

# *DATA CENTERS MANAGEMENT*

## **MCQ – Revision**

- *Exam of SWE Agile (Same Subject)*
- *Points Mentioned in the Book*

Mansoura University

Faculty of Computer and Information

Total Grade: Max. 60 marks

No. of pages: 2 pages (1 double face).



Final Term Exam - Model 2

Academic Year 2021/2022

Course Name: Agile Methods (SWE136)

Level: 4<sup>th</sup> year SWE Program

Time Allowed: 1.5 Hours

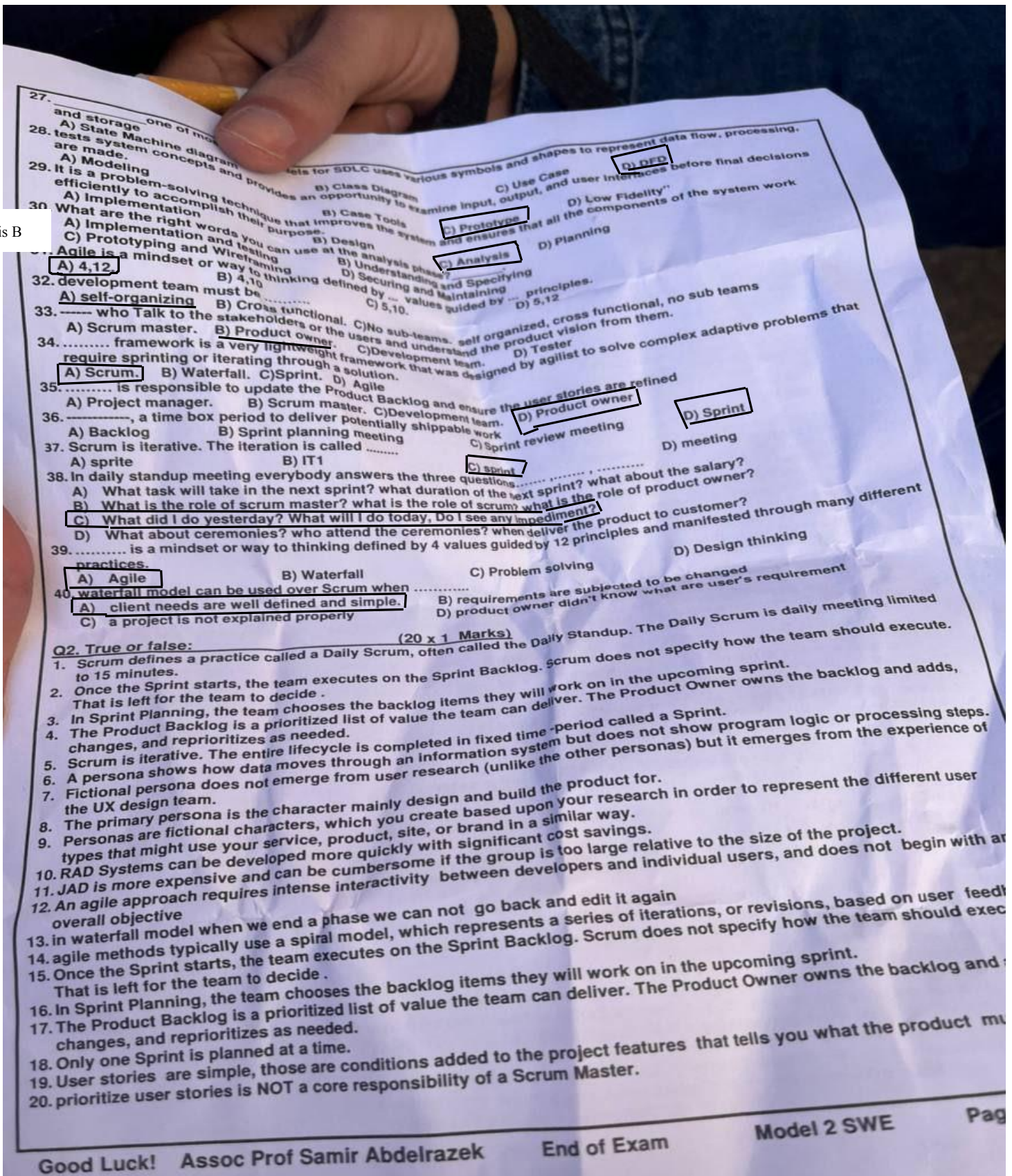
17 Jan 2022

Choose the correct answer: (40 x 1 Marks)

