Total No. of Questions : 10]

SEAT No. :

P1762

[Total No. of Pages : 2

[5460] - 592
T.E. (Information Technology)
DATABASE MANAGEMENT SYSTEM
(2015 Pattern)

Time : 2½ Hours] *[Max. Marks :70*

Instructions to the candidates:

1) ***Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6 , Q.7 or Q.8, Q.9 or Q.10.***

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

Q1) a) Describe the three level architecture of DBMS. Explain how it is useful for achieving data independence. **[5]**

b) When are two schedules said to be view equivalent? **[5]**

OR

Q2) a) List the responsibilities of DBA. **[5]**

b) Describe DROP TABLE command of SQL with both the options CASCADE and RESTRICT. **[5]**

Q3) a) Write short note on : Mapping of ISA relationship of E - R diagram to tables. **[4]**

b) State and explain (any 6) Codd's norms for RDBMS. **[6]**

OR

Q4) a) What are the measures of Query cost? **[5]**

b) Why are cursors necessary in embedded SQL? **[5]**

Q5) a) Draw and explain the architecture of Parallel databases. **[6]**

b) What is a checkpoint? List the operations to be performed by the system when a checkpoint is to be taken. What does the recovery system do if there is a crash. **[10]**

P.T.O.

OR

Q6) a) Explain Query optimization with respect to SQL databases. **[8]**

b) Discuss and explain data replication and allocation issues in Distributed database system. **[8]**

Q7) a) Explain XML data model. List advantages of XML. **[8]**

b) Explain in brief the advantages of Mongo DB over RDBMS. **[8]**

OR

Q8) a) Discuss data management issues in cloud databases. **[8]**

b) What is HDFS? Draw and explain the architecture. **[8]**

Q9) a) Explain Association rules with Support and Confidence measures. **[6]**

b) Explain architecture of data mining system. **[6]**

c) Explain the conceptual models for data ware house. **[6]**

OR

Q10) a) Write a short note on : (any 3) **[12]**

i) Data processing techniques.

ii) OLAP

iii) Machine learning for business intelligence.

iv) Big data features

b) Explain KDD in detail. **[6]**

♦♦♦♦