



# B.K. BIRLA CENTRE FOR EDUCATION

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



## PERIODIC TEST I 2026-27

### I.T – SET – 2 (QUESTION PAPER)

Class : XII

Date :

Admission No.:

Duration : 1 Hrs

Max. Marks : 25

Roll No.:

#### General Instructions:

Try to attempt all questions as per given order.

All questions are compulsory.

The Question Paper is divided into Three sections Section A to C.

- Section A has 10 questions attempt 7 and carry 1 mark each.
- Section B has 7 questions attempt 6 and carry 2 marks each.
- Section C has 4 questions attempt 2 and carry 3 marks each.

#### SECTION – A

**Q1. Choose the correct answer from the given options**

*(7x1 =7 Marks)*

- Which of the following terms describes the total number of rows (tuples) in a relation?
  - Degree
  - Cardinality
  - Domain
  - Attribute
- Which key ensures column values are unique but, unlike a Primary Key, permits NULL values
  - Foreign Key
  - Candidate Key
  - Unique Key
  - Composite Key
- Regarding a relational database, which of the following statements is accurate concerning the order of rows in a table
  - The order is strictly maintained and mathematically affects query results.
  - The order must be alphabetical based on the Primary Key.
  - The order is important exclusively for index optimization.

- d) The order is mathematically irrelevant and does not affect the result of standard queries.
- IV. Which SQL option automatically deletes child records when the corresponding parent record is deleted?
- a) ON DELETE RESTRICT
  - b) ON DELETE CASCADE
  - c) ON DELETE SET NULL
  - d) ON DELETE NO ACTION
- V. Which SQL command is utilized to retrieve data from a database table?
- a) GET
  - b) FETCH
  - c) EXTRACT
  - d) SELECT
- VI. Which constraint makes it mandatory for a column to always possess a value, ensuring it cannot be left empty?
- a) DEFAULT
  - b) CHECK
  - c) NOT NULL
  - d) UNIQUE
- VII. Which constraint automatically assigns a preset value to a column when no value is provided by the user?
- a) NOT NULL
  - b) UNIQUE
  - c) CHECK
  - d) DEFAULT
- VIII. Which of the following best defines a self-referencing table in a relational database?
- a) A table that contains a Foreign Key referencing the Primary Key of another schema.
  - b) A table that prohibits the implementation of Foreign Keys.
  - c) A table that automatically duplicates its own Primary Key for indexing.
  - d) A table that contains a Foreign Key referencing the Primary Key of the exact same table.
- IX. A sentence comprising two independent clauses joined by a coordinating conjunction (such as 'and', 'but', 'so') is grammatically classified as a:
- a) Simple sentence
  - b) Complex sentence
  - c) Compound sentence
  - d) Compound-Complex sentence

- X. In the context of the five stages of Active Listening, what does the 'Evaluating' stage refer to?
- a) Memorizing the spoken words verbatim for later recall.
  - b) Judging the value and importance of the information received.
  - c) Providing immediate, unprompted verbal feedback to the speaker.
  - d) Focusing entirely on the physiological reception of sound waves.

### **SECTION – B:**

#### **Short Answer Questions**

*(2x6 =12 Marks)*

- Q2.** What is a Database? State any two problems of a traditional file system that a database solves.
- Q3.** Define Entity Integrity and Referential Integrity. Why are they important in a relational database?
- Q4.** What is a DBMS? State any two advantages of using DBMS over a traditional file system.
- Q5.** Explain the roles of: (a) Database Administrator (DBA) (b) End User in a database environment.
- Q6.** Explain ON DELETE CASCADE with an example. How is it different from ON DELETE SET NULL?
- Q7.** What is the Communication Cycle? Name and briefly explain any three of the six components of the Communication Process.
- Q8.** Differentiate between a Simple Sentence and a Complex Sentence. Give one example of each.

### **SECTION – C:**

#### **Long Answer Questions**

*(3x2 =6 Marks)*

- Q9.** Discuss the advantages and disadvantages of the Database Management System (DBMS) approach. Write at least three advantages and two disadvantages.
- Q10.** Explain 3 scenarios with help of flowchart.
- Q11.** What is Referential Integrity? Explain the difference between ON DELETE CASCADE and ON DELETE SET NULL with suitable examples from a Student–Class relationship
- Q12.** Refer to the Library table below and write SQL queries for the following tasks:

Table:

Bid	Name	Author	Price
B01	Wings of Fire	APJ Abdul Kalam	550
B02	The Monk Who Sold His Ferrari	Robin Sharma	340
B03	You Can Win	Shiv Khera	230

- Count the total number of books in the Library table.
- Find the maximum price from the Library table.
- Display all books where Price is between 200 and 400 (inclusive).

**\*\*\*\*\* END OF QUESTION PAPER – SET 2 – ALL THE BEST \*\*\*\*\***