Chapter 2

Accounting Systems Documentation

MULTIPLE CHOICE QUESTIONS

1. Accounting systems documentation is used for which of the following?
    A. To communicate how an accounting system works
    B. To communicate management's overall corporate strategy
    C. To describe the role of financial planners in an organization
    D. To depict a company's hierarchical organizational chart

    A

2. What does the Sarbanes-Oxley Act of 2002 require relative to documentation?
    A. A company must document its internal control in detail.
    B. A company must document its internal control at a general level.
    C. A company must document each step in its cash receipts and disbursements processes in detail.
    D. A company must document each step in its cash receipts and disbursements processes at a general level.

    A

3. Documentation types can be divided into two group according to which of the following?
    A. Cost
    B. Ease of understanding
    C. Intended recipients
    D. Complexity

    C

4. What type of documentation describes an accounting system from the outside looking in?
    A. System design documentation
    B. Top-down design documentation
    C. User documentation
    D. Technical documentation

    C

5. Which of the following statements concerning user documentation is true?
    A. User documentation describes the system from the outside looking in.
    B. Different classes of users have different capabilities and needs and require different types of user documentation.
    C. User documentation emphasizes how to operate the system and includes instructions for executing the various programs and instructions for handling data.
    D. All of the above statements are true.

    D

6.   What does end-user documentation include?
        A.   Control procedures
        B.   Error recovery procedures
        C.   Names of technical support people who participated in preparing the
                documentation
        D.   A and B
D

7.   Who would be most likely to use system documentation?
        A.   Auditors
        B.   Management
        C.   Human resources
        D.   Administrative support
A

8.   Which of the following applies to documentation standards?
        A.   Standards must conform to applicable industry, national or international
                conventions.
        B.   Each item of documentation should bear the name of person checking and
                authorizing documentation for use.
        C.   Each item should bear the date and name of person preparing it.
        D.   All of the above apply.
D

9.   What is one question that documentation standards can answer?
        A.   How long should the documentation be?
        B.   What authorizations are required?
        C.   What amount should the cost of documentation be restricted to?
        D.   How should documentation be discarded?
B

10.   How should distribution of or access to documentation be handled?
        A.   Through multiple channels
        B.   Saved so that is can be a basis of comparison for future documentation
                development
        C.   On a need-to-know basis
        D.   None of the above
C

11.   Which of the following issues should system narrative descriptions attempt to cover?
        A.   Relationship of every member in the organization as they pertain to the system
        B.   Cost of the system
        C.   The relationship between the current system documentation and any past
                documentation
        D.   System specifications

D

12.   What is the appropriate use of a narrative description?
        A.   When there is not enough justification to hire technical personnel to develop
               graphical documentation
        B.   As an alternative to graphical representation
        C.   As a companion to graphical representation
   D.   None of the above
C

13.   What are two types of system documentation?
        A.   Narrative description; relationship-entity diagram
        B.   Narrative description; data flow diagrams
        C.   Linear matrix diagram; relationship-entity diagram
        D.   Cost-benefit analysis; data flow diagram
B

14.   What are two types of block diagrams?
        A.   Horizontal block diagrams; program block diagrams
        B.   Horizontal block diagrams; hierarchical block diagrams
        C.   Hierarchical block diagrams; functional block diagrams
        D.   Functional block diagrams; program block diagrams
B

15.   In the following horizontal block diagram, what do the connecting lines represent?
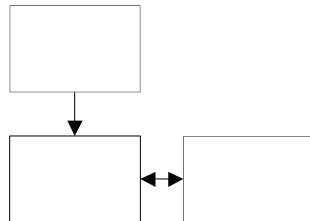
        A.   Interlevel association of parent-child relationship
        B.   Movement of paperwork from one group to another
        C.   Flow of documents, transactions, and objects among sources and destinations
        D.   Major information flows among subsystems of the accounting information system
D

16.   What is the correct labeling, in correct order, for the following data flow diagram symbols?
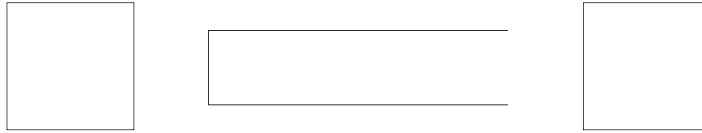
   A. Source of data, data store, destination of data
   B. Data store, process that transforms data, source or destination of data
   C. Destination of data, source of data, process that transforms data
   D. Process that transforms data, destination of data, source of data

A

17.   Which of the following statements about data flow diagrams is correct?
   A.   They can only be understood when used in conjunction with block diagrams.
   B.   They show what an accounting system is doing and how the system is doing it.
   C.   They are also called functional information diagrams.
   D.   They provide a more detailed representation of an accounting information system than do block diagrams.

