## Multiple Choice Questions

1. Which of the following is not a logic model?
   - a. Structured English
   - b. decision tables
   - c. sequence diagram
   - d. data flow diagrams

2. Which of the following is a modified version of the English language useful for representing the logic in information system processes?
   - a. Structured English
   - b. COBOL
   - c. Unified Modeling Language
   - d. pseudocode

3. A modeling technique that allows you to represent a set of conditions and the actions that follow from them in a tabular format best describes:
   - a. data flow diagram
   - b. decision table
   - c. flowchart
   - d. Structured English

4. Techniques used for modeling process decision logic include:
   - a. sequence diagrams
   - b. decision tables
   - c. Structured English
   - d. all of the above

5. In the analysis phase, logic modeling:
   - a. will be complete and reasonably detailed, but it will also be generic in that it will not reflect the structure or syntax of a particular programming language
   - b. should not be complete and detailed; it will be generic in that it will not reflect the structure or syntax of a particular programming language
   - c. should be complete and detailed, reflecting the structure and syntax of a particular programming language
   - d. should be complete and reflect the physical aspects of the system

6. Modeling a system’s logic is part of:
   - a. requirements determination
   - b. requirements structuring
   - c. alternative generation and selection
   - d. logical design

7. The deliverables for logic modeling include:
   - a. a Structured English representation of process logic
   - b. state-transition diagrams
   - c. decision table representation
   - d. all of the above
8. A modified form of the English language used to specify the logic of information system processes defines:
   a. Structured English
   b. shorthand
   c. decision logic
   d. state-transition diagram

9. Which of the following is a difference between Structured English and pseudocode?
   a. Structured English is a communication technique between programmers and systems analysts.
   b. Pseudocode is a communication technique between analysts and users.
   c. Structured English resembles spoken English; pseudocode resembles a programming language.
   d. Actually, Structured English and pseudocode are synonymous terms.

10. In a decision table, a condition whose value does not affect which actions are taken for two or more rules is referred to as a(n):
    a. indifferent condition
    b. static condition
    c. fixed condition
    d. flexible condition

11. A decision table is simplified by:
    a. removing extended entries
    b. removing any rules with impossible actions
    c. removing simple entries
    d. removing any rules with static actions

12. Which of the following uses a format for a process description that mimics the format usually used in programming languages.
    a. state-transition diagram
    b. Structured English
    c. decision table
    d. sequence diagram

13. It is possible to use Structured English to represent all of the following processes typical of structured programming except for:
    a. sequence
    b. conditional statements
    c. decision points
    d. repetition

14. When converting conditions and actions to sequential statements, Structured English:
    a. is superior to decision tables and decision trees
    b. and decision trees are viewed as being the best techniques
    c. is rated the third best
    d. is rated second best

15. For checking consistency and completeness, Structured English was rated as:
    a. the best technique
    b. the second best technique
    c. the third best technique
    d. not very useful
16. For checking consistency and completeness, decision tables:
   a. were rated as second best when compared with Structured English and decision trees
   b. were rated best when compared with Structured English and decision trees
   c. were rated third best when compared with Structured English and decision trees
   d. tied with decision trees as the best technique

17. For which of the following criteria are decision tables rated best when compared to Structured English?
   a. checking consistency and completeness
   b. making decisions
   c. portraying simple problems
   d. none of the above

18. For which of the following criteria are Structured English rated best when compared to decision tables?
   a. portraying complex logic
   b. more compact
   c. easier to manipulate
   d. determining conditions and actions

19. For which of the following criteria were decision tables rated good when compared to Structured English?
   a. more compact
   b. easier to manipulate
   c. portraying complex logic
   d. determining conditions and actions

20. Which of the following is a true statement?
   a. Decision tables can be checked for completeness, consistency, and degree of redundancy.
   b. The pioneers of structured analysis and design thought decision tables were best for portraying complex logic.
   c. The pioneers of structured analysis and design thought Structured English was better for simpler problems.
   d. All of the above.
## Answers

1. Which of the following is not a logic model?
   a. Structured English
   b. Decision tables
   c. Sequence diagram
   d. Data flow diagrams

   **Answer:** d  **Difficulty:** Med  **Reference:** p. 253

2. Which of the following is a modified version of the English language useful for representing the logic in information system processes?
   a. Structured English
   b. COBOL
   c. Unified Modeling Language
   d. Pseudocode

   **Answer:** a  **Difficulty:** Med  **Reference:** p. 255

3. A modeling technique that allows you to represent a set of conditions and the actions that follow from them in a tabular format best describes:
   a. Data flow diagram
   b. Decision table
   c. Flowchart
   d. Structured English

   **Answer:** b  **Difficulty:** Med  **Reference:** p. 258

4. Techniques used for modeling process decision logic include:
   a. Sequence diagrams
   b. Decision tables
   c. Structured English
   d. All of the above

