P30/P32/CMP206/EE/20180119

Time : 3 Hours

Marks : 80

Instructions :

1. All Questions are Compulsory.

2. Each Sub-question carry 5 marks.

3. Each Sub-question should be answered between 75 to 100 words. Write every questions answer on separate page.

4. Question paper of 80 Marks, it will be converted in to your programme structure marks.

1. Solve any **four** sub-questions.

   a) What are the different components of database, Explain.   5

   b) Explain different services provided by DBMS over conventional file system.   5

   c) Discuss different applications of DBMS.   5

   d) What is data model, Explain record based logical model.   5

   e) What is RDBMS? Explain different relational database components.   5

2. Solve any **four** sub-questions.

   a) What is foreign key? Explain foreign key constrain.   5

   b) What are the different set operations? Explain cross product with example.   5

   c) What is DML? Discuss different DML statements.   5

   d) What is aggregate function? Describe any five useful aggregate functions.   5

   e) What is union? Describe union operator with suitable example.   5

3. Solve any **four** sub-questions.

   a) What is data modelling? Explain basic styles of data models. 5

   b) What is entity? Differentiate between strong and weak entity. 5

   c) What is relationship? Explain different types of relationships. 5

   d) What is keys? Explain different keys for relationship set. 5

   e) What is ER modelling? Explain steps in E-R Modelling. 5

4. Solve any **four** sub-questions.

   a) What is decomposition or small schema? 5

   b) What is functional dependency? Explain sub type of it. 5

   c) What is normalization? Explain the need of normalization. 5

   d) What is transaction? Explain the properties of transaction. 5

   e) What is schedule? Explain recoverable schedules. 5

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