

Roll No.

SAP ID



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, July 2020

Course: IT for Forensic Science
Programme: B.TECH.(CSE), LL.B. (Hons.) Cyber Laws
Course Code CSEG424
Max. Marks: 100

Semester: VIII
Time: 03 hrs.

Note: All questions are compulsory.

1. Which of the following does authentication aim to accomplish? **CO1 1**
 - a. Restrict what operations/data the user can access Incorrect
 - b. Determine who the user is Correct
 - c. Flag the user if he/she misbehaves Incorrect
 - d. Determine if the user is an attacker Incorrect

2. Which of the following does authorization aim to accomplish? **CO1 1**
 - a. Determine if the user is an attacker Incorrect
 - b. Flag the user if he/she misbehaves Incorrect
 - c. Restrict what operations/data the user can access Correct
 - d. Determine who the user is Incorrect

3. Which of the following is an authentication method? **CO1 1**
 - a. Secret question Incorrect
 - b. Biometric Incorrect
 - c. Password Incorrect
 - d. All of the above Correct
 - e.

4. Which of the following is not a security exploit? **CO1 1**
 - a. Eavesdropping Incorrect
 - b. Cross-site scripting Incorrect
 - c. Authentication Correct SQL
 - d. Injection Incorrect

5. Where does the packet sniffing happen? **CO1 1**
 - a. In the database Incorrect
 - b. On GitHub Incorrect
 - c. Over the network Correct
 - d. All of the above Incorrect

6. What was the first company to provide biometric verification to unlock phones? **Co4 1**
- Google Incorrect
 - Apple Correct
 - Windows Incorrect
 - Samsung Incorrect
7. What are biometrics most commonly used for? **CO1 1**
- Internet Incorrect
 - Online banking and Authorization of payments Correct
 - Phones and Laptops Incorrect
 - Security of buildings Incorrect
8. Which one is not a considered a unique and distinct characteristic of security device measurement? **CO1 1**
- Tongue Correct
 - Fingerprints Incorrect
 - Iris Incorrect
 - Voice Patterns Incorrect
9. Which one does not interrupt or falsify the scanning of biometrics? **CO1 1**
- Sunglasses Incorrect
 - Eye Contacts Correct
 - Dirty fingerprints Incorrect
 - face recognition Incorrect
10. The purpose of biometric is specifically to find or confirm the ----- of individuals from intrinsic traits. **CO1 1**
- identity Correct
 - face Incorrect
 - finger Incorrect
 - iris Incorrect
11. Which one is not how companies identified individuals before biometrics? **CO1 1**
- Fingerprints Correct
 - Access Cards Incorrect
 - Passwords/Passcodes Incorrect
 - Pin Incorrect
12. What percentage of respondents in the survey said that biometrics are the future of identity verifications? **CO1 1**
- 58% Incorrect
 - 76% Correct
 - 24% Incorrect
 - 33% Incorrect
13. A false negative is a failure to match a sample against the correct reference, and the proportion of those is called **CO1 2**
- False Accept Rate (FAR) Incorrect
 - False Reject Rate (FRR) Correct

- c. None of these Incorrect
d. All of the above Incorrect
14. The three basic types of fingerprint pattern are: **CO1 2**
a. arches, loops and rings. Incorrect
b. whorls, arches and accidentals. Incorrect
c. whorls, accidentals and loops. Incorrect
d. loops, arches and whorls. Correct
15. Which of the following is not one of the features that must be present in order for a fingerprint pattern to be classified as a loop pattern? **CO1 2**
a. A core. Incorrect
b. A ridge ending. Correct
c. A single delta. Incorrect
d. A minimum ridge count of one. Incorrect
16. The practice of concealing messages or information within other nonsecret text or data **CO2 2**
a. Password Incorrect
b. Biometric Incorrect
c. Steganography Correct
d. Watermarking Incorrect
17. The purpose of ----- is to provide data protection **CO2 2**
a. biometric Incorrect
b. Watermarking Incorrect
c. Steganography Incorrect
d. Cryptography Correct
18. Different methods of audio steganography include **CO2 2**
a. Parity Encoding Incorrect
b. Phase Coding Incorrect
c. Spread Spectrum Incorrect
d. All of the above Correct
19. Image Steganography approaches include **CO2 2**
a. Random and Statistical Generation Incorrect
b. Linguistic Method Incorrect
c. Least Significant Bit Correct
d. Format Based Method Incorrect
20. ----- is an open source Steganography software that lets you hide a secret file in image or audio file. **CO2 2**
a. Stegosuite Incorrect
b. Steghide Incorrect
c. OpenPuff Incorrect
d. All of the above Correct
21. Which method embeds messages in the intensity of the pixels directly? **CO4 2**

