

**Q61.** Which of the following is an explanation of enterprise architecture (EA)?

- a) It is a technique to abstract and express business processes with the four (4) basic elements of data flow, process, file, and data sources and absorption.
- b) It is a technique to analyze each business operation and information system through the four (4) systems of business, data, application, and technology, and reexamine it from the viewpoint of total optimization.
- c) It is a technique to analyze or design a system by using schematic diagrams such as a class diagram, and it is developed by integrating and standardizing various methods that support an object-oriented design.
- d) It is a technique to clarify the data structure and the relationship between data items by expressing the conceptual data model with entities and relationships.

**Q62.** When a workflow system is used for business improvement, which of the following is an appropriate effect that can be expected?

- a) Improved processing speed for office procedures, from document submission to approval
- b) The provision of a standard protocol used for data exchange between a company and its customers
- c) The provision of services such as a discount according to the amount of the customer's purchase
- d) Warehouse automation of shipping and receipt of stocked products

**Q63.** In computerization investment planning, which of the following is an explanation of ROI as an evaluation index for investment value?

- a) ROI is a measure that indicates market competitiveness in the event that a project is not implemented.
- b) ROI is a measure that is calculated by dividing the profit generated through factors such as sales increase and cost reduction by the investment amount.
- c) ROI is a measure that is calculated by subtracting the current value of cash outflow from the current value of cash inflow.
- d) ROI is a measure that is obtained by comparing some parameters, such as the sales to investment ratio and the amount of investment per employee, with that of other companies.

**Q64.** Which of the following is a description that corresponds to CSR procurement?

- a) Choosing the product with the lowest price to minimize costs
- b) Having multiple suppliers to avoid situations in which procurement is impossible, such as after a disaster
- c) Indicating procurement standards that consider the environment, human rights, etc., and requesting that suppliers comply with these
- d) Using EDI to purchase goods in order to perform prompt and accurate procurement

**Q68.** Which of the following is the purpose of CRM?

- a) Acquisition of customer loyalty and maximization of customer lifetime value
- b) Ascertainment of the sales information for each product at the time of sales
- c) Determination of the order quantity and order timing of material required for manufacturing
- d) Reduction in loss of sales opportunities due to inventory shortage

**Q65.** Which of the following is an activity that is performed when non-functional requirements are defined?

- a) Clarifying the flows of information (i.e., data) between the functions that constitute business operations
- b) Creating technical requirements of development standard according to the programming language used in system development
- c) Defining the scope to be implemented as system functions
- d) Specifying the interface for exchanging information with other systems

**Q68.** When an IT vendor uses a “Balanced Scorecard” to promote a solution business, which of the following is an example of the learning and growth KPI goal? Here, “solution” means “to support a customer through information technology and professional services that are offered by experts so that the customer can achieve its management objectives.”

- a) To increase the number of customer proposals by a factor of 1.5 over that of the previous year by preparing an environment for reusing proposals to augment the number of registered solution cases
- b) To increase the sales volume in the consulting business for information strategy planning and system planning for it to account for 15% or more of the total sales of the company
- c) To set an average satisfaction score of 3.5 out of five (5) or more in a satisfaction survey of customers for whom a service is offered
- d) To train 30 employees as IT professionals in order to focus on the consulting services in the information strategy

**Q65.** In computerization planning, which of the following is an activity that should be performed?

- a) Clarifying what roles are assigned to the business and information-system departments when the organizational structure of system development construction is planned and clarifying the basis of cost calculation for development, operation, and maintenance when considering the costs
- b) Determining interfaces, such as screens or forms, based on the requirements definition document and describing them in the design document
- c) Performing maintenance and management of the system so that it conforms to the business and the environment and analyzing details and clarifying the potential impacts of modification requests
- d) Performing system startup and shutdown, monitoring, and file maintenance in a planned manner and verifying that business is being carried out smoothly



**Q79.** Which of the following is the profit obtained by the expression shown below in the income statement, when the regulation of corporate accounting in Japan is applied?

Operating profit + (Non-operating revenue – Non-operating expense)

- |                         |                                    |
|-------------------------|------------------------------------|
| a) Current net profit   | b) Current net profit before taxes |
| c) Extraordinary profit | d) Ordinary profit                 |

**Q61.** Among the “four categories ”of enterprise architecture, which of the following is the remaining one after business architecture, technology architecture, and application architecture?

- a) Bus architecture
- b) Data architecture
- c) Software architecture
- d) System architecture

**Q62.** When a workflow system is used for business improvement, which of the following is an appropriate effect that can be expected?

- a) A standard protocol used for data exchange between a company and its customers can be provided.
- b) Processing speed for office procedures from document submission to approval can be improved.
- c) Services such as discounts can be provided according to the purchase amount of a customer.
- d) Shipping and receiving of stocked products can be automated in a warehouse.

