1. Which of the following statements is true about state diagrams?
2. A state diagram describes all the states an object can have and the transitions of states as a result of events.
3. State diagram describes the behavior of multiple objects in the same Use Case.
4. State diagram describes the types of objects in the system and the different types of relationships between them.
5. ﻿﻿﻿State diagram shows the various components in the system and their dependencies.
6. \_\_\_\_ is a systems development technique that tests system concepts and provides an opportunity to examine input, output, and user interfaces before final decisions are made.
7. Scrum
8. Prototyping
9. Modeling
10. ﻿Rapid application development
11. Determining the\_\_\_\_ means defining the specific boundaries, or extent, of a project.
12. ﻿﻿﻿ project index
13. ﻿﻿﻿ project matrix
14. ﻿﻿﻿ project scope
15. ﻿﻿﻿ project table
16. Iterative and Incremental development means that:
17. ﻿﻿﻿ the team is using a prototyping methodology
18. ﻿﻿﻿ the system will be developed through versions
19. ﻿﻿﻿ the system will be developed in phases
20. ﻿﻿﻿ the system will undergo continuous testing and refinement
21. Which of the following is a form of Incremental model?
22. Spiral model
23. RAD model
24. Agile model
25. ﻿﻿﻿V-shaped model
26. In a systems development life cycle (SDLC) model, the purpose of the\_\_\_ is to build a logical model of the new system.
27. systems analysis phase
28. systems implementation phase
29. systems design phase
30. ﻿﻿﻿systems support and security phase
31. Which view in UML shows how functionality will be designed within the system, through concepts of static structure as well as dynamic behavior of the system?
32. Usecase view
33. Logical view
34. Component view
35. ﻿﻿﻿Deployment view
36. To represent the physical relationships between software and hardware components in a system, which UML diagram would you use?
37. Deployment Diagram
38. Activity Diagram
39. Class Diagram
40. ﻿﻿﻿State Diagram
41. means that the projected benefits of a proposed system outweigh the estimated costs.
42. Economic feasibility
43. Schedule feasibility
44. Operational feasibility
45. ﻿﻿﻿Technical feasibility
46. A \_\_\_\_ is a requirement or condition that a system must satisfy or an outcome that a system must achieve.
47. trigger
48. constraint
49. Query
50. Key
51. In class diagram, which relationship is defined as a structural relationship that conceptually means that the two components are linked to each other.
52. association
53. dependency
54. aggregation
55. composition
56. In a systems development life cycle (SDLC) model, the purpose of the \_\_\_\_ is to create a physical model that will satisfy all documented requirements for the system.
57. systems implementation phase
58. systems planning phase
59. systems analysis phase
60. ﻿﻿﻿systems design phase
61. In a sequence diagram, the symbol [some\_text] represents:
62. Message
63. Condition
64. Iteration
65. ﻿﻿﻿Delete object (deletion)