- Who manages scrum Team ?  
A) Nobody B) Scrum Master C) Product Owner D) Developer
- Scrum teams commit to ship working software through set intervals called \_\_\_\_  
A) Iterations B) Sprints C) Boards D) Artifacts
- The name of \_\_\_\_ comes from the rugby term scrum, where team members lunge at each other to achieve their objectives.  
A) agile B) SCRUM C) Kanban D) xp
- The Requirements can be represented in Object-Oriented way like \_\_\_\_.  
A) User Stories B) Use case C) SRS D) WBS
- The completion of steps in sequential order, one after another. Called \_\_\_\_.  
A) Sequence B) Iteration C) Selection. D) Mutate
- ... isn't belong to principle of agile  
A) Build Projects Around Motivated Individuals B) Face-to-Face Conversations  
C) Working Software is Key D) Don't welcome to change
- "We will value face to face communication" is part of which Agile Value?  
A) Responding to Change Over Following a Plan B) Working software over Comprehensive Documentation  
C) Customer Collaboration Over Contract Negotiation D) Individuals and Interactions over Processes and Tools
- The Reality of any project is ...  
A) Customers know exactly what they want B) Developers know exactly how to build it.  
C) Nothing will change along the way D) Developers discover how to build it when they build it
- the customer requirement stored in ...  
A) Product backlog B) Sprint backlog C) Database D) GitHub
- The main roles in Scrum are .....  
A) ScrumMaster B) Product Owner C) Team D) scrum master, product owner, team
- During the Sprint Planning the Scrum Team decides...  
A) What change need to be made to the product backlog.  
B) What stories can be committed for the sprint and plan of action to execute  
C) What stories are done – done.  
D) What didn't go will in previous iteration
- According to the Agile Principles, ....., this is the highest priority.  
A) attention to details B) attention to scrums planning C) deliver value faster D) face-to-face conversion
- in the sprint planning meeting we must produce .....  
A) User story B) Sprint backlog C) Acceptance criteria D) Documentation
- ..... who responsible for understands the vision of the product and he's coming back to the team and he's saying that he's I know these items are the most important items  
A) Product owner B) Scrum master C) Development team D) Project manger
- ..... are simple, those are conditions added to the user story that tells you what the user story must do  
A) user story B) notes C) Acceptance criteria D) product backlog
- ..... methods attempt to develop a system incrementally, by building a series of prototypes and constantly adjusting them to user requirements.  
A) Agile B) JAD C) O-O D) RAD
- Structured walk-throughs take place throughout the SDLC and is called \_\_\_\_ in maintenance phase.  
A) code review B) test review C) design-review D) planning phase
- Structured walk-throughs take place throughout the SDLC and is called \_\_\_\_ in implementation phase.  
A) code review B) test review C) design-review D) planning phase
- Structured walk-throughs take place throughout the SDLC and is called \_\_\_\_ in Design phase.  
A) code review B) test review C) design-review D) planning phase
- ..... the three elements of a User Story.  
A) card, criteria, calculation B) card, conversion, change C) card, conversion, confirmation D) card, change, calculation
- Agile is a \_\_\_\_.  
A) zigzag B) zigzag and iterative C) Iterative D) Sequential
- During the ..... meeting the Scrum Team decides what's stories can be committed for the sprint & a plan of action to execute  
A) sprint review B) Retrospective daily C) standup D) sprint planning
- the syntax of user story is ....  
A) I want to <perform task> As a <user type> so that I can <achieve a goal>  
B) As a <user type> I want to <perform task>  
C) As a <user type> I want to <perform task> so that I can <achieve a goal>  
D) I want to <perform task> As a <user type> so that I can <achieve a goal>
- ..... is a simple description of a product feature that is written from end users' point of view.  
A) User story B) Product backlog C) Sprint backlog D) Notes
- ..... who is responsible for ensuring Scrum is understood.  
A) Scrum master B) Product owner C) Development team D) tester
- ..... step aims to correct errors and adapt to changes in the environment  
A) Analysis B) Maintenance C) Evaluation D) Implementation



Answer is B



- 1) TRUE 2) TRUE 3) TRUE 4) TRUE 5) TRUE 6) TRUE 7) TRUE 8) TRUE 9) TRUE 10) TRUE  
 11) TRUE 12) TRUE 13) TRUE 14) TRUE 15) TRUE 16) TRUE 17) TRUE 18) TRUE 19) TRUE  
 20) TRUE

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# Data Center Concepts

- 1) \_\_\_\_\_ is a process of planning a new data center system or replacing an existing system by defining its components or modules to satisfy the specific requirements.

