

Question 1. (Single Select)

Consider the following relations shown in the exhibit. Which of the following SQL statements would return the Customers2 relation from the Customers relation?

A: SELECT *

B: SELECT *

C: SELECT *

Cust_No	Cust_Name	Satisfaction_Rate	Sales_Office	Sales_Rep_No
1011	MicroWidget	75	Atlanta	1350
1012	MacroWidget	98	New York	7403
1013	Xyz Corp	78	Los Angeles	2457
1014	DayCo	95	Atlanta	1350
1015	DigiTech	85	Chicago	3303
1016	DataTech	92	Los Angeles	2457
1017	UniSort	81	New York	7403

Customers Relation

1015	DigiTech	85	Chicago	3303
1017	UniSort	81	New York	7403

Customers2 Relation

D: SELECT *

Correct Answer: C

Question 2. (Single Select)

Consider the Recreation relation shown in the exhibit. You need to apply a SQL statement to the Recreation relation that will return the following data:

Student_ID	Activity	Activity_Fee
1001	Bowling	50
1001	Racquetball	75
1002	Bowling	50
1003	Handball	35
1003	Racquetball	75
1004	Bowling	50
1004	Fencing	125

Recreation Relation

Bowling
 Fencing
 Handball
 Racquetball

Which SQL statement applied to the Recreation relation will return this data?

- A: SELECT Activity FROM Recreation;
- B: SELECT Activity FROM Recreation
- C: SELECT Activity FROM Recreation
- D: SELECT DISTINCT Activity FROM Recreation;

Correct Answer: B

Question 3. (Single Select)

Consider the following database information:

domain s_id: integer

domain grd: fixed length character string length 1

STUDENT_GRADE(

Student_Number: s_id NOT NULL

Grade: grd)

Primary Key Student_Number

During which phase of the database design process would this information be developed?

- A: Logical
- B: Implementation
- C: Physical
- D: Conceptual

Correct Answer: A

Question 4. (Single Select)

In a relational database, which term describes a single table consisting of rows and columns?

- A: Data dictionary
- B: Relation
- C: Matrix
- D: Entity

Correct Answer: C

Question 5. (Single Select)

Which pair of relational algebraic operations requires union compatibility?

- A: Selection and projection
- B: Projection and Cartesian product
- C: Intersection and difference
- D: Cartesian product and intersection

Correct Answer: C