[6003]-706
T.E. (Information Technology)
ADVANCED DATABASE & MANAGEMENT SYSTEM
(2019 Pattern) (Semester - I) (314445B) (Elective - I)

Time : 2½ Hours]   *[Max. Marks : 70*

Instructions to the candidates :

1) Answer Q.1 or Q.2, Q3 or Q4, Q5 or Q6, Q7or 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) Explain with example Four Types of No SQL Databases. Also explain Column-Oriented Database: Apache Cassandra.   **[12]**

b) Explain Mongo DB NoSQL Database.   **[6]**

OR

Q2) a) Explain NoSQL database Development Tool: MapReduce. Compare Relational and NoSQL databases.   **[10]**

b) Explain NoSQL Programming Languages XML and JSON.   **[8]**

Q3) a) What is Data warehouses? Explain characteristics and limitations of data Warehouse.   **[8]**

b) Explain different OLAP Architectures.   **[9]**

OR

Q4) a) Write a note on Decision support system. Explain with example views and Decision support.   **[10]**

b) Define OLAP? Compare different OLAP Architecture.   **[7]**

Q5) a) What is KDD? Explain KDD seven step process with suitable diagram.**[10]**

b) Explain predictive and descriptive algorithms in data mining. **[8]**

OR

Q6) a) Explain different issues in Data mining task. Explain Data Preprocessing Tasks in KDD Process. **[10]**

b) Explain Pattern Evaluation and knowledge presentation steps in Data Mining. **[8]**

Q7) a) Compare Temporal, Spatial and Deductive Databases. **[5]**

b) Write a note on : **[12]**

i) Mobile databases

ii) Multimedia databases

OR

Q8) a) Write a note on : **[10]**

i) Geographical Information Systems (GIS)

ii) Genome data management.

b) Explain "Event-Condition- Action" model in Active Databases **[7]**

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