

(6 pages)

Reg. No. :

Code No. : 20420 E Sub. Code : SECA5C

B.C.A. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2021.

Fifth Semester

Computer Application

Major Elective — CYBER SECURITY

(For those who joined in July 2017-2019)

Time : Three hours

Maximum : 75 marks

PART A — ($10 \times 1 = 10$ marks)

Answer ALL the questions.

Choose the correct answer :

1. It is a program or hardware device that filters the information coming through an internet connection to a network or computer system.
 - (a) Anti Virus
 - (b) Cookies
 - (c) Firewall
 - (d) Cyber security
2. It allow a visited website to store its own information about a user on the user's computer.
 - (a) Spam
 - (b) Cookies
 - (c) Malware
 - (d) Adware

3. It is stealing ideas or creations of others.
- (a) Plagarism
 - (b) Intellectual Property Rights
 - (c) Piracy
 - (d) All of the above
4. Exploring appropriate and ethical behaviors related to online environments and digital media.
- (a) Cyber ethics (b) Cyber security
 - (c) Cyber safety (d) Cyber law
5. Which of the following is digital certificate standard?
- (a) X. 508 (b) X. 509
 - (c) D. 509 (d) None of the above
6. Which of the following technique is used to verify the integrity of the message?
- (a) Message digest
 - (b) Digital signature
 - (c) Decryption algorithm
 - (d) Protocol

7. Which of the following principle is violated if computer system is not accessible?
- (a) Confidentiality
 - (b) Availability
 - (c) Access control
 - (d) Authentication
8. The certificate Authority signs the digital certificate with
- (a) User's Public Key
 - (b) User's Private Key
 - (c) It's Own Public Key
 - (d) It's own Private Key
9. What is the another name for Internet Layer?
- (a) TCP Layer
 - (b) Interwebs
 - (c) IP Layer
 - (d) SSL Layer
10. Which of the following is the collective name for Trojan horses, Spyware and Worms?
- (a) Spyware
 - (b) Botnets
 - (c) Virus
 - (d) Malware

PART B — ($5 \times 5 = 25$ marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) What is information? How the information can be represented?

Or

- (b) List out the critical characteristics of information.

12. (a) What is meant by security balancing and Access?

Or

- (b) What are the deliverables of risk assessment?

13. (a) What is information security policy? Brief it.

Or

- (b) What are the constraints of ISO 17799?

14. (a) Give short notes on the approaches of implementing firewall?

Or

- (b) What is the need of IDS? Explain it.

15. (a) What is the standard for encryption currently recommended by NIST?

Or

- (b) What are the positions of security personnel in IS hierarchy?

PART C — ($5 \times 8 = 40$ marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Explain the various concepts of Information System.

Or

- (b) Explain different phases of Security Systems Development Life Cycle (SSDLC).

17. (a) Discuss the components of risk identification in detail.

Or

- (b) Discuss the risk controlling strategies in detail.

18. (a) What are the three types of Security policies? Explain.

Or

- (b) Explain the security architecture design process with a neat sketch.

19. (a) What is intrusion detection system? Explain its categories.

Or

- (b) Explain in detail about Firewall Processing modes and its architecture.

20. (a) What is Cryptography? Discuss the different cipher methods with suitable examples.

Or

- (b) Write short notes on :

- (i) Public Key Infrastructure (PKI)
- (ii) Digital signature
- (iii) Digital certificate
- (iv) Steganography.