- a. Data centers Design
- b. Data center Requirement
- c. Data centers model

| Data center System Analysis   | Data center System Design   |
|---|---|
| consists of those activities that enable a person to understand and specify what the new datacenter system should accomplish. | consists of those activities that enable a person to describe in detail how the information system will actually be implemented to provide the needed solution. |
| The operative words here are <u>understanding</u> and <u>specifying</u> .   | how the system will actually work.  |

- 2) What is required for the new system to solve the problem

- a. Analysis
- b. Design
- c. Both

- 3) How the system will operate to solve the problem

- a. Analysis
- b. Design
- c. Both

- 4) An information system has five key components hardware, software, data, processes, and people
- a. True
  - b. False
- 5) \_\_\_\_\_ consists of everything in the physical layer of the information system
- a. Hardware
  - b. Software
  - c. Processes
  - d. People
- 6) number of transistors on an integrated circuit chip would double about every 24 months.
- a. Brooks Law
  - b. Moore's Law
- 7) programs that control the hardware and produce the desired information or results.
- a. Hardware
  - b. Software
  - c. Processes
  - d. People

- 8) \_\_\_\_\_ is a system adapted for use in many different types of companies.
- a. A horizontal system
  - b. A vertical system
  - c. Both
- 9) \_\_\_\_\_ is designed to meet the unique requirements of a specific business or industry
- a. A horizontal system
  - b. A vertical system
  - c. Both
- 10) A company must consider how a new system will interface with older systems, which are called \_\_\_\_\_
- a. New Systems
  - b. legacy systems
  - c. both
- 11) Data is the raw material that an information system transforms into useful information.
- a. True
  - b. False

- 12) \_\_\_\_\_ describe the tasks and business functions that users, Managers, and IT staff members perform to achieve specific results, Building Blocks of the IS
- a. Hardware
  - b. Software
  - c. Processes
  - d. People
- 13) \_\_\_\_\_ who have an interest in an information system are called stakeholders. **People are the most important part of IS.** Stakeholders: Management stuff, users, end users, IT stuff, Sponsors, anyone related to the project.
- a. Hardware
  - b. Software
  - c. Processes
  - d. People
- 14) Domain Driven Design: is the concept that the structure and language of software code (class names, class methods, class variables) should match the business domain.
- a. True
  - b. False



# BUSINESS TODAY

- 15) \_\_\_\_\_ enabled computer-to-computer data transfer, usually over private telecommunications lines. Used as a data-sharing arrangement between companies
- a. **electronic data interchange (EDI)**
  - b. A supply chain (SC)
  - c. SCM (Supply chain management)
  - d. Both
- 16) \_\_\_\_\_ refers to all the companies who provide materials, services, and functions needed to provide a product to a customer.
- a. electronic data interchange (EDI)
  - b. **A supply chain (SC)**
  - c. SCM (Supply chain management)
  - d. Both
- 17) \_\_\_\_\_ is complex and dynamic, specialized software helps businesses manage inventory levels, costs, alternate suppliers, and much more.
- a. electronic data interchange (EDI)
  - b. A supply chain (SC)
  - c. **SCM (Supply chain management)**
  - d. Both

- 18) \_\_\_\_\_ Sets of inter-related procedures using IT infrastructure in a business enterprise to generate and disseminate desired information. designed to support decision making by the people associated with the enterprise in the process of attainment of its objectives.
- a. BUISNESS INFORMATION SYSTEMS (BIS)
  - b. ECS (Enterprise Computing System)
  - c. TPS (Transaction Processing System)
  - d. BSS (Business Support System)
- 19) information systems that support company-wide operations and data management requirements. enterprise resource planning (ERP) systems provide cost-effective support for users and managers throughout the company.
- a. BUISNESS INFORMATION SYSTEMS (BIS)
  - b. ECS (Enterprise Computing System)
  - c. TPS (Transaction Processing System)
  - d. BSS (Business Support System)
- 20) \_\_\_\_\_ process data generated by day-to-day business operations. systems typically involve large amounts of data and are mission-critical systems because the enterprise cannot function without them.
- a. BUISNESS INFORMATION SYSTEMS (BIS)
  - b. ECS (Enterprise Computing System)
  - c. TPS (Transaction Processing System)

