- 1 1. Account lockout is a mitigation strategy used by Jane, the administrator, to combat which of the following attacks? (Choose two.)
- 2 A. Spoofing
- B. Man-in-the-middle
- 4 C. Dictionary
- 5 D. Brute force
- 6 E. Privilege escalation
- 8 2. A recent audit has discovered that at the time of password expiration clients are able to recycle the previous credentials for authentication. Which of the following controls should be used together to prevent this from occurring? (Choose two.)
- 9 A. Password age
- 10 B. Password hashing
- 11 C. Password complexity
- 12 D. Password history
- 13 E. Password length
- 14

- 15 3. A password history value of three means which of the following?
- 16 A. Three different passwords are used before one can be reused.
- 17 B. A password cannot be reused once changed for three years.
- 18 C. After three hours a password must be re-entered to continue.
- 19 D. The server stores passwords in the database for three days.

20

- 4. An administrator discovers that many users have used their same passwords for years even though the network requires that the passwords be changed every six weeks. Which of the following, when used together, would BEST prevent users from reusing their existing password? (Choose two.)
- 22 A. Length of password
- 23 B. Password history
- 24 C. Minimum password age
- 25 D. Password expiration
- 26 E. Password complexity
- 27 F. Non-dictionary words

28

- 29 5. A system administrator has noticed that users change their password many times to cycle back to the original password when their passwords expire. Which of the following would BEST prevent this behavior?
- 30 A. Assign users passwords based upon job role.
- 31 B. Enforce a minimum password age policy.
- 32 C. Prevent users from choosing their own passwords.
- 33 D. Increase the password expiration time frame.

34

- 35 6. Which of the following is an important implementation consideration when deploying a wireless network that uses a shared password?
- 36 A. Authentication server
- 37 B. Server certificate
- 38 C. Key length
- 39 D. EAP method

40

- 41 7. A security administrator is reviewing the below output from a password auditing tool:
- 42 P@ss.
- 43 @pW1.

44 S3cU4

45

- Which of the following additional policies should be implemented based on the tool's output?
- 47 A. Password age
- 48 B. Password history
- 49 C. Password length
- 50 D. Password complexity

- 8. Several employee accounts appear to have been cracked by an attacker. Which of the following should the security administrator implement to mitigate password cracking attacks? (Choose two.)
- A. Increase password complexity
- 54 B. Deploy an IDS to capture suspicious logins
- 55 C. Implement password history
- 56 D. Implement monitoring of logins
- 57 E. Implement password expiration

58 F. Increase password length

59

- 9. Human Resources suspects an employee is accessing the employee salary database. The administrator is asked to find out who it is. In order to complete this task, which of the following is a security control that should be in place?
- A. Shared accounts should be prohibited.
- B. Account lockout should be enabled
- 63 C. Privileges should be assigned to groups rather than individuals
- 0. Time of day restrictions should be in use

65

- 10. A network administrator is configuring access control for the sales department which has high employee turnover. Which of the following is BEST suited when assigning user rights to individuals in the sales department?
- 67 A. Time of day restrictions
- 68 B. Group based privileges
- 69 C. User assigned privileges
- 70 D. Domain admin restrictions

71

- 72 11. A new network administrator is setting up a new file server for the company. Which of the following would be the BEST way to manage folder security?
- 73 A. Assign users manually and perform regular user access reviews
- 74 B. Allow read only access to all folders and require users to request permission
- 75 C. Assign data owners to each folder and allow them to add individual users to each folder
- 76 D. Create security groups for each folder and assign appropriate users to each group

77

- 12. A new intern was assigned to the system engineering department, which consists of the system architect and system software developer's teams. These two teams have separate privileges. The intern requires privileges to view the system architectural drawings and comment on some software development projects. Which of the following methods should the system administrator implement?
- 79 A. Group based privileges
- 80 B. Generic account prohibition
- 81 C. User access review
- 82 D. Credential management

83

- 13. A system administrator needs to ensure that certain departments have more restrictive controls to their shared folders than other departments. Which of the following security controls would be implemented to restrict those departments?
- 85 A. User assigned privileges
- 86 B. Password disablement
- 87 C. Multiple account creation
- 88 D. Group based privileges

