

Total No. of Questions : 12]

SEAT No. :

P1476

[Total No. of Pages : 2

[4164] - 724

May Term 2012

B.E. (IT)

ADVANCED DATABASE MANAGEMENT SYSTEM

(Elective - I) (2008 Pattern) (Sem. - I)

Time : 3 Hours]

[Max. Marks : 100

Instructions to the candidates:-

- 1) *Answer three questions from each Section.*
- 2) *Answers to the two sections should be written in separate books.*
- 3) *Figures to the right indicate full marks.*
- 4) *Neat diagrams must be drawn wherever necessary.*
- 5) *Assume suitable data, if necessary.*

SECTION - I

Q1) a) Draw PL/SQL block structure and execution environment. Explain each block. [8]

b) Which control structures are allowed in PL/SQL? [8]

OR

Q2) What are cursors in PL/SQL? Write a cursor to calculate a bill in cake shop for a customer. [16]

Q3) a) What are transactional workflows? [8]

b) What are two-phase locks? Give an example. [8]

OR

Q4) a) Specify the need of concurrency control mechanisms. State the mechanisms. [8]

b) What are compensating transactions? [8]

Q5) a) What are the limitations of RDBMSes? [10]

b) What is XML DTD? Explain with example. [8]

OR

Q6) a) How is inheritance implemented in SQL? [8]

b) How is querying and transformation done in XML? [10]

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SECTION - II

Q7) a) Write a short note on classes of schemas that are popularly used for modeling data warehouse. [9]

b) What is preprocessing? What is the need of this step while building data warehouse? [9]

OR

Q8) a) Explain how Oracle implements data warehouse. [9]

b) What does ETL mean? Explain any ETL tool in short. [9]

Q9) a) What is k-means algorithm used for? Explain with help of example. [8]

b) What is data mining? Mention any five algorithms. [8]

OR

Q10) Write short notes on : (any two) [16]

a) Categories of OLAP tools

b) Supervised and unsupervised learning

c) Classification algorithm

Q11) a) What are locks? Why do we need them? What are the disadvantages of locks? [8]

b) Write a note on Database threats. [8]

OR

Q12) a) Explain statistical database auditing. [8]

b) What is the need of granting and revoking privileges? [8]