- d. BSS (Business Support System)
- 21) Provide job-related information support to users at all levels of a company. These systems can analyze transactional data, generate information needed to manage and control business processes, and provide information that leads to better decision making.
- a. KMS (Knowledge Management System)
  - b. ECS (Enterprise Computing System)
  - c. TPS (Transaction Processing System)
  - d. BSS (Business Support System)
- 22) Use a large database called a knowledge base that allows users to find information by entering keywords or questions in normal English phrases. A knowledge management system uses inference rules, which are logical rules that identify data patterns and relationships.
- a. KMS (Knowledge Management System)
  - b. ECS (Enterprise Computing System)
  - c. TPS (Transaction Processing System)
  - d. UPS (User Productivity System)
- 23) \_\_\_\_\_ technology that improves productivity of users include email, voice mail, video and web conferencing, word processing, automated calendars, database management. e Groupware programs enable users to share data, collaborate on projects, and work in teams.
- a. KMS (Knowledge Management System)

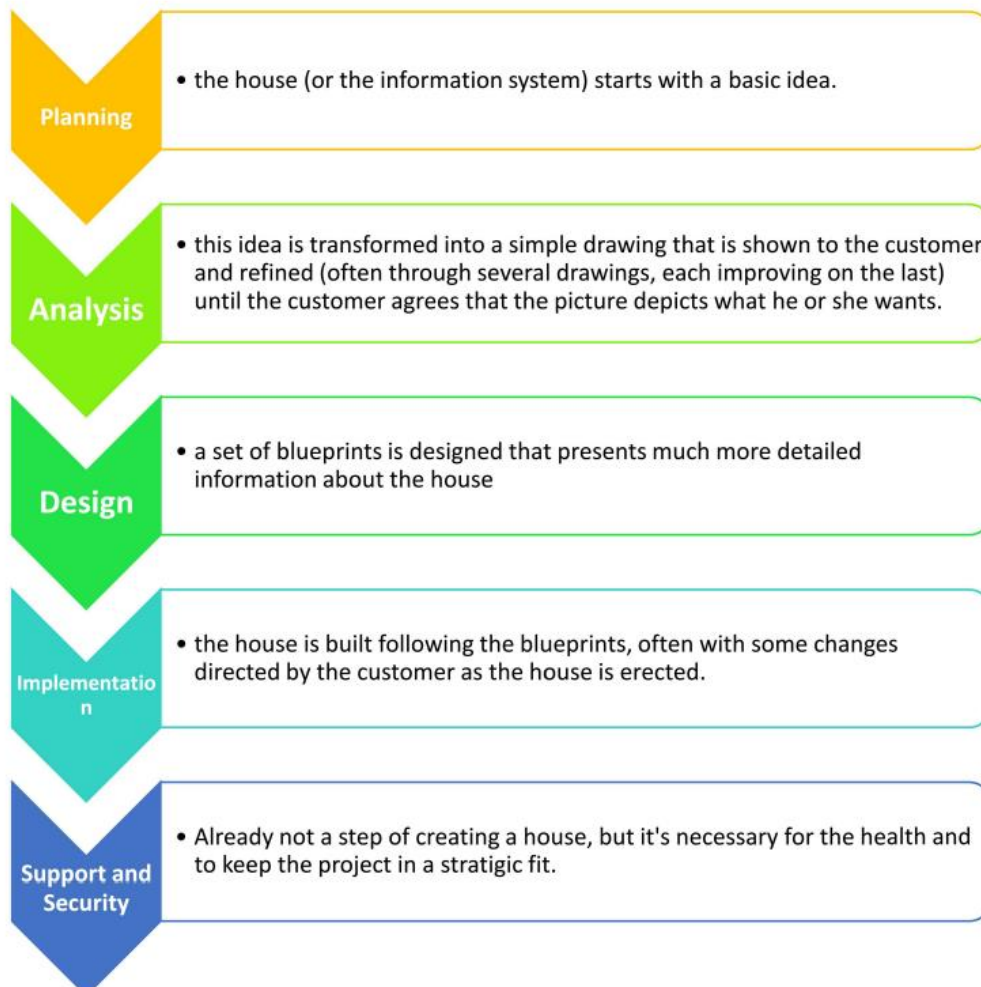
- b. ECS (Enterprise Computing System)
  - c. TPS (Transaction Processing System)
  - d. UPS (User Productivity System)
- 24) \_\_\_\_\_ include systems analysts, programmers, accountants, researchers, trainers, human resource specialists, and other professionals. Knowledge workers provide support for the organization's basic functions.
- a. Knowledge workers
  - b. Top Level Management
  - c. Middle Level Management
  - d. All of the mentioned
- 25) In many companies, operational users also need information to handle tasks and make decisions that were assigned previously to supervisors. This trend, called empowerment.
- a. True
  - b. False
- 26) A possible disadvantage of prototyping is that important decisions might be made too early, before business or IT issues are understood thoroughly.
- a. True
  - b. False
- 27) agile methods, also called \_\_\_\_\_, which include the latest trends in software development



