Reg. No. ☐☐☐☐☐☐☐☐☐☐

MCA 502

Fifth Semester M.C.A. Degree Examination, December 2018
ADVANCED DATABASE MANAGEMENT SYSTEMS

Time : 3 Hours Max. Marks : 75

Note : Answer **any five full** questions. **All** questions carry **equal** marks.

1. a) What you understand by distributed databases ? Explain the various architecture of DDBMS. **8**

   b) Mention types of distributed database with a neat block diagram. **7**

2. a) Describe data fragmentation, replication and allocation in distributed databases. **8**

   b) Briefly explain distributed query processing. **7**

3. a) What is an object identifier ? What primary characteristics should an OID possess ? What are its advantages and disadvantages ? **8**

   b) Compare RDBMS, OODBMS and ORDBMS along with their advantages and disadvantages. **7**

4. a) How do you create a trigger ? Explain types of trigger. **7**

   b) Summarize the syntax and semantics of starburst, oracle and DB2 databases. **8**

5. a) Write the working principle of RSA algorithm with an example. **7**

   b) Discuss how time is represented in Temporal databases and compare the different time dimensions. **8**

6. a) Define data warehouse. Explain data modelling for data warehousing. **7**

   b) What are the functionalities of a data warehouse ? Explain with data cube. **8**

7. a) Explain in detail XML database. What are the differences between the uses of tags in XML versus HTML ? Explain with suitable example. **8**

   b) Define DTD. Explain the types of DTD with suitable example. **7**

8. Write a short note on :
   a) Multimedia database **5**
   b) Spatial Database **5**
   c) XML schema. **5**

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