History of Cybersecurity

TOTAL POINTS 18

1. What was shown in the movie *War Games* that concerned President Reagan? | 1 point |

   ◯ KGB agents from the USSR were able to hack into Pentagon computer systems and steal plans for advanced US weapons.

   ◯ US Army gererals did not know how to use the advanced weapons systems they were responsable for.

   ◯ A teenager hacked into a Pentagon computer that was capable of launching nuclear weapons.

   ⦿ The movie gave an accurate portayal of the Iran-Contra scandle that could have only come from inside sources.

2. In addition to the movie *War Games*, what other event made the need for advanced cybersecurity apparent? | 1 point |

   ◯ The failed Bay of Pigs invasion.

   ⦿ 9/11

   ◯ The attack against the USS Cole while it was in port in Yeman.

   ◯ Confirmed reports of Al Qaeda operatives hacking the E-mail servers of US Government agencies.

3. What were the three (3) main cybersecurity concerns arising from the 9/11 attacks? | 1 point |

   ☑ How did this happen?

   ☑ Could an attack like this happen in the virtual world too?

   ☑ Could this happen again?

   ☐ Who wrote the malware that took control of the 4 airplanes navigation systems?

4. According to a Forbes Magazine study, the annual cost of cybercrime in the United States alone has reached how much? | 1 point |

   ◯ $100M

   ◯ $1B

   ◯ $10B

   ⦿ $100B

5. Who are Alice, Bob and Trudy? | 1 point |

   ◯ They were members of British Navel Intelligence who did pioneering work in secure communications that later became known as cryptography.

   ◯ They are the founders of modern cryptography.

   ⦿ They are fictional characters used to illustrate how cryptography works.

   ◯ They are the pseudonyms (false names) used by members of the hacktivist group Anonymous.

6. Which of the following is considered a legitimate challenge to implementing a comprehensive cybersecurity solution? | 1 point |

○ Security practices are viewed as being "in the way".

○ Security architectures require constant effort.

○ Security is often an after-thought; something that is added at the end of a project rather than baked into the project from the start.

● All of the above

7. Jeff Crume described five challenges in security today. Which two (2) of these are challenges because their numbers are decreasing?   `1 point`

☐ Alerts

☐ Needed knowledge

☑ Available time

☐ Threats

☑ Available analysts

8. "A defined way to breach the security of an IT system through a vulnerability" is the definition of which key cybersecurity term?   `1 point`

● Exploit

○ Threat

○ Vulnerability

○ Risk

9. "A situation involving exposure to a danger." Is the definition of which key cybersecurity term?   `1 point`

○ Threat

○ Vulnerability

○ Exploit

● Risk

10. Which aspect of a comprehensive approach to cybersecurity includes these items: *evaluate, create teams, establish baselines, identify and model threats, identify use cases, identify risks, establish monitoring and control requirements*?   `1 point`

○ Asset management

○ Administrative controls

○ Technical controls

● Security program

11. According to a 2018 report by Domo, over what period of time do the following things occur: *49,380 videos are uploaded to Instagram, 25,000 gifs are sent on Facebook Messenger, 4.2 million videos are viewed on Snapchat and 473,400 tweets are sent on Twitter*?   `1 point`

○ Every 1 second

● Every 1 minute

○ Every 1 hour

○ Every 1 day

○ Every 1 month

○ Every 1 month

○ Every 1 year

12. In the examples using Bob, Alice and Trudy, what aspect of cybersecurity is being illustrated? [1 point]

○ The positioning of firewalls that assure the integrity of communication between the 3 friends.

○ The complexity of communication between people who use different protocols.

● The security of communication between Alice and Bob that risks interception by Trudy.

○ The availability of communication that needs to be shared between the 3 friends.

13. Alice sends an unencrypted message to Bob but it is intercepted by Trudy. Trudy reads the message but does not in any way interfere with its content or delivery. Which precept of the CIA Triad would have been violated? [1 point]

● Confidentiality

○ Integrity

○ Availability

○ All of the above.

14. Alice sends an encrypted message to Bob but it is intercepted by Trudy. Trudy cannot read it so, in anger, she deletes it without allowing its delivery to Bob. Which precept of the CIA Triad would have been violated? [1 point]

○ Confidentiality

○ Integrity

● Availability

○ All of the above

15. Alice sends an encrypted message to Bob but it is intercepted by Trudy. Trudy cannot read it but forwards it on to Bob from an anonymous address she controls. Which precept of the CIA Triad would have been violated? [1 point]

○ Confidentiality

● Integrity

○ Availability

○ All of the above

16. A major metropolitan police department gets a warrant from a judge to hack into the computer of a suspected crime boss. A skilled penetration tester working for the department conducts the hack and retrieves incriminating evidence. What color hat does this officer wear? [1 point]

○ A Black Hat

● A White Hat

○ A Gray Hat

17. Which three (3) are resources that are available to help guide penetration testing efforts by cybersecurity specialists? [1 point]

☑ NIST SP 800-42 Guidelines on Network Security Testing.

☐ Health Information Portability and Accountability Act (HIPAA)

☑ Open Source Security Testing Methodology Manual (OSSTMM).

☑ Federal Financial Institutions Examination Council (EFIEC) Information Technology Examination.

18. According to the Vulnerability Assessment Methodology, Vulnerabilities are determined by which 2 factors? [1 point]

○ Exposure and Sensitivity

○ Identify Indicators and Exposure

○ Sensitivity and Adaptive Capacity

● Potential Impacts and Adaptive Capacity

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○ Sensitivity and Adaptive Capacity

● Potential Impacts and Adaptive Capacity

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