

Total No. of Questions : 10]

SEAT No. :

P2362

[Total No. of Pages : 2

[5254] - 695

**B.E. (I.T.) (Semester - II)**  
**ADVANCED DATABASES**  
**(2012 Pattern)**

*Time : 2½ hours]*

*[Max. Marks : 70]*

**Instructions to the candidates:**

- 1) Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8, Q9 or Q10.
- 2) Figures to the right indicate full marks.

**Q1)** a) Explain data replication in distributed DBMS? What is the difference between synchronous and asynchronous replication? [4]

b) What is DTD? Explain example of DTD for any XML document? [6]

OR

**Q2)** a) Explain main architectures for building parallel database system? [6]

b) What is data transparency? Explain different types of transparencies distributed databases should achieve? [4]

**Q3)** a) What are the similarities and differences between OODBMS and ORDBMS? [6]

b) Explain the replication strategy in Cassandra? [4]

OR

**Q4)** a) List and explain the four elements of Big data? [4]

b) Explain different methods of storing data in distributed database system in detail? [4]

c) Explain structured and unstructured data in object based databases? [2]

**Q5)** a) Explain in details apriori graph based approach for frequent subgraph mining? [8]

b) What is Data stream mining? Explain how data stream management system works? [8]

**P.T.O.**

OR

- Q6)** a) How stream classification performed? Explain any one method of stream classification? [10]  
b) Explain relevance of big data and data analysis in E - commerce industry? [6]

- Q7)** a) What is text categorization? Which are various text categorization methods? Explain any one text categorization method in details. [10]  
b) What is natural language processing (NLP)? Which are the tasks involved in NLP? [8]

OR

- Q8)** a) Explain recommender system? Which are the problems associated with recommender system? [10]  
b) Explain in detail web usage mining and web content mining. [8]

- Q9)** a) Define temporal databases? Explain different types of temporal databases? Enlist the any two application of temporal databases? [8]  
b) Explain the following [8]  
i) Multimedia databases  
ii) Cloud databases.

OR

- Q10)** a) Explain in details spatial data and spatial databases? Explain various application of spatial database? [8]  
b) Define deductive databases? Explain various semantics of deductive databases? [8]

