



IT Trends

IT Passport

1. Which of the following is a term for commands to a computer that are written in a programming language?

- A. PIN code
- B. Source code
- C. Binary code
- D. Character code



1. Which of the following is a term for commands to a computer that are written in a programming language?

- A. PIN code
- B. Source code**
- C. Binary code
- D. Character code



2. Which of the following is the most appropriate description concerning a compatible CPU?

A. It can run the OS or the application software that can be run on the original CPU.

B. It must not be developed nor manufactured as long as the patents of the original CPU are valid.

C. A compatible CPU for single-core CPU has been developed, while one for multi-core CPU does not exist.

D. It is a CPU that is intended to improve the performance of an outdated PC, and is not adopted for a new model of PC.

2. Which of the following is the most appropriate description concerning a compatible CPU?

A. It can run the OS or the application software that can be run on the original CPU.

B. It must not be developed nor manufactured as long as the patents of the original CPU are valid.

C. A compatible CPU for single-core CPU has been developed, while one for multi-core CPU does not exist.

D. It is a CPU that is intended to improve the performance of an outdated PC, and is not adopted for a new model of PC.

3. Which of the following is an appropriate explanation of HDMI?

- A. It is an interface for an AV device that handles the input and output of video, audio, and control signals through a single cable.
- B. It is an interface that makes use of the infrared rays used in the exchange of information between cell phones.
- C. It is a serial interface that connects an external hard disk or such other devices through a cable.
- D. It is a wireless interface that makes use of radio waves and can perform communication even when there is a slight shielding.

3. Which of the following is an appropriate explanation of HDMI?

A. It is an interface for an AV device that handles the input and output of video, audio,

and control signals through a single cable.

B. It is an interface that makes use of the infrared rays used in the exchange of information between cell phones.

C. It is a serial interface that connects an external hard disk or such other devices through a cable.

D. It is a wireless interface that makes use of radio waves and can perform communication even when there is a slight shielding.

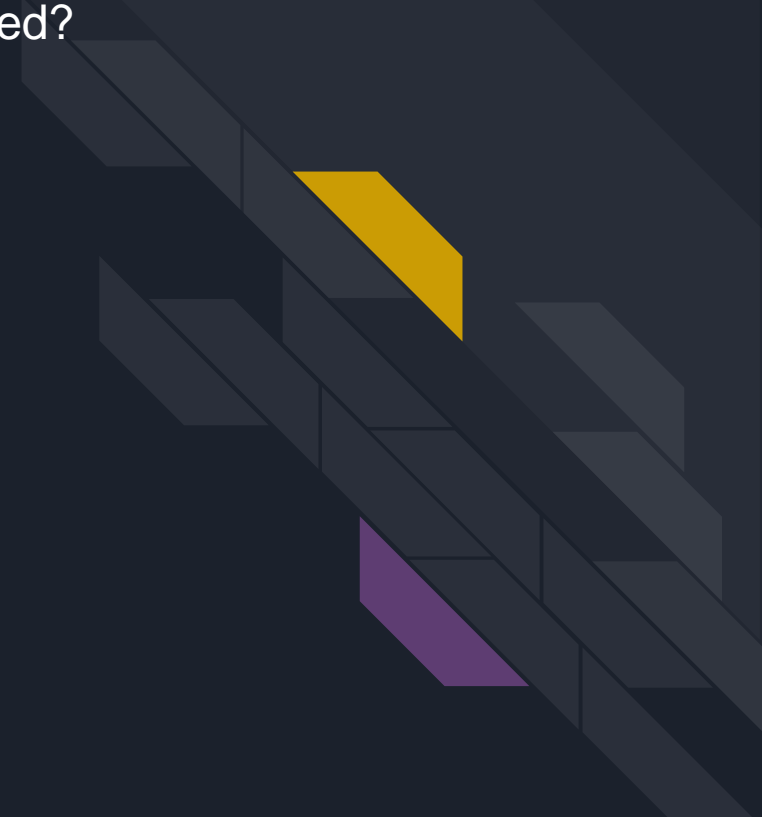
4. Two (2) HDDs are connected to a server. If only one (1) of the HDDs fails, the operation needs to be able to continue. Which of the following is an appropriate configuration that should be used?