D

18.   Data flow diagrams include what symbols?
   A   A stop-sign indicating that a process is complete
   B.   A circle to indicate a process or operation
   C.   A square to indicate the beginning point of a diagram
   D.   A square to indicate a data store

B

19.   Which is not true about a level 0 data flow diagram?
   A.   It describes the entire system of interest on a sheet of paper.
   B.   It shows all the major processes, data stores, and external entities.
   C.   Each process can be exploded into subprocesses.
   D.   It can only accommodate up to a 10.0 level to ensure understandability.

D

20.   What is a disadvantage of a data flow diagram?
   A.   Inability to show relationships among subsystems
   B.   Poor communications tool
   C.   Difficulty of understanding for nontechnical personnel
   D.   Inability to represent points of detail

D

21.   What does the following symbol represent in a data flow diagram?

        ┌─────────────┐
        │   │
        └─────────────┘

        A.   Data store
        B.   Flow direction
        C.   Source or destination of data
        D.   Process that transforms data

A

22.   Which of the following is not a characteristic of system flowcharts?
        A   They are governed by national and international standards.
        B.   They show technical details.
        C.   They are used to guide the construction of new systems and maintain/evaluate
                existing systems.
        D.   They are also known as problem definition documentation.

D

23.   Which of the following statements about a system flowchart is correct?
        A.   It is usually designed for top-management.
        B.   It focuses on the role of accountants in the system.
        C.   It shows what a system does and how it does it.
        D.   It is amenable to complex accounting systems than to simple systems.

C

24.   What is the difference in an internal control flowchart and a system flowchart?
        A.   An internal control flowchart uses fewer symbols than a system flowchart.
        B.   An internal control flowchart shows functional areas to indicate the authorization
                of transactions, the custody of assets, and the recording of transactions.
        C.   An internal control flowchart is prepared prior to preparing a system flowchart.
        D.   An internal control flowchart needs an auditor's input for accurate development.

B

25.   What is the symbol that can be used as short-hand for a group of symbols for a process
        that may be repeated in several locations in a system flowchart?
        A.   Pre-defined operation symbol
        B.   Display device symbol
        C.   Organizational change symbol
        D.   Communication link symbol

A

26. Which is not true about system flowchart symbols?
     A.   They are more numerous than are data flow diagram symbols.
     B.   Rigid conventions determine their use.
     C.   Labels attached to the symbols are self-explanatory.
   D.   Completely different sets of symbols are used for computerized and manual systems.

D

27. Which of the following statements about system flowcharts is correct?
     A.   Like other graphical representations, system flowcharting is not governed by national and international standards.
     B.   Because it is governed by standards, flowcharting is not a subjective activity.
     C.   Individual styles can help achieve a clear and orderly layout.
     D.   If two different people flowchart the same system, the flowcharts will be identical.

C

28. What is a step that should be taken prior to creating a system flowchart?
     A.   List the steps in the system processes.
     B.   Determine what software should be used.
     C.   Avoid making decisions based on personnel requests as this biases the development.
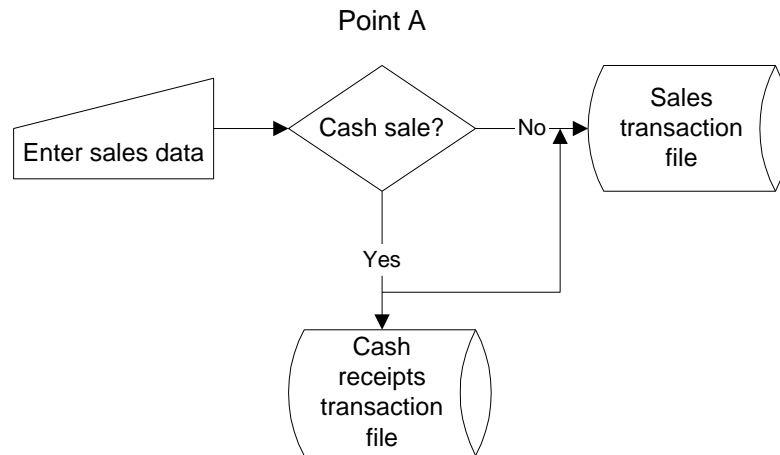   D.   Restrict the research of the accounting system to the outputs of the system.

