

**BIM / Sixth Semester / IT 225: Computer Security and Cyber Law**

*Candidates are required to answer all the questions in their own words as far as practicable.*

**Group "A"**

**1. Brief Answer Questions:**

**[10 × 1 = 10]**

- i. Find the totient value of the number 11.
- ii. What is disruption?
- iii. Write down the uses of Proxy Server.
- iv. What is Replay attack?
- v. Write down the factors that make data sensitive.
- vi. Differentiate between cryptographic function and hash function.
- vii. What types of services are kept in DMZ?
- viii. List the characteristics of PGP.
- ix. How does virus differ with trojan horse?
- x. What is Digital Forensics?

**Group "B"**

**Exercise Problems:**

**[5 × 4 = 20]**

2. Explain the working mechanism of Kerberos.
3. How can we reduce the inappropriate internet activities?
4. Encrypt the sentence "ATTACK IS POSTPONED" using Caesar Cipher where  $K = 3$ . Also illustrate the Brute Force Attack to find the plain text from cipher text.
5. Explain the Principle of Least Privilege with suitable example.
6. Explain the features of SET (Secure Electronic Transaction).

**Group "C"**

**Comprehensive Questions:**

**[2 × 5 = 10]**

7. Define access control. Explain the case of loss of integrity, loss of availability, loss of confidentiality with example.
8. Why IPSec is widely used? Explain its operation mode.