**Q65.** Which of the following descriptions corresponds to CSR procurement?

- a) Choosing the product with the lowest price in order to minimize costs
- b) Having multiple suppliers to avoid situations in which procurement is not possible after disasters
- c) Indicating procurement standards that take the environment, human rights, etc. into account, and requiring suppliers to comply with these
- d) Using EDI for purchasing goods to perform prompt and accurate procurement

**Q66.** An RFP is presented to each vendor that has responded to an RFI. Which of the following should be done beforehand in order to proceed with future vendor selection processes fairly?

- a) Besides the items of the RFP, giving a high evaluation to a vendor who is familiar with the current system in order to select that vendor easily
- b) Establishing processes of selection, such as setting evaluation standards or weighting rules of conformity to the request items
- c) Issuing unofficial agreements to all vendors to whom the RFP has been presented and requesting them to prepare a contract and a statement of work to accelerate the conclusion of the contract after vendor selection
- d) Preparing bailout for a vendor that received a high evaluation on the response to the RFI in case it fails in the selection

**Q64.** Which of the following is an explanation of BPM?

- a) To achieve a reduction in inventory and a shortening of lead time by exchanging information about a series of business processes, from the supply of components to the sale of products, in real time
- b) To achieve overall optimization of management resources through consolidated information management of the main corporate activities, such as production, materials flow, sales, finance, and human affairs
- c) To incorporate the management cycle of analysis, design, execution, and improvement into business processes in order to continuously execute improvement and revision of business processes
- d) To perform consistent management of business processes that concern the customer, which include not only the sales of products but also maintenance service and the handling of queries and claims, based on a customer database

**Q65.** Which of the following is an explanation of SaaS?

- a) It is a service where the user uses the functions of application software via the Internet only when necessary.
- b) It is a software package for performing integrated management of mission-critical business operations in order to effectively employ the management resources of a company.
- c) It refers to a document of consent concerning the content of service quality between the ordering company and the service provider.
- d) It refers to a far-reaching revision of the existing organization and business processes, and the redesigning of duties, business flow, management mechanism, and information systems.

**Q67.** Which of the following is an explanation of the non-functional requirements definition?

- a) It clearly identifies business functions that are difficult to implement in a system, and that constitute manual operation, from among business requirements.
- b) It clearly identifies the conformity of a new package to be installed in order to implement business requirements.
- c) It clearly identifies the functions that are lacking in the current system in order to determine business requirements.
- d) It clearly identifies the quality requirements, technical requirements, and operational requirements necessary to implement business requirements.



**Q79.** Which of the following inventory valuation methods calculates the inventory unit price by dividing the total purchase amount by the total quantity of items purchased at the end of the accounting period?

- a) First-in- first-out method
- b) Last-in- first-out method
- c) Moving average method
- d) Periodic average method

**Q63.** Which of the following is a description of the SOA?

- a) A concept of constructing a system by considering the software functions as components called services and combining them
- b) A concept of improving the sales efficiency and quality by using IT for the sales activities to increase the sales and profits as well as to improve customer satisfaction
- c) A concept of re-designing the business processes to innovatively improve the cost, quality, service, and speed
- d) Outsourcing the in-house operations other than those of the core businesses to concentrate the management resources on the core businesses

**Q64.** Which of the following is a scheme where the user establishes a connection to the system of a service provider via the Internet and makes online use of only the necessary functions of the applications provided by the service provider at the necessary time?

a) ERP

b) SaaS

c) SCM

d) XBRL

**Q65.** A company chooses products and services that are acknowledged as actively addressing environmental concerns. What is this initiative called?

- a) CSR
- b) Environmental assessment
- c) Green procurement
- d) Macro environment analysis

**Q75.** Which of the following is a major role of a CIO?

- a) The CIO creates a plan for optimizing the effect of investment on the information resources of the entire company to support the business strategy when a computerization strategy is established.
- b) The CIO gives advice to the information system department by auditing whether the information system is functioning appropriately with respect to the corporate activities.
- c) The CIO receives queries about the information system, reports on the problems, and gives specific instructions to the department in charge so that the information system of the entire company can be managed optimally.
- d) The CIO understands the status of the information system development and operation and specifically instructs improvement points so that the information system of the entire company functions optimally.

**Q79.** Which of the following is a method for making decisions on the basis of the sum of the future cashflows discounted by a discount rate?

- a) Internal Rate of Return Method (IRR)
- b) Net Present Value Method (NPV)
- c) PayBack Period Method (PBP)
- d) Return on Investment Method (ROI)

**Q67.** Which of the following is an explanation of green procurement?

- a) It refers not only to the fulfillment of the requirements of quality and price but to the preferential purchase of products and services with the lower environmental burden from companies that work toward a reduction in their environmental impact.
- b) It refers to a certificate that enables commercial trading of the green power generated from natural energy such as sunlight, biomass, wind power, and geothermal heat.
- c) It refers to international standards concerning environmental labels such as eco marks that are certified by a third party on the basis of certain criteria.
- d) It refers to mass promotion of the details of environmental protection activities, and the raising of funds for environmental protection from investors.