A

29. Which of the following symbolic representations indicates that a purchase order has been prepared?
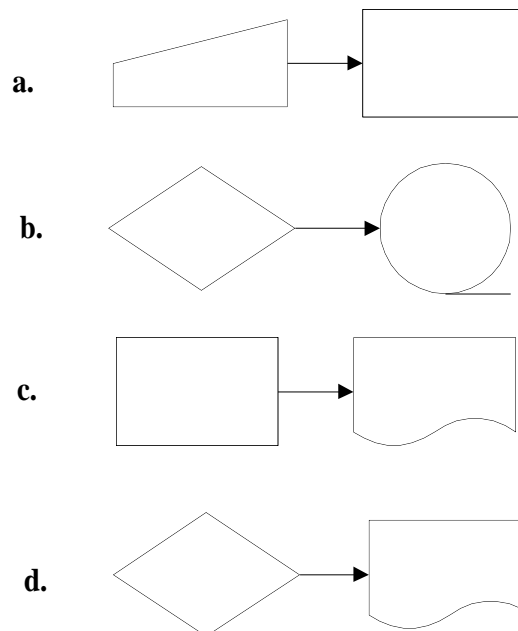
C

30.   In the figure below, what does the flowcharting symbol at Point A represent?

Point A

```
                          Point A
  ┌──────────┐        ╱────────╲                    ┌─────────────┐
  │Enter     │──────▶│Cash sale?│──────No────────▶│   Sales      │
  │sales data│        ╲────────╱                    │ transaction  │
  └──────────┘            │                          │    file      │
                          │                          └─────────────┘
                         Yes
                          │
                          ▼
                    ┌───────────┐
                    │   Cash     │
                    │ receipts   │
                    │transaction │
                    │   file     │
                    └───────────┘
```

A.   A manual operation
B.   Initiation of a process
C.   A computerized operation
D.   A decision

D

31.   Which of the following serves as a bridge between broad system design documentation
and detailed system flowcharts?
A.   Data flow diagrams
B.   Block diagrams
C.   Narrative descriptions
D.   HIPO charts

A

32.   Which type of documentation shows the flow of data through various stages of
processing without regard for the logic of the individual processing activities?
A   System flowchart
B.   Hierarchical block diagram
C.   Structure chart
D.   Data flow diagram

D

33.   What is the most common, flexible, and useful type of overall design documentation for
an accounting information system?
A.   System flowcharts
B.   Pseudocode
C.   HIPO charts
D.   Block diagrams

A

34.   Which type of system documentation provides the most detail?
       A.   System flowchart
       B.   Block diagram
       C.   Data flow diagram
       D.   System narrative description

A

35.   What are the broadest and most detailed forms of system documentation, respectively?
       A.   Block diagrams; system flowcharts
       B.   Narrative descriptions; block diagrams
   C.   System flowcharts; narrative descriptions
       D.   Narrative descriptions; system flowcharts

D

36.   Which of the following statements about computer-assisted system documentation tools is correct?
       A.   They consist primarily of flowcharting programs.
       B.   They are restricted to helping create block diagrams.
       C.   They have the disadvantage of being difficult to distribute.
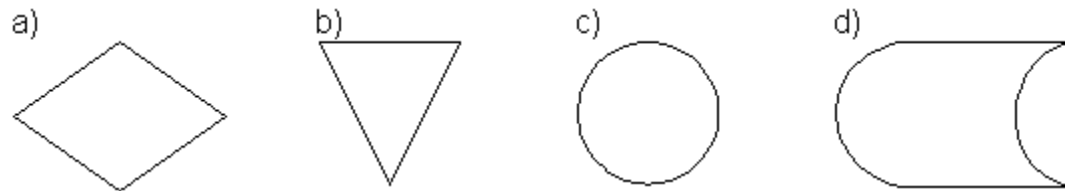   D.   They are also known as accounting systems development guideline tools.

