

M. SC. (Computer Science) SEM – III (Choice Based Credit & Grade System) : WINTER - 2018

SUBJECT: ELECTIVE: b) ADVANCED DATABASE MANAGEMENT SYSTEMS

Day : Friday
Date : 26/10/2018

W-2018-1056

Time: 03.00 PM TO 06.00 PM
Max. Marks: 60

N.B.:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Draw neat labeled diagrams **WHEREVER** necessary.
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Q.1 Elaborate distributed DBMS architecture in detail. (15)

OR

What is meant by parallel query optimization? Explain with example.

Q.2 A) Answer any **ONE** of the following: (08)

- i) What is Two-phase locking? Explain with example.
- ii) Explain the use of checkpoints with example.

B) Answer any **ONE** of the following: (07)

- i) What are spatial temporal patterns?
- ii) Elaborate the concept of query processing.

Q.3 Answer any **THREE** of the following: (15)

- a) Discuss various reliability measures.
- b) Explain in detail network partitioning.
- c) Describe the properties of object oriented DBMS.
- d) What is deadlock? How to avoid it?
- e) Write in brief about Horizontal fragmentation.

Q.4 Write short notes on any **THREE** of the following: (15)

- a) Two phase commit
- b) Query decomposition
- c) Data localization
- d) Mobile databases
- e) Deductive databases

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