﻿﻿

1. \_\_\_is a planned meeting during which a systems analyst obtains information from another person.
2. A survey
3. An interview
4. Sampling
5. ﻿﻿﻿Research
6. \_\_\_allows objects with different internal structures to have a common external interface.
7. information hiding
8. polymorphism
9. encapsulation
10. ﻿﻿﻿inheritance
11. Sequence diagrams are used in:
12. logical view
13. process view
14. deployment view
15. ﻿﻿﻿implementation view.
16. The Beta version of the system is the result of which phase in the Unified Process?
17. Inception phase
18. Elaboration phase
19. Construction phase
20. ﻿﻿﻿Transition phase
21. In which phase of the Unified Process do we install the system, test the deployed product, collect feedback from users, and maintain the system?
22. Inception phase
23. Elaboration phase
24. Construction phase
25. ﻿﻿﻿Transition phase
26. To identify classes in ClassDiagram, the first step is to focus on carefully researching which of the following issues?
27. Nouns in problem statements
28. Specialized knowledge within the scope of the problem
29. Usecases
30. ﻿﻿﻿All are correct
31. A\_\_\_\_ involves breaking a project down into a series of smaller tasks.
32. work breakdown structure (WBS)
33. value breakdown structure (VBS)
34. risk breakdown structure (RBS)
35. ﻿﻿﻿concept breakdown structure (CBS)
36. Which section of the Usecase specification does the following description belong to?"The system has the ability to print to the screen in other languages. This function will be activated when the user selects Other Language on the menu.
37. UC Description
38. Exit conditions
39. Special requirements
40. ﻿﻿﻿All are wrong
41. During the\_\_\_ of the systems development life cycle (SDLC), a new system is constructed.
42. systems planning phase
43. systems support and security phase
44. systems design phase
45. ﻿﻿﻿systems implementation phase
46. Rapid application development (RAD) relies heavily on
47. prototyping
48. management direction
49. agile methods
50. ﻿﻿﻿scrum
51. Which of the following statements is not true about associations in class diagrams?
52. Associations represent relationships between instances of classes
53. Associations are the processes that a class will perform
54. Associations can be unidirectional
55. ﻿﻿﻿The connection can be in both directions
56. Which feature of OOP helps reduce system costs?
57. Encapsulation (encapsulation)
58. Inheritance (inheritance)
59. Polymorphism (polymorphism)
60. ﻿﻿﻿Abstraction (abstractness)
61. The systems implementation phase of the systems development life cycle (SDLC) includes an assessment, called a \_\_\_ ,to determine whether the system operates properly and if costs and benefits are within expectation.
62. systems estimation
63. systems verification
64. systems validation
65. ﻿﻿﻿systems evaluation
66. Waterfall model is not suitable for:
67. Small projects
68. Complex projects
69. Accommodating changes
70. Maintenance Projects
71. In UML 2.0, how many types of structural modeling diagrams are there?
72. 3
73. 4
74. 5
75. 6
76. \_\_\_\_\_ limitations result when a system that was designed for a specific hardware configuration becomes obsolete when new hardware is introduced.
77. Accessibility
78. Relationship
79. Feasibility
80. ﻿﻿﻿Performance
81. Which UML tools serve the unit testing phase?
82. Usecase and Usecase specification
83. Class Diagram and class specification
84. Activity and Sequence Diagram
85. ﻿﻿﻿Component Diagram and ERD
86. To evaluate\_\_\_\_, a systems analyst needs information about projected future volume for all outputs, inputs, and processes.
87. scalability
88. reliability
89. compatibility
90. ﻿applicability
91. \_\_\_\_ is a mechanism that prevents the UML language from becoming too complex, while still allowing for necessary extensions and modifications.
92. Stereotype (pattern)
93. Tagged value (attached value)
94. Constraint
95. ﻿﻿﻿Guillement (Extended Character)
96. Which of the following statements is correct regarding asynchronous message sending in a sequence diagram?
97. Asynchronous messages can create a new thread, can create a new object, and can communicate with other running threads.
98. Asynchronous messages can create a new object but cannot create a new thread and cannot communicate with other running threads.
99. Asynchronous messages cannot create a new object but can create a new thread and can communicate with other running threads.
100. Asynchronous messages can create a new object, can create a new thread but cannot communicate with other running threads.
101. The purpose of the Interaction Diagram is:
102. Provide a rigorous definition of the class's purpose, valid behavior and state.
103. Show how objects collaborate in a use case.
104. Represent groups of classes and dependencies between them
105. ﻿﻿﻿Provides several useful techniques for analysis, design, and coding.
106. Projects that provide the\_\_\_\_are assigned the highest priority when setting priorities for systems requests.
107. greatest benefit, at the lowest cost, in the shortest period of time
108. greatest benefit, at the highest cost, in the shortest period of time
109. least benefit, at the lowest cost, in the longest period of time
110. ﻿﻿﻿least benefit, at the highest cost, in the longest period of time
111. Which of the following is a typical example of a system requirement for the output category?
112. Manufacturing employees must swipe their ID cards into data collection terminals trecord labor costs.
113. The contact management system must generate a daily reminder list for all sales reps.
114. As the final step in year-end processing, the payroll system must update employee salaries, bonuses, and benefits and produce tax data required by the IRS.
115. ﻿﻿﻿All transactions must have audit trails.
116. \_\_\_\_means that a project can be implemented in an acceptable time frame.
117. Operational feasibility
118. Technical feasibility
119. Schedule feasibility
120. ﻿﻿﻿Economic feasibility
121. Adding more people to a project actually might increase the time necessary to complete the project because of a principle called
122. Brooks' Law
123. Bernoulli's Law
124. Hooke's Law
125. ﻿﻿﻿Moody's Law
126. The analysis phase of the SDLC answers which questions
127. who will create the system and when will it be used
128. who will the system be for, what the system will do, when will it be used, and where will it be used
129. why build the system, what the system will be, and how the system will work
130. ﻿﻿﻿why build the system, who will the system be for, when will it be used, and how the system will work
131. Systems development typically starts with a\_\_\_
132. feasibility study, followed by a systems request, which includes a preliminary investigation
133. systems request, followed by a preliminary investigation, which includes a feasibility study
134. preliminary investigation, followed by a feasibility study, which includes a systems request
135. ﻿﻿﻿feasibility study, followed by a preliminary investigation, which includes a systems request
136. Which of the following is true about product backlog?
137. It is created in Sprint Planning Meeting
138. It contains a list of all desired features and is owned by the product owner.
139. It is a subset of the product backlog owned by development team and commits to deliver it in a sprint.
140. ﻿﻿﻿All of the above
141. Consider the following statement of requirements for the first iteration of a Library System.