89

- 90 14. Which of the following practices reduces the management burden of access management?
- 91 A. Password complexity policies
- 92 B. User account audit
- 93 C. Log analysis and review
- 94 D. Group based privileges

95

- 15. A supervisor in the human resources department has been given additional job duties in the accounting department. Part of their new duties will be to check the daily balance sheet calculations on spreadsheets that are restricted to the accounting group. In which of the following ways should the account be handled?
- A. The supervisor should be allowed to have access to the spreadsheet files, and their membership in the human resources group should be terminated.
- 98 B. The supervisor should be removed from the human resources group and added to the accounting group.
- 99 C. The supervisor should be added to the accounting group while maintaining their membership in the human resources group.
- 100 D. The supervisor should only maintain membership in the human resources group.

- 102 16. A security analyst implemented group-based privileges within the company active directory. Which of the following account management techniques should be undertaken regularly to ensure least privilege principles?
- 103 A. Leverage role-based access controls.
- 104 B. Perform user group clean-up.
- 105 C. Verify smart card access controls.
- 106 D. Verify SHA-256 for password hashes.

- 107
- 108 17. Privilege creep among long-term employees can be mitigated by which of the following procedures?
- 109 A. User permission reviews
- 110 B. Mandatory vacations
- 111 C. Separation of duties
- 112 D. Job function rotation

- 18. A recent audit of a company's identity management system shows that 30% of active accounts belong to people no longer with the firm. Which of the following should be performed to help avoid this scenario? (Choose two.)
- 115 A. Automatically disable accounts that have not been utilized for at least 10 days.
- 116 B. Utilize automated provisioning and de-provisioning processes where possible.
- 117 C. Request that employees provide a list of systems that they have access to prior to leaving the firm.
- 118 D. Perform regular user account review / revalidation process.
- 119 E. Implement a process where new account creations require management approval.

120

- 19. In order for network monitoring to work properly, you need a PC and a network card running in what mode?
- 122 A. Launch
- 123 B. Exposed
- 124 C. Promiscuous
- 125 D. Sweep

126

- 20. Which of the following techniques enables a highly secured organization to assess security weaknesses in real time?
- 128 A. Access control lists
- 129 B. Continuous monitoring
- 130 C. Video surveillance
- 131 D. Baseline reporting

132

- 21. A customer has provided an email address and password to a website as part of the login process. Which of the following BEST describes the email address?
- 134 A. Identification
- 135 B. Authorization
- 136 C. Access control
- 137 D. Authentication

138

- 22. A company has 5 users. Users 1, 2 and 3 need access to payroll and users 3, 4 and 5 need access to sales. Which of the following should be implemented to give the appropriate access while enforcing least privilege?
- A. Assign individual permissions to users 1 and 2 for payroll. Assign individual permissions to users 4 and 5 for sales. Make user 3 an administrator.
- B. Make all users administrators and then restrict users 1 and 2 from sales. Then restrict users 4 and 5 from payroll.
- 142 C. Create two additional generic accounts, one for payroll and one for sales that users utilize.
- D. Create a sales group with users 3, 4 and 5. Create a payroll group with users 1, 2 and 3.

144

- 23. An administrator implements SELinux on a production web server. After implementing this, the web server no longer serves up files from users' home directories. To rectify this, the administrator creates a new policy as the root user. This is an example of which of the following? (Choose two.)
- 146 A. Enforcing SELinux in the OS kernel is role-based access control
- 147 B. Enforcing SELinux in the OS kernel is rule-based access control
- 148 C. The policy added by the root user is mandatory access control
- 149 D. Enforcing SELinux in the OS kernel is mandatory access control
- 150 E. The policy added by the root user is role-based access control
- 151 F. The policy added by the root user is rule-based access control

- 24. A security administrator has deployed all laptops with Self Encrypting Drives (SED) and enforces key encryption. Which of the following represents the greatest threat to maintaining data confidentiality with these devices?
- 154 A. Full data access can be obtained by connecting the drive to a SATA or USB adapter bypassing the SED hardware.
- B. A malicious employee can gain the SED encryption keys through software extraction allowing access to other laptops.

