

National Institute of Technology Silchar
Mid-Semester (UG) Examination- 2021

Subject Code: CS 302
Semester: 5th
Duration: One Hour

Subject: Database Management System
Department: CSE
Total Marks: 20

Figure in the right hand margin indicates full marks for the question.
(The questions are self-explanatory and need no explanation)

- 1** Consider the following information about New Insurance Co. Ltd., an insurance company. You have to draw a clean and neat ER diagram based on the given information. Do not forget to capture the constraints and clearly show the mapping cardinalities. All the primary keys be underlined. *Any missing information may suitably be resolved by taking suitable assumptions.* **7**
1. Customers have a PAN card, name, address and phone nos.
 2. The attributes of cars are license plate, state, model, make and year.
 3. A car is owned by a customer.
 4. Each customer that owns a car has an insurance policy.
 5. A customer can make a claim from the insurance company due to accidental damage of his/her car by placing the claimed amount. Also, the date of claim is recorded.
 6. For each claim, claim id, policy and description is recorded.
 7. Multiple payments may be made from a claim to the customer (claimant) by recording each payment amount and date of disbursal.
- 2** With reference to Q. No. 1, transform all the identified relationship sets into appropriate relational schemas capturing all the integrity constraints using proper SQL statements. **6**
- 3** Write a SQL statement to find the name of the customer who has claimed accidental damage from his insurance policy no “1116787” against his car “AS11D9216”. **2**
- 4** Define the following terms: *attributes, key constraints, mapping cardinalities, referential integrity constraint, super key* **5**