Book and Journals: The library contains books and journals. It may have several copies of given book. Some of the books are for short term loans only.

All other books may be borrowed by any library member for three weeks. Members of library can normally borrower up to six items at a time, but members of staff may borrow up to twelve items at one time. Only members of staff may borrow journals.

Borrowing : The system must keep track of when books and journals are borrowed and returned, enforcing the rules described above.

Which of the following classes are part of the Library System?

1. book, journal, copy (of book), library member, member of staff
2. item, copy (of book), library member, member of staff
3. item, library member, member of staff
4. ﻿﻿﻿system, rule, week, item, member
5. Which of the following is false about System Sequence Diagrams?
6. SSD is a picture that shows for a particular scenario of a use case the events that external actors generate, their order and inter-system events.
7. SSDs are part of the Use-Case Model.
8. SSDs can also be used to illustrate collaborations between systems.
9. System events and their associated system operations can be expressed in terms of the physical input medium or interface widget level.
10. What is true about UML stereotypes?
11. UML Profiles can be stereotyped for backward compatibility
12. The stereotype {frozen} indicates that the UML element cannot be changed
13. A stereotype is used for extending the UML language
14. ﻿﻿﻿A stereotyped class must be abstract
15. The project plan is the document that is used to \_\_\_.
16. describe how the project team will go about developing the proposed system
17. outline the tasks to be addressed in developing the proposed system and develop a time estimate for each task.
18. outline the technical, economic, and organizational feasibility of the proposed system
19. summarize the business need and explain how the proposed system supports that need and creates value
20. The project sponsor is the\_\_\_.
21. lead systems analyst on the project team
22. person or department that requested the system
23. any of the above may fill the role of the project sponsor
24. ﻿﻿﻿project team leader in charge of developing the system
25. Which of the following is not project management goal?
26. Keeping overall costs within budget
27. Delivering the software to the customer at the agreed time
28. Maintaining a happy and well-functioning development team
29. ﻿﻿﻿Avoiding customer complaints
30. A\_\_\_must be achieved to fulfill a company's mission.
31. key performance factor
32. core competency
33. critical success factor
34. ﻿﻿﻿vision competency
35. In a(n)\_\_\_\_ model, the result of each phase is called a deliverable, which flows into the next phase.
36. interactive
37. iterative
38. waterfall
39. ﻿﻿﻿spiral
40. Which is diagram giving an overview of a software system.
41. Class diagram
42. Usecase diagram
43. Entity Relationship diagram
44. ﻿﻿﻿All of the above

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1. Which of the following models is a combination of the waterfall model and the prototype model?
2. V-shaped model
3. Iterative model
4. Incremental model
5. ﻿﻿﻿Spiral model
6. A(n)\_\_\_ is a characteristic or feature that must be included in an information system to satisfy business needs and be acceptable to users.
7. system requirement
8. property
9. questionnaire
10. ﻿﻿﻿object