- 156 C. If the laptop does not use a Secure Boot BIOS, the SED hardware is not enabled allowing full data access.
- 157 D. Laptops that are placed in a sleep mode allow full data access when powered back on.
- 158
- 25. A recent review of accounts on various systems has found that after employees' passwords are required to change they are recycling the same password as before. Which of the following policies should be enforced to prevent this from happening? (Choose two.)
- 160 A. Reverse encryption
- 161 B. Minimum password age
- 162 C. Password complexity
- 163 D. Account lockouts
- 164 E. Password history
- 165 F. Password expiration

- 26. An organizations' security policy requires that users change passwords every 30 days. After a security audit, it was determined that users were recycling previously used passwords. Which of the following password enforcement policies would have mitigated this issue?
- 168 A. Password history
- 169 B. Password complexity
- 170 C. Password length
- 171 D. Password expiration

172

- 27. A security administrator must implement a system that will support and enforce the following file system access control model:
- 174 FILE NAME -- SECURITY LABEL
- 175 Employees.doc -- Confidential
- 176 Salary.xls -- Confidential
- 177 OfficePhones.xls -- Unclassified
- 178 PersonalPhones.xls -- Restricted

179

- 180 Which of the following should the security administrator implement?
- 181 A. White and black listing
- 182 B. SCADA system
- 183 C. Trusted OS
- 184 D. Version control

185

- 28. Which of the following is the BEST reason for placing a password lock on a mobile device?
- 187 A. Prevents an unauthorized user from accessing owner's data
- 188 B. Enables remote wipe capabilities
- 189 C. Stops an unauthorized user from using the device again
- 190 D. Prevents an unauthorized user from making phone calls

191

- 29. Ann is the data owner of financial records for a company. She has requested that she have the ability to assign read and write privileges to her folders. The network administrator is tasked with setting up the initial access control system and handing Ann's administrative capabilities. Which of the following systems should be deployed?
- 193 A. Role-based
- 194 B. Mandatory
- 195 C. Discretionary
- 196 D. Rule-based

197

- 30. Ann was reviewing her company's event logs and observed several instances of GUEST accessing the company print server, file server, and archive database. As she continued to investigate, Ann noticed that it seemed to happen at random intervals throughout the day, but mostly after the weekly automated patching and often logging in at the same time. Which of the following would BEST mitigate this issue?
- 199 A. Enabling time of day restrictions
- 200 B. Disabling unnecessary services
- 201 C. Disabling unnecessary accounts
- 202 D. Rogue machine detection

- 31. Ann is a member of the Sales group. She needs to collaborate with Joe, a member of the IT group, to edit a file. Currently, the file has the following permissions:
- 205 Ann:read/write
- 206 Sales Group:read
- 207 IT Group:no access

- 208
- If a discretionary access control list is in place for the files owned by Ann, which of the following would be the BEST way to share the file with Joe?
- 210 A. Add Joe to the Sales group.
- 211 B. Have the system administrator give Joe full access to the file.
- 212 C. Give Joe the appropriate access to the file directly.
- D. Remove Joe from the IT group and add him to the Sales group.

- 32. A network administrator, Joe, arrives at his new job to find that none of the users have changed their network passwords since they were initially hired. Joe wants to have everyone change their passwords immediately. Which of the following policies should be enforced to initiate a password change?
- 216 A. Password expiration
- 217 B. Password reuse
- 218 C. Password recovery
- 219 D. Password disablement

220

- 33. Ann, a security administrator at a call center, has been experiencing problems with users intentionally installing unapproved and occasionally malicious software on their computers. Due to the nature of their jobs, Ann cannot change their permissions. Which of the following would BEST alleviate her concerns?
- 222 A. Deploy a HIDS suite on the users' computers to prevent application installation.
- 223 B. Maintain the baseline posture at the highest OS patch level.
- 224 C. Enable the pop-up blockers on the users' browsers to prevent malware.
 - D. Create an approved application list and block anything not on it.

