**A. all outcomes.**B. all actions.   
C. the order.   
D. all conditions.

Which of the following is not one of three main advantages of a decision tree over a decision table?   
**A. More correct as a communication tool**B. Sequential structure of decision tree branches   
C. Conditions and actions of decision trees are found on some branches   
D. More readily understood

Which choice is correct?   
A. Use structured English when not every condition is relevant to every action.   
B. Use decision tables when communication to end users is important.   
**C. Use decision trees when the sequence of conditions and actions is critical.**D. Use decision tables when there are many repetitious actions.

If a process explodes to a child diagram:   
**A. the process logic shows the order of execution for the child diagram processes.**B. the process logic must be created using a decision table. Each process on the child diagram is a PERFORM statement within the parent decision table.   
C. the process logic is depicted using a decision tree, with child data flow appearing as the connecting lines on the tree.   
D. process logic is not written.

The rules for horizontal balancing are:   
A. All base elements on an output data flow must be on an input flow or included in the process logic.   
**B. All derived elements on an output data flow must be on an input flow or included in the process logic.**C. The input and output from a parent process must be present on the child diagram.   
D. Data flow from a parent process must indicate the sequence of execution of child diagram processes.

Which of the following is not a business rule?   
A. Business conditions and actions   
**B. User ethics**C. Logical inferences   
D. Processing sequences

Which of the following is not a problem when creating decision tables?   
A. Impossible situations   
**B. Too many conditions**C. Redundancy   
D. Contradictions

In a decision table, contradictions occur when:   
A. an important condition is omitted.   
B. when the situation cannot occur because there are two or more conditions that cannot occur at the same time.   
C. identical sets of alternatives require the same action.   
**D. rules suggest different actions but satisfy the same conditions.**

When applying the principles of horizontal balancing, base elements:   
A. must come from a data store.   
B. must be derived from process logic.   
**C. must be on an input.**D. must go to a data store.

\_\_\_\_\_\_\_\_\_\_\_ are created for primitive processes on a data flow diagram.

**Process specifications**

One of the goals of producing \_\_\_\_\_\_\_\_\_\_ is to validate the system design, including the data flow diagram and the data dictionary.

**Process specifications**

Process descriptions may exist on a form or within a(n) \_\_\_\_\_\_\_\_ repository

**CASE tool**

When structured decisions are not complex, an appropriate technique for analyzing the decision process is the use of \_\_\_\_\_\_\_\_\_ **English.**

**Structured**

Structured English can be more complex if blocks of \_\_\_\_\_\_\_\_ are nested within other blocks of (instructions).

**Instructions,** instructions

\_\_\_\_\_\_\_\_\_ data dictionary entries become IF...THEN...ELSE structured English statements.

**Selection**

\_\_\_\_\_\_\_\_\_ data dictionary entries become DO WHILE, DO UNTIL, or PERFORM UNTIL structured English statements.

**Iteration**

One of the ways to reduce the complexity of unwieldy decision tables is to use extended \_\_\_\_\_\_\_\_.

**Entries**

Using an ELSE column is helpful in preventing errors of \_\_\_\_\_\_\_\_\_\_.

**Omission**

Decision tables are an important tool in the analysis of \_\_\_\_\_\_\_\_\_ decisions.

**Structured**

One major advantage of using decision tables over other methods is that tables help the analyst ensure \_\_\_\_\_\_\_\_\_\_\_.

**Completeness**

In systems analysis, trees are used mainly for identifying and organizing \_\_\_\_\_\_\_\_ and \_\_\_\_\_\_ in a completely structured decision process.

**Conditions, actions**

The use of \_\_\_\_\_\_\_ makes the decision tree more readable when one thinks of a circle as signifying IF when the square means THEN.

**Notation**

In drawing the tree, begin building from left to right while making sure you are complete in listing all possible \_\_\_\_\_\_\_\_ before moving over to the right.

