P5093

TE/Insem.-642

T.E. (Information Technology)

DATABASE MANAGEMENT SYSTEMS

(2015 Pattern) (Semester - I)

Time : 1 Hours]

[Max. Marks : 30

Instructions to the candidates:-

1) *Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6.*
2) *Neat diagrams must be drawn wherever necessary.*
3) *Figures to the right side indicate full marks.*
4) *Use of calculator is allowed.*
5) *Assume suitable data, if necessary.*

Q1) a) Explain the distinctions among the terms primary key, candidate key, and super key with example. **[4]**

b) List different components used in E-R diagram with their meaning and construct an E-R diagram for a car insurance company whose customers own one or more cars each. Each car has associated with it zero to any number of recorded accidents. Each insurance policy covers one or more cars, and has one or more premium payments associated with it. Each payment is for a particular period of time, and has an associated due date, and the date when the payment was received. **[6]**

OR

Q2) a) Explain Specialization, generalization and aggregation with example. **[5]**

b) What is schema definition? Explain the types of attributes with an example. **[5]**

Q3) a) Explain different DDL and DML commands with example. **[5]**

b) State the need of normalization? Explain 1NF, 2NF and 3NF with example. **[5]**

OR

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Q4) a) Explain good database design properties. **[5]**

b) State and explain Armstrong's axioms and its properties. **[5]**

Q5) a) What is Transaction? Explain ACID properties of transaction. **[5]**

b) What is serializable schedule? Explain with suitable example the types of serializable schedules. **[5]**

OR

Q6) a) What is cursor? Explain types of cursor with suitable example. **[5]**

b) What is trigger? Explain trigger with suitable example. **[5]**

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