

1. _____ assures (確保) that individuals (個人) control or influence (影響) what information related to them may be collected (蒐集) and stored (儲存) and by whom and to whom that information may be disclosed (揭露).
(A) Availability (B) System Integrity (C) Privacy (隱私) (D) Data Integrity
2. _____ assures that a system performs its intended function (預期功能) in an unimpaired (不受影響) manner, free from deliberate (有恃商榷的) or inadvertent (疏忽的) unauthorized (未經授權的) manipulation (操作) of the system.
(A) System Integrity (系統完整性) (B) Data Integrity
(C) Availability (D) Confidentiality
3. A loss of _____ is the unauthorized (未經授權的) disclosure (揭露) of information.
(A) confidentiality (機密) (B) integrity
(C) authenticity (D) availability
4. A _____ level breach (漏洞) of security could be expected to have a severe (嚴重的) or catastrophic (災難性地) adverse (不利的) effect on organizational operations, organizational assets (資產), or individuals.
(A) low (B) normal (C) moderate (D) **high**
5. A flaw (漏洞) or weakness (弱點) in a system's design, implementation (實作), or operation and management that could be exploited (利用) to violate (違反) the system's security policy is a(n) _____.
(A) countermeasure (B) vulnerability (脆弱性)
(C) adversary (D) risk
6. An assault (衝擊) on system security that derives (來自於) from an intelligent act that is a deliberate attempt to evade (規避) security services and violate (違反) the security policy of a system is a(n) _____.
(A) risk (B) asset (C) attack (攻擊) (D) vulnerability
7. A(n) _____ is an action, device, procedure, or technique that reduces (降低) a threat (威脅), a vulnerability (脆弱性), or an attack by eliminating (消除) or preventing (避免) it, by minimizing the harm (傷害) it can cause, or by discovering and reporting it so that correct action can be taken.
(A) attack (B) countermeasure (對策)
(C) adversary (D) protocol

8. A(n) _____ is an attempt (嘗試) to learn or make use (利用) of information from the system that does not affect system resources.
(A) passive attack (被動攻擊) (B) inside attack
(C) outside attack (D) active attack
9. Masquerade (偽裝), falsification (證偽), and repudiation (抵賴) are threat actions that cause _____ threat consequences.
(A) unauthorized disclosure (B) deception (欺騙)
(C) disruption (D) usurpation
10. A threat action in which sensitive (機敏性) data are directly released to an unauthorized entity is _____.
(A) corruption (B) disruption (C) intrusion (D) exposure (曝光)
11. An example of _____ is an attempt by an unauthorized user to gain access to a system by posing as an authorized user.
(A) masquerade (偽裝) (B) interception (C) repudiation (D) inference
12. The _____ prevents or inhibits the normal use or management of communications facilities.
(A) passive attack (B) traffic encryption
(C) denial of service (阻斷服務) (D) masquerade
13. A _____ is any action that compromises the security of information owned by an organization.
(A) security mechanism (B) security attack (資安攻擊)
(C) security policy (D) security service
14. The assurance that data received are exactly as sent by an authorized entity is _____.
(A) authentication (B) data confidentiality
(C) access control (D) data integrity (資料完整性)
15. _____ is the insertion of bits into gaps in a data stream to frustrate (提高難度) traffic analysis attempts.
(A) Traffic padding (訊務填充) (B) Traffic routing
(C) Traffic control (D) Traffic integrity
16. The original message or data that is fed (餵) into the algorithm is _____.
(A) encryption algorithm (B) secret key (C) decryption algorithm (D) plaintext (明文)
17. The _____ is the encryption algorithm run in reverse (反向).
(A) decryption algorithm (解密演算法) (B) plaintext
(C) ciphertext (D) encryption algorithm

18. _____ is the scrambled (攪亂) message produced as output.
(A) Plaintext (B) Ciphertext (密文) (C) Secret key (D) Cryptanalysis
19. On average (平均), _____ of all possible keys must be tried in order to achieve success with a brute-force attack (暴力攻擊).
(A) one-fourth (B) half (一半) (C) two-thirds (D) three-fourths
20. The most important symmetric (對稱式) algorithms, all of which are block ciphers, are the DES, triple DES, and the _____.
(A) SHA (B) RSA (C) AES (進階加密標準) (D) DSS
21. If the only form of attack that could be made on an encryption algorithm is brute-force, then the way to counter such attacks would be to _____.
(A) use longer keys (使用較長的金鑰) (B) use shorter keys
(C) use more keys (D) use less keys
22. _____ is a procedure that allows communicating parties to verify that received or stored messages are authentic.
(A) Cryptanalysis (B) Decryption
(C) Message authentication (訊息認證) (D) Collision resistance
23. The purpose of a _____ is to produce a “fingerprint” of a file, message, or other block of data.
(A) secret key (B) digital signature
(C) keystream (D) hash function (雜湊函式)
24. _____ is a block cipher in which the plaintext and ciphertext are integers between 0 and $n-1$ for some n and its encryption key is different from its decryption key and hence an asymmetric (非對稱) cryptography algorithm.
(A) DSS (B) **RSA** (C) SHA (D) AES
25. A _____ is created by using a secure hash function to generate a hash value for a message and then encrypting the hash code with a private key.
(A) digital signature (數位簽名) (B) keystream
(C) one way hash function (D) secret key
26. Transmitted data stored locally are referred to as _____. (§2.6, pp.79)
(A) ciphertext (B) DES (C) data at rest (暫歇資料) (D) ECC

