

(3 Hours)

[Total Marks: 80]

N.B.: (1) Question No. 1 is **Compulsory**.(2) Attempt any **three** questions out of the remaining **five**.

(3) Each question carries 20 marks and sub-question carry equal marks.

(4) Assume suitable data if required.

1. **Solve any four.** (20)
  - (a) Illustrate the Botnets structures used in cyber crimes (5)
  - (b) Demonstrate with example the difference between weak passwords, strong passwords and Random passwords. (5)
  - (c) Recommend any five steps for creating Cyber security Awareness. (5)
  - (d) Summarize Notable features of the ITAA (5)
  - (e) Differentiate between Steganography and cryptography. (5)
2. (a) Discuss traditional techniques to prevent attacks on WIFI. (10)
  - (b) Examine the PCI DSS compliance 'levels' and discuss how are they determined. (10)
3. (a) Predict high-Level Threats and Vulnerabilities for mobile use at organizational level. (10)
  - (b) Draw and explain DDoS attacks. How to prevent Dos/DDos attacks? (10)
4. (a) Determine Security Considerations for top Web Security Threats. (10)
  - (b) Examine the common HIPAA violations Causes and what are its categories? (10)
5. (a) Illustrate factors to be considered in the security of:
  - a) Debit and Credit Card
  - b) Mobile Banking
  - c) UPI
  - d) Online banking
 (10)
  - (b) How does a VPN work? What should a good VPN do? How to surf securely with a VPN? (10)
6. (a) Judge the role of AI/ML in Cyber Security. (10)
  - (b) What are the FISMA Compliance Requirements?  
Demonstrate Penalties for FISMA Compliance Violations (10)

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