**Alternatives**

Use decision trees when not every condition is relevant to every \_\_\_\_\_\_\_.

**Action**

All the process specifications are consolidated for a computer program and are included in the \_\_\_\_\_\_\_\_\_\_\_ given to the computer programmer.

**Specification packet**

\_\_\_\_\_\_\_\_\_\_\_ means that all output data flow must be either on input data flow or described in the process logic.

**Horizontal balancing**

When performing horizontal balancing, all \_\_\_\_\_\_\_\_\_\_ on an output data flow must be present on an input data flow.

**Base elements**

When performing horizontal balancing, all \_\_\_\_\_\_\_\_\_\_ on an output data flow must be present on an input data flow or created by the process.

**Derived elements**

\_\_\_\_\_\_\_\_\_\_\_\_\_ are the set of procedures, conditions, or formulas that allow a **corporation to run its business.**

**Business rules**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | In order to determine the human information requirements using a decision analysis strategy, what must the systems analyst determine? A. necessary data B. objectives  C. information D. data structure | | | | | | | B. objectives | | | | | | | |
|  | A goal of producing process specifications is to: A. reduce process interactions. B. build technical specifications for a specific computer language C. validate the system design, including data flow diagrams and the data dictionary. D. design computer input and output processes. | | | | | | | C. validate the system design, including data flow diagrams and the data dictionary. | | | | | | | |
|  | Primitive process specifications are not produced for: A. processes that use decision trees. B. processes for which pre-written code already exists.  C. processes that involve complex editing. D. All of the above. | | | | | | | B. processes for which pre-written code already exists. | | | | | | | |
|  | When creating process specifications, what needs to be done for manual tasks? A. Create well-defined procedures for employees performing the tasks .B. Replace them with automated processes. C. Outline the decisions using a decision tree. D. Nothing, they are not part of processing specifications. | | | | | | | A. Create well-defined procedures for employees performing the tasks | | | | | | | |
|  | Which of the following is not a business rule? A. logical inferences B. mathematical and functional derivations C. programming language IF statements D. definitions of business terms | | | | | | | C. programming language IF statements | | | | | | | |
|  | Process logic may be represented as: A. structured English. B. a decision table. C. a decision tree. D. a formula. E. All of the above. | | | | | | | E. All of the above. | | | | | | | |
|  | Which is structured English not based on? A. instructions organized into nested and grouped procedures B. simple English statements C. unstructured logic D. add, multiply, move, and so on | | | | | | | C. unstructured logic | | | | | | | |
|  | In order to use structured English, which convention is not advisable? A. Express all logic in terms of sequential structures, decision structures, case structures, or iterations. B. Indent blocks of statements to show their hierarchy. C. Capitalize names of data stores and processes. D. Be careful when using "and" and "or." | | | | | | | C. Capitalize names of data stores and processes. | | | | | | | |
|  | Which of the following is not one of the three basic constructs used to code computer programs? A. sequence B. selection C. iteration D. computation | | | | | | | D. computation | | | | | | | |
|  | When selection is indicated for elements in the data dictionary A. a simple sequence of structured English statements is all that is necessary.  B. an IF...THEN...ELSE structure must be present in the structured English statements.  C. DO WHILE, DO UNTIL, or PERFORM UNTIL structured English statements must be included. D. a decision tree must be used to depict the logic. | | | | | | | B. an IF...THEN...ELSE structure must be present in the structured English statements. | | | | | | | |
| When iteration is indicated for an element or a group of elements in the data dictionary: A. a simple sequence of structured English statements is all that is necessary. B. an IF..THEN...ELSE structured must be present in the structured English statements. C. DO WHILE, DO UNTIL, or PERFORM UNTIL structured English statements must be included.  D. a decision table must be used to depict the logic. | | | | | | C. DO WHILE, DO UNTIL, or PERFORM UNTIL structured English statements must be included. | | | | | | |