27. Digital signatures and key management are the two most important applications of _____ encryption.
(A) private-key (B) public-key (公開金鑰)
(C) preimage resistant (D) advanced
28. A _____ is to try every possible key on a piece of ciphertext until an intelligible translation into plaintext is obtained.
(A) mode of operation (B) hash function
(C) cryptanalysis (D) brute-force attack (暴力攻擊)
29. Combined one byte at a time with the plaintext stream using the XOR operation, a _____ is the output of the pseudorandom bit generator.
(A) keystream (金鑰串流) (B) digital signature
(C) secure hash (D) message authentication code
30. A _____ protects (保護) against an attack in which one party generates a message for another party to sign.
(A) data authenticator (B) strong hash function (強雜湊函式)
(C) weak hash function (D) digital signature
31. A _____ is a separate file from the user IDs where hashed passwords are kept.
(A) **shadow** (影子) (B) password (C) secret (D) account
32. A password _____ prevents duplicate passwords from being visible in the password file. Even if two users choose the same password the hashed passwords of the two users will differ.
(A) sugar (B) salt (鹽) (C) random (D) hash
33. Presenting or generating authentication information that corroborates (證實) the binding between the entity and the identifier is the _____.
(A) identification step (B) verification step (驗證步驟)
(C) authentication step (D) corroboration step
34. Recognition (辨識) by fingerprint, retina, and face are examples of _____.
(A) face recognition (B) dynamic biometrics
(C) static biometrics (靜態生物識別) (D) token authentication
35. A _____ is a password guessing program.
(A) password hash (B) password cracker (密碼破解器)
(C) password biometric (D) password salt

36. The _____ strategy is when users are told the importance of using hard to guess passwords and provided with guidelines (指引) for selecting strong passwords.
- (A) reactive password checking (B) proactive password checking
(C) computer-generated password (D) user education (使用者教育)
37. A _____ strategy is one in which the system periodically (週期性的) runs its own password cracker to find guessable passwords.
- (A) user education (B) proactive password checking
(C) reactive password checking (反應式密碼檢查) (D) computer-generated password
38. The most common means of human-to-human identification are _____.
- (A) facial characteristics (臉部特徵) (B) signatures
(C) retinal patterns (D) fingerprints
39. _____ systems identify features (特徵) of the hand, including shape (形狀), and lengths and widths of fingers.
- (A) Signature (B) Hand geometry (手部幾何特徵)
(C) Fingerprint (D) Palm print
40. Each individual who is to be included in the database of authorized users must first be _____ in the system.
- (A) verified (B) authenticated (C) identified (D) enrolled (註冊)
41. To counter threats to remote user authentication, systems generally rely on some form of _____ protocol.
- (A) eavesdropping (B) Trojan horse
(C) challenge-response (挑戰與回應) (D) denial-of-service
42. A _____ is when an adversary (敵對) attempts (嘗試) to achieve (達成) user authentication without access to the remote host or to the intervening (介入) communications path.
- (A) client attack (客戶端攻擊) (B) eavesdropping attack
(C) host attack (D) Trojan horse attack
43. A _____ is directed at the user file at the host where passwords, token passcodes, or biometric templates (樣本) are stored
- (A) eavesdropping attack (B) denial-of-service attack
(C) client attack (D) host attack (主機攻擊)
44. A _____ attack involves an adversary (敵手) repeating a previously captured user response.
- (A) client (B) replay (重播) (C) Trojan horse (D) eavesdropping