- a. Frequency domain Incorrect
 - b. Spatial Domain Correct
 - c. None of these Incorrect
 - d. All of the above Incorrect
22. Which one is a transform domain technique? **CO4 2**
- a. DCT Incorrect
 - b. DWT Incorrect
 - c. DFT Incorrect
 - d. All of the above Correct
23. _____ is used not only to detect the stego-image but it tries to recover the hidden data. **CO2 2**
- a. Steganography Incorrect
 - b. Steganalysis Correct
 - c. Watermarking Incorrect
 - d. Cryptography Incorrect
24. Which one offers multiresolution representation of image and it gives perfect reconstruction of decomposed image? **CO4 2**
- a. DFT Incorrect
 - b. DCT Incorrect
 - c. DWT Correct
 - d. None of these Incorrect
25. A biometric identifier known as a _____ is used to map the unique patterns of a person's retina. **CO1 2**
- a. finger scan Incorrect
 - b. face scan Incorrect
 - c. iris scan Incorrect
 - d. retinal scan Correct
26. _____ is an automated method of biometric identification that uses mathematical pattern-recognition techniques on video images of the _____ of an individual's eyes, whose complex random patterns are unique and can be seen from some distance. **CO4 2**
- a. face recognition, face Incorrect
 - b. retina recognition, retina Incorrect
 - c. Iris recognition , irises Correct
 - d. None of these Incorrect
27. Which one is not a behavioral characteristics? **CO1 2**
- a. Voice Incorrect
 - b. Gait Incorrect
 - c. DNA Correct
 - d. Keystroke Incorrect
28. To enforce copyright to prevent a product from being copied: **CO3 2**

- a. The claimant's product must be represented in an artistic work Incorrect
 - b. Articles made to the design must have been marketed Incorrect
 - c. The defendant's product must be a substantial copy of the claimant's product
Incorrect
 - d. The claimant's designer must have created the design for the claimant's
product in the form of a drawing or a model that is an artistic work
Correct
29. Which of them is not a wireless attack? **CO2 1**
- a. Phishing Correct
 - b. Wireless Hijacking Incorrect
 - c. MAC Spoofing Incorrect
 - d. Eavesdropping Incorrect
30. Why would a hacker use a proxy server? **CO3 1**
- a. To create a stronger connection with the target. Incorrect
 - b. To create a ghost server on the network. Incorrect
 - c. To obtain a remote access connection. Incorrect
 - d. To hide malicious activity on the network. Correct
31. The first phase of hacking an IT system is compromise of which foundation of security **CO2 1**
- a. Availability Incorrect
 - b. Confidentiality Correct
 - c. Integrity Incorrect
 - d. Authentication Incorrect
32. Which one is not an authentication protocol? **CO2 1**
- a. Password Authentication Protocol Incorrect
 - b. Time based one time password Incorrect
 - c. Simple Mail Transfer Protocol Correct
 - d. Challenge Handshake Authentication Protocol Incorrect
33. _____ is a biometric that identifies users by the shape of their hands. **CO1 2**
- a. Fingerprints Incorrect
 - b. hand geometry Correct
 - c. vein recognition Incorrect
 - d. face recognition Incorrect
34. _____ is a branch of Information Hiding (IH) using written natural language to
conceal secret messages **CO2 2**
- a. Image Steganography Incorrect
 - b. Technical Steganography Incorrect
 - c. Linguistic steganography Correct
 - d. Video Steganography Incorrect
35. Which is not the steganalytic attack? **CO3 2**
- a. Visual attack Incorrect
 - b. Statistical attack Incorrect

- c. active attack Correct
d. None of these Incorrect
36. The word _____ is a combination of the Greek words 'steganos' which means "covered or concealed", and 'graphein' which means "writing". **CO2 2**
a. Cryptography Incorrect
b. Tomography Incorrect
c. Chorography Incorrect
d. Steganography Correct
37. The main motive for using steganography is that hackers or other users can hide a secret message behind a _____. **CO2 2**
a. special file Incorrect
b. ordinary file Correct
c. program file Incorrect
d. encrypted file Incorrect
38. Which one of the following statements is true? **CO3 2**
a. Copyright must be registered in order to gain protection. Incorrect
b. The owner of a patent cannot sell it but can prevent others using his invention. Incorrect
c. A patent must be registered in order to gain protection. Correct
d. The definition of an invention is set out in the Patents Act 1977. Incorrect
39. Which one of the following actions is not a breach of copyright? **CO3 2**
a. To import copied CDs. Incorrect
b. To purchase a CD and copy it to your laptop for your own private use. Correct
c. To make a copy of a CD and sell it. Incorrect
d. To borrow a CD from a friend and copy it to your laptop for your own private use. Incorrect
40. The remedies available for infringement of copyright does NOT include which of the following: **CO2 1**
a. Injunction Incorrect
b. Rectification Correct
c. Account of profits Incorrect
d. Damages Incorrect
41. Viruses, worms, malware, Denial of Service attacks, and password crackers are all examples of _____ cyber attacks **CO3 2**
a. passive Incorrect
b. active Correct
c. none of these Incorrect
d. All of the above Incorrect
42. Which of the following would NOT allow protection through copyright? **CO2 2**
a. Music and broadcasts Incorrect