225226

- 34. Which of the following should be used to authenticate and log connections from wireless users connecting with EAP-TLS?
- 228 A. Kerberos
- 229 B. LDAP
- 230 C. SAML
- 231 D. RADIUS

232

- 35. Ann has recently transferred from the payroll department to engineering. While browsing file shares, Ann notices she can access the payroll status and pay rates of her new coworkers. Which of the following could prevent this scenario from occurring?
- 234 A. Credential management
- 235 B. Continuous monitoring
- 236 C. Separation of duties
- 237 D. User access reviews

238

- 36. An organization's security policy states that users must authenticate using something you do. Which of the following would meet the objectives of the security policy?
- 240 A. Fingerprint analysis
- 241 B. Signature analysis
- 242 C. Swipe a badge
- 243 D. Password

244

- 37. Which of the following protocols is MOST likely to be leveraged by users who need additional information about another user?
- 246 A. LDAP
- 247 B. RADIUS
- 248 C. Kerberos
- 249 D. TACACS+

250

- 38. The security manager wants to unify the storage of credential, phone numbers, office numbers, and address information into one system. Which of the following is a system that will support the requirement on its own?
- 252 A. LDAP
- 253 B. SAML
- 254 C. TACACS
- 255 D. RADIUS

- 39. Joe, a network administrator, is able to manage the backup software console by using his network login credentials. Which of the following authentication services is the MOST likely using?
- 258 A. SAML
- 259 B. LDAP

- 260 C. iSCSI
- 261 D. Two-factor authentication

- 40. An organization is implementing a password management application which requires that all local administrator passwords be stored and automatically managed. Auditors will be responsible for monitoring activities in the application by reviewing the logs. Which of the following security controls is the BEST option to prevent auditors from accessing or modifying passwords in the application?
- 264 A. Time of day restrictions
- 265 B. Create user accounts for the auditors and assign read-only access
- 266 C. Mandatory access control
 - D. Role-based access with read-only

267268

- 41. A security administrator is tackling issues related to authenticating users at a remote site. There have been a large number of security incidents that resulted from either tailgating or impersonation of authorized users with valid credentials. The security administrator has been told to implement multifactor authentication in order to control facility access. To secure access to the remote facility, which of the following could be implemented without increasing the amount of space required at the entrance?
- 270 A. MOTD challenge and PIN pad
- 271 B. Retina scanner and fingerprint reader
- 272 C. Voice recognition and one-time PIN token
- D. One-time PIN token and proximity reader

274

- 42. The security administrator notices a user logging into a corporate Unix server remotely as root. Which of the following actions should the administrator take?
- 276 A. Create a firewall rule to block SSH
- 277 B. Delete the root account
- 278 C. Disable remote root logins
- 279 D. Ensure the root account has a strong password

280

- 43. A company plans to expand by hiring new engineers who work in highly specialized areas. Each engineer will have very different job requirements and use unique tools and applications in their job. Which of the following is MOST appropriate to use?
- 282 A. Role-based privileges
- 283 B. Credential management
- 284 C. User assigned privileges
- 285 D. User access

286

- 44. A file on a Linux server has default permissions of rw-rw-r--. The system administrator has verified that Ann, a user, is not a member of the group owner of the file. Which of the following should be modified to assure that Ann has read access to the file?
- 288 A. User ownership information for the file in question
- 289 B. Directory permissions on the parent directory of the file in question
- 290 C. Group memberships for the group owner of the file in question
- 291 D. The file system access control list (FACL) for the file in question

292

- 45. Which of the following protocols uses an asymmetric key to open a session and then establishes a symmetric key for the remainder of the session?
- 294 A. SFTP
- 295 B. HTTPS
- 296 C. TFTP
- 297 D. TLS

298

- 46. A company uses PGP to ensure that sensitive email is protected. Which of the following types of cryptography is being used here for the key exchange?
- 300 A. Symmetric
- 301 B. Session-based
- 302 C. Hashing
- 303 D. Asymmetric

304

- 305 47. Which of the following is true about asymmetric encryption?
- 306 A. A message encrypted with the private key can be decrypted by the same key
- 307 B. A message encrypted with the public key can be decrypted with a shared key.
- 308 C. A message encrypted with a shared key, can be decrypted by the same key.
- 309 D. A message encrypted with the public key can be decrypted with the private key.

