

**B.TECH. DEGREE EXAMINATION, APRIL 2011****Eighth Semester**

Branch : Computer Science/Information Technology

**SECURITY IN COMPUTING (RT)**

(Regular/Supplementary)

Time : Three Hours

Maximum : 100 Marks

**Part A**

*Answer all questions.  
Each question carries 4 marks.*

1. Describe the relevance of network security.
2. Write a note on viruses.
3. Describe the official levels of computer security.
4. What are the protection mechanisms adopted for OS security ?
5. With figure, explain encryption and decryption mechanisms.
6. What do you mean by crypt analysis ?
7. Differentiate blue and application security.
8. Define applet security.
9. Describe SQL security.
10. Define Statistical database security.

(10 × 4 = 40 marks)

**Part B**

*Answer all the questions.  
Each question carries 12 marks.*

11. Explain the following :—

(a) Hackers.

(6 marks)

(b) Crackers.

(6 marks)

*Or*

12. What are the different services and mechanisms for providing network security ? (12 marks)
13. Explain access control mechanism. What do you mean by discretionary and mandatory access control ?

*Or*

14. What are the different authentication mechanisms associated with OS Security ?

Turn over

15. With an example, explain the Diffie-Hellman key exchange algorithm.

*Or*

16. Compare RSA and DES algorithms. List the merits and demerits of each.

17. Explain the IP security architecture with relevant figures.

*Or*

18. With an example, explain the E-mail security.

19. What is the relevance of database security and explain statistical database security ?

*Or*

20. Explain how MAC provides multilevel security for database.

(5 × 12 = 60 marks)