Total No. of Questions : 8] SEAT No. :

P4134 [Total No. of Pages : 2

[4860]-340

M.E. (Computer Engineering / Computer Networking)

HIGH PERFORMANCE DATABASE SYSTEMS

(2008 Pattern) (Semester - II)

Time : 3 Hours] *[Max. Marks : 100*

Instructions to the candidates:

1) *Solve any three questions from each section.*
2) *Answer to each section should be written on different answer sheets.*
3) *Assume suitable data, if necessary.*
4) *Draw neat diagram wherever required.*

SECTION - I

Q1) a) Explain in detail three levels of Database Tuning which can be used by DBA to tune different parameters. **[6]**

b) Explain TP-monitor Architecture. **[6]**

c) List and explain atleast four features of TPC benchmarks that help make them realistic and dependable measures. **[4]**

Q2) a) Explain hash join algorithm with example. **[6]**

b) Discuss heuristics in Optimization. **[6]**

c) Explain immediate and deffered view maintenance. **[4]**

Q3) a) Explain 2 phase locking protocol with example. **[6]**

b) Explain the difference between hash index and B+ Tree index with example. **[6]**

c) Discuss Nested and Compensating transactions. **[4]**

Q4) a) Explain data warehouse Architecture. **[6]**

b) Discuss Business Intelligence. **[6]**

c) Explain OLAP operation with example. **[6]**

P.T.O.

SECTION - II

Q5) a) Discuss Aggregations in SQL. **[6]**

b) How XML integration is achieved with SQL servers. **[6]**

c) Discuss about SQL 3 standards, Objected oriented and security features. **[4]**

Q6) a) Discuss how to find candidate and frequent itemsets using APRIORI algorithm with example. **[6]**

b) What is supervised and unsupervised learning. **[6]**

c) Discuss issues in Data mining. **[4]**

Q7) a) Explain Active and Deductive databases. **[6]**

b) Discuss main memory database. Explain relative merits of loading entire database back into main memory before resuming transaction processing. **[6]**

c) Brief about Object Relational database. **[4]**

Q8) Write a short note on (any 3) : **[18]**

a) LDAP

b) Webservice

c) Datawarehouse schema

d) Dashboards