- A. Stripping
- B. Data Mining
- C. Tethering
- D. Mirroring



4. Two (2) HDDs are connected to a server. If only one (1) of the HDDs fails, the operation needs to be able to continue. Which of the following is an appropriate configuration that should be used?

- A. Stripping
- B. Data Mining
- C. Tethering
- D. Mirroring



5. Which of the following is an appropriate description concerning Open Source Software (OSS)?

- A. Source code can be edited and then redistributed.
- B. Source code is free of charge, but maintenance and support are charged.
- C. Copyrights are waived, so it can be used without permission.
- D. If the copyright is not waived, the operability must be warranted.

5. Which of the following is an appropriate description concerning Open Source Software (OSS)?

A. Source code can be edited and then redistributed.

B. Source code is free of charge, but maintenance and support are charged.

C. Copyrights are waived, so it can be used without permission.

D. If the copyright is not waived, the operability must be warranted.

6. Which of the following is the most appropriate method for displaying the content of database to a limited extent in accordance with each user's business operations?

- A. Setting up access rights based on the combination of data and user
- B. Distributing a copy of the database limited to each user
- C. Setting up a set of data items (columns) dedicated to each user
- D. Setting up a password for each record in order to protect data

6. Which of the following is the most appropriate method for displaying the content of database to a limited extent in accordance with each user's business operations?

- A. Setting up access rights based on the combination of data and user
- B. Distributing a copy of the database limited to each user
- C. Setting up a set of data items (columns) dedicated to each user
- D. Setting up a password for each record in order to protect data

7. Which of the following is a device that is used to recognize handwritten characters and convert them into character codes?

- A. BD-R
- B. CD-R
- C. OCR
- D. OMR



7. Which of the following is a device that is used to recognize handwritten characters and convert them into character codes?

- A. BD-R
- B. CD-R
- C. OCR
- D. OMR



8. Which of the following is an appropriate explanation of raster graphics, which is a method of handling the graphics that is used as a collection of points called pixels in painting software?

- A. It is widely used in CAD.
- B. The type and brightness of a color can be adjusted for each pixel.
- C. The file capacity is constant regardless of the level of resolution.
- D. No jaggies are visible at the edges of shapes even upon enlargement.

8. Which of the following is an appropriate explanation of raster graphics, which is a method of handling the graphics that is used as a collection of points called pixels in painting software?

A. It is widely used in CAD.

B. The type and brightness of a color can be adjusted for each pixel.

C. The file capacity is constant regardless of the level of resolution.

D. No jaggies are visible at the edges of shapes even upon enlargement.

9. Which of the following is an appropriate description of online storage?

- A. A virtual private network that is established via the Internet
- B. A service that lends disk space for storing data via the Internet
- C. Software that is distributed or sold via the Internet
- D. A computer game that multiple users can simultaneously play via the Internet

9. Which of the following is an appropriate description of online storage?

A. A virtual private network that is established via the Internet

B. A service that lends disk space for storing data via the Internet

C. Software that is distributed or sold via the Internet

D. A computer game that multiple users can simultaneously play via the Internet

10. Which of the following is an appropriate description of a SIM card?

- A. A card-type device that is used for the purpose of ensuring security in Internet banking and generates a password that can be used only once when a password is required
- B. An IC card that is inserted into a mobile phone for its use and that the phone number and subscriber ID are recorded on
- C. A large-capacity memory card that is used in digital music players or digital cameras for storing contents
- D. A card that is provided with a receiver for digital broadcasting and is used for decoding scrambled digital broadcasting

10. Which of the following is an appropriate description of a SIM card?

A. A card-type device that is used for the purpose of ensuring security in Internet banking and generates a password that can be used only once when a password is required

B. An IC card that is inserted into a mobile phone for its use and that the phone number and subscriber ID are recorded on

C. A large-capacity memory card that is used in digital music players or digital cameras for storing contents

D. A card that is provided with a receiver for digital broadcasting and is used for decoding scrambled digital broadcasting

11. Which of the following is a protocol that is used for synchronization of the internal clock of a computer via a network with a server that holds a reference clock?

