

Total No. of Questions : 12]

SEAT No. :

P3199

[Total No. of Pages : 2

B.E. (Computer Engineering)
ADVANCED DATABASES (410445)
(2003 Pattern) (Elective-I)

Time : 3 Hours]

[Max. Marks : 100

Instructions to the candidates:

- 1) *Answers to the two sections should be written in separate answer books.*
- 2) *Section-I: Q. No. 1 or Q. No. 2, Q. No. 3 or Q. N. 4, Q. No. 5 or Q. No. 6.*
- 3) *Section-II: Q. No. 7 or Q. No. 8, Q. No. 9 or Q. NO. 10, Q. No. 11 or Q. No. 12.*
- 4) *Neat diagrams must be drawn wherever necessary.*
- 5) *Figures to the right side indicate full marks.*
- 6) *Assume suitable data, if necessary.*

SECTION-I

- Q1)** a) Explain in detail intra-query parallelism. [8]
b) Explain any two partitioning techniques. [8]

OR

- Q2)** a) What is meant by skew? Explain different ways of handling skew. [10]
b) Explain Fragment and Replicate join. [6]

- Q3)** a) Explain the following with respect to distributed databases. [10]
i) Data fragmentation.
ii) Two phase commit protocol.
b) What is meant by LDAP? Explain. [8]

OR

- Q4)** a) Explain the following with respect to distributed databases: [10]
i) Data Replication.
ii) Data transparency.
b) Explain any one locking protocol. [8]

P.T.O.

- Q5)** a) Write short note on: XML applications. [8]
b) Explain XML schema. [8]

OR

- Q6)** a) Write short note on: Web services. [8]
b) What is meant by XQuery? Explain. [8]

SECTION-II

- Q7)** a) Explain with neat diagram Data warehouse architecture. [8]
b) Explain Star schema for multidimensional data model. [8]

OR

- Q8)** a) Explain Snowflake schema for multidimensional data model. [8]
b) Write short note on: OLAP. [8]

- Q9)** a) What is meant by decision tree? Explain. [8]
b) Explain Bayesian classifier. [8]

OR

- Q10)** a) Explain k-means algorithm with suitable example. [10]
b) State apriori algorithm. [6]

- Q11)** a) Explain relevance ranking using terms. [10]
b) Explain the following terms: [8]
i) Synonyms.
ii) Homonyms.

OR

- Q12)** a) Explain the following terms: [12]
i) Web crawlers.
ii) Indexing of documents.
iii) Ontologies.
b) How to measure retrieval effectiveness? [6]