**Sectional Test – MySQL (Total Marks: 10)**

**Instructions:** Answer all questions. Each question carries 2.5 marks.

**Q1. SQL Clauses & Filtering with Operators**

Consider a table Books(book\_id, title, author, price, publication\_year, genre).

Write SQL queries to:  
a) Retrieve the titles and prices of all books written by 'Arundhati Roy' published after the year 2015.  
b) List all books that are either in the 'Fiction' or 'Philosophy' genres and cost between 300 and 600.

**Q2. Aggregate Functions & Grouping**

Assume a table Sales(region, product, quantity, amount).

Write SQL queries to:  
a) Find the **total quantity sold** for each region.  
b) Display the **regions** where the **total sales amount exceeds 50,000**, using appropriate grouping and filtering.

**Q3. Joins**

You are given two tables:

* Students(student\_id, name, department)
* Results(student\_id, subject, marks)

Write SQL queries to:  
a) Get the names of students along with the subjects they appeared in and the marks they scored.  
b) Retrieve the list of all students and their marks, ensuring that students who haven’t received any marks are still shown.

**Q4. Simulating FULL JOIN Using UNION Operator**

You are given the following two tables:

* Dev\_Team(dev\_emp\_id, dev\_emp\_name, dev\_project\_name)
* QA\_Team(qa\_emp\_id, qa\_emp\_name, qa\_project\_name)

Each table contains records of employees involved in different projects under **Development** and **Quality Assurance**, respectively.

1. Write an SQL query using UNION to simulate a **FULL OUTER JOIN** that lists **all unique employees** along with the projects they are involved in, regardless of which team they belong to. The output columns should show details as below

(dev\_emp\_name, dev\_project\_name, qa\_emp\_name, qa\_project\_name)