - (b) coursera.org – Drag and drop website development tool
 - (c) ncert.nic.in – Online learning resources like e-books and journals
 - (d) udacity.org – Free grammar testing website
- (vi) Which of the following is not an advantage of online shopping?
 - (a) Shopping is possible round the clock.
 - (b) Products can be compared easily.
 - (c) The product cannot be physically examined before purchase.
 - (d) Home delivery of the product is available.

Q.(5) Answer any 8 out of the given 10 questions:

(8 x 1 = 8)

- (i) Mention the expanded form of IDE in the context of programming.
- (ii) Which of the following is a logical operator in Java?
 - (a) %
 - (b) &&
 - (c) +=
 - (d) ==
- (iii) What will be the output of the following Java statements?


```
int a = 10;
a = a - 4;
System.out.print(a);
```

 - (a) 10
 - (b) 6
 - (c) 4
 - (d) 14
- (iv) Which method is used in Java to display the output on the screen and then move the cursor to the next line?
 - (a) System.out.print()
 - (b) System.out.println()
 - (c) getText()
 - (d) setText()
- (v) Which of the following statements is true about the switch statement in Java?
 - (a) The switch statement is used to execute a block of code based on the value of an expression.
 - (b) The break statement is optional and has no effect on the execution of a switch.
 - (c) If no case matches, the program generates an error.
 - (d) A switch can have only one case statement.
- (vi) Which data type is used to store true or false values?
 - (a) int
 - (b) Boolean
 - (c) char
 - (d) float
- (vii) Which keyword is used to exit from a switch case?
 - (a) stop
 - (b) exit
 - (c) break
 - (d) return
- (viii) How many primitive data types are available in Java?
 - (a) 6
 - (b) 7
 - (c) 8
 - (d) 9
- (ix) State whether the following statement is True or False:
If there is only one statement in the body of a for loop, the set of curly braces enclosing the body can be omitted.
- (x) Which loop executes its body at least once?
 - (a) for
 - (b) while
 - (c) do-while
 - (d) switch

SECTION B: SUBJECTIVE TYPE QUESTIONS

Answer any 3 out of the given 5 questions: Answer each question in 20 – 30 words.(3 x 2 = 6)

Q.(6) What is active listening? Mention any two ways of becoming a better listener. 1+1=2

- Q.(7) Write any two points that should be kept in mind while writing an effective e-mail. 2
- Q.(8) What is a personality disorder? Name any two common personality disorders. 1+1=2
- Q.(9) Explain the SMART method of setting goals. 2
- Q.(10) Write any two differences between sorting and filtering of data in a spreadsheet. 2

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

- Q.(11) What is data redundancy? How does a Database Management System help in reducing it? 1+1=2
- Q.(12) Name and explain any two aggregate functions used in SQL. 1+1=2
- Q.(13) Write the output of the following Java code: 2

```
public class JavaProg {
    public static void main(String[] args) {
        String myStr = "Digital-India ";
        System.out.println(myStr.concat("Mission"));
    }
}
```

- Q.(14) Write any two rules that must be followed while naming a variable in Java. 2
- Q.(15) Write any two differences between the while loop and the do-while loop in Java. 2

Answer any 2 out of the given 4 questions: Answer each question in 30 – 50 words.

(2 x 3 = 6)

- Q.(16) What is a primary key? How is it different from a foreign key? Explain with the help of an example. 1+2=3
- Q.(17) Write any three advantages of online shopping for a customer. 3
- Q.(18) Explain the following control statements of Java with the help of one example each: 3
- (a) if-else statement (b) for loop (c) do-while loop
- Q.(19) What will be the output of the following Java program when executed? 3

```
public class Series {
    public static void main(String[] args) {
        int sum = 0;
        for (int i = 1; i <= 5; i++) {
            if (i % 2 == 0)
                sum = sum + i;
        }
        System.out.println("Sum = " + sum);
    }
}
```

Answer any 3 out of the given 4 questions on Introduction to DBMS, Operating Web based Application and Java Programming with NetBeans. Answer each question in 50 – 80 words.

(3 x 4 = 12)

- Q.(20) Answer the following questions related to a Database Management System: 1+1+1+1=4
- (a) What is a Database Management System? Write any one advantage of using a DBMS.
- (b) Differentiate between a tuple and an attribute with the help of an example.
- (c) What is meant by data consistency in a database?
- (d) Name any two real-life applications of a DBMS.
- Q.(21) (a) What is e-Governance? Write any two benefits of e-Governance to a citizen. 2+2=4
- (b) Write any two advantages of online education.
- Q.(22) Explain the following terms in the context of Java: 4
- (a) Variable (b) Data type

Q.(23) (a) Write a Java program to calculate and display the area of a rectangle whose length is 12 units and breadth is 8 units. **2+2=4**

(b) What will be the output of the following Java program when executed?

```
public class Counter {  
    public static void main(String[] args) {  
        int i = 1;  
        while (i <= 4) {  
            System.out.println("Value = " + i);  
            i = i + 2;  
        }  
    }  
}
```

******* END OF SET - 2 *******