45. An institution that issues debit cards to cardholders and is responsible for the cardholder's account and authorizing transactions is the _____. (§3.8,pp.122)
(A) cardholder (B) auditor (C) issuer (發行者) (D) processor
46. _____ allows an issuer to access regional and national networks that connect point of sale devices and bank teller machines worldwide. (§3.8,pp.122)
(A) EFT (B) POS (C) BTM (D) ATF
47. _____ implements (實現) a security policy that specifies who or what may have access to each specific system resource and the type of access that is permitted in each instance.
(A) Audit control (B) Resource control
(C) System control (D) Access control (存取控制)
48. _____ is verification that the credentials (證件) of a user or other system entity are valid.
(A) Adequacy (B) Authentication (認證) (C) Authorization (D) Audit
49. _____ is the granting (授予) of a right or permission to a system entity to access a system resource.
(A) Authorization (授權) (B) Authentication (C) Control (D) Monitoring
50. _____ is the traditional (傳統的) method of implementing access control. (§4.1,pp.131)
(A) MAC (B) RBAC (C) DAC (自由選定存取控制) (D) MBAC
51. _____ controls access based on comparing security labels with security clearances. (§4.1,pp.131)
(A) MAC (強制存取控制) (B) DAC (C) RBAC (D) MBAC
52. A _____ is an entity capable of accessing objects.
(A) group (B) object (C) subject (主體) (D) owner
53. A(n) _____ is a resource to which access is controlled.
(A) object (客體) (B) owner (C) world (D) subject
54. The final permission bit is the _____ bit which restricts a file can only be deleted by its owner.
(A) superuser (B) kernel (C) set user (D) sticky (沾粘)
55. _____ is based on the roles the users assume in a system rather than the user's identity.
(A) DAC (B) RBAC (基於角色的存取控制)
(C) MAC (D) URAC
56. A _____ is a named job function within the organization that controls this computer system.
(A) user (B) role (角色) (C) permission (D) session

57. _____ provide a means of adapting RBAC to the specifics of administrative and security policies in an organization.
(A) Constraints (限制) (B) Mutually Exclusive Roles (C) Cardinality (D) Prerequisites
58. _____ refers to setting a maximum number with respect to roles.
(A) Cardinality (基數) (B) Prerequisite (C) Exclusive (D) Hierarchy
59. Subject attributes, object attributes and environment attributes are the three types of attributes in the _____ model.
(A) DSD (B) RBAC (C) ABAC (基於屬性的存取控制) (D) SSD
60. The _____ component deals with the management and control of the ways that entities are granted access to resources. (§4.7, pp.157)
(A) resource management (B) access management (存取管理)
(C) privilege management (D) policy management
61. A(n) _____ is a structured collection of data stored for use by one or more applications.
(A) attribute (B) database (資料庫) (C) tuple (D) inference
62. The basic building block of a _____ is a table of data, consisting of rows and columns, similar to a spreadsheet.
(A) relational database (關聯式資料庫) (B) query set
(C) DBMS (D) perturbation
63. In relational database parlance (用語), the basic building block is a _____, which is a flat table.
(A) attribute (B) tuple (C) primary key (D) relation (關聯)
64. In a relational database rows are referred to as _____.
(A) relations (B) attributes (C) views (D) tuples (值組)
65. A _____ is defined to be a portion of a row used to uniquely (唯一) identify (識別) a row in a table.
(A) foreign key (B) query (C) primary key (主鍵) (D) data perturbation
66. A _____ is a virtual (虛擬) table.
(A) tuple (B) query (C) view (檢視表) (D) DBMS
67. A(n) _____ is a user who has administrative responsibility for part or all of the database.
(A) administrator (管理員) (B) database relations manager
(C) application owner (D) end user other than application owner

68. An end user who operates on database objects via a particular application but does not own any of the database objects is the _____.
(A) application owner (B) end user other than application owner (非應用擁有者的終端使用者)
(C) foreign key (D) administrator
69. _____ is the process of performing authorized queries (查詢) and deducing (推論) unauthorized information from the legitimate (合法的) responses received.
(A) Perturbation (B) Inference (推理) (C) Compromise (D) Partitioning
70. A _____ is the portion of the data center that houses data processing equipment (設備).
(A) computer room (主機房) (B) main distribution area
(C) entrance room (D) horizontal distribution area
71. _____ houses cross-connects and active equipment for distributing cable to the equipment distribution area.
(A) Main distribution area (B) Equipment distribution area
(C) Horizontal distribution area (水平分佈區域) (D) Zone distribution area
72. _____ encompasses (包含) intrusion detection, prevention and response.
(A) Intrusion management (入侵管理) (B) Security assessments
(C) Database access control (D) Data loss prevention
73. _____ is an organization that produces data to be made available for controlled release, either within the organization or to external users.
(A) Client (B) Data owner (資料擁有者) (C) User (D) Server
74. _____ is an organization that receives the encrypted data from a data owner and makes them available for distribution to clients.
(A) User (B) Client (C) Data owner (D) Server (伺服器)
75. What are the three main categories (分類) of SQLi attack?
(A) **out-of-band** (B) **inferential** (C) **inband** (D) online