

SUBJECT: DATABASE CONCEPTS

Day: Tuesday  
Date: 27/11/2018

W-2018-1149

Time: 02.30 pm to 05.30 pm  
Max Marks : 60

---

**N.B. :**

- 1) Question No. 1 is **COMPULSORY**.
  - 2) Attempt **ANY FOUR** of the remaining.
  - 3) Figures to the **RIGHT** indicate **FULL** marks.
  - 4) Draw neat **DIAGRAM** wherever necessary.
- 

- Q.1** Explain **ANY FOUR** of the following: **(20)**
- a) SQL Constraints
  - b) ACID
  - c) Parallel Database
  - d) Database Security
  - e) OLAP Vs. OLTP
- Q.2** What is 'Data Model'? Explain various data models with example. Highlight **(10)** advantages of Relational model.
- Q.3** Explain various types of 'JOINS' used in SQL with relevant example. **(10)**
- Q.4** Explain 'Database Design Process' in detail. **(10)**
- Q.5** What are 'Concurrent Transactions' in DBMS? Explain any one technique of **(10)** concurrency control in detail.
- Q.6** What do you mean by 'Data Warehouse' and 'Data Mining'? Why are they **(10)** required? Explain with suitable scenario.
- Q.7** Explain the concepts of 'Generalization', 'Specialization' and 'Aggregation' **(10)** with suitable example.

\* \* \* \*