- A. FTP
- B. NTP
- C. OP
- D. SMTP



11. Which of the following is a protocol that is used for synchronization of the internal clock of a computer via a network with a server that holds a reference clock?

- A. FTP
- B. NTP
- C. OP
- D. SMTP



12. Which of the following is the most appropriate description of a WAN?

- A. A virtual private network that uses the Internet
- B. A network that connects countries, rather than a network that connects various regions within a country
- C. A network that uses a network service from a network operator for connecting geographically separated locations, for example, a head office and its branch
- D. A brand name that is granted only to devices where interconnectivity has been confirmed, by the industrial association that promotes products that support the IEEE 802.11 standard that is used in wireless LANs

12. Which of the following is the most appropriate description of a WAN?

- A. A virtual private network that uses the Internet
- B. A network that connects countries, rather than a network that connects various regions within a country
- C. A network that uses a network service from a network operator for connecting geographically separated locations, for example, a head office and its branch
- D. A brand name that is granted only to devices where interconnectivity has been confirmed, by the industrial association that promotes products that support the IEEE 802.11 standard that is used in wireless LANs

13. Which of the following is an appropriate description of LTE in wireless communications?

- A. A wireless LAN communication method that enables devices to communicate directly with each other without using any access point
- B. A small-scale network that connects PCs and peripheral devices within a range of several meters
- C. A wireless communication standard for mobile phones to enable faster data communication than 3G
- D. A small base station system for mobile phones to be installed in households and offices where it is difficult for radio waves to penetrate

13. Which of the following is an appropriate description of LTE in wireless communications?

- A. A wireless LAN communication method that enables devices to communicate directly with each other without using any access point
- B. A small-scale network that connects PCs and peripheral devices within a range of several meters**
- C. A wireless communication standard for mobile phones to enable faster data communication than 3G
- D. A small base station system for mobile phones to be installed in households and offices where it is difficult for radio waves to penetrate

14. Risks on information assets are assessed on the basis of threats and vulnerabilities. Which of the following falls under a threat?

- A. Unencrypted communication
- B. An inconsistency in procedures for handling confidential documents
- C. A door that cannot be locked
- D. An unexpected power failure due to a disaster such as a thunderbolt

14. Risks on information assets are assessed on the basis of threats and vulnerabilities. Which of the following falls under a threat?

- A. Unencrypted communication
- B. An inconsistency in procedures for handling confidential documents
- C. A door that cannot be locked
- D. An unexpected power failure due to a disaster such as a thunderbolt**

15. Which of the following is an appropriate description of risk assessment in information security?

- A. Quarantining a virus that has intruded into a PC or a server, as well as minimizing the risk of a spread of the infection
- B. Analyzing and assessing risks on identified assets, and determining whether any action is necessary according to a criteria
- C. Confirming that the user of a system is authentic by using information that has been registered in advance
- D. Calculating the cost effectiveness of installing an information system

15. Which of the following is an appropriate description of risk assessment in information security?

- A. Quarantining a virus that has intruded into a PC or a server, as well as minimizing the risk of a spread of the infection
- B. Analyzing and assessing risks on identified assets, and determining whether any action is necessary according to a criteria**
- C. Confirming that the user of a system is authentic by using information that has been registered in advance
- D. Calculating the cost effectiveness of installing an information system

16. Which of the following is an appropriate description concerning a scheme for authenticating the user of a system?

A. A scheme where authentication is accomplished by utilizing a password that can be used only once is called a single sign-on.

B. A scheme where the use of multiple servers or applications is authorized by accomplishing an authentication once is called a one time password.

C. A scheme where numbers or characters that are placed on positions that the user remembers within a table on the screen are entered as a password is called a matrix authentication.

D. A scheme where authentication of the user is accomplished by using fingerprints, voiceprint, or other physical characteristics is called a challenge-response authentication.

16. Which of the following is an appropriate description concerning a scheme for authenticating the user of a system?

A. A scheme where authentication is accomplished by utilizing a password that can be used only once is called a single sign-on.

