Seat No.	

B.E. (C.S.E.) (Semester - VII) (Revised) Examination, April - 2018
ADVANCED DATABASE SYSTEM
Sub. Code : 67543

Day and Date : Thursday, 26 - 04 - 2018 **Total Marks : 100**
Time : 02.30 p.m. to 05.30 p.m.

Instructions :
1) **Attempt any three questions from each section.**
2) **Figures to the right indicate full marks.**
3) **Assume suitable data wherever necessary.**

SECTION - I

Q1) a) For each of the three partitioning techniques, namely round-robin, hash partitioning, and range partitioning, give an example of a query for which that partitioning technique would provide the fastest response. **[8]**

b) What is interquery parallelism? Explain cache coherency problem and protocol available to guarantee cache coherency. **[8]**

Q2) a) Explain the following with respect to robustness of distributed databases. **[8]**

i) Coordinator selection.

ii) Majority based approach.

b) What is object? What are the properties of object? Explain with example object structure? **[8]**

Q3) a) Describe the working of cursor and types of cursors in PL/SQL with example? **[8]**

b) What is trigger? Write the trigger for updating the records in the database. **[8]**

P.T.O.

Q4) Write a short note on (Any three). **[18]**

a) Type and Table inheritance in ORDBMS.

b) Database life cycle.

c) Distributed query processing.

d) Persistence.

SECTION - II

Q5) a) What is public-key encryption? How does it differ from the encryption approach taken in the Data Encryption Standard (DES), and in what is it better than DES? **[6]**

b) Explain the use of an audit trail, with special reference to a statistical database system. **[4]**

c) Explain with example discretionary access control mechanism? **[6]**

Q6) a) Describe Xquery algebra operation. Describe FLWOR expression with example. **[8]**

b) What is XML Schema? Explain with example. **[8]**

Q7) a) With neat schematic explain business intelligence framework? **[6]**

b) Explain with suitable example any two operations on multidimensional data. **[4]**

c) What is data mining? Explain association rule mining? **[6]**

Q8) Write a short note on (Any Three). **[18]**

a) OLAP Vs OLTP.

b) Bell-Lapdula model.

c) DTD.

d) Data warehouse.

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