**Q61.** Which of the following is a technique that is used to perform the optimum resource allocation for a computerization investment in each category classified on the basis of the similarities of risks and the investment value?

- a) 3C analysis
- b) Benchmarking
- c) Enterprise architecture
- d) IT portfolio



**Q62.** Which of the following represents a part of the total cost of ownership (TCO) for SaaS (Software as a service)?

- a) Cost of upgraded installation
- b) Data migration cost
- c) New software development cost
- d) Server hardware investment to host the software

**Q63.** Which of the following is a measure for the risk of a decline in the system maintenance and operation quality during the outsourcing of an IT service?

- a) Human resources with assessment capabilities with respect to the service cost of system maintenance and operations are secured in the company.
- b) In order to validate the service cost, the detailed fee structure by service is clearly stated in the contract or other documents.
- c) The proposal for the human resource development plan of the company after outsourcing is requested during the stage of subcontractor selection, and is also clearly stated in the contract or other documents.
- d) The service quality improvement activities are proceeded by agreeing to the desired level of quality with the subcontractor by using indexes that demonstrate the service quality.

**Q64.** Which of the following is a characteristic of hosting service?

- a) A usage method, such as a high-performance server of a service provider being exclusively used by a single user, is not supported.
- b) In terms of operations management, all activities, including the monitoring of server operations, incident handling, etc. are addressed by users.
- c) The utilization right of a server prepared by a service provider is lent out to users.
- d) Users freely select and combine servers by providing their own servers to the service provider facility.

**Q65.** Which of the following is an explanation of BYOD (Bring Your Own Device)?

- a) Carrying information devices provided by the company at any time for work use
- b) Configuring a usage environment for the personal use of personally-owned information devices
- c) Using employees' personally-owned information devices for work
- d) Using laptop computers or other information devices provided by the company for personal use outside of the company

**Q66.** Which of the following is the work that is performed when non-functional requirements are defined?

- a) Clarifying the flow of information (i.e., data) between the functions constituting business operations
- b) Clarifying the interface for exchanging information with other systems
- c) Creating the technical requirements for the development criteria and standards according to the programming language used in system development
- d) Defining the scope to be implemented as system functions

**Q62.** Which of the following is an explanation of Enterprise Architecture (EA)?

- a) It is a technique to abstract and express the business processes with the four (4) basic elements of data flow, process, file, and data sources and absorption.
- b) It is a technique to analyze each business operation and information system through the four (4) systems of business, data, application, and technology and reexamine it from the viewpoint of total optimization.
- c) It is a technique to analyze or design a system by using schematic diagrams such as a class diagram, and it is developed by integrating and standardizing various methods that support an object-oriented design.
- d) It is a technique to clarify the data structure and the relationship between data items by expressing the conceptual data model with entities and relationships.

**Q64.** Which of the following is a purpose of Business Process Management (BPM) in corporate activities?

- a) Analysis and effective use of information resources
- b) Conservation and analysis of customer information
- c) Continuous improvement of business processes
- d) Effective use of management resources

**Q68.** The RFP is presented to each vendor that has responded to an RFI. Which of the following should be done beforehand to proceed fairly with the future vendor selection processes?

- a) Besides the items of an RFP, giving a high evaluation to a vendor who is familiar with the current system to select that vendor easily
- b) Establishing processes of selection such as setting evaluation standards or weighting rules of conformity to the request items.
- c) Issuing unofficial agreements to all vendors to whom the RFP has been presented and requesting them to prepare a contract and a statement of work to accelerate the conclusion of the contract after the vendor selection.
- d) Preparing a bailout for a vendor who received a high evaluation on the response to the RFI, in case it fails in the selection.



**Q79.** Which of the following is the role of a CIO?

- a) To implement investigation, research, and education of information technology
- b) To make a computerization strategy from a corporate level perspective, and confirm and evaluate its consistency with business strategy
- c) To manage a project through extensive business experience, knowledge of information technology, and leadership
- d) To present the computerization proposal of his/her own department to the information system department as a representative of each department

**Q62.** Which of the following is an appropriate feasibility evaluation when checking whether the lifetime benefits of the proposed information system is greater than its lifetime costs?

- a) Economic feasibility
- b) Operational feasibility
- c) Scheduling feasibility
- d) Technical feasibility

**Q64.** Among the “four categories” of the enterprise architecture, which of the following completes the list after business architecture, technology architecture, and application architecture?

- a) Bus architecture
- b) Data architecture
- c) Software architecture
- d) System architecture

**Q65.** Which of the following is an appropriate explanation of EMS?

- a) It refers to acting as the customer service desk for responding by telephone to consumer electronics-related inquiries from general consumers.
- b) It refers to planning, design, and development of products without owning manufacturing facilities.
- c) It refers to the contract production of electronic devices, etc. ordered by other manufacturers.
- d) It refers to the dedicated selling of electronic devices, etc. purchased from other manufacturers.