|  | | | | | | In order to build decision tables, what does the analyst not need to do? A. Eliminate any impossible situations. B. Simplify the table as much as possible. C. Determine the minimum size of the table. D. Eliminate inconsistencies. | | | | | | | C. Determine the minimum size of the table. | | |
|  | | | | | | Which of the following is not one of the main problems that can occur in developing decision tables? A. incompleteness B. impossible situations C. contradictions D. repetition | | | | | | | D. repetition | | |
|  | | | | | | Unlike the decision tree used in management science, what doesn't the analyst's tree contain? A. decisions B. conditions  C. outcomes D. actions | | | | | | | C. outcomes | | |
|  | | | | | | When drawing the tree, systems analysts do not have to identify: A. all outcomes.  B. all actions. C. the order. D. all conditions. | | | | | | | A. all outcomes. | | |
|  | | | | | | Which is \*not\* one of three main advantages of a decision tree over a decision table? A. more correct as a communication tool  B. sequential structure of decision tree branches C. conditions and actions of decision trees are found on some branches D. more readily understood | | | | | | | A. more correct as a communication tool | | |
|  | | | | | | Which is the correct choice? A. Use structured English when not every condition is relevant to every action. B. Use decision tables when communication to end users is important. C. Use decision trees when the sequence of conditions and actions is critical.  D. Use decision tables when there are many repetitious actions | | | | | | | C. Use decision trees when the sequence of conditions and actions is critical. | | |
|  | | | | | | Which of the following is not a business rule? A. business conditions and actions B. user ethics  C. logical inferences D. processing sequences | | | | | | | B. user ethics | | |
|  | | | | | | Which of the following is not a problem when creating decision tables? A. impossible situations B. too many conditions C. redundancy D. contradictions | | | | | | | B. too many conditions | | |
|  | | | | | | In a decision table, contradictions occur when: A. an important condition is omitted B. when the situation cannot occur because there are two or more conditions that cannot occur at the same time C. identical sets of alternatives require the same action. D. rules suggest different actions but satisfy the same conditions. | | | | | | | D. rules suggest different actions but satisfy the same conditions. | | |
| Which of the following is not a goal of producing process specifications? A. to reduce the ambiguity of the process B. to reduce the time it takes for a process to run C. to obtain a precise description of what is accomplished D. to validate the system design | | | | | B. to reduce the time it takes for a process to run | | | | | | |
|  | | | | | Which of the following is not an example of a keyword for structured English? A. IF B. DO C. PERFORM D. IS LIKE | | | | | | | D. IS LIKE | | | |
|  | | | | | Running a section of code over and over again until some condition is met is an example of a: A. loop  B. branch C. condition D. return | | | | | | | A. loop | | | |
|  | | | | | \_\_\_\_\_\_\_\_ are created for primitive processes on a data flow diagram. A. Process specifications  B. Process diagrams C. Process databases D. Production specifications | | | | | | | A. Process specifications | | | |
|  | | | | | One of the goals of producing \_\_\_\_\_\_\_\_ is to validate the system design, including the data flow diagram and the data dictionary. A. process diagrams B. process databases C. process specifications  D. production specifications | | | | | | | C. process specifications | | | |
|  | | | | | Process descriptions may exist on a form or within a \_\_\_\_\_\_\_\_ repository. A. data B. data dictionary C. CASE tool  D. CASE diagram | | | | | | | C. CASE tool | | | |
|  | | | | | When structured decisions are not complex, an appropriate technique for analyzing the decision process is the use of \_\_\_\_\_\_\_\_. A. CASE tools B. structured English C. decision trees D. decision diagrams | | | | | | | B. structured English | | | |
|  | | | | | A data structure with optional elements contained in parenthesis or either/or elements contained in brackets will have a corresponding \_\_\_\_\_\_\_\_ statement in the process specification. A. DO ... WHILE B. PERFORM C. DO ... UNTIL D. IF ...THEN ...ELSE | | | | | | | D. IF ...THEN ...ELSE | | | |