A

37. What type of documentation is the following?
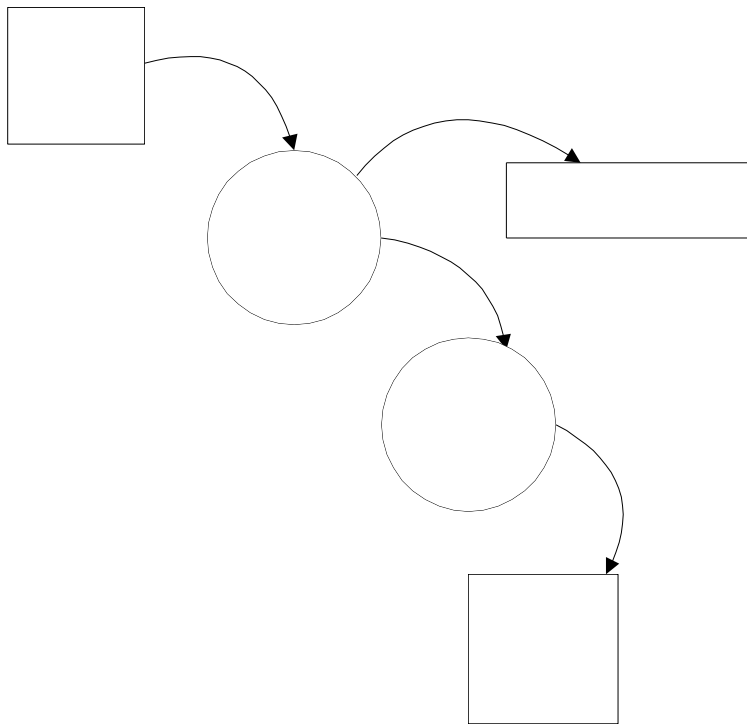
     A.   Data flow diagram
     B.   System flowchart
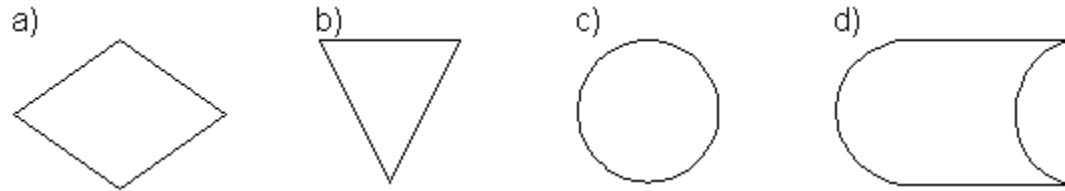   C.   Hierarchical block diagram
     D.   Horizontal block diagram

A

38. The system flowchart symbol for a filing a paper document (such as filing a copy of a paid invoice by date) is:

a)   b)   c)   d)

B

39. The system flowchart symbol for a decision (such as whether the customer is approved) is:

a)   b)   c)   d)

A

TRUE/FALSE QUESTIONS

1. System documentation is prepared for the benefit of top management.
    F

2. End-user documentation typically includes a list of programs with operating instructions.
    T

3. Unauthorized documentation circulating in an organization should be immediately destroyed.
    F

4. A type of system documentation is pseudocode.
    T

5. System documentation can include narrative description or graphical representation.
    T

6. Because of the differences in each type of system documentation, there is rarely an overlap of flexibility in accommodating users' needs.
    F

7. Narrative descriptions are the dominant choice of documentation for showing details.
    F

8. Information about a system's goals and objectives should be included in a narrative description.
    T

9. A horizontal block diagram is typically prepared prior to preparing a detailed hierarchical block diagram.
    F

10.   Because of the limited amount of detail, block diagrams are generally used in conjunction with other documentation that shows complementary aspects of an accounting system.
        T

11.   Documentation as it relates to accounting systems is a communication device that describes in pictures, words, or both how to use the system, and what the system does, and how the system operates.
        T

12.   User documentation offers an inside view of the accounting system and is written in precise technical language.
        F

13.   A narrative description should cover the reasons for having the accounting system, including the background, the objectives of the system, and the scope of the system.
        T

14.   A hierarchical block diagram shows the subsystems of an accounting system and the direction of the information flows among the subsystems.
        F

15.   A data flow diagram show what an accounting system is doing and how the system is doing it.
        F

16.   The initial data flow diagram is called a context diagram.
        T

17.   A systems flowchart uses only four symbols.
        F

18.   A systems flowchart identifies all existing control procedures for preventing or detecting errors and irregularities.
        F

19.   Systems flowcharts suffer from a lack of standard flowcharting symbols.
        F

20.   In a systems flowchart, a rectangle represents a process, or operation.
        T

SHORT ANSWER/ESSAY QUESTIONS

1.   Arrange by increasing amount of detail the types of system documentation that are frequently used by accountants.

Answer:
Narrative description, block diagram, data flow diagram, system flowchart

2.   One guideline for creating an effective system flowchart is to show the source and disposition of all major documents and copies of those documents. What are four other guidelines?

Answer:
Refer to Exhibit 2.8–Guidelines for Effective System Flowcharting.

