

Roll No.

23562

**M. Tech 2nd Semester (Cyber Forensics
and Information Security)
Examination – May, 2018**

DATABASE SECURITY

Paper : MTCF-202

Time : Three Hours]

[Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt *five* questions in all, selecting *one* from each Unit. Question No. 1 is *compulsory*.

1. Explain the following :

(i) Take-Grant Model

(ii) Secure DBMS Design

(iii) Types of Attacks

(iv) Protection of object oriented Database 20

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UNIT – I

- 2. Define Database Security. Explain the different problems in Database Security controls. Also explain different security models. 20
- 3. Explain the following : 20
 - (i) Jajodia and Sandhu's Model
 - (ii) Dion's Model

UNIT – II

- 4. Describe the following : 20
 - (i) User Identification/Authentication
 - (ii) Resource Protection
- 5. Explain the following : 20
 - (i) Secure Operating System Design
 - (ii) Security Packages

UNIT – III

- 6. Give a complete description about statistical Database protection and Intrusion Detection System. 20
- 7. Explain the following : 20
 - (i) IDES System
 - (ii) ASES System

UNIT – IV

- 8. Describe in detail the models for the Protection of New Generation Database System ? 20
- 9. Describe the following : 20
 - (i) A Model for the protection of frame Based systems.
 - (ii) The Orion Model. 20