|  | | | | | \_\_\_\_\_\_\_\_, indicated by braces on a data structure, must have a corresponding DO WHILE, DO UNTIL, or PERFORM UNTIL structured English statement A. Iteration B. Selection C. Movement D. Sequence | | | | | | | A. Iteration | | | |
|  | | | | | Structured English can be more complex if blocks of (instructions) are \_\_\_\_\_\_\_\_ within each other to show hierarchy. A. nested  B. grouped C. selected D. placed | | | | | | | A. nested | | | |
| \_\_\_\_\_\_\_\_ are used when complex branching occurs in a structured decision process. A. Decision tables B. Data dictionaries C. Decision trees  D. All of the above. | | | | C. Decision trees | | | | | | |
|  | | | | What is a reference work of data about data compiled by systems analysts? A. data dictionary  B. data flow diagrams C. structured analysis D. design | | | | | | | A. data dictionary | | | | |
|  | | | | What become(s) important for large systems that produce several thousand data elements requiring cataloging and cross-referencing? A. data dictionary B. structured analysis C. data flow diagrams D. automated data dictionaries  E. design | | | | | | | D. automated data dictionaries | | | | |
|  | | | | Which of the following is not contained in the repository? A. procedural logic B. use cases C. generated computer code  D. screen and report design | | | | | | | C. generated computer code | | | | |
|  | | | | A data flow that contains data that are used between processes is called: A. internal  B. derived. C. base. D. iterative. | | | | | | | A. internal | | | | |
|  | | | | Data structures are described using \_\_\_\_\_\_\_\_ notation A. relational B. metadatic C. geometric D. algebraic | | | | | | | D. algebraic | | | | |
|  | | | | What does this symbol represent [ ]? A. either/or alternative  B. optional C. iteration D. selection | | | | | | | A. either/or alternative | | | | |
|  | | | | Braces { } are used to indicate:A. either/or alternative.B. optional.C. iteration. D. selection. | | | | | | | C. iteration. | | | | |
|  | | | | Which of the following is included in a physical data structure? A. codes that identify the status of a master record B. expansion area for file records C. the type of data structure, either for a screen or report D. editing criteria for the structure | | | | | | | A. codes that identify the status of a master record | | | | |
|  | | | | A synonym or other name for an element is called a(n): A. common element. B. structural element. C. attributive element. D. alias. | | | | | | | D. alias. | | | | |
| A base element is one that: A. was initially keyed into the system. B. does not change over a period of time. C. is used within one and only one subsystem. D. is the result of a calculation or some other logic. | | | A. was initially keyed into the system. | | | | | |
|  | | | A derived element is one that: A. is keyed, derived by the users. B. has several different meanings, one for each user group. C. is created by processes as a result of calculations or a series of decision-making statements.  D. has the displayed length and the stored length the same. | | | | | | C. is created by processes as a result of calculations or a series of decision-making statements. | | | | | |
|  | | | When determining the length for elements: A. look at what the current length of data is and use that value. B. use values that other corporations have for similar elements. C. figure the amount of a numeric element and add a few characters for reasonable expansion.  D. keep the value for the length small to save file space. | | | | | | C. figure the amount of a numeric element and add a few characters for reasonable expansion. | | | | | |
|  | | | The symbol X(8) represents: A. eight digits. B. eight alphanumeric characters C. a data structure or element that repeats eight times. D. an element that is found within eight data structures. | | | | | | B. eight alphanumeric characters | | | | | |
|  | | | A varchar data type: A. is used to represent elements for which the analyst needs to determine the length. B. is an element that contains a check digit. C. is used to represent a floating point number with an indeterminate number of decimal positions. D. is used for data that can contain any number of characters (up to the database limit). | | | | | | D. is used for data that can contain any number of characters (up to the database limit). | | | | | |
|  | | | A default value on a GUI screen may be used for: A. drop-down lists. B. radio buttons. C. check boxes. D. All of the above. | | | | | | D. All of the above. | | | | | |
