QUIZ - 4

Module – 05

Batch ID – JEE/CGNT-M/54/01

Exam Date – 13/07/2023

Total Marks – 20

Student Name: Student ID:

1.Which of the following is not a reason for analyzing the current system (if it exists)?

|  |  |
| --- | --- |
| A) | The analyst needs to know about problems with and defects in the current system. |
| B) | The analyst must not lose sight of his or her objectives. |
| |  |  | | --- | --- | | C) | Much of the functionality of the existing system will be required in the new system. | | |

2. Which of the following is not an example of a functional requirement?

|  |  |
| --- | --- |
| A) | Security considerations B) Details of data that must be held in the system. |
| C) | Descriptions of the processing that the system will be required to carry out |

3. Which of the following describes a requirement.

|  |  |
| --- | --- |
| A) | The system must be capable of responding to all queries within 5 seconds |
| B) | Users of the system will make 50% fewer errors than with the existing system |
| C) | The system must allow users to enter details of advertising campaigns. |

4. Which of the following is not an example of a non-functional requirement?

|  |  |
| --- | --- |
| A) | Volume of data B) Performance requirements C) The content of printed reports required from the system |

5. Which of the following describes a non-functional requirement?

|  |  |
| --- | --- |
| A) | The system must be capable of holding 500Mb of data initially, growing by 100Mb per year |
| B) | The system must produce a report of all advertising campaigns for a particular client |
| C) | The system must allow users to enter details of clients |

6. Which of the following is not the kind of information gathered to understand usability requirements?

|  |  |  |
| --- | --- | --- |
| |  |  | | --- | --- | | A) | The characteristics of the users of the system. B) The context in which the system will be used | |
| |  |  | | --- | --- | | C) | The volume of data in the existing system. | |

7. Which of the following lists only contains systems analysis fact-finding techniques?

|  |  |
| --- | --- |
| A) | Sampling, questionnaires, interviewing, reading and observation |
| B) | Use case modelling, interviewing, class diagramming, observation and knowledge acquisition |
| C) | Sampling, background reading, interviewing, use case modeling and activity diagramming |

8. Which fact-finding technique is most suitable to be used in the initial stages of fact-finding and particularly where the analyst is not familiar with the organization that is being studied?

|  |  |
| --- | --- |
| A) | Background reading B) Interviewing C) Questionnaires |

9. Which of the following is a valid reason for using interviewing as a fact-finding technique?

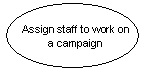
|  |  |
| --- | --- |
| A) | The interviewer can gather statistical data about documents. |
| B) | The interviewer can respond flexibly to the interviewee’s responses. |
| C) | Interviews take very little time |

10. In which of the following circumstances is it not appropriate to use questionnaires?

|  |  |
| --- | --- |
| A) | The views and knowledge of a large number of people must be obtained |
| B) | The people who work for the organization are geographically dispersed |
| C) | There is a need to check how people actually carry out their work. |

11. Which of the following categories of people are not likely to be involved in a steering committee?

|  |  |
| --- | --- |
| A) | Senior managers. |
| B) | System testers. |
| C) | Representatives of users |

12. 

ANS:

|  |  |
| --- | --- |
| A) | An actor. |
| B) | A use case |
| C) | An activity |

13. 

ANS:

|  |  |
| --- | --- |
| A) | An actor |
| B) | A use case |
| C) | A user |

14. Which of the following is not a purpose for using use cases?

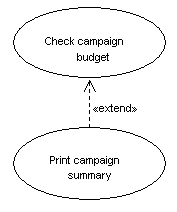
|  |  |
| --- | --- |
| A) | To document the scope of the system. |
| B) | To provide a high-level view of system functionality from the users’ perspective. |
| C) | To describe the logic of operations |

15. Which of the following pairs lists valid dependencies to show on a use case diagram?

|  |  |
| --- | --- |
| A) | «extend» and «include». |
| B) | «extend» and «retract». |
| C) | «exclude» and «include». |

16. Which of the following is the correct name for the symbols placed round stereotyped names such as «extend»?

|  |  |
| --- | --- |
| A) | Guillemots |
| B) | Parakeets |
| C) | Guillemets |

17. 