B. A scheme where the use of multiple servers or applications is authorized by accomplishing an authentication once is called a one time password.

C. A scheme where numbers or characters that are placed on positions that the user remembers within a table on the screen are entered as a password is called a matrix authentication.

D. A scheme where authentication of the user is accomplished by using fingerprints, voiceprint, or other physical characteristics is called a challenge-response authentication.

17. Which of the following is a protocol that is used for encrypted communication between a web server and a browser that are connected through HTTPS?

- A. SEO
- B. SPEC
- C. SQL
- D. SSL/TLS



17. Which of the following is a protocol that is used for encrypted communication between a web server and a browser that are connected through HTTPS?

- A. SEO
- B. SPEC
- C. SQL
- D. SSL/TLS**



18. Which of the following is a security standard that is used in a wireless LAN?

- A. Cookie
- B. ESSID
- C. MIME
- D. WPA2



18. Which of the following is a security standard that is used in a wireless LAN?

- A. Cookie
- B. ESSID
- C. MIME
- D. WPA2



19. Which of the following is an appropriate example of biometric authentication?

A. A user hovers his/her hand over a sensor when he/she uses an ATM, and then authentication is accomplished by matching his/her vein pattern against the preregistered one.

B. By drawing on the screen of a smartphone a preregistered sequence in a single stroke, the lock on the screen is released.

C. By requesting the user to answer a question that a machine is unlikely to be able to answer, it is confirmed that a human is doing the operation. For example, the user is requested to choose photos of an outdoor scenery from multiple photos.

D. By requesting the user to choose images that relate to the user, for example, photos of his/her relatives, from multiple photos, the authentication is accomplished.

19. Which of the following is an appropriate example of biometric authentication?

A. A user hovers his/her hand over a sensor when he/she uses an ATM, and then authentication is accomplished by matching his/her vein pattern against the preregistered one.

B. By drawing on the screen of a smartphone a preregistered sequence in a single stroke, the lock on the screen is released.

C. By requesting the user to answer a question that a machine is unlikely to be able to answer, it is confirmed that a human is doing the operation. For example, the user is requested to choose photos of an outdoor scenery from multiple photos.

D. By requesting the user to choose images that relate to the user, for example, photos of his/her relatives, from multiple photos, the authentication is accomplished.

20. When risk management in information security is divided into risk identification, risk analysis, risk assessment, and risk treatment, which of the following is included in risk treatment?

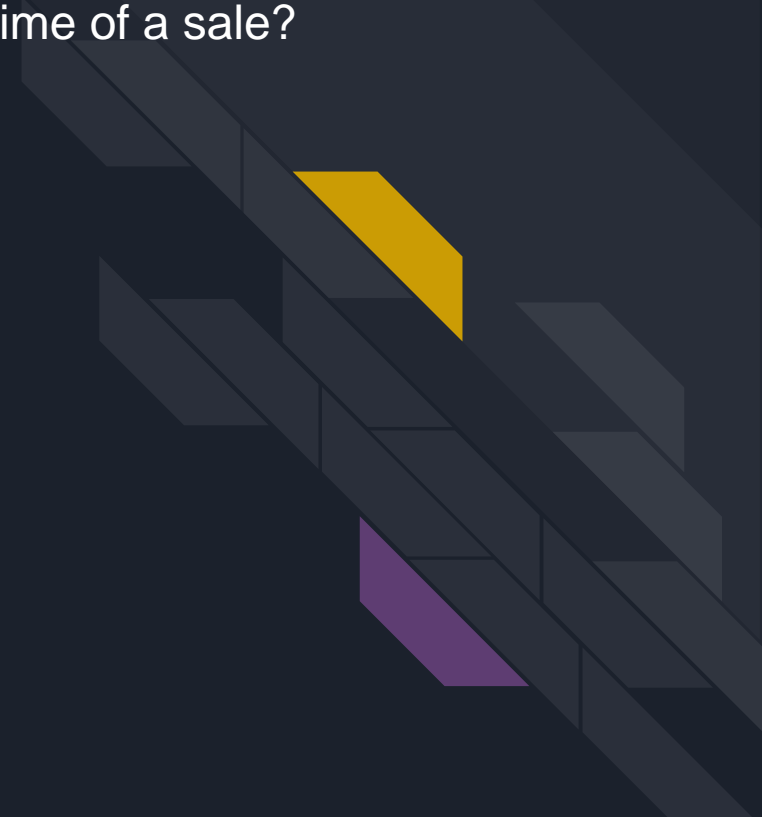
- A. Finding risks that exist in an organization
- B. Comparing the level of each risk and risk acceptance criteria, and determining the necessity of implementing controls
- C. Calculating the level of each risk from the probability that the risk will be realized and its impact
- D. Selecting a method to deal with each risk, and creating a plan to implement specific control

