

IT / Sem V / EBCS

21 MAY 2019



(Time: 3 Hrs)

Marks: 80

N.B. : 1. Question no. 1 is compulsory.

2. Solve any **Three** questions out of remaining **Five** questions.

- Qu-1 Attempt any **FOUR** of the following.
- Write short note on "Query Evaluation Plan" 5
 - Justify the statement "Collections of operations that form a single logical unit of work are called Transactions." 5
 - List and explain the commonly accepted security goals for databases. 5
 - List the Distribution Design Issues and explain any one in detail. 5
 - List and explain basic tasks involved in Data Transformation. 5
- Qu-2
- Show that the two-phase locking protocol ensures conflict serializability, and that transactions can be serialized according to their lock points. 10
 - Explain generic layering scheme for Distributed Query Processing. 10
- Qu-3
- Explain Temporal databases with suitable example. 10
 - List and explain any four OLAP Operations in a cube with suitable example. 10
- Qu-4
- What is the general purpose of the Data-warehouse architecture? Explain the architectural components of Data-warehouse with suitable diagram. 10
 - List various fragmentation strategies in distributed database and explain any one in detail. 10
- Qu-5
- List and explain the types of activities and tasks that compose the ETL process. 10
 - Explain ARIES Algorithm in detail. 10
- Qu-6 Attempt the following.
- Measures of Query Cost. 5
 - Shadow Paging. 5
 - Mobile Databases. 5
 - Factless Fact Table. 5
