

Code No: 5158Q

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

M.Tech II Semester Examinations, October - 2015

DATABASE SECURITY

(Computer Science and Engineering)

Time: 3 Hours

Max. Marks: 60

**Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 20 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit.

Each question carries 8 marks and may have a, b, c as sub questions.

**PART - A**

5 × 4 marks = 20

- 1.a) How security is provided for databases? [4]
- b) List and explain security functionalities in some operating systems. [4]
- c) What are the design steps to obtain security software. [4]
- d) Discuss briefly about ASES system discovery. [4]
- e) Draw a neat sketch to explain the model for protection of object oriented databases. [4]

**PART - B**

5 × 8 marks = 40

2. Explain how Bussolati and Martella's Model is used for distributed databases? [8]
- OR**
3. Give an example to explain Access Matrix Model for distributed databases. [8]
4. Describe in detail about Sea View Model for distributed databases. [8]
- OR**
5. Discuss about User Identification/Authentication in security mechanisms. [8]
6. Explain in detail about the Methodological Approach to Secure Operating System Design. [8]
- OR**
7. Describe the design steps for obtaining the Secure DBMS. [8]
8. Explain the statistical concepts to obtain database protection. [8]
- OR**
9. With a neat sketch explain IDES System for intrusion detection system. [8]
10. Describe the Model for the Protection of Frame Based Systems. [8]
- OR**
11. Explain the ORION model for the protection of active databases. [8]

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