3.   Explain the difference between a horizontal and a hierarchical block diagram.

Answer:
A horizontal block diagram shows the subsystems of an accounting system and the direction of the information flows among the subsystems. A hierarchical block diagram shows the analysis of an accounting system into successive levels of subsystems or, alternatively, the synthesis of subsystems into a complete system.

4.   Draw four symbols used in a system flowcharts and explain their meanings.

Answer:
Refer to Exhibit 2.7–System Flowcharting Symbols.

5.   List three questions that document standards should answer.

Answer:
Any three of the following:
*   Who should prepare the various types of documentation?
*   What should be included (and omitted)?
*   How should the material be presented?
*   What authorizations are required for each type of documentation?
*   How should the documentation be prepared?
*   How should documentation be distributed and used?
*   What procedures are appropriate for reviewing and maintaining the various types of documentation?

6.   What are four forms of systems documentation used frequently by accountants?

Answer:
*   Narrative description
*   Block diagram
*   Data flow diagram
*   System flowchart

7.   List three guidelines for effective systems flowcharting.

Answer:
Any three of the following :

- Start with the entry of data into the system you are flowcharting.
- Show all working files or database tables.
- Show the source and disposition of all major documents and reports. This does not apply to paper journals and ledgers since they do not flow anywhere.
- Use arrowheads on all flow lines to indicate the direction of the flow.
- Make the direction of the flow lines primarily from left to right and top to bottom. Occasionally, these directions can be reversed when it makes the flowchart more concise, but this should be done sparingly.
- Avoid crossing flow lines to the extent possible.
- Put the entire system on one page unless it is impractical to do so.
- Use on-page and off-page connectors sparingly. An overuse of connectors indicates poor layout and makes the flowchart hard to follow.
- Use telegraphic, keyword active style in the words on the flowchart, leaving out nonessential words, such as a, an, the.
- When abbreviating is necessary, use standard abbreviations only, or use a footnote or legend to explain nonstandard abbreviations.
- Include written comments whenever it helps make a flowchart more complete or easier to understand. Comments can be included within the flowchart using the comment symbol, or they can be included as footnotes at the bottom or on one side.
- If showing segregation of duties, used vertical columns, horizontal rows, or the organizational change symbol.
- Do not leave dangling branches. A dangling branch occurs when a process suddenly stops on the flowchart, but obviously needs other activities to complete the process. Explain what happens with a note or show data going into another system. Do not leave the reader wondering.
- Place a title, the preparer's name, and the date on all pages of the flowchart. Number pages as "page x of n," for example, "page 1 of 3," so the reader will know when the flowchart is complete.
- Use a template for symbols if drawing the flowchart by hand.

- Draw a flowchart for a computerized accounting system depicting the preparation of two copies of a customer invoice. The first copy is sent to the customer and the second copy is filed by date.

  Answer:
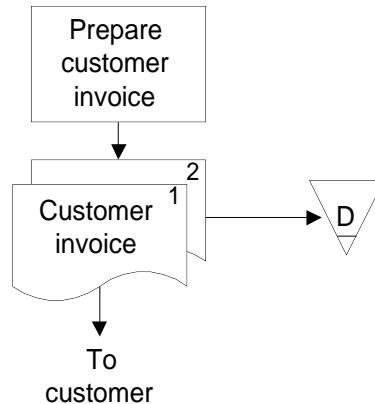
6.   Define the following terms: file maintenance, level 0 DFD, data flow diagrams, exception report, system flowchart.

Answer: file maintenance (unique, non-routine, should be done by someone other than person doing day-to-day recording, includes adding/deleting accounts/customers/vendors), level 0 (entire system on one sheet, basic processes, major tasks), dfd (what system does and how it does it), exception report (shows deviations from a norm ONLY), system flowchart (most detailed, what system does and how it does it).

MATCHING QUESTIONS

Several types of system documentation are listed below.
   A. System flowchart
   B. Block diagram
   C. Narrative description
   D. Data flow diagram
   E. Internal control flowchart

Fill in the letter that corresponds to the type of documentation that is defined in 1-4 below. One type may be used more than one time, and some types may not be used at all.

1.   Provides an overview of an accounting system in terms of its major subsystems.

B

2.   Explains the reasons for having the accounting system, including the
       background, the objectives of the system, and the scope of the system.

C

3.   Provides a more detailed representation of an accounting system than a block
       diagram can provide but has fewer technical details than does a system flowchart.

D

4.   Emphasizes the flow of data elements through an accounting system and the role
       of computer programs and human beings in the processing of accounting data.

A