**Q66.** Which of the following is an explanation of green procurement?

- a) It refers not only to the fulfillment of the requirements of quality and price, but also to the preferential purchase of products and services that exert a lower environmental burden from companies working towards a reduction in environmental burden.
- b) It refers to a certificate that enables commercial trading of the green power generated from natural energy such as sunlight, biomass, wind power, and geothermal heat.
- c) It refers to international standards concerning environmental labels such as eco marks that are qualified by a third party based on a certain standard.
- d) It refers to mass promotion of the details of environmental protection activities, and the raising of funds from investors.

**Q67.** Which of the following is an appropriate description of an RFI?

- a) It is a document describing the basic policy for the system, including a summary of the system, the purpose, the necessary functions, the system requirements, and contract matters.
- b) It is a document that is created after an RFP.
- c) It is a document used by companies looking for implementation of computerization to request specific system proposals from prospective suppliers such as system vendors.
- d) It is a document used to request information concerning computerization from prospective suppliers such as system vendors.

**Q79.** Which of the following is a method of making decisions based on the discount rate at which the net present value of the payback amount and the investment amount are equal?

- a) Internal Rate of Return method
- b) Net Present Value method
- c) Payback Period method
- d) Return on Investment method

**Q61.** Which of the following is the purpose of BPM (Business Process Management) in the context of corporate activity?

- a) Analysis and effective utilization of information resources.
- b) Continual improvement of business processes.
- c) Effective utilization of management resources.
- d) Management and analysis of customer information.



**Q64.** Which of the following is an explanation of SOA?

- a) It is a concept that considers the functions of software as components called services, and combines these services in order to develop application systems.
- b) It is a concept that enhances the efficiency and quality of sales activities by utilizing IT in order to increase sales and profits and to improve customer satisfaction.
- c) It is a concept that redesigns the business processes fundamentally in order to improve cost, quality, service, and speed in an innovative manner.
- d) It refers to the outsourcing of internal activities other than the core businesses in order to concentrate management resources on the core businesses.

**Q65.** Which of the following is an explanation of application architecture that configures enterprise architecture?

- a) It systematically indicates the business processes and information flow necessary for the business strategy
- b) It systematically indicates the content of data required for a business operation, the relationship between data, and the structure of data.
- c) It systematically indicates the functions and configuration of a system supporting a business process.
- d) It systematically indicates the technical components necessary for the development and the operation of the information system.

**Q74.** Which of the following is a role that CIO is required to perform?

- a) Design and operation of an organization of legal compliance.
- b) Planning and execution of the research and development policy of the company.
- c) Planning and implementation of a financial strategy for business administration.
- d) Promotion of use of IT services that maximizes business value.

**Q75.** Among the measures that a company should adopt in order to fulfill social responsibility, which of the following is implemented in terms of the environment?

- a) To develop an internal organization for the purpose of green purchasing.
- b) To enhance the transparency of the management status of the company for shareholders.
- c) To establish a system that supports volunteer activities of employees following disasters.
- d) To setup an ethics helpline within the company.

**Q65.** Which of the following is an appropriate sequence of procedure for creating a business model?

- A. Associating a business process with an existing organization
- B. Clarifying a business process
- C. Associating a business process with an information system
- D. Clarifying a data class (information model)
- E. Associating a business process with a data class

- a)  $B \rightarrow D \rightarrow C \rightarrow E \rightarrow A$
- b)  $B \rightarrow D \rightarrow E \rightarrow C \rightarrow A$
- c)  $D \rightarrow B \rightarrow C \rightarrow E \rightarrow A$
- d)  $D \rightarrow B \rightarrow E \rightarrow C \rightarrow A$

**Q66.** Which of the following is an appropriate description of cloud computing?

- a) It is a collection of computer resources from multiple locations designed to reach a common goal.
- b) It is a field of computer science that studies distributed systems in which components located on networked computers communicate and coordinate their actions by passing messages.
- c) It is a model for enabling ubiquitous, convenient, on-demand access to a shared pool of configurable computing resources.
- d) It is a service provisioning model in which a service provider makes computing resources and infrastructure management available to the customers as needed and charges them for a specific usage rather than a flat rate.

**Q67.** Which of the following is an appropriate combination of layers managed by vendors when using IaaS?

- a) Middleware, Servers, Storage, Networking
- b) Middleware, Virtualization, Servers, Storage
- c) Operating system, Virtualization, Storage, Networking
- d) Virtualization, Servers, Storage, Networking

**Q68.** Which of the following is a work that is performed when nonfunctional requirements are defined?

- a) Clarifying flows of information (i.e., data) between functions constituting business operations
- b) Creating development criteria and standards based on programming language used in system development
- c) Defining the scope to be implemented as system functions
- d) Specifying the interface for exchanging information with other systems



**Q64.** Which of the following is the cloud-computing service model that allows users to install operating-system images and their application software on the system?