311 48. Encryption used by RADIUS is BEST described as: 312 A. Quantum 313 B. Elliptical curve 314 C. Asymmetric 315 D. Symmetric 316 317 49. Symmetric encryption utilizes , while asymmetric encryption utilizes A. Public keys, one time 318 319 B. Shared keys, private keys 320 C. Private keys, session keys 321 D. Private keys, public keys 322 323 50. Users need to exchange a shared secret to begin communicating securely. Which of the following is another name for this symmetric key? 324 A. Session Key 325 B. Public Key 326 C. Private Key 327 D. Digital Signature 328 329 51. In order to securely communicate using PGP, the sender of an email must do which of the following when sending an email to a recipient for the first time? 330 A. Import the recipient's public key 331 B. Import the recipient's private key 332 C. Export the sender's private key 333 D. Export the sender's public key 334 335 52. A network stream needs to be encrypted. Sara, the network administrator, has selected a cipher which will encrypt 8 bits at a time before sending the data across the network. Which of the following has Sara selected? 336 A. Block cipher 337 B. Stream cipher 338 C. CRC 339 D. Hashing algorithm 340 341 53. The concept of rendering data passing between two points over an IP based network impervious to all but the most sophisticated advanced persistent threats is BEST categorized as which of the following? 342 A. Stream ciphers B. Transport encryption 343 344 C. Key escrow D. Block ciphers 345 346 347 54. Which of the following transportation encryption protocols should be used to ensure maximum security between a web browser and a web server? A. SSLv2 348 349 B. SSHv1 350 C. RSA 351 D. TLS 352 353 55. When employing PKI to send signed and encrypted data the individual sending the data must have: (Choose two.) 354 A. The receiver's private key 355 B. The root certificate C. The sender's private key 356 357 D. The sender's public key 358 E. The receiver's public key 359 360 56. Which of the following concepts is enforced by certifying that email communications have been sent by who the message says it has been sent by? 361 A. Key escrow B. Non-repudiation 362 363 C. Multifactor authentication 364 D. Hashing 365 366 57. All of the following are valid cryptographic hash functions EXCEPT: 367 A. RIPEMD. B. RC4. 368 369 C. SHA-512.

D. MD4.
371
58. Which of the following concepts is used by digital signatures to ensure integrity of the data?

373 A. Non-repudiation

- 374 B. Hashing
- 375 C. Transport encryption
- 376 D. Key escrow

377

- 378 59. A security administrator discovers an image file that has several plain text documents hidden in the file. Which of the following security goals is met by camouflaging data inside of other files?
- 379 A. Integrity
- 380 B. Confidentiality
- 381 C. Steganography
- 382 D. Availability

383

- 384 60. A security analyst discovered data such as images and word documents hidden within different types of files. Which of the following cryptographic concepts describes what was discovered?
- 385 A. Symmetric encryption
- 386 B. Non-repudiation
- 387 C. Steganography
- 388 D. Hashing

389

- 390 61. Which of the following can hide confidential or malicious data in the whitespace of other files (e.g. JPEGs)?
- 391 A. Hashing
- 392 B. Transport encryption
- 393 C. Digital signatures
- 394 D. Steganography

395

- 396 62. Which of the following must a user implement if they want to send a secret message to a coworker by embedding it within an image?
- 397 A. Transport encryption
- 398 B. Steganography
- 399 C. Hashing
- 400 D. Digital signature

401

- 402 63. Digital Signatures provide which of the following?
- 403 A. Confidentiality
- 404 B. Authorization
- 405 C. Integrity
- 406 D. Authentication
- 407 E. Availability

408

- 409 64. Matt, a security analyst, needs to select an asymmetric encryption method that allows for the same level of encryption strength with a lower key length than is typically necessary. Which of the following encryption methods offers this capability?
- 410 A. Twofish
- 411 B. Diffie-Hellman
- 412 C. ECC
- 413 D. RSA

414

- 415 65. Which of the following types of cryptography should be used when minimal overhead is necessary for a mobile device?
- 416 A. Block cipher
- 417 B. Elliptical curve cryptography
- 418 C. Diffie-Hellman algorithm
- 419 D. Stream cipher

- 421 66. A security technician is attempting to access a wireless network protected with WEP. The technician does not know any information about the network. Which of the following should the technician do to gather information about the configuration of the wireless network?
- 422 A. Spoof the MAC address of an observed wireless network client
- 423 B. Ping the access point to discover the SSID of the network
- 424 C. Perform a dictionary attack on the access point to enumerate the WEP key
- 425 D. Capture client to access point disassociation packets to replay on the local PC's

loopback

426

- 427 67. The IT department has installed new wireless access points but discovers that the signal extends far into the parking lot. Which of the following actions should be taken to this?
- 428 A. Disable the SSID broadcasting
- 429 B. Configure the access points so that MAC filtering is not used
- 430 C. Implement WEP encryption on the access points
- D. Lower the power for office coverage only

432

- 433 68. Joe, the systems administrator, is setting up a wireless network for his team's laptops only and needs to prevent other employees from accessing it. Which of the following would BEST address this?
- 434 A. Disable default SSID broadcasting.
- 435 B. Use WPA instead of WEP encryption.
- 436 C. Lower the access point's power settings.
- 437 D. Implement MAC filtering on the access point.