ANS:

|  |  |
| --- | --- |
| A) | Check campaign budget extends Print campaign summary |
| B) | Check campaign budget includes Print campaign summary |
| C) | Print campaign summary extends Check campaign budget |

18. Which of the following statements is true?

|  |  |
| --- | --- |
| A) | Actors are linked to use cases by inheritance |
| B) | Actors are linked to use cases by communication associations |
| C) | Actors are linked to use cases by «uses» dependencies |

19. Which of the following is shown in a use case diagram by a rectangle surrounding a group of use cases?

|  |  |
| --- | --- |
| A) | The class that implements the use cases |
| |  |  | | --- | --- | | B) | The system or sub-system that the use cases belong to. | | |
| C) | The package that contains the use cases |

20. Which of the following is the best definition of an actor?

|  |  |
| --- | --- |
| A) | An actor represents a user of the system |
| B) | An actor represents a role played by a user of the system |
| C) | An actor represents a role played by a user of the system or by an external system. |

1 Which of the following is not a reason for using a model?

|  |  |
| --- | --- |
| A) | A model is quicker and easier to build than the real thing |
| B) | We can use a model in simulations to test our ideas |
| C) | We can use a model instead of building the real thing |

2 Which of the following is not a model?

|  |  |
| --- | --- |
| A) | Concorde B) A scale model of Concorde to use in a wind tunnel |
| C) | An engineer’s drawing of a cross-section through the fuselage of Concorde |
|  |  |

3 Analysts and designers use models that consist of which of the following?

|  |  |
| --- | --- |
| A) | Diagrams and text B) Only diagrams C) Only text |

4 Which of the following do analysts and designers use diagrams for?

|  |  |
| --- | --- |
| A) | To communicate ideas B) To understand structures and relationships C) Both 1 and 2 |

5 Which of the following do analysts and designers use diagrams for?

|  |  |
| --- | --- |
| A) | To ensure that users don’t understand the specification for a system |
| B) | To communicate ideas to users and other analysts and designers C) Neither A nor B |

6 Why are systems analysis and design diagram standards important?

|  |  |
| --- | --- |
| A) | They promote communication between team members |
| B) | They provide work for international standards committees |
| C) | 3. They prevent systems analysts’ clothes from shrinking in the wash |

7 Which of the following are the rules that modeling techniques should enforce?

|  |  |
| --- | --- |
| A) | Simplicity of representation, external consistency, completeness and network representation |
| B) | Simplicity of representation, internal consistency, completeness and hierarchical representation |
| C) | Simplicity, internal consistency, completeness and hierarchical symbols |

8 Which of the following is not an element of UML diagram notation?

|  |  |
| --- | --- |
| A) | Icon B) Vertex C) String |

9 Which of the following is true?

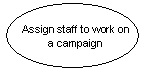
|  |  |
| --- | --- |
| A) | Icons can contain two-dimensional symbols B) 2. Two-dimensional symbols can contain icons |
| C) | An icon contains at least one vertex and one string |

10 Which of the following is true?

|  |  |
| --- | --- |
| A) | A model consists of one and only one diagram |
| B) | A diagram contains at least one model C) A model contains diagrams |

11 Which of the following is the UML notation for a model?

|  |  |
| --- | --- |
| A) | Answer A B) Answer B C) Answer C |

12. 

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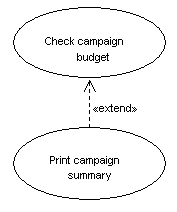
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1.Some of the tasks in the general problem-solving model are listed below. Which of the following list these tasks in the correct sequence?

|  |  |
| --- | --- |
| A) | Problem definition, Finding solutions, Problem redefinition. |
| B) | Data gathering, Finding solutions, Finding ideas. |
| C) | Problem definition, Data gathering, Problem redefinition. |

2. Which of the following is a consequence of subdividing the development process?

|  |  |
| --- | --- |
| A) | It makes it more difficult to manage a project. |
| B) | It allows teams of developers with specialist skills to be allocated to a particular phase. |
| C) | It helps identify smaller tasks that can be completely finished. |

3. Which of the following best describes the term life cycle model?

|  |  |
| --- | --- |
| A) | It describes the way requirements for an application change at different stages in the life of the organization. |
| B) | It describes how a computerized information system is used during its lifetime. |
| C) | It describes the phases through which a development project passes from the inception of the idea to completion of the product and its eventual decommissioning. |

4. Which of the following is a true statement regarding a systems development project?

|  |  |
| --- | --- |
| A) | A systems development project is only concerned with developing a software system. |
| B) | A systems development project is only concerned with developing systems for controlling devices or machines. |
| C) | A systems development project may not involve software development. |

5. Which of the following describes Strategic Information Systems Planning?

|  |  |
| --- | --- |
| A) | It is concerned with planning the implementation of information systems. |
| B) | It is concerned with planning information systems development within the context of the organizational strategy. |
| C) | It is concerned with how information systems can support strategic planning in an organization. |

