

Master of Computer Application (MCA-III) (CBCS Pattern) Fifth Semester  
**PSMCAT502 - Paper-II : Digital Cyber Security**

P. Pages : 2

Time : Three Hours



**GUG/W/18/11117**

Max. Marks : 80

- Notes :
1. All the questions are compulsory and carry equal marks.
  2. Draw neat and labelled diagram wherever necessary.
  3. Avoid vague answers and write the answers relevant and specific to questions only.

- 1.** Either
- a) Discuss in detail about RFC 2196. **8**
  - b) Write a note on **8**
    - i) Authentication failures.
    - ii) Protocol failures.

**OR**

- c) Explain in detail various levels of security threats. **8**
  - d) Discuss the strategies for a secure network. **8**
- 2.** Either
- a) What is virus? Explain the structure and protection against virus. **8**
  - b) Define firewall. How a firewall can be build? Explain. **8**

**OR**

- c) Write a note on **8**
    - i) Dynamic Packet filter.
    - ii) Application level filtering.
  - d) Explain in detail various firewall problems and the testing of firewall. **8**
- 3.** Either
- a) Discuss in detail about SASL. **8**
  - b) Explain in detail Chroot caging suspect software. **8**

**OR**

- c) Explain Ined-Network services in detail. **8**
- d) Write a note on **8**
  - i) Biometrics.
  - ii) PKI

4. Either
- a) Explain various modes of operation in cryptography. 8
  - b) Discuss in detail about secure Hash functions. 8

**OR**

- c) Explain various VPN threats and Exploits. 8
  - d) Explain in detail about Encryption and Decryption. 8
5. Attempt all the questions.
- a) Write a short note on Active Attacks. 4
  - b) Explain in brief Distributed firewalls. 4
  - c) Write in short about POP3. 4
  - d) Explain in brief software VPN. 4

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