

M.Sc. (Part-II) (Computer Science) Sem-IV
MSC241233 - Elective-3.3 - Paper-III : Cyber Security

P. Pages : 1

Time : Three Hours



GUG/S/19/2353

Max. Marks : 80

- Notes :
1. All questions are compulsory and carry equal marks.
 2. Draw Neat and Labeled Diagram wherever necessary.
 3. Avoid vague answers and write answers relevant and specific to questions only.

1. Either 2*8

- a) What is Internet Security? Explain the need and strategies to be adopted for Secure Network.
- b) Write short note with suitable example the classes of attacks.

OR

- c) What do you mean by Authentication Failures? Explain Denial - of - service - attacks in details.
- d) Describe the security plans for RFC (2196) in details.

2. Either 2*8

- a) What do you mean by Firewall Engineering? Explain the important rulesets to be followed.
- b) Write down the procedure for building firewall for Organization and for Individuals.

OR

- c) Explain different ways available for minimizing potential attack for introducing any computer viruses, Trojan horses and logic bombs.
- d) Explain in brief about the classification of Viruses with suitable illustration.

3. Either 2*8

- a) What is Authentication? Explain the levels of authentication in details.
- b) What do you mean by SASL? Explain Host – to – Host Authentication in details.

OR

- c) Describe important network administration tools available for network administrator.
- d) What is SAMBA? Explain how SMB Implementation helps to manage web server.

4.. Either 2*8

- a) Explain the various levels on which we need to encrypt data or network?
- b) Explain the standard modes of operation that can be used with any block ciphers.

OR

- c) What is Cryptography? Explain the basic principles of cryptography.
- d) Describe the advantages and disadvantages of virtual private network.

5. Solve all the questions. 4*4

- a) What ethics must be followed for computer security?
- b) What do you mean by Distributed firewalls?
- c) Describe PKI in details.
- d) Explain Layer 3 VPNs in details.