20. When risk management in information security is divided into risk identification, risk analysis, risk assessment, and risk treatment, which of the following is included in risk treatment?

- A. Finding risks that exist in an organization
- B. Comparing the level of each risk and risk acceptance criteria, and determining the necessity of implementing controls
- C. Calculating the level of each risk from the probability that the risk will be realized and its impact
- D. Selecting a method to deal with each risk, and creating a plan to implement specific control**

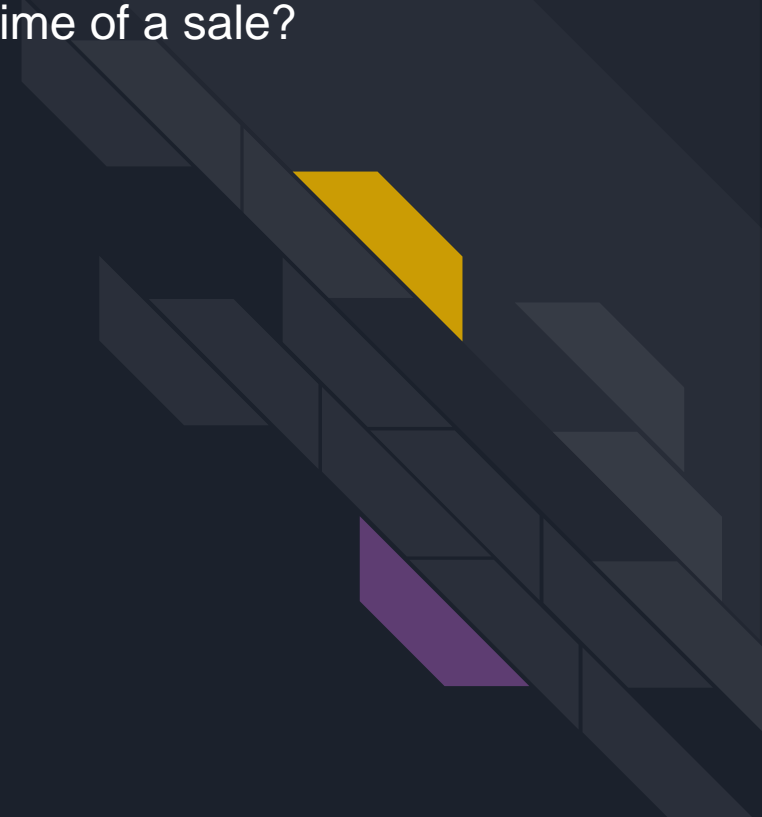
21. Which of the following is a system that collects information that is required for sales management or inventory control by reading or keying in a product code or a buyer's attribute at the time of a sale?

- A. ETC
- B. GPS
- C. POS
- D. SCM



21. Which of the following is a system that collects information that is required for sales management or inventory control by reading or keying in a product code or a buyer's attribute at the time of a sale?

- A. ETC
- B. GPS
- C. POS
- D. SCM



22. When the processes from product development to shipment are divided into development, production planning, production, and shipment, which of the following is an appropriate process that can result in labor saving and improved efficiency by the introduction of the Flexible Manufacturing System (FMS)?

- A. Development
- B. Production planning
- C. Production
- D. Shipment



22. When the processes from product development to shipment are divided into development, production planning, production, and shipment, which of the following is an appropriate process that can result in labor saving and improved efficiency by the introduction of the Flexible Manufacturing System (FMS)?