438

- 439 69. Which of the following provides the strongest authentication security on a wireless network?
- 440 A. MAC filter
- 441 B. WPA2
- 442 C. WEP
- 443 D. Disable SSID broadcast

444

- 445 70. Which of the following is a concern when encrypting wireless data with WEP?
- 446 A. WEP displays the plain text entire key when wireless packet captures are reassembled
- 447 B. WEP implements weak initialization vectors for key transmission
- 448 C. WEP uses a very weak encryption algorithm
- 449 D. WEP allows for only four pre-shared keys to be configured

450

- 71. Which of the following provides the HIGHEST level of confidentiality on a wireless network?
- 452 A. Disabling SSID broadcast
- 453 B. MAC filtering
- 454 C. WPA2
- 455 D. Packet switching

456

- 72. While setting up a secure wireless corporate network, which of the following should Pete, an administrator, avoid implementing?
- 458 A. EAP-TLS
- 459 B. PEAP
- 460 C. WEP
- 461 D. WPA

462

- 73. Joe, an employee, was escorted from the company premises due to suspicion of revealing trade secrets to a competitor. Joe had already been working for two hours before leaving the premises. A security technician was asked to prepare a report of files that had changed since last night's integrity scan. Which of the following could the technician use to prepare the report? (Choose two.)
- 464 A. PGP
- 465 B. MD5
- 466 C. ECC
- 467 D. AES
- 468 E. Blowfish
- 469 F. HMAC

470

- 74. Users report that after downloading several applications, their systems' performance has noticeably decreased. Which of the following would be used to validate programs prior to installing them?
- 472 A. Whole disk encryption
- 473 B. SSH
- 474 C. Telnet
- 475 D. MD5

- 477 75. Which of the following is used to verify data integrity?
- 478 A. SHA
- 479 B. 3DES
- 480 C. AES

```
481
     D. RSA
482
483
      76. Which of the following can be implemented with multiple bit strength?
484
485
     B. DES
486
     C. SHA-1
487
     D. MD5
488
     E. MD4
489
490
      77. To ensure compatibility with their flagship product, the security engineer is
      tasked to recommend an encryption cipher that will be compatible with the majority of
      third party software and hardware vendors. Which of the following should be recommended?
     A. SHA
491
492
     B. MD5
      C. Blowfish
493
494
      D. AES
495
496
      78. Which of the following provides additional encryption strength by repeating the
      encryption process with additional keys?
497
      A. AES
498
     B. 3DES
499
     C. TwoFish
500
     D. Blowfish
501
502
      79. Which of the following are restricted to 64-bit block sizes? (Choose two.)
503
     A. PGP
     B. DES
504
505
     C. AES256
506
     D. RSA
507
     E. 3DES
508
     F. AES
509
510
      80. A bank has a fleet of aging payment terminals used by merchants for transactional
      processing. The terminals currently support single DES but require an upgrade in order
      to be compliant with security standards. Which of the following is likely to be the
      simplest upgrade to the aging terminals which will improve in-transit protection of
      transactional data?
511
     A. AES
512
     B. 3DES
513
     C. RC4
514
     D. WPA2
515
516
      81. Which of the following would Matt, a security administrator, use to encrypt
      transmissions from an internal database to an internal server, keeping in mind that the
      encryption process must add as little latency to the process as possible?
      A. ECC
517
     B. RSA
518
519
      C. SHA
520
     D. 3DES
521
522
      82. Which of the following MUST Matt, a security administrator, implement to verify
     both the integrity and authenticity of a message while requiring a shared secret?
523
     A. RIPEMD
524
     B. MD5
525
     C. SHA
526
     D. HMAC
527
528
      83. Which of the following cryptographic algorithms is MOST often used with IPSec?
529
      A. Blowfish
530
     B. Twofish
531
     C. RC4
532
     D. HMAC
533
534
      84. When creating a public / private key pair, for which of the following ciphers would
      a user need to specify the key strength?
535
     A. SHA
536
     B. AES
```