- a) Desktop as a service (DaaS)
- b) Infrastructure as a service (IaaS)
- c) Platform as a service (PaaS)
- d) Software as a service (SaaS)

**Q65.** According to the ISO/IEC 12207, the activities of the requirements definition process include stakeholder identification, requirements identification, requirements evaluation, and requirements agreement. Among these activities, which of the following is a task that is implemented in requirements identification?

- a) Analyzing elicited requirements, eliminating conflicting and ambiguous points, and organizing them as a set of consistent requirements
- b) Clarifying which parties will take part in which processes throughout the entire system life cycle
- c) Eliciting requirements from stakeholders, and clarifying constraints and operational scenarios
- d) Explaining how to resolve conflicting and impractical requirements to stakeholders, and obtaining agreement

**Q66.** Which of the following is an explanation of the green procurement (sustainable procurement)?

- a) It refers to a certificate that enables commercial trading of the green power that is generated from natural energy such as sunlight, biomass, wind power, and geothermal heat.
- b) It refers to a mass promotion of the environmental protection activities and the fund raising from investors for the environmental protection.
- c) It refers to a preferential purchase of products and services that exert a lower environmental burden.
- d) It refers to an international standard concerning environmental labels such as eco mark that is certified by a third party as a product that contributes to environment protection.

**Q63.** Which of the following is an explanation of SOA?

- a) SOA combines the three logical structures of sequence, selection, and iteration to perform component-level design.
- b) SOA facilitates response to business changes by constructing software from components called services.
- c) SOA is composed of the four main concepts of business architecture, data architecture, applications architecture, and technology architecture, and seeks to optimize business operations and systems.
- d) SOA uses data flow diagrams to simultaneously construct both models of information and models of functions.

**Q65.** In computerization investment planning, which of the following is an explanation of the ROI that is an evaluation index for investment value?

- a) ROI is a measure that indicates market competitiveness in the case where a project is not implemented.
- b) ROI is a measure that is calculated by dividing the profit generated through factors, such as sales increase and cost reduction, by the amount of investment.
- c) ROI is a measure that is calculated by subtracting the current value of cash outflow from the current cash inflow.
- d) ROI is a measure that is obtained by comparing some parameters, such as the sales to investment ratio and the amount of investment per employee, with other companies.

**Q66.** Which of the following is the most appropriate action to be taken in order to eliminate the “digital divide”?

- a) Estimating IT investment, setting effect targets based on investment goals, and performing prior evaluation of the feasibility of achieving each effect target
- b) Increasing learning opportunities for information literacy, and preparing an environment to further facilitate the use of information and telecommunications equipment along with information services
- c) Reducing energy consumption by promoting the efficiency of business operations, including telecommuting and energy saving of the daily life field such as electrical appliances and facilities with the help of IT
- d) Using IC tags to enable the tracking of distribution information on products and foodstuffs, in all processes from production to final consumption or disposal

**Q63.** Among the architectures included in the “four domains” of the enterprise architecture, which of the following is the architecture other than business architecture, technology architecture, and application architecture?

- a) Bus architecture
- b) Data architecture
- c) Software architecture
- d) System architecture

**Q64.** IT investment evaluation is performed as prior evaluation, interim evaluation, or post evaluation according to each stage of the planning, execution, and completion for an individual project. Which of the following is an explanation concerning “prior evaluation”?

- a) Analyzing in detail not only the differences between the execution plan and the actual results but also their causes, and determining whether the investment amount and performance objectives need to be changed
- b) Evaluating the status of achievement of the performance objectives that are set beforehand, and on an as-required basis, considering the improvement plan for achieving the original objectives
- c) Planning beforehand the period of achieving the performance objectives and the method of collecting the data necessary for evaluation, and then performing evaluation according to that period
- d) Setting the performance objectives based on the purpose of investment, and providing the top management with information necessary for determining the feasibility of implementation



**Q65.** Which of the following is the purpose of defining a business model at the planning stage of total optimization in an information strategy?

- a) To confirm operational procedures in order to create user manuals and operations manuals required for the actual operations of the information system
- b) To identify the components, such as hardware, software, and networks, which are required to build the information system
- c) To organize the relationships between a company's entire business operations and their utilized information, and establish a clear vision for the information system
- d) To understand the scope and development scale of computerization, and estimate the required time, person-hours, and costs for system development

**Q66.** When a computerization plan is made, which of the following is an item to be considered?

- a) Clarifying the cost and investment effect of the development, maintenance, and operations of the system
- b) Describing the test plan, operation manuals, and measures against failures in a specific and clear way
- c) Installing an equivalent system used by other companies in the same industry in order to avoid failures
- d) Proceeding with the plan on the premise that the system is developed by a company's own staff in view of system operations

**Q67.** Which of the following is an explanation concerning non-functional requirements definition?

- a) It clearly defines the business functions that are performed by manual operations rather than automated systems, from among the business requirements.
- b) It clearly defines the conformity of the new package to be installed, in order to implement business requirements.
- c) It clearly defines the functions that are not supported in the current system, in order to determine the business requirements.
- d) It clearly defines the quality requirements, technical requirements, and operational requirements necessary to implement business requirements.