6. Some of the phases of the Traditional Life Cycle are listed below. Which of the following lists is in the correct sequence?

|  |  |  |  |
| --- | --- | --- | --- |
| |  |  | | --- | --- | | A) | Construction, Installation and Testing.  B) Requirements analysis, Systems engineering, Design | | |
| C) | Systems engineering, Requirements analysis, Design |

7. Which of the following is true about system requirements?

|  |  |
| --- | --- |
| A) | They can be used to develop user acceptance tests.  B) They are mainly identified during systems engineering.  C) They change from one phase to another. |

8. Which of the following is true about the criteria for acceptance tests?

|  |  |  |  |
| --- | --- | --- | --- |
| |  |  | | --- | --- | | A) | They are best identified at the end of the design phase. | | |
| B) | They are best identified at the end of requirements analysis. |
| C) | They are best identified at the beginning of the testing phase. |

9. Which of the following statements is true about adaptive maintenance?

|  |  |
| --- | --- |
| A) | It is concerned with changing the system when requirements change. |
| B) | It is concerned with ensuring the system data is adapted to suit changes in the organization. |
| C) | It is concerned with maintaining the system so that it can adapt automatically to changes in the organization. |

10. One of the major challenges during system installation is which of the following?

|  |  |
| --- | --- |
| A) | Ensuring that the new software is correctly installed to use the computer effectively. |
| B) | Avoiding unnecessary disruption and minimizing the attendant risk of change. |
| C) | Ensuring that both old and new systems run in parallel. |

11. Which of the following best describes a type?

|  |  |
| --- | --- |
| A) | A description of a set of objects with similar behaviours. B) A superclass in a generalization hierarchy. C) A class with a characteristic that distinguishes it from all other classes. |

12. Which of the following is not an advantage of using generalization?

|  |  |
| --- | --- |
| A) | Generalization helps to organize a model so that the degree of similarity between classes is made more explicit. B) A generalization hierarchy is easy to extend to fit a changing picture. |
| C) | Generalization helps to encapsulate classes and subsystems so that their implementation is hidden from other parts of the system. |

13. How does generalization differ from inheritance?

|  |  |
| --- | --- |
| A) | It doesn't - they are the same thing.  B) Inheritance is a mechanism by which some OO languages implement generalization. |
| C) | With generalization each class has only one superclass, whereas with inheritance each class has two or more superclasses. |

14. Which of the following is not a characteristic of a subclass?

|  |  |
| --- | --- |
| A) | A subclass can only have superclasses, it cannot have subclasses of its own. |
| B) | A subclass inherits all the characteristics of its superclass. |
| C) | A subclass includes at least one detail that is not shared by its superclass. |

15. What is meant by 'transitive operation' in the context of generalization and inheritance?

|  |  |
| --- | --- |
| A) | An operation in a superclass may be overwritten by a different operation in a subclass. |
| B) | An operation in a superclass may not be overwritten by a different operation in a subclass. |
| C) | A subclass inherits characteristics from all its superclasses at all levels. |

16. What is the significance of message-passing in an OO system?

|  |  |
| --- | --- |
| A) | Messages represent input from users that tells the software system what to do. |
| B) | Objects exchange messages in order to communicate with each other. |
| |  |  | | --- | --- | | C) | Messages represent output to users that show the results of processing. | | |

17. What is a message protocol or signature?

|  |  |
| --- | --- |
| A) | A message protocol is a valid sequence of keystrokes by a user. |
| B) | A message protocol is a valid sequence of operations in a series of different objects. |
| C) | A message protocol is the interface to an operation. |

18. What is meant by multiple inheritance?

|  |  |
| --- | --- |
| A) | Multiple inheritance signifies that a class simultaneously belongs to more than one generalization hierarchy. |
| B) | Multiple inheritance signifies that a class has more than one superclass. |
| C) | Multiple inheritance signifies that a class can have different superclasses at different times. |

19. Which of the following best describes encapsulation?

|  |  |
| --- | --- |
| A) | The implementation of an object can only be changed by its original programmer. |
| B) | Data within an object can only be accessed by passing a valid message to one of its own operations.  C) Data within an object can only be accessed by passing a valid message to its class. |

20. Which of the following best describes an object's interface?

|  |  |
| --- | --- |
| A) | The view that an object presents to users of the system.  B) The links that an object has with other objects.  C) The complete set of signatures for all the object's operations. |