538

C. DES

D. RSA

```
539
540
      85. Which of the following uses both a public and private key?
541
     A. RSA
542
      B. AES
543
     C. MD5
544
     D. SHA
545
546
     86. Which of the following ciphers would be BEST used to encrypt streaming video?
547
     A. RSA
548
     B. RC
549
     C. SHA1
     D. 3DES
550
5.5.1
552
      87. Due to hardware limitation, a technician must implement a wireless encryption
      algorithm that uses the RC4 protocol. Which of the following is a wireless encryption
      solution that the technician should implement while ensuring the STRONGEST level of
      security?
553
     A. WPA2-AES
554
    B. 802.11ac
555
     C. WPA-TKIP
556
     D. WEP
557
558
      88. A security administrator must implement a wireless encryption system to secure
      mobile devices' communication. Some users have mobile devices which only support 56-bit
      encryption. Which of the following wireless encryption methods should be implemented?
559
      A. RC4
     B. AES
560
561
     C. MD5
562
     D. TKIP
563
564
     89. Which of the following can use RC4 for encryption? (Choose two.)
565
     A. CHAP
566
     B. SSL
567
     C. WEP
568
     D. AES
569
     E. 3DES
570
571
      90. Which of the following would provide the STRONGEST encryption?
572
      A. Random one-time pad
573
      B. DES with a 56-bit key
574
      C. AES with a 256-bit key
575
     D. RSA with a 1024-bit key
576
577
      91. Which of the following symmetric key algorithms are examples of block ciphers?
      (Choose three.)
     A. RC4
578
     B. 3DES
579
     C. AES
580
581
     D. MD5
582
     E. PGP
583
     F. Blowfish
584
585
      92. Which of the following should be used when a business needs a block cipher with
     minimal key size for internal encryption?
586
     A. AES
587
     B. Blowfish
588
      C. RC5
589
      D. 3DES
590
591
      93. Sara, a security engineer, is testing encryption ciphers for performance. Which of
      the following ciphers offers strong encryption with the FASTEST speed?
592
      A. 3DES
593
     B. Blowfish
594
      C. Serpent
595
      D. AES256
596
597
      94. Jane, a VPN administrator, was asked to implement an encryption cipher with a
      MINIMUM effective security of 128-bits. Which of the following should Jane select for
```

the tunnel encryption?

```
598
     A. Blowfish
599
    B. DES
600
     C. SHA256
601
     D. HMAC
602
603
      95. When using PGP, which of the following should the end user protect from compromise?
      (Choose two.)
604
     A. Private key
605
     B. CRL details
606
    C. Public key
607
     D. Key password
608
     E. Key escrow
609
      F. Recovery agent
610
611
      96. A security administrator must implement a system to allow clients to securely
      negotiate encryption keys with the company's server over a public unencrypted
      communication channel. Which of the following implements the required secure key
      negotiation? (Choose two.)
612
      A. PBKDF2
613
      B. Symmetric encryption
614
      C. Steganography
615
      D. ECDHE
616
     E. Diffie-Hellman
617
618
      97. An administrator has two servers and wants them to communicate with each other
      using a secure algorithm. Which of the following choose to provide both CRC integrity
      checks and RCA encryption?
619
     A. NTLM
620
     B. RSA
     C. CHAP
621
622
     D. ECDHE
623
624
     98. Connections using point-to-point protocol authenticate using which of the
     following? (Choose two.)
625
     A. RIPEMD
     B. PAP
626
     C. CHAP
627
628
     D. RC4
629
     E. Kerberos
630
631
     99. Which of the following offers the LEAST secure encryption capabilities?
632
    A. TwoFish
633
     B. PAP
634
     C. NTLM
635
     D. CHAP
636
637
      100. Which of the following algorithms has well documented collisions? (Choose two.)
638
     A. AES
639
     B. MD5
    C. SHA
640
```

642

D. SHA-256

E. RSA