**Q65.** Which of the following is an appropriate explanation of IT governance?

- a) A capability to guide the development and implementation of an IT strategy in a desired direction to gain a competitive advantage
- b) A comprehensive framework and a set of best practice standards concerning the management and operations of IT services
- c) A group of administrative services provided online by local governments to individuals by using the Internet and Web sites
- d) A set of knowledge, skills, and abilities to take advantage and make use of information technology in order to resolve problems

**Q66.** From a viewpoint of corporate management, which of the following is an explanation of BPM?

- a) A reduction of inventory and lead time is achieved by exchanging information about a series of business processes from the supply of components up to the sale of products on a real-time basis.
- b) Business processes ranging from the sales of products up to after-sales service and also including queries and claims are consistently managed on the basis of a customer database.
- c) The management cycle of analysis, design, execution, and improvement is incorporated into business processes so that business processes can be continuously reviewed for improvement and integrated with optimum processes.
- d) The overall optimization of corporate management resources is achieved by managing business-critical information about business operations or activities, such as production, logistics, sales, finance, and human affairs, in an integrated manner.

**Q67.** Which of the following is an explanation of SOA (Service-Oriented Architecture)?

- a) It is a concept that management resources can be concentrated on the core business by outsourcing the non-core business from among the in-house activities.
- b) It is a concept that sales efficiency and quality are enhanced with the aid of IT in order to increase sales and profits and to improve customer satisfaction.
- c) It is a concept that the business process is redesigned radically in order to improve the cost, quality, service, and speed in an innovative manner.
- d) It is a concept that the functions of software are considered as components called services, and these services are combined together to construct a system.

**Q69.** Which of the following corresponds to an example of “**non-functional**” requirements?

- a) Clarifying the flow of data between the functions constituting business operations
- b) Deciding the scope that is to be implemented as system functions
- c) Selecting development standards based on the language used in system development
- d) Specifying the interface used for exchanging information with other systems

**Q63.** Which of the following is a management approach or technique that can be used for redesigning and restructuring the value-creating processes in an organization in order to gain significant benefits in productivity, profitability, service, and quality through maximizing the potential of individuals and teams?

- a) BPA                      b) BPM                      c) BPO                      d) BPR



**Q64.** Which of the following is an explanation of SaaS?

- a) It is a service where the user can use the functions of application software via the Internet only when necessary.
- b) It is a software package for managing mission-critical business operations in an integrated way in order to effectively use the management resources of a company.
- c) It is to fundamentally review the existing organization and its business process, and to redesign duties, business flow, management mechanism, and information systems.
- d) It refers to a document of consent concerning the content of service quality between the ordering party and the service provider.

**Q65.** Among the costs related to computerization, which of the following is included in the running cost?

- a) Consulting cost of information systems strategy planning
- b) Cost of systems engineers performing requirements definition
- c) Initial installation cost of software packages
- d) Maintenance cost of information equipment such as servers

**Q66.** Which of the following is an explanation of the digital divide?

- a) It refers to an environment provided in such a way that anybody can use information and communication so that the difficulty experienced by elderly persons and disabled persons in the use of information and communication does not lead to a social and economic gap.
- b) It refers to persons for whom acquisition of information is difficult because they do not understand the method of using information and communication devices such as PCs, or because they do not have information and communication devices.
- c) It refers to the social or economic gap that occurs depending on the level of information literacy and also on the differences in the usage environment of information technology.
- d) It refers to whether all persons including elderly persons and disabled persons can use information and communication systems including hardware and software, as well as information services, and whether these things are easy to use.

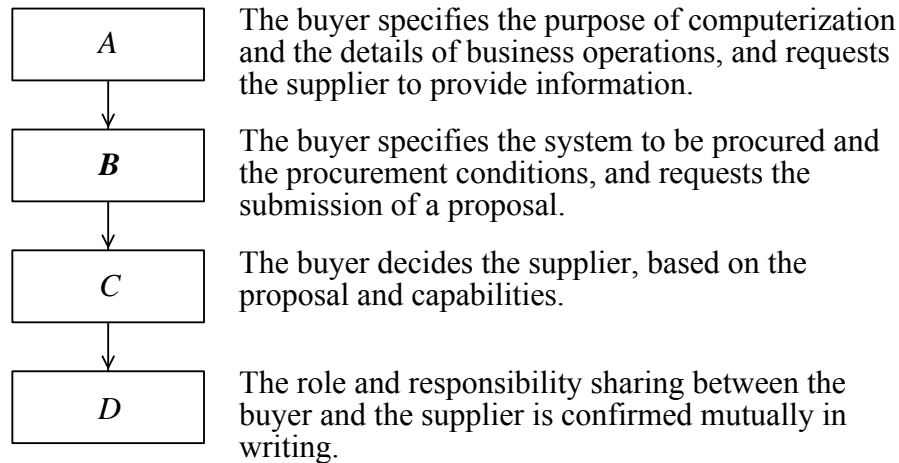
**Q64.** When an information strategy is developed, which of the following is an item that must always be made consistent with the strategy?

