





8) Chuck and Jill Scruggs travel in their motor home six months of the year and buy unique artifacts. Within hours after the Scruggs make a purchase, they have photographed it, written a description of it, and posted it for sale on eBay with a reservation price. Anything that does not sell is shipped back to Perth, Australia, for display in The House of Curiosities, a retail business that the Scruggs operate during the balance of the year. Which symbol should be used to represent eBay in a context diagram of this process?

8) \_\_\_\_\_

A)



B)



C)



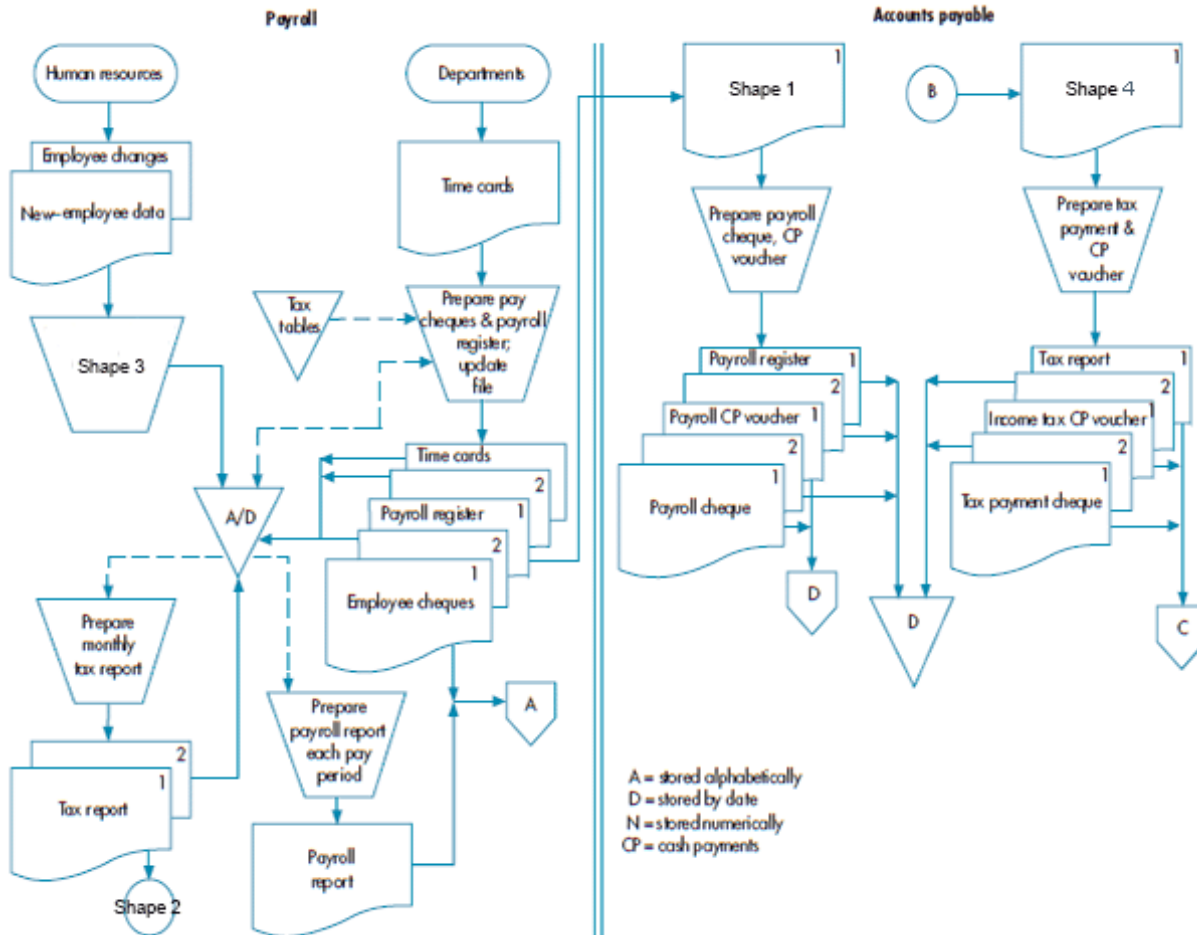
D)



Answer: A

Explanation: A)  
B)  
C)  
D)

Refer to the diagram below to answer the following question(s).



9) How many off-page connectors are there in the diagram?

