

Total No. of Questions : 12]

SEAT No. :

P843

[4458]-794

[Total No. of Pages : 2

B.E. (Information Technology) (Semester - I)
ADVANCED DATABASE MANAGEMENT
(2008 Course) (Elective - I (a))

Time : 3 Hours]

[Max. Marks : 100

Instructions to the candidates:

- 1) *Answer 3 questions from each Section.*
- 2) *Answers to the two sections should be written in separate answer-books.*
- 3) *Figures to the right indicate full marks.*

SECTION - I

- Q1)** a) Describe the working of cursor and types of cursors in PL/SQL. [8]
b) Explain the concept of trigger in detail. [8]

OR

- Q2)** a) Differentiate between stored procedure and function. State advantages of using these database objects. [8]
b) Explain the need of packages and describe the package in detail with its advantages. [8]

- Q3)** a) Draw and explain the architectures of Transaction-processing monitors.[8]
b) Explain the different concurrency control protocol for Multidatabase System. [8]

OR

- Q4)** a) What is Transactional Workflow explain in detail with example. [8]
b) Explain the Transaction Management in Multidatabase System and protocols for global atomic commit. [8]

- Q5)** a) What is object oriented databases? Explain the type Inheritance and table Inheritance in OODB. [8]
b) Explain the need and structure of XML document. [8]
c) Compare Object Oriented Database and Object Relational Database.[2]

OR

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- Q6)** a) List and explain the query languages for XML. [8]
 b) What is Persistent object? Explain the approaches to make the object Persistent. [8]
 c) Consider the following nested relational schema. [2]
 Emp = (ename, childrenset setoff (children), skillset setoff (skill))
 Children = (name, birthday), Birthday (day, Month, year)
 Skills (type, Examset setoff (Exams)), Exams = (year, city))
 Write DTD and XML file

SECTION - II

- Q7)** a) Draw and explain the three tier architecture for Data warehouse. [8]
 b) Explain the Data Warehouse Data flows in detail. [8]

OR

- Q8)** a) Discuss the features of Star, Snowflake and Fact Constellation schema of Data warehouse, Compare the above three schema's. [8]
 b) State and explain the process of Data ware house Design. [8]

- Q9)** a) Write K means algorithm in details and apply this algorithm on the following Items in cluster : {2,4,10,12,3,20,30,11,25} Assume k= 2 [10]
 b) Explain decision tree classifier. [8]

OR

- Q10)** a) What is OLAP benchmarks? List the applications and Benefits of OLAP. [9]
 b) i) Discuss the Classification and Predictive Modeling [4]
 ii) Write a short note on Bayesian classification. [5]

- Q11)** a) Explain different security and integrity threats to the database. [8]
 b) What is statistical database how it provides security? [8]

OR

- Q12)** a) Explain the implicit and explicit locking for providing security in SQL.[8]
 b) Explain the use of Privileges and Role in Oracle with example. [8]

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