

The INF115 exam (Fall 2022) was graded according to the following guideline.

1. Multiple Choice Questions: (20 points)

Students get 10 questions, each question is worth 2 points.

2 points for the fully correct answer.

0 points if any correct option is missed or any incorrect option is selected.

2. Concepts: (20 points)

This part consists of 3 questions.

Question 11: ER model (4 points)

This is a text with gaps where the correct answer is selected from a drop-down list for each gap.

1 point for each correct answer, 0 points for incorrect answers.

Question 12: Transactions (10 points)

This is a text with gaps where the correct answer is selected from a drop-down list for each gap.

1 point for each correct answer, 0 points for incorrect answers.

Question 13: Database Life Cycle (6 points)

Select the correct phases of the database life cycle and put them in the correct order.

1 point for each correct answer, 0 points for incorrect answers.

3. Exercise on Diagrams and Queries: (10 points)

This part consists of 5 questions related to a data model.

Question 14: Diagram (3 points)

Select the three correct items from a list and place them in the correct gaps on the diagram.

1 point for each correct answer, 0 points for incorrect answers.

Question 15: Query 1 (2 points)

Select the three correct items from a list and place them in the correct gaps on the query.

1 point for each correct answer, 0 points for incorrect answers.

Question 16: Query 2 (2 points)

Select the four correct items from a list and place them in the correct gaps on the query.

1 point for each correct answer, 0 points for incorrect answers.

Question 17: Algebra 1 (2 points)

Select the three correct items from a list and place them in the correct gaps on the equation.

1 point for each correct answer, 0 points for incorrect answers.

Question 18: Algebra 2 (1 points)

Select the two correct items from a list and place them in the correct gaps on the equation.

1 point for each correct answer, 0 points for incorrect answers.

4. Normalization of a Table: (20 points)

This part consists of 6 questions related to the normalization of a table.

Question 18: Redundancy (2 points)

Give an example of redundancy in the table.

2 points for one clear example of redundancy in this table.

Question 19: Functional dependencies (6 points)

List all functional dependencies in the table using clear notation.

1 or 2 points for each correct functional dependency,
there are 5 functional dependencies in the table for this exercise.

Question 20: Candidate Key (2 points)

Select the column names that are part of the candidate key of the table.

2 points for the fully correct answer.
0 points if any correct option is missed or any incorrect option is selected.

Question 21: Types of dependencies (3 points)

Select the types dependencies present in the table.

1 point for each correct type of dependency,
there are 3 types of dependencies in the table for this exercise.

Question 22: Normal Form (2 points)

Which is the normal form of the table?

2 points for the correct answer.
0 points if any correct option is missed or any incorrect option is selected.

Question 23: Normalise the Table (5 points)

Give the result of normalization to BCNF of the table, where primary and foreign keys are properly indicated.

1 or 1.5 point for each correct table: there are 4 tables in the normalization.

All primary keys and foreign keys must be correct to earn full points.

Grade Thresholds:

A: above 90 points

B: 80 to 90 points

C: 70 to 80 points

D: 60 to 70 points

E: 50 to 60 points

F: below 50 points