- A. Development
- B. Production planning
- C. Production
- D. Shipment



23. When two or more companies work together under an alliance agreement, which of the following is the most appropriate risk that is expected to be reduced?

- A. Business investment risk
- B. Information leakage risk
- C. Brain drain risk
- D. Fraud risk



23. When two or more companies work together under an alliance agreement, which of the following is the most appropriate risk that is expected to be reduced?

- A. Business investment risk
- B. Information leakage risk
- C. Brain drain risk
- D. Fraud risk



24. Which of the following is an explanation of the maturity stage in the product life cycle?

- A. It is a stage where there is a sudden increase in sales. Competition intensifies as newcomers enter the market.
- B. It is a stage where sales and profits suddenly drop. In this stage, withdrawal from the market should be considered.
- C. It is a stage where demand growth slows down. Measures such as product quality improvement and style change are taken to maintain market share and secure profits.
- D. It is a stage where the product is marketed to early adopters. Strategies to enhance brand recognition are planned and implemented.

24. Which of the following is an explanation of the maturity stage in the product life cycle?

A. It is a stage where there is a sudden increase in sales. Competition intensifies as newcomers enter the market.

B. It is a stage where sales and profits suddenly drop. In this stage, withdrawal from the market should be considered.

C. It is a stage where demand growth slows down. Measures such as product quality improvement and style change are taken to maintain market share and secure profits.

D. It is a stage where the product is marketed to early adopters. Strategies to enhance brand recognition are planned and implemented.

25. Which of the following is the most appropriate term that is sometimes used to mean the creation of an epoch-making business model or a reform in technology?

- A. Innovation
- B. Migration
- C. Real option
- D. Revolution



25. Which of the following is the most appropriate term that is sometimes used to mean the creation of an epoch-making business model or a reform in technology?

- A. Innovation
- B. Migration
- C. Real option
- D. Revolution



26. Which of the following is an explanation of free software?

- A. Software that can be installed on any number of computers without limitation in a predetermined location of use
- B. Software that requires the users to pay predetermined charges to the developer if it continues to be used after a certain period of free trial
- C. Software that is commercially available and permitted to be installed on one or more computers
- D. Software that is provided without charge, and can be modified, copied, and distributed without restriction under the license agreement.

26. Which of the following is an explanation of free software?

A. Software that can be installed on any number of computers without limitation in a predetermined location of use

B. Software that requires the users to pay predetermined charges to the developer if it continues to be used after a certain period of free trial

C. Software that is commercially available and permitted to be installed on one or more computers

D. Software that is provided without charge, and can be modified, copied, and distributed without restriction under the license agreement.

27. Which of the following is the appropriate rule for “brainstorming” that is a method of resolving problems?

- A. Participants should select and present only high-quality ideas among their own ideas.
- B. Participants should criticize another participant's ideas without hesitation.
- C. Participants should avoid presenting better ideas based on another participant's.
- D. Participants should listen to free-wheeling opinions, including unique ideas.

27. Which of the following is the appropriate rule for “brainstorming” that is a method of resolving problems?

- A. Participants should select and present only high-quality ideas among their own ideas.
- B. Participants should criticize another participant's ideas without hesitation.
- C. Participants should avoid presenting better ideas based on another participant's.
- D. Participants should listen to free-wheeling opinions, including unique ideas.**