- b. Ideas Correct
 - c. Typological arrangements of published editions Incorrect
 - d. Dramatic productions Incorrect
43. How could you define a statistical methods? **CO3 2**
- a. It substitute redundant parts of a cover with a secret message (spatial domain) Incorrect
 - b. store information by signal distortion and measure the deviation from the original cover in the decoding step. Incorrect
 - c. embed secret information in a transform space of the signal Incorrect
 - d. It encode information by changing several statistical properties of a cover and use hypothesis testing in the extraction process Correct
44. Which one is not a steganography technique? **CO3 2**
- a. Spread spectrum Incorrect
 - b. Distortion Incorrect
 - c. Statistical Incorrect
 - d. Watermarking Correct
45. What is the difference between cryptography and steganography? **CO2 2**
- a. cryptography makes the data unreadable, or hides the meaning of the data, while steganography hides the existence of the data Correct
 - b. steganography and cryptography both makes the data unreadable, or hides the meaning of the data as well as hides the existence of the data Incorrect
 - c. steganography makes the data unreadable, or hides the meaning of the data, while cryptography hides the existence of the data Incorrect
 - d. none of these Incorrect
46. Which one is not a type of watermarking? **CO3 1**
- a. Visible Watermarks Incorrect
 - b. Public Watermarks Incorrect
 - c. Invisible Watermark Incorrect
 - d. Local Watermarks Correct
47. Which one is a Digital watermarking process? **CO3 2**
- a. attack , Embed, Protection Incorrect
 - b. Protection, embed, attack Incorrect
 - c. Embed, attack , Protection Correct
 - d. none of these Incorrect
48. Which one is not an application of watermarking? **CO3 2**
- a. Brands Incorrect
 - b. Forensics Incorrect
 - c. video authentication Incorrect
 - d. verification Correct

49. Transforming the difference between adjacent pixels is known as **CO3 2**
- a. image normalization Incorrect
 - b. image compression Incorrect
 - c. image equalization Incorrect
 - d. image watermarking Correct
50. Access controls include the following: **CO3 2**
- a. require employee logouts when the workstations are left unattended. Incorrect
 - b. prohibitions against visitors roaming the building in which computers are stored. Incorrect
 - c. form design. Incorrect
 - d. Answers i and ii only. Correct
51. Which of the following is a fundamental control for protecting privacy? **CO2 1**
- a. Information rights management (IRM) software Incorrect
 - b. Training Incorrect
 - c. Encryption Correct
 - d. None of the above Incorrect
52. What is the first step in protecting the confidentiality of intellectual property and other sensitive business information? **CO3 2**
- a. Encrypt the data. Incorrect
 - b. Install information rights management software. Incorrect
 - c. Employ deep packet inspection techniques on all incoming packets. Incorrect
 - d. Identify where confidential data resides and who has access to it. Correct
53. The average fingerprint has approximately how many individual ridge characteristics? **CO1 1**
- a. 300 Incorrect
 - b. 225 Incorrect
 - c. 75 Incorrect
 - d. 150 Correct
54. What is the basis for the determination of the primary classification of fingerprints? **CO1 2**
- a. the presence or absence of arch patterns Incorrect
 - b. the presence or absence of loop patterns Incorrect
 - c. the presence or absence of minutiae Incorrect
 - d. the presence or absence of whorl patterns Correct
55. Consists of a row/column configuration of tiny metal electrodes. Every column is linked to a pair of sample-and-hold circuits. The fingerprint image is recorded in sequence, row by row, as each metal electrode acts as one capacitor plate and the contacting finger acts as the second plate. **CO1 2**
- a. Sensor Incorrect
 - b. Comparison Incorrect
 - c. Live Scan Incorrect

- d. Capacitive Sensor Correct
56. A value returned by a biometric algorithm that indicates the degree of similarity or correlation between a biometric sample and a reference. **CO1 2**
- a. Comparison Incorrect
 - b. Modality Incorrect
 - c. Difference Score Incorrect
 - d. Similarity Score Correct
57. A potentially interesting technique because considerable voice communication takes place with regard to everyday business transactions. **CO1 2**
- a. Bifurcation Incorrect
 - b. Signature Verification Incorrect
 - c. Verification Incorrect
 - d. Voice Verification Correct
58. A behavioral biometric modality that analyzes dynamic characteristics of an individual's signature. **CO1 2**
- a. Signature Verification Incorrect
 - b. Biometric Sample Incorrect
 - c. Keystroke Dynamics Incorrect
 - d. Signature Dynamics Correct
59. A relatively stable human physical characteristic, such as a fingerprint, hand silhouette, iris pattern, or blood vessel pattern on the back of the eye. This type of measurement is unchanging and unalterable without significant duress. **CO1 2**
- a. Threshold Incorrect
 - b. Behavioral Incorrect
 - c. Spoofing Incorrect
 - d. Physiological Correct
60. A biometric modality that uses an image of the physical structure of an individual's iris for recognition purposes. **CO1 1**
- a. Recognition Incorrect
 - b. Palm print recognition Incorrect
 - c. Iris Scanning Incorrect
 - d. Iris recognition Correct