B.E.(with Credits)-Regular-Semester 2012 - Computer Science and Engineering Sem VIII

CSE8041 Elective -III : Advanced Database

P. Pages : 1 **GUG/W/16/7032**

Time : Three Hours * 4 8 2 0 * Max. Marks : 80

Notes : 1. All questions carry equal marks.
2. Answer **Five** questions.
3. Due credit will be given to neatness and adequate dimensions.
4. Assume suitable data wherever necessary.

1. a) What is query processing and query optimization? Explain the steps in query processing. **8**

b) Explain the following. **8**
i) Temporal Databases. ii) Spatial Databases .

OR

2. Define Normalization. Discuss in detail 1NF, 2NF, 3NF and BCNF with suitable examples. **16**

3. a) Discuss the advantage and disadvantage of a DDBMS. **10**

b) What is the difference between homogeneous and heterogeneous DDBMS. **6**

OR

4. a) With relevant examples discuss distributed query processing. **8**

b) Distinguish between parallel Databases and distributed databases. **8**

5. How will you model and design an object oriented databases? Explain in detail. **16**

OR

6. a) What is the difference between persistent and transient objects? How is persistence handled in typical 00 database systems? **8**

b) How do regular inheritance, multiple inheritance and selective inheritance differ? Explain. **8**

7. a) Write short note on. **8**
i) Mobile Databases. ii) Web Databases.

b) Explain in detail the client/server model with neat diagram. **8**

OR

8. What are the different phases of the knowledge discovery from databases? Describe a complete application scenario in which new knowledge may be mined from an existing database of transactions. **16**

9. a) What are multimedia databases? Discuss the challenges in designing the multimedia databases. **8**

b) Write the features of Active Databases. **8**

OR

10. Describe the concept of deductive database. What is the similarity between rules used in deductive databases and views in the relational model? **16**

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