

[4366]- 503
TYMCA (Engg. Faculty)
ADVANCED DATABASES
(Semester - V) (2008 Pattern) (710903)
MAY 2013 EXAMINATIONS

Time: 3 Hours]

[Max. Marks : 70]

Instructions to the candidates:

- 1) Answers to the two sections should be written in separate books.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Assume Suitable data if necessary.

SECTION I

- Q1) a) With suitable diagrams explain the steps in query processing. [5]
b) Explain the external sort merge algorithm with suitable example. [6]

OR

- Q2) a) What are the measures of query cost? [5]
b) Explain the different ways of executing pipelines. [6]

- Q3) a) Explain Transaction Server Process Structure. [6]
b) What are the implementation issues of distributed systems? [6]

OR

- Q4) a) Explain Speed up & Scale up. [6]
b) Explain centralized and client server database architecture. [6]

- Q5) a) Explain object identity and reference type? [6]
b) Why OODBMS is required? Differentiate between DBMS, RDBMS and OODBMS. [6]

OR

- Q6) a) Explain Array and Multiset in SQL with example. [6]
b) Explain persistent C++ system. [6]

SECTION II

- Q7) a) While analyzing the data, it was found that many tuples have no recorded values for several attributes. How this problem of missing values can be solved? [6]
- b) Explain snowflake schema for multidimensional database. [6]

OR

- Q8) a) Explain in brief OLAP. What are the possible operations on cube? [6]
- b) Explain star schema for multidimensional database. [6]
- Q9) a) Form clusters using clustering K-Means algorithm. Use appropriate distance formula. [8]

RID	Age	Years of Service
1	30	5
2	50	25
3	50	15
4	25	5
5	30	10
6	55	25

- b) Explain outlier analysis. [4]

OR

- Q10) a) Find frequently occurred item using apriori algorithm. [8]

TID	ITEM
100	1,3,4
200	2,3,5,
300	1,2,3,5
400	2,5

- b) Explain descriptive & predictive data mining. [4]

- Q11) a) Describe the ranking using TF-IDF. [8]

- b) Define the following terms. [3]
- 1) Hub 2) Authority 3) Web crawler

OR

- Q12) a) Describe the popularity ranking. [8]

- b) Define the following terms- [3]
- 1) Ontology 2) Search engine spamming 3) False positive