|  | | | Data stores are used to store: A. all base elements and some derived elements.  B. all derived elements and some base elements. C. all base and derived elements. D. only some base elements and some derived elements (the most critical ones in the system). | | | | | | A. all base elements and some derived elements. | | | | | |
|  | | | Since a single data flow may only show part of the collective data, A. the data store may be linked to several external structures defining the different data flows B. many data flows may have to be examined to determine the contents of a data store  C. data stores must contain multiple redundant elements within repeating groups indicated by braces {}. D. an alias must be used. | | | | | | B. many data flows may have to be examined to determine the contents of a data store | | | | | |
|  | | | The data dictionary may be used to create: A. screens. B. reports. C. forms. D. All of the above. | | | | | | D. All of the above. | | | | | |
|  | | | Which of the following is a flaw in the system design that is detected by analyzing the data dictionary entries? A. All derived elements on an output flow must be present on an input data flow. B. The data store may contain elements that are not present on any data flow to or from the data store. C. All base elements on an output data flow must be present on a data flow into the process.  D. All elements that are discrete must have a table of codes definition. | | | | | | C. All base elements on a | | | | | |
| Elements on a data flow going into or out from a data store: A. must be created by the process linking to the data store. B. must be base elements. C. must be on a data flow that is input to the process that creates the output that is going to the data store. D. must be contained by the data store. | | D. must be contained by the data store. | | | | | | | |
|  | | What is not a characteristic of the ideal data dictionary? A. automated B. efficient  C. interactive D. online E. evolutionary | | | | | | | | B. efficient | | | | |
|  | | Which of the following may be created by transforming an XML document? A. a Web page B. a portable document format (PDF) file C. output for a handheld device D. All of the above. | | | | | | | | D. All of the above. | | | | |
|  | | Which of the following is not included in an XML document type definition? A. the number of times an element repeats B. an element that is optional C. the rules for transforming the XML document into standard output  D. the attributes of an XML element | | | | | | | | C. the rules for transforming the XML document into standard output | | | | |
|  | | Which of the following is a more precise way to define the content of an XML document? A. a schema  B. a document attribute list C. an ID REF, listing the identifiable elements of a document D. an XML repository specifications document | | | | | | | | A. a schema | | | | |
|  | | A \_\_\_\_\_\_\_\_ is a large collection of information that is larger than a data dictionary. A. repository  B. schema C. data element D. data alias | | | | | | | | A. repository | | | | |
|  | | \_\_\_\_\_\_\_\_ is usually the first component to be stored in the data dictionary. A. Data flow  B. Data direction C. Data mining D. Database schema | | | | | | | | A. Data flow | | | | |
|  | | A \_\_\_\_\_\_\_\_ is composed of related elements. A. data structure B. data alias C. database schema D. data flow | | | | | | | | A. data structure | | | | |
|  | | A \_\_\_\_\_\_\_\_ is one that is contained within a larger data structure and consists of further subdivisions. A. structural record  B. transactional record C. data alias D. schema | | | | | | | | A. structural record | | | | |
|  | | \_\_\_\_\_\_\_\_ data structures include additional elements necessary for implementing the system. A. Physical  B. Logical C. Informational D. Logistical | | | | | | | | A. Physical | | | | |
| The correct determination of a(n) \_\_\_\_\_\_\_\_ length is important to avoid truncation. A. address B. zip code C. database D. element | | | | | | | D. element | | | | | |
|  | | | | | | | A(n) \_\_\_\_\_\_\_\_ value for an element is one that has a finite number of possible values, though the number might be large. A. absolute B. discrete  C. variable D. continuous | | | | | | B. discrete |
|  | | | | | | | A(n) \_\_\_\_\_\_\_\_ element is one that has an infinite number of possible values. A. absolute B. discrete C. variable D. continuous | | | | | | D. continuous |