[6353] - 125

T.E. (Information Technology)
ADVANCED DATABASE AND MANAGEMENT SYSTEM
(2019 Pattern) (Semester - I) (314445 B) (Elective-I)

Time : 2½ Hours]   *[Max. Marks : 70*
Instructions to the candidates:

1) *Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8.*

2) *Neat diagrams must be drawn wherever necessary.*

3) *Figures to the right side indicate full marks.*

4) *Assume Suitable data if necessary.*

Q1) a) What is a NOSQL Database? How would you classify the different types of NOSQL Databases? **[9]**

b) Explain in brief the advantages of MongoDB over RDBMS. **[9]**

OR

Q2) a) What is meant by a column-based database? What are the different components of the Cassandra Database? **[9]**

b) How would you classify the difference between SQL and NOSQL databases? **[9]**

Q3) a) How would you compare OLTP and OLAP Systems based on their features? **[8]**

b) Draw and explain the main components of a data warehouse and its characteristics. **[9]**

OR

Q4) a) Explain in brief the characteristics and limitations of the data warehouse.**[8]**

b) Explain what is a data warehouse and describe schemas in the data warehouse. **[9]**

Q5) a) How would you demonstrate the KDD seven-step process? **[9]**

b) Explain different applications of data mining. **[9]**

OR

Q6) a) Explain the architecture of data mining techniques. **[9]**

b) How would you demonstrate predictive and descriptive algorithms with an example? **[9]**

Q7) a) Elaborate the term Mobile databases. **[9]**

b) Differentiate between Spatial and Temporal databases. **[8]**

OR

Q8) a) Write a short note on Multimedia databases. **[9]**

b) Discuss Geographical Information Systems in detail. **[8]**

▶◀ ▶◀ ▶◀