

- (iii) Bank employees are identified by their employee-id values. The bank also keeps packs of the employee's start date and thus length of employment.
- (iv) The Bank offers two account Saving and Banking account. Account can be held by more than one customer and a customer has more than one account.
- (v) A loan is originated at a particular branch and can be held by one or more customers. The Data and Time are recorded for each payment.

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## UNIT - II

- 2 (a) How does Tuple Relational Calculus differ from Domain Relational Calculus. 8
- (b) Differentiate between Degree and Cardinality of a relation. 8

OR

- 2 Write short notes on the following :
  - (i) Internet Data Base
  - (ii) Object Oriented Data Base System
  - (iii) Integrity constraints
  - (iv) Join Dependency
  - (v) Multivalued Dependencies.

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## UNIT - III

- 3 (a) What is normalization ? How is it useful in a good Data Base Design ? 6
- (b) Discuss the purpose of BCNF and describe how BCNF different from 3NF. Provide an example to illustrate your answer. 10

OR

- 3 What do you mean by serializability ? Discuss the conflict and view serializability with suitable example. Discuss the testing of serializability also. 16

