Code No: 09A80507

# JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
## B. Tech IV Year II Semester Examinations, April – 2014
## DATABASE SECURITY
### (Computer Science and Engineering)

Time: 3 Hours                                                                 Max. Marks: 75

**Answer any Five Questions**
**All Questions Carry Equal Marks**
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1. What is the need for Database Security? Explain the databases security issues in detail.

2. Discuss the following security models for Distributed Databases:
   i) Access Matrix Model
   ii) Hartson and Hsiao's Model

3.a) Explain Bell and LaPadula's Model with an example.
   b) Describe the Lattice Model for the Flow Control.

4.a) Give a detailed note on Control Flow Mechanisms.
   b) Why do you need to protect resources? How is it achieved?

5. With an example, explain the approaches used in designing secure DBMS and Database Security.

6.a) Explain various types of attacks in detail.
   b) Enumerate on RETISS System.

7.a) Discuss SORION Model for the Protection of Object-Oriented Databases.
   b) Explain the Model for the Protection of Frame Based Systems.

8.a) Describe the Orion Model for the Protection of New Generation Database Systems.
   b) What are active databases? Describe the Model for the Protection of Active Databases.

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