

Code No: 09A80507

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year II Semester Examinations, July - 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 do you mean by Database Security? Discuss the problems related to databases security in detail. Suggest solutions to these problems.
2. Discuss the following security models for Distributed Databases:
  - i) Acten Model
  - ii) Fernandez's Model
- 3.a) Describe the Principle of Biba's Model. How is different from Bell and LaPadula's Model.  
b) Explain the security model proposed by Jajodia and Sandhu.
- 4.a) What is the need for User Identification/Authentication. Discuss Authentication mechanisms in detail.  
b) Explain how Trusted Computer System provides security.
- 5.a) With an example, explain the approach used in designing Security Software.  
b) Mention the features of the Security Packages available in the market.
- 6.a) Enumerate on Inference Controls.  
b) Explain in detail IDES System.
7. Discuss the Models for the Protection of Frame Based Systems and Object-Oriented Systems
- 8.a) Describe the Jajodia and Kogan's Model for the Protection of New Generation Database Systems.  
b) Explain the Model for the Protection of Active Databases.

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