   **Answer:** d  **Difficulty:** Med  **Reference:** p. 253

5. In the analysis phase, logic modeling:
   a. Will be complete and reasonably detailed, but it will also be generic in that it will not reflect the structure or syntax of a particular programming language
   b. Should not be complete and detailed; it will be generic in that it will not reflect the structure or syntax of a particular programming language
   c. Should be complete and detailed, reflecting the structure and syntax of a particular programming language
   d. Should be complete and reflect the physical aspects of the system

   **Answer:** a  **Difficulty:** Hard  **Reference:** p. 254
<p>| | |</p>
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<td>c.</td>
<td>alternative generation and selection</td>
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<td>d.</td>
<td>logical design</td>
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<td><strong>Answer</strong>: b</td>
<td><strong>Difficulty</strong>: Med</td>
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| 7. | The deliverables for logic modeling include: |
| a. | a Structured English representation of process logic |
| b. | state-transition diagrams |
| c. | decision table representation |
| d. | all of the above |
| **Answer**: d  | **Difficulty**: Med  | **Reference**: p. 254 |

| 8. | A modified form of the English language used to specify the logic of information system processes defines: |
| a. | Structured English |
| b. | shorthand |
| c. | decision logic |
| d. | state-transition diagram |
| **Answer**: a  | **Difficulty**: Med  | **Reference**: p. 255 |

| 9. | Which of the following is a difference between Structured English and pseudocode? |
| a. | Structured English is a communication technique between programmers and systems analysts. |
| b. | Pseudocode is a communication technique between analysts and users. |
| c. | Structured English resembles spoken English; pseudocode resembles a programming language. |
| d. | Actually, Structured English and pseudocode are synonymous terms. |
| **Answer**: c  | **Difficulty**: Med  | **Reference**: p. 258 |

| 10. | In a decision table, a condition whose value does not affect which actions are taken for two or more rules is referred to as a(n): |
| a. | indifferent condition |
| b. | static condition |
| c. | fixed condition |
| d. | flexible condition |
| **Answer**: a  | **Difficulty**: Med  | **Reference**: p. 259 |

<p>| 11. | A decision table is simplified by: |
| a. | removing extended entries |
| b. | removing any rules with impossible actions |
| c. | removing simple entries |
| d. | removing any rules with static actions |
| <strong>Answer</strong>: b  | <strong>Difficulty</strong>: Med  | <strong>Reference</strong>: p. 260 |</p>
<table>
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| 12.      | Which of the following uses a format for a process description that mimics the format usually used in programming languages.  
  a. state-transition diagram  
  b. Structured English  
  c. decision table  
  d. sequence diagram  
  Answer: b  
  Difficulty: Med  
  Reference: p. 257 |
| 13.      | It is possible to use Structured English to represent all of the following processes typical of structured programming except for:  
  a. sequence  
  b. conditional statements  
  c. decision points  
  d. repetition  
  Answer: c  
  Difficulty: Med  
  Reference: p. 255 |
| 14.      | When converting conditions and actions to sequential statements, Structured English:  
  a. is superior to decision tables and decision trees  
  b. and decision trees are viewed as being the best techniques  
  c. is rated the third best  
  d. is rated second best  
  Answer: b  
  Difficulty: Med  
  Reference: p. 262 |
| 15.      | For checking consistency and completeness, Structured English was rated as:  
  a. the best technique  
  b. the second best technique  
  c. the third best technique  
  d. not very useful  
  Answer: c  
  Difficulty: Med  
  Reference: p. 262 |
| 16.      | For checking consistency and completeness, decision tables:  
  a. were rated as second best when compared with Structured English and decision trees  
  b. were rated best when compared with Structured English and decision trees  
  c. were rated third best when compared with Structured English and decision trees  
  d. tied with decision trees as the best technique  
  Answer: d  
  Difficulty: Hard  
  Reference: p. 262 |
| 17.      | For which of the following criteria are decision tables rated best when compared to Structured English?  
  a. checking consistency and completeness  
  b. making decisions  
  c. portraying simple problems  
  d. none of the above  
  Answer: a  
  Difficulty: Med  
  Reference: p. 262 |
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| 18. | For which of the following criteria are Structured English rated best when compared to decision tables? | a. portraying complex logic  
b. more compact  
c. easier to manipulate  
d. determining conditions and actions | d | Med | p. 262 |
| 19. | For which of the following criteria were decision tables rated good when compared to Structured English? | a. more compact  
b. easier to manipulate  
c. portraying complex logic  
d. determining conditions and actions | d | Med | p. 262 |
| 20. | Which of the following is a true statement? | a. Decision tables can be checked for completeness, consistency, and degree of redundancy.  
b. The pioneers of structured analysis and design thought decision tables were best for portraying complex logic.  
c. The pioneers of structured analysis and design thought Structured English was better for simpler problems.  
d. All of the above. | d | Med | p. 262 |