

B. C. A. DEGREE EXAMINATION, APRIL 2023
SIXTH SEMESTER

COURSE : MAJOR CORE
PAPER : SECURITY CONCEPTS
TIME : 3 HOURS

MAX. MARKS: 100

SECTION A

ANSWER ALL QUESTIONS.

(20 X 1 = 20)

Choose the correct answer:

1. A _____ device uses distinctive personally identifiable characteristics or unique physical traits to positively identify an individual.
a. Physical b. biometric c. scanner d. None of the mentioned
2. _____ establishes who the user is.
a. Identification b. Authorization c. Credentials d. Authentication
3. _____ are used to restrict access to specific services.
a. Antivirus b. Firewalls c. Lock d. Worms
4. A significant but often missed or under-considered factor in determining an appropriate _____ design strategy is to identify how the network will be used and what is expected from the business it supports
a. network b. firewall c. security d. antivirus
5. _____ provide virtual network links based on encrypting and isolating traffic at the packet level while using commodity Internet services for transport.
a. Router b. VPN c. WAN d. Bridge
6. _____ is the process of monitoring and identifying specific malicious traffic.
a. Intrusion detection b. Routing c. Identification d. networking
7. _____ devices combine the best features of flash drives and portable hard drives
a. VPN b. CD c. solid-state drive d. Mapping
8. _____ are designed to be automatically “fired” whenever specific actions take place within a database.
a. Procedures b. Triggers c. Functions d. Intrusion
9. _____ keys use hardware or software based authenticators that generate a random seed based on the current time of day.
a. Action based b. Network based c. Time-based d. None
10. _____ modelling is a technique for reviewing the security properties of a design and identifying potential issues and fixes.
a. Security b. Networking c. Threat d. State

Fill in the blanks :

11. CCTV stands for _____
12. All _____ systems are based on one of three different types of human traits.
13. The fundamental purpose of TCP/IP is to provide computers with a method of _____ data from one computer to another over a network.

14. _____ are more intelligent devices that learn the various MAC addresses of connected devices and transmit packets only to the devices they are specifically addressed to.
15. A VPN is referred to as a _____ because the client does not know or care about the actual path between the two endpoints.
16. A _____ is installed on the host it is intended to monitor.
17. _____ creates a protected zone where only identified devices within that zone are allowed to communicate with each other
18. Databases offer developers the ability to create and reuse SQL code through the use of objects called _____.
19. _____ key systems use a passphrase to generate one-time passwords.
20. _____ is essentially a development process that includes security practices and decision making inputs for software development.

SECTION - B

Answer ALL the questions

(5 X 2 = 10)

21. What is mantrap?
22. State the reasons to look for an information security provider for an outsourced services.
23. What is split tunnelling?
24. Write about port zoning.
25. List out the types of authentication systems available today:

SECTION - C

Answer any EIGHT questions

(8 X 5 = 40)

26. Describe classification of assets.
27. The security professional establishes controls to limit access to a facility or system or privileges granted to a user in an organization. State the reason.
28. Explain Firewall configuration.
29. Write about Designing Security into a Network.
30. Discuss about Encapsulating Security Payload in detail.
31. Describe the features of IDS.
32. Explain the two key areas of risk to data.
33. Summarize the usage and capacities of database.
34. List out and explain different types of File-Access Permissions.
35. Explain with neat diagram about Secure Development Lifecycle.

SECTION - D

Answer any THREE questions

(3 X 10 = 30)

36. Write the factors to be considered in choosing site location for security.
37. Describe the functions of core firewall.
38. Explain Authentication process in Remote access VPN security.
39. Discuss Security areas of arrays in storage security with the diagram.
40. Write in detail about certificate based authentication.