- a. adaptive methods
- b. traditional methods
- c. structured methods
- d. none

## IS As Building A House

In many ways, building an information system is similar to building a **house**. As illustrated in figure 1-12 about the basic steps of creating a house.



# System Development Methods

## AGILE MANIFESTO 12 PRINCIPLES

- Software is delivered early and continuously through the development process, satisfying the customer.
- Changing requirements are embraced regardless of when they occur in the development process.
- Working software is delivered frequently to the customer.
- Customers and developers work together to solve the business problem.
- Motivated individuals create solutions; provide them the tools and environment they need, and trust them to deliver.
- Face-to-face communication within the development team is the most efficient and effective method of gathering requirements.
- The primary measure of progress is working, executing software.
- Both customers and developers should work at a pace that is sustainable. That is, the level of work could be maintained indefinitely without any worker burnout.
- Agility is heightened through attention to both technical excellence and good design.
- Simplicity, the avoidance of unnecessary work, is essential.
- Self-organizing teams develop the best architectures, requirements, and designs.
- Development teams regularly reflect on how to improve their development processes.

28) Because it focuses on processes that transform data into useful information, structured analysis is called a \_\_\_\_\_ .

- a. process-centered technique
- b. Object centered technique
- c. Both

- 29) \_\_\_\_\_ To has a one instance of a system (Hardware or Software and upgrade it to expand the Capacity of the business work. (User Requests, More functions) ex: Upgrade Hard disks from 500TB to 1 Peta Bytes.
- a. Scale Up
  - b. Scale Out
  - c. Both
- 30) To has many instances of a system (HW or SW) dispersed geographically, example Distributed Systems, Service Oriented Architectures (SOA) and Microservices.
- a. Scale Up
  - b. Scale Out
  - c. Both
- 31) The Merging of DevOps and Agile approaches improve the quality and decrease the time of project for 37%.
- a. True
  - b. False
- 32) The RAD model consists of four phases: requirements planning, user design, construction, and cutover.
- a. True
  - b. False

- 33) \_\_\_\_\_ The construction phase focuses on program and application development tasks similar to the SDLC. But with user-involvement.
- a. DATA CENTERS CONSTRUCTION
  - b. requirements planning
  - c. user design
  - d. cutover
- 34) \_\_\_\_\_ resembles the final tasks in the SDLC implementation phase, including data conversion, testing, changeover to the new system, and user training.
- a. DATA CENTERS CONSTRUCTION
  - b. requirements planning
  - c. user design
  - d. cutover

## Project Mangement & Business

- 35) Mission statements usually focus on long-term challenges and goals, the importance of the firm's stakeholders, and a commitment to the firm's role as a corporate citizen.
- a. True
  - b. False



- 36) A critical success factor is one that must be achieved to fulfill the company's mission
- a. True
  - b. False
- 37) \_\_\_\_\_ Is the constraint something that must be met as soon as the system is developed or modified, or is the constraint necessary at some future time?
- a. Present versus future
  - b. Internal versus external
  - c. Mandatory versus desirable
  - d. All of the mentioned
- 38) Is the constraint due to a requirement within the organization, or does some external force, such as government regulation, impose it?
- a. Present versus future
  - b. Internal versus external
  - c. Mandatory versus desirable
  - d. All of the mentioned
- 39) Is the constraint mandatory? Is it absolutely essential to meet the constraint, or is it merely desirable?
- a. Present versus future
  - b. Internal versus external

c. Mandatory versus desirable

d. All of the mentioned

40) Most large projects have a \_\_\_\_\_. He handles administrative responsibilities for the team and negotiates with users who might have conflicting requirements or want changes that would require additional time or expense.