A) Two

B) Three

C) Four

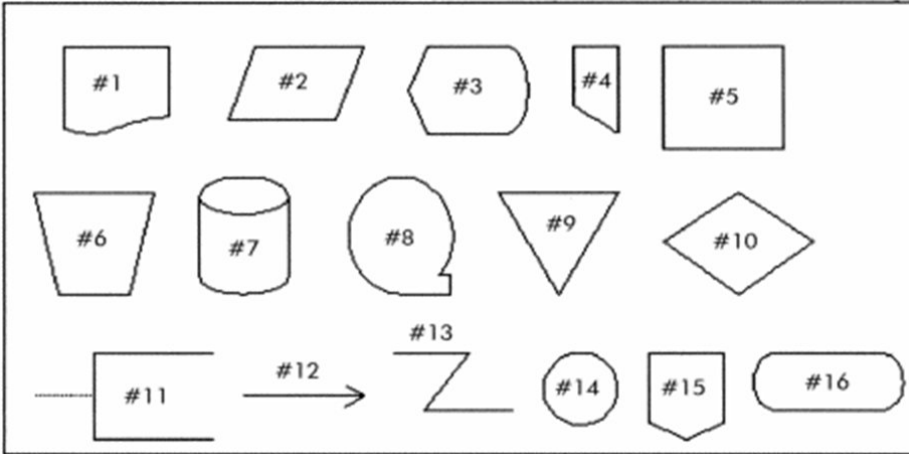
D) Five

9) \_\_\_\_\_

Answer: B

Explanation: A)  
B)  
C)  
D)

Use the chart below to answer the following question(s) regarding flowchart symbols.



- 10) Which symbol would be used in a flowchart to represent a general ledger?  
 A) #1                      B) #3                      C) #2                      D) #5

10) \_\_\_\_\_

Answer: C  
 Explanation: A)  
                   B)  
                   C)  
                   D)

- 11) Chuck and Jill Scruggs travel in their motor home six months of the year and buy unique artifacts. Within hours after the Scruggs make a purchase, they have photographed it, written a description of it, and posted it for sale on eBay with a reservation price. Anything that does not sell is shipped back to Perth, Australia, for display in The House of Curiosities, a retail business that the Scruggs operate during the balance of the year. Which symbol should be used to represent the preparation of data for submission to eBay in a context diagram of this process?

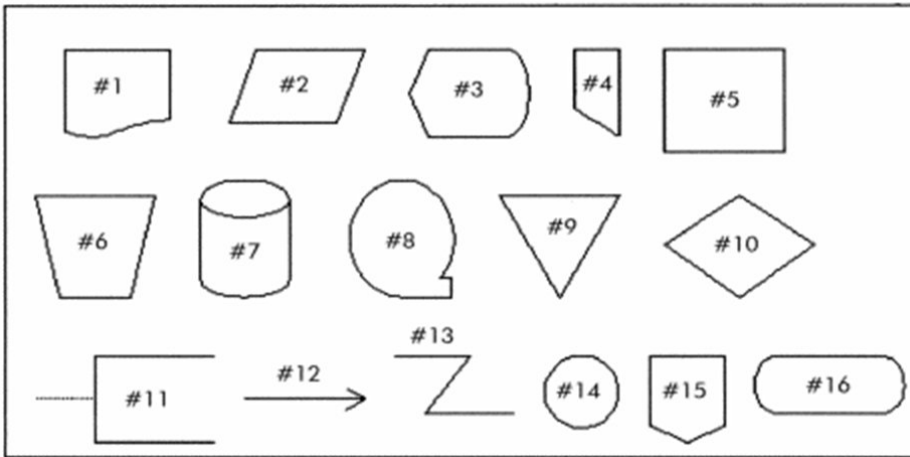
11) \_\_\_\_\_

- A)                       B)                       C)                       D) 

Answer: B  
 Explanation: A)  
                   B)  
                   C)  
                   D)



Use the chart below to answer the following question(s) regarding flowchart symbols.



15) Which symbol would be used in a flowchart to represent a file of paper documents?

15) \_\_\_\_\_

- A) #7                                      B) #15                                      C) #9                                      D) #8

Answer: C

- Explanation:    A)  
                          B)  
                          C)  
                          D)

16) In preparing a DFD, when data are transformed through a process, the symbol used should be

