

SUBJECT : ADVANCED DATABASE CONCEPTS

Day : Friday
Date : 12/04/2019

S-2019-1231

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 diagrams **WHEREVER** necessary.
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Q.1 Elaborate the distinguishing features of multimedia database and web database in detail. (15)

OR

Discuss the features of distributed Database. Differentiate between homogenous and heterogeneous systems.

Q.2 A) Answer **ANY ONE** of the following. (08)
i) Discuss various scalar operators available in temporal database.
ii) Write in detail about deductive database.

B) Answer **ANY ONE** of the following. (07)
i) Explain the terms – fault, error and failure.
ii) Describe the cost model in parallel query optimization.

Q.3 Answer **ANY THREE** of the following. (15)
a) Give applications and usage of GIS.
b) What is meant by degree of fragmentation?
c) What is inter and intra operator parallelism?
d) Discuss the graphical notations used to represent ODL schemas.
e) Describe ACID properties of transactions in brief.

Q.4 Write short notes on **ANY THREE** of the following. (15)
a) MTBF and MTTR
b) Database Tuning
c) Two phase locking
d) DDL commands
e) Query optimization

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