

**COMMON TO ALL BRANCHES**  
**THEORY EXAMINATION (SEM-IV) 2016-17**  
**CYBER SECURITY**

**Time : 3 Hours**

**Max. Marks : 100**

**Note : Be precise in your answer.**

**SECTION – A**

**1. Attempt all of the following questions: 10 x 2 = 20**

- (a) What is CIA (Confidentiality, Integrity and Availability) trade?
- (b) What are the threats to information system?
- (c) What is System Development Life Cycle (SDLC)?
- (d) Define the terms RTGS and NEFT.
- (e) What do you mean by virus, worm and IP spoofing?
- (f) How cyber security is different from computer security?
- (g) State the difference between Risk Management and Risk Assessment.
- (h) Explain briefly about disposal of data.
- (i) Define IT asset and the security of IT Assets.
- (j) What is the need of cyber laws in India?

**SECTION – B**

**2. Attempt any five parts of the following question: 5 x 10 = 50**

- (a) What are biometric? How can a biometric be used for access control? Discuss the criteria for selection of biometrics.
- (b) What is Intrusion Detection System (IDS)? Explain its type in detail.
- (c) What are the backup security measures? Discuss its type.
- (d) What are the basic fundamental principles of information security? Explain.
- (e) Write a short note on CCTV and its applications.
- (f) What is Electronic cash? How does cash based transaction system differ from credit card based transactions?
- (g) What do you mean by Virtual Private Networks? Discuss authentication mechanism used in VPN.
- (h) **Write a short note on:**
  - (i) Database Security
  - (ii) Email Security
  - (iii) Internet Security

**SECTION – C**

**Attempt any two of the following questions: 2 x 15 = 30**

- 3.** What is Electronic Data Interchange (EDI)? What are the benefits of EDI? How can it be helpful in governance?
- 4.** What is digital signature? What are the requirements of a digital signature system? List the security services provided by digital signature.
- 5.** Explain the following in detail :
  - (i) Private Key cryptosystem and Public key cryptosystems.
  - (ii) Firewall.