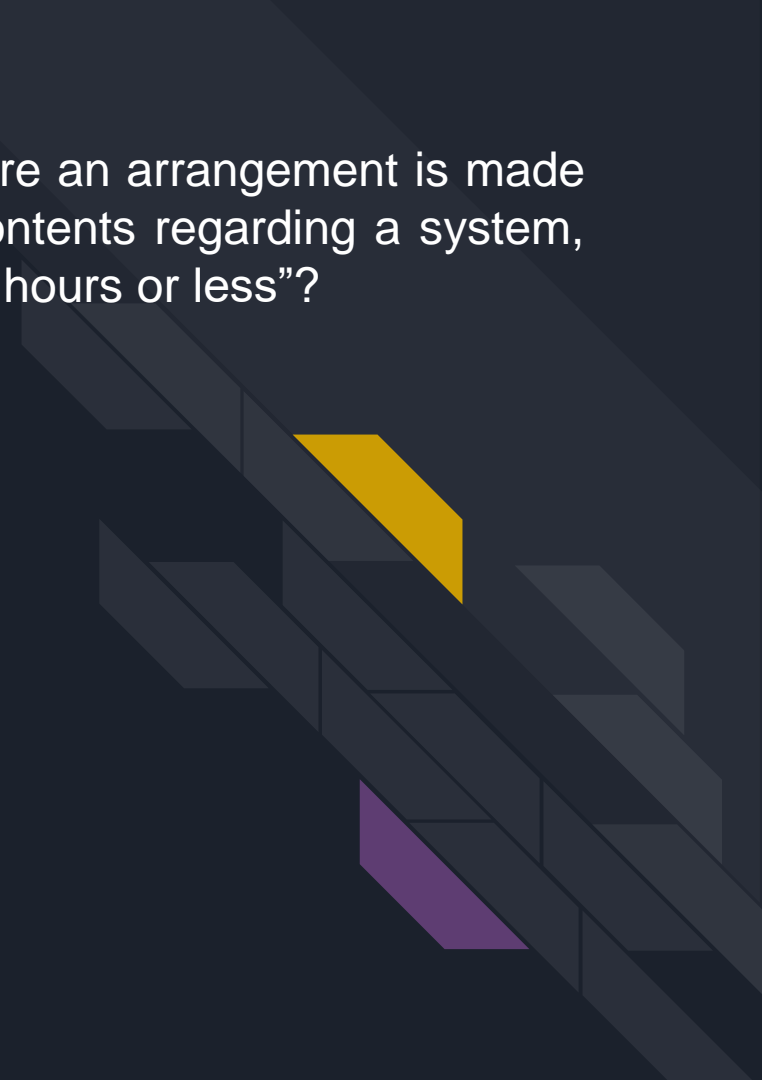
28. Which of the following is a document where an arrangement is made between a system operator and a user on contents regarding a system, such as “the recovery from a failure shall be 3 hours or less”?

- A. Service level agreement
- B. Software detailed design document
- C. Request for proposal (RFP)
- D. Project charter



28. Which of the following is a document where an arrangement is made between a system operator and a user on contents regarding a system, such as “the recovery from a failure shall be 3 hours or less”?

- A. Service level agreement
- B. Software detailed design document
- C. Request for proposal (RFP)
- D. Project charter



29. Activities in project management include project cost management, project scope management, project time management, and project integration management. Which of the following is an item that is created in project integration management?

- A. Development schedule for the entire project
- B. List of deliverables for the entire project
- C. Budget document for the entire project
- D. Planning document for executing, monitoring, and controlling the entire project

29. Activities in project management include project cost management, project scope management, project time management, and project integration management. Which of the following is an item that is created in project integration management?

- A. Development schedule for the entire project
- B. List of deliverables for the entire project
- C. Budget document for the entire project
- D. Planning document for executing, monitoring, and controlling the entire project**

30. Knowledge areas in project management include project cost management, project human resource management, project time management, and project quality management. In project quality management of system development, which of the following is an appropriate activity for quantitatively analyzing the quality of deliverables?

- A. Calculating the rate of progress on the basis of the number of units in completed deliverables, and performing a comparison with the planned rate of progress
- B. Clarifying the skills that are required by a member who creates a design document
- C. Performing a comparison of the actual number and the target number of the defective cases that are found in a test
- D. Estimating the development cost in consideration of the scope and the productivity of a program

30. Knowledge areas in project management include project cost management, project human resource management, project time management, and project quality management. In project quality management of system development, which of the following is an appropriate activity for quantitatively analyzing the quality of deliverables?

A. Calculating the rate of progress on the basis of the number of units in completed deliverables, and performing a comparison with the planned rate of progress

B. Clarifying the skills that are required by a member who creates a design document

C. Performing a comparison of the actual number and the target number of the defective cases that are found in a test

D. Estimating the development cost in consideration of the scope and the productivity of a program