

Seat No. : _____

NE-129

December-2015

4th Year M.Sc. (CA & IT)

Advanced Database Management Systems

Time : 3 Hours]

[Max. Marks : 100

1. (a) Define the following : **10**
- (1) Schema
 - (2) Snapshot
 - (3) High level Language
 - (4) Naïve User
 - (5) Cache memory
- (b) Answer the following : (any 3) **9**
- (1) What is the responsibility of Stored Data Manager (SDM) in DBMS component modules ?
 - (2) Explain all three database states.
 - (3) Explain primary and secondary memory.
 - (4) Explain Form Based interface for DBMS.
- (c) Define : Database Designers. **1**
2. (a) Answer any **one** : **10**
- (1) What is loss of confidentiality in database ? Explain four types of countermeasures against loss of confidentiality.
 - (2) Explain the use of GRANT and REVOKE options with example.
- (b) Answer the following : **10**
- (1) Explain cipher text in encryption.
 - (2) What is polyinstantiation ?
 - (3) What is multilevel security ?
 - (4) What do you mean by account level privilege ?
 - (5) Explain goals of database tuning.

3. (a) Answer the following : **16**
- (1) Explain In-place updating and shadowing ?
 - (2) What is fuzzy check pointing ? What are the actions taken at a check point ?
 - (3) Explain transaction and cascading rollback.
 - (4) Explain the procedure for choosing a new coordinator site in case of failure.
- (b) Define : Dense and Non-Dense Index. **4**
4. Answer the following : (any 4) **20**
- (1) Explain point events and duration events.
 - (2) Write and explain all types of spatial queries.
 - (3) Write advantages of Distributed DBMS.
 - (4) Write and explain types of autonomy in DDBMS.
 - (5) Explain horizontal and vertical fragmentation in DDBMS.
5. (a) Define the following : (any 5) **10**
- (1) Base Stations
 - (2) Geographic mobility domain
 - (3) Access contiguity
 - (4) Dozing
 - (5) Broadcasting
 - (6) MANET
- (b) Answer the following : **10**
- (1) Explain functionality for mobile database.
 - (2) What do you mean by Genetics ? Explain types of genetics.
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