a. project coordinator

b. team leader

c. analyst

41) \_\_\_\_\_ When tasks must be completed one after another

a. Dependent Tasks

b. MULTIPLE SUCCESSOR TASKS

c. MULTIPLE PREDECESSOR TASKS

42) When several tasks can start at the same time, each is called a concurrent task

a. Dependent Tasks

b. MULTIPLE SUCCESSOR TASKS

c. MULTIPLE PREDECESSOR TASKS

43) task requires two or more prior tasks to be completed before it can start.

a. Dependent Tasks

b. MULTIPLE SUCCESSOR TASKS

c. MULTIPLE PREDECESSOR TASKS

## DATA CENTERS REQUIREMENT MODELING

44) \_\_\_\_\_ refers to electronic or printed information produced by the system.

a. Output

b. Input

c. Process

d. Performance

45) \_\_\_\_\_ refers to necessary data that enters the system, either manually or in an automated manner.

a. Output

b. Input

c. Process

d. Performance

46) \_\_\_\_\_ refers to the logical rules that are applied to transform the data into meaningful information.

a. Output

b. Input

c. Process

- d. Performance
- 47) refers to system characteristics, such as speed, volume, capacity, availability, and reliability.
- a. Output
  - b. Input
  - c. Process
  - d. Performance
- 48) Security refers to hardware, software, and procedural controls that safeguard and protect the system and its data from internal or external threats.
- a. True
  - b. False

## Requirements Modeling In Practical for Data Center

- 49) The Open Group states that TOGAF is intended to:
- a. Ensure everyone speaks the same language
  - b. Avoid lock-in to proprietary solutions by standardizing on open methods for enterprise architecture
  - c. Save time and money, and utilize resources more effectively
  - d. Achieve demonstrable ROI
  - e. All of the mentioned



- 50) The interviewing process consists of seven steps for each interview, 4 steps for preparing, 1 Step while Interview and 2 after.
- a. True
  - b. False
- 51) \_\_\_\_\_ encourage spontaneous and unstructured responses. Such questions are useful to understand a larger process or draw out the interviewee's opinions, attitudes, or suggestions.
- a. Open-ended questions
  - b. Closed-ended questions
  - c. Range-of-response questions
- 52) \_\_\_\_\_ limit or restrict the response. Closed-ended questions are used when information that is more specific is needed, or when facts must be verified.
- a. Open-ended questions
  - b. Closed-ended questions
  - c. Range-of-response questions
- 53) \_\_\_\_\_ questions are closed-ended questions that ask the person to evaluate something by providing limited answers to specific responses or on a numeric scale.
- a. Open-ended questions
  - b. Closed-ended questions
  - c. Range-of-response questions

- 54) The purpose of the study was to determine how various changes in the work environment would affect employee productivity. The surprising result was that productivity improved during observation whether the conditions were made better or worse.
- a. Hawthorne Effect
  - b. Eyad Effect
- 55) Another popular method of obtaining input is called \_\_\_\_\_ , which refers to a small group discussion of a specific problem, opportunity, or issue.
- a. Observation
  - b. Brainstorming
  - c. Both
- 56) In structured brainstorming, each participant speaks when it is his or her turn, or passes. In unstructured brainstorming, anyone can speak at any time. At some point, the results are recorded and made part of the fact-finding documentation process.
- a. True
  - b. False
- 57) \_\_\_\_\_ A systematic sample would select every tenth customer for review. To ensure that the sample is balanced geographically
- a. SYSTEMATIC SAMPLING
  - b. STRATEFIED SAMPLING
  - c. RANDOM SAMPLING

- 58) \_\_\_\_\_ could be used to select five customers from each of four postal codes. Another example of stratified sampling is to select a certain percentage of transactions from each postal code, rather than a fixed number.
- a. SYSTEMATIC SAMPLING
  - b. STRATEFIED SAMPLING**
  - c. RANDOM SAMPLING
- 59) A \_\_\_\_\_ selects any 20 customers.
- a. SYSTEMATIC SAMPLING
  - b. STRATEFIED SAMPLING
  - c. RANDOM SAMPLING**