Reg. No. : ☐☐☐☐☐☐☐☐☐☐☐☐

Question Paper Code: U2604S

B.E./B.Tech. DEGREE EXAMINATION, NOV 2024

(Professional Elective)

Computer Science Engineering

21CSV604-CYBER SECURITY

(Common to AIML and CSD)

(Regulations 2021)

Duration: Three hours   Maximum: 100 Marks

PART A - (10 x 2 = 20 Marks)

1. What is Cyber Security and How it is different from Information Security?   CO1 U

2. Who are Cyber Criminals and what kind of harms done by them/   CO1 U

3. Define Social Engineering Attack and its types   CO1 U

4. Distinguish the terms "Hackers, Crackers and Phreakers"   CO1 U

5. What is the goal of social engineering reconnaissance?   CO1 U

6. What is the function of the -A switch in Nmap?   CO1 U

7. Create a Presentation on "Cyber Security Attacks"   CO1 U

8. Define hybrid intrusion detection system   CO1 U

9. What is Firewall?   CO1 U

10. What do you mean by packet filtering in Firewall?   CO1 U

PART – B (5 x 16= 80 Marks)

11. (a) Examining the Cyber Crimes and Cyber Criminals during the   CO1 U   (16)
        recent period.

Or

    (b) Apply the Indian cyber laws for various Cyber Crimes.   CO1 U   (16)

12. (a) Explain the types of Malicious Attack in detail.   CO1 U   (16)

Or

    (b) Define a web application attack and explain why web   CO1 U   (16)
        applications are often targeted by cybercriminals. Provide
        examples of common web application vulnerabilities.

13. (a) You are tasked with identifying potential security weaknesses in a company's network. Describe how you would approach this task, starting from reconnaissance to reporting vulnerabilities.   CO2 App   (16)

Or

(b) Write the differences between port scanning techniques such as SYN scan, Stealth scan, and XMAS scan? When would you use each?   CO2 App   (16)

14. (a) How can be Intrusion Detection system is the backbone of Information system? Justify along with its categories.   CO2 App   (16)

Or

(b) Which system was designed and implemented for the detection of intrusions in a multi-user Air Force computer system. Explain in detail   CO2 App   (16)

15. (a) Evaluate the impact of firewall placement in network architecture on its ability to protect different segments of the network.   CO3 Ana   (16)

Or

(b) Compare and contrast firewalls and intrusion prevention systems (IPS) in terms of their roles and effectiveness in protecting network infrastructure. What unique advantages does each provide?   CO3 Ana   (16)

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