- a) Medium and long-term management plans
- b) New emerging information technologies
- c) The annual plan of the information systems department
- d) The improvement plan of a mission-critical system

**Q66.** Which of the following is provided by an ASP (Application Service Provider)?

- a) A service in which a facility equipped with high-speed lines and earthquake-resistant equipment owned by the provider is provided in order to install the server and communication equipment of the customer
- b) A service in which an external provider collectively undertakes business operations such as general affairs, personnel affairs, accounting, and payroll calculation that are performed within the customer's organization
- c) A service in which some of the servers owned by the provider are lent to a customer and used like the customer's own servers
- d) A service in which the functions of a general-purpose application system are provided to several customers via a network

**Q67.** When an information system is procured according to the procedure shown in the figure below, which of the following is to be inserted into blank *B*?



- a) Conclusion of a contract
- b) RFI
- c) RFP
- d) Selection of supplier

**Q76.** Which of the following is an explanation of a CIO?

- a) An executive who is positioned to perform investment decision-making, funding, accounting, and financial reporting
- b) An executive who is positioned to plan and execute strategies including information management and information system control
- c) An organization that is positioned to approve or reject the change requests made to the system
- d) An organization that is positioned to manage multiple projects in a consolidated manner

**Q65.** Which of the following is a deliverable of data architecture that is one of the four architectures contained in Enterprise Architecture?

- a) E-R diagram
- b) Information system relationship diagram
- c) Software configuration diagram
- d) Work flow diagram



**Q67.** When a computerization plan is made, which of the following is an item to be considered?

- a) Clarifying the cost and investment effect of development, maintenance, and operations
- b) Describing the test plan, operation manuals, and measures against failures in a specific and concrete way
- c) Installing an equivalent system used by other companies in the same industry in order to avoid failures
- d) Proceeding with planning on the assumption that the system is developed by a company's own staff in consideration of system operations

**Q68.** Which of the following is an item to be performed in the requirements definition process of system development?

- a) Analyzing the business environment, such as legal restrictions and economic circumstances, and setting business goals and operational objectives
- b) Clarifying the procedures and rules of new business operations together with the constraints, and obtaining agreement between stakeholders
- c) Evaluating the investment effect and effectiveness of business operations actually resulting from the new system
- d) Performing the test for the software and database in order to check to see if the requirements are met

**Q64.** The “four domains” of enterprise architecture include business architecture, technology architecture, application architecture, and one other. Which of the following is the one remaining architecture?

- a) Bus architecture
- b) Data architecture
- c) Software architecture
- d) Systems architecture

**Q65.** Which of the following is the purpose of BPM that is a management approach in a company or an organization?

- a) Analysis and effective use of a company's information resources
- b) Continuous improvement of a company's operational processes
- c) Effective use of a company's management resources
- d) Management and analysis of a company's customer information

**Q67.** Which of the following is an appropriate explanation of the RFI that is created when a new information system is procured?

- a) A request is made from the ordering party to the supplier in order to change the details agreed upon in the contract.
- b) A request is made to conclude the contract after the roles of the ordering party and the supplier are confirmed.
- c) A request is made to the vendor for helpful information by showing the details of business operations and the purpose of the computerization.
- d) A request is made to the vendor for the submission of a proposal by showing the system to be procured and the procurement conditions.

**Q69.** Which of the following is applicable to the definition of “**non-functional**” requirements?

- a) Creating development criteria and standards suitable for the language used in system development
- b) Defining the scope of system functions to be designed and implemented in system development
- c) Identifying the flow of information (i.e., data) between functions that compose the business operations
- d) Identifying the interface functions to be used for the exchange of information with other systems

**Q67.** Which of the following is the activity that is performed in the phase of requirements definition?

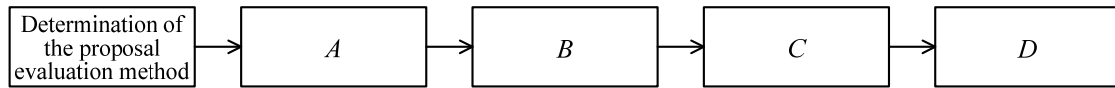
- a) Creating a policy on the computerization needed to achieve business objectives and targets
- b) Developing software that meets the needs described by the customer
- c) Identifying the specifications of the business operations and system to be newly established and clarifying the scope of computerization
- d) Operating software products and providing users with operations support

**Q69.** Among the costs related to computerization, which of the following is included in the running cost?

- a) Consulting cost for developing information systems strategy
- b) Cost of systems engineers who define requirements
- c) Installation cost of software packages
- d) Maintenance cost for information equipment such as servers



**Q70.** When the procurement process that begins with “determination of the proposal evaluation method” is classified into selection of the supplier, procurement, issuance of the RFP (Request for Proposal), and proposal evaluation and then aligned in the appropriate order, which of the following is inserted in blank *C*?



