BCA Examination 2023-24

(Even Semester)

CYBER SECURITY

Time : Three Hours] *[Maximum Marks : 60*

Note :– Attempt all questions.

SECTION – A

1. Attempt all parts of the following : 8×1=8

   (a) Briefly explain the term cybersecurity.

   (b) What is zero-click vulnerability?

   (c) What is MITRE ATT & CK?

   (d) What are TTPs?

   (e) What is a CVE?

   (f) What are IoCs?

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(g) WHat is OWASP Top 10?

(h) What is SIEM?

SECTION – B

2. Attempt any two parts of the following : 2×6=12

(a) Discuss how integration across different domain helps to adapt to new threats and strengthen security posture of organizations.

(b) Explain SQLi, Brute-force, Misconfiguration and watering hole-attack.

(c) What is defense in depth? Explain the different network controls in layered security.

(d) Explain why cyber resilience programs are under pressure?

SECTION – C

Note :– Attempt all questions. Attempt any two parts from each questions. 8×5=40

3. (a) Explain reasons for a cybersecurity attack.

(b) Write a short note on target attack kill chain analysis.

(c) Explain any cybersecurity attack with the help of a case study.

4. (a) What are the tasks of a security analyst?

(b) What is dark web? What is TOR, explain how TOR works?

(c) Explain any four top financial attacks.

5. (a) Discuss the anatomy of an APT.

(b) Explain the difference between SSH and telnet in security context. Explain how wireshark can be used to show the difference?

(c) What is a proxy? Explain how burpsuite helps in web application security testing?

6. (a) Explain the impact of data breaches and ransomware in government and healthcare sectors.

(b) Explain how SIEM can identify phishing attack.

(c) Briefly explain the common IOT device attack vectors.

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