Total No. of Questions :12]

SEAT No. :

P3410

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B.E. (Information Technology)

a:ADVANCED DATABASE MANAGEMENT

(2008 Course) (Semester -I) (Elective - I)

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

Instructions to the candidates:

1) ***Answer Question 1 or 2, 3 or 4, 5 or 6 from section I and Question 7 or 8, 9 or 10, 11 or 12 from section II.***
2) ***Figures to the right indicates full marks.***
3) ***Neat diagrams must be drawn wherever necessary.***
4) ***Assume suitable data, if necessary.***
5) ***Answers to the two sections should be written in separate books.***

SECTION-I

Q1) a) Define Triggers. Explain any two types of trigger in detail with suitable example. **[8]**

b) Explain different PL/SQL transaction types. **[8]**

OR

Q2) a) Write a PL/SQL procedure which gets the name of the employee when employee id is passed as the parameter. **[6]**

b) Write a cursor for retrieving the records from the student table and displaying them one by one. **[8]**

c) What do you mean by Packages. **[2]**

Q3) a) Define transactions. Explain ACID properties. **[8]**

b) Explain Real time transaction systems. **[8]**

OR

P.T.O.

Q4) a) Describe in detail the concept of locks with examples. **[8]**

b) Explain the following: **[8]**

i) Timestamping concurrency control

ii) Optimistic concurrency control

Q5) a) Explain in detail Object based databases and XML. **[10]**

b) Write a short note on document schema. **[6]**

c) Describe Array in SQL. **[2]**

OR

Q6) a) Write short note on structures types and inheritance. **[8]**

b) Consider the following nested relational schema **[10]**

Std= (sname, Subjectsset setoff(Subjects), Addressset setoff(Address)
Subjects = (name, Marks), Marks = (Term 1, Term 2, Terms 3)
Address = (street City)

Answer the following:

i) Write DTD and XML file

ii) Write a query in XPath to list all students.

iii) Find the name of all the students who live in the city 'Pune'.

iv) Find those students who failed in the subject 'Chemistry'.

v) List all student's marks in the subject 'Physics'.

SECTION-II

Q7) a) Write in detail about Data warehousing and it's architecture. **[8]**

b) Write a short note on Meta data in Data warehousing. **[8]**

OR

Q8) a) Explain Data warehousing technologies (ETL) in detail. **[12]**

b) Explain in detail about concept of data mart. **[4]**

Q9) a) Explain decision tree algorithm with suitable example. **[12]**

b) Explain in detail about extensions to SQL. **[6]**

OR

Q10)a) What do you mean by OLAP beanchmarks? Explain applications and benefits. **[12]**

b) Write note on Bayesian classifier. **[6]**

Q11)a) Explain Security issue based on granting/revoking of privileges. **[12]**

b) Write note on auditing and control. **[4]**

OR

Q12)Write short note on following: **[16]**

a) Object Oriented Databases.

b) Multi sets in SQL.

c) XML Applications.

d) Dimensionality modeling.

EEE