

(2009 Admissions)

Time: Three Hours

Maximum: 70 Marks

Part A (Short Answer Questions (one/two sentences)

Answer all questions.

- What is Rail fence Transposition Technique?
- 2. What are the two approaches to attacking a cipher?
- 3. Define the classes of message authentication function.
- 4. Define Kerberos.
- 5. What are the uses of VPN?

 $(5 \times 2 = 10 \text{ marks})$

Part B (Analytical/Problem Solving Questions)

Answer any four questions.

- 6. Which parameters and design choices determine the actual algorithm of a feistel cipher?
- 7. How is the S-box constructed?
- 8. Explain multilevel security models.
- 9. Assume the client C wants to communicate server S using Kerberos procedure. How can it be achieved?
- Discuss operating system security.
- 11. Define a policy. What are the types of information security policies?

 $(4 \times 5 = 20 \text{ marks})$

Part C (Descriptive / Analytical / Problem Solving Questions)

12. (A) Explain the OSI Architecture.

Or

- (B) Explain DES Algorithm.
- 13. (A) Explain Authentication Functions.

Or

(B) Explain Intrusion Detection.

Turn over

14 (A) Discuss the protocols for secure communications.

Or

- (B) Briefly explain Secure Socket Layer in detail.
- 15 (A) Describe next generation secure computing.

Or

(B) Illustrate software tamper resistance in detail.

 $(4 \times 10 = 40 \text{ marks})$