- a) Issuance of the RFP
- b) Procurement
- c) Proposal evaluation
- d) Selection of the supplier

**Q68.** Which of the following is an activity concerning a model of business operations developed during the overall planning of information systems?

- a) Associating business processes with data classes
- b) Associating functions with forms in an organization
- c) Defining the functions and necessary data items of mission-critical systems
- d) Defining the relationships between the existing information systems and databases

**Q70.** Which of the following is an explanation of digital divide?

- a) It refers to a single point of contact to provide all services for each segment of civic events or corporate activities.
- b) It refers to allowing citizens to directly participate in shaping central or local government policies by means such as the Internet.
- c) It refers to communication and broadcasting services which are equally available to all citizens without regional disparities at a reasonable price.
- d) It refers to economic or social disparities caused by differences in capabilities or opportunities to use PCs and telecommunications.

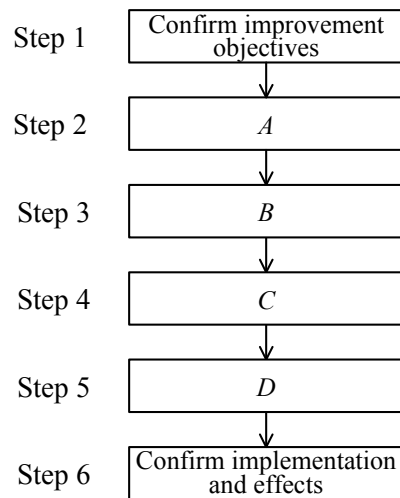
**Q73.** Which of the following is the most appropriate position that is primarily responsible for centralized oversight of enterprise IT strategic planning?

- a) CEO (Chief Executive Officer)
- b) CFO (Chief Financial Officer)
- c) CIO (Chief Information Officer)
- d) COO (Chief Operating Officer)

**Q68.** Which of the following is an explanation of EA (Enterprise Architecture)?

- a) It is a technique for system analysis and design using model diagrams such as a class diagram, which unifies and standardizes various methods for assisting object oriented design.
- b) It is a technique to abstract and represent company's business processes by means of four basic elements—data flow, process, file, and data source/sink.
- c) It is a technique to clearly define the relationship between data structure and data item by representing a conceptual data model using entities and their relationships.
- d) It is a technique to review respective business operations and information systems from the perspective of overall optimization through analysis of four key architectures—business, data, application, and technology.

**Q69.** The diagram below shows the procedure for business improvement in six steps. When activities “a)” through “d)” are to be inserted into the blank boxes *A* through *D*, which of the following is the activity inserted in the blank box *C*?



- |                             |                              |
|-----------------------------|------------------------------|
| a) Develop improvement plan | b) Evaluate improvement plan |
| c) Set improvement goals    | d) Understand problems       |

**Q71.** Which of the following is a document that asks to provide the information necessary for the preparation of a document that asks for proposals?

- a) IFB                      b) RFI                      c) RFP                      d) RFQ

**Q73.** A data warehouse was set up, but it is hardly used. The result of a hearing suggests that the users' skill level is lower than expected. Which of the following is an appropriate measure for improvement to promote usage?

- a) To add more information that is believed to be requested by users
- b) To prepare, as standards, templates according to data extraction and analysis patterns
- c) To provide the data more close to real time, and improve the data precision
- d) To send a notice to promote usage through management



**Q63.** The weighted comprehensive evaluation method is used to integrate and quantify the evaluation scores of multiple items for quantitatively evaluating the effect of improvements. Which of the following is the improvement proposal that should be prioritized in the table below?

Evaluation items	Weighting factor	Improvement proposals			
		Proposal 1	Proposal 2	Proposal 3	Proposal 4
Labor savings	4	6	8	2	5
Shortening of time frame	3	5	5	9	5
Reduction of resources	3	6	4	7	6

- a) Proposal 1      b) Proposal 2      c) Proposal 3      d) Proposal 4

**Q71.** As shown in the tables below, the 5-year investment effects of IT investment plans A through D are evaluated on the basis of ROI (Return on Investment). Which of the following has the highest effect? Here, the internal rate of return (IRR) is 0, and ROI is calculated by dividing the total profit for the period by the amount of investment.

<i>A</i>	Year	0	1	2	3	4	5
	Profit		15	30	45	30	15
	Amount of investment	100					

<i>B</i>	Year	0	1	2	3	4	5
	Profit		105	75	45	15	0
	Amount of investment	200					

<i>C</i>	Year	0	1	2	3	4	5
	Profit		60	75	90	75	60
	Amount of investment	300					

<i>D</i>	Year	0	1	2	3	4	5
	Profit		105	105	105	105	105
	Amount of investment	400					

a) *A*

b) *B*

c) *C*

d) *D*