Sem VI Database System I.T. 22/5/06

[REVISED COURSE]

CON/1786-06. TV-8595

(3 Hours) [Total Marks : 100

N.B. : (1) Question No.1 is compulsory.
(2) Solve any four from remaining.

1(a) Draw the typical database system architecture and explain in detail. 10
(b) Explain the E-R diagram notations. Also explain the advantages of E-R diagram. 10

2 Write following queries for given table 20
(i)client_master(Client_no(PK),name,address1,address2,city,state, pincode,bal_due)
(ii) product_master(Product_no (PK), Description, Profit_percent, Unit measure, Qty_on_hand, Recorder, Sell_price, Cost-prize)
(a) Write down SQL syntax to create above tables.
(b) Write down SQL syntax to insert data into above tables (one example each).
(c) Perform following SQL operations.
1] Find out names of all the clients
2] Print the entire client –master tables.
3] Retrieve the list of names & the cities .
4] List the various products available from the product-master table
5] Find the names of all the clients having name starts with letter 'a'.
6] Find out clients who stay in the city Mumbai.
7] Print the list of clients who are located in city either Pune,Nashik or Nagpur.
8] Print the list of client whose balance due are greater than value 10000.
9] Find out the product with description 'pen'
10] Find the product whose selling price is greater than 2000 & less than or equal to 5000..

3(a) What is view in SQL , how it is defined ? Discuss the problem that may arise when we attempts to update a view. How views typically implemented.? 10
(b) How security can be achieved in SQL ? Explain with example. 10
4(a) List the ACID properties. Explain the usefulness of each.. 10
(b) What is importance of recovery ? explain the log based recovery scheme. 10
5.a) Explain the following term. 10
i) Object structure ii) Object identity. iii) Specialization iv) Generalization
v) Persistence .
(b) Compare the following 10
i) RDBMS, OODBMS & ORDBMS. ii) SQL and OQL
6(a) Explain normalization with different forms with example. 10
(b) Explain functional dependencies with examples. 10
7. Write a short notes on (any four) 20
(a) Group by and order by clause in SQL
(b) OODB
(c) Integrity constraints.
(d) Database Administrator (DBA)
(e) Joins in tables.
