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MASTER OF COMPUTER APPLICATIONS DEGREE EXAMINATION, SEPTEMBER - 2023
SECOND SEMESTER
MCA 205B - CYBER SECURITY

(Under C.B.C.S. Revised Regulations w.e.f. 2020-2021)
(Common Paper to University and All Affiliated Colleges)

Time : 3 Hours

Max. Marks : 70

PART-A

Answer any **FIVE** of the following questions. Each question carries 4 marks. (5×4=20)

1. a) What is vulnerability? Explain.
    b) How is a threat different from attack? in Cybersecurity?
    c) What is meant by Packet Sniffing attach? Explain.
    d) Explain about CIA triad.
    e) What is IP Spoofing? Explain.
    f) What is meant by cyber warfare?
    g) What is Penetration Testing? Explain.
    h) What is VPN used for?
    i) What is the difference between Security and Privacy?
    j) What is an IP Right? Explain.

PART - B

Answer **FIVE** questions, choosing **ONE** question from each Unit. Each question carries **10** marks. (5×10=50)

UNIT - I

2. i) Discuss about different types of cyber security attacks.
    ii) Explain the process of vulnerability assessment.

(OR)

3. i) Explain about different layers in cyber security.
    ii) Discuss about at least five web based attacks.

(1)

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UNIT - II

4. i) Give an overview about different Cyber threat actors and their motives.
   ii) Write about the network security model.

(OR)

5. i) Discuss about how and why DoS attacks happen? How can you mitigate them?
   ii) Write about various Social Engineering attacks. How can one prevent them?

UNIT - III

6. i) Discuss about Top-10 OWASP attacks.
   ii) Discuss about the best practices in IT governance.

(OR)

7. i) Discuss about the Incidence Response Process in detail.
   ii) Discuss about Cyber Security Compliance and Audit.

UNIT - IV

8. i) What are the different types of firewalls? Explain.
   ii) Explain about firewall administration procedures.

(OR)

9. i) Write about Antivirus and Antimalware softwares and their uses.
   ii) Discuss about VPN Administration.

UNIT - V

10. i) List atleast two popular cybercrimes that happened in the past one year and explain the losses. How in your opinion could those cybercrimes be prevented?
    ii) Explain about security issues arising out of social media marketing.

(OR)

11. i) Explain Digital Forensics tools. Explain their use.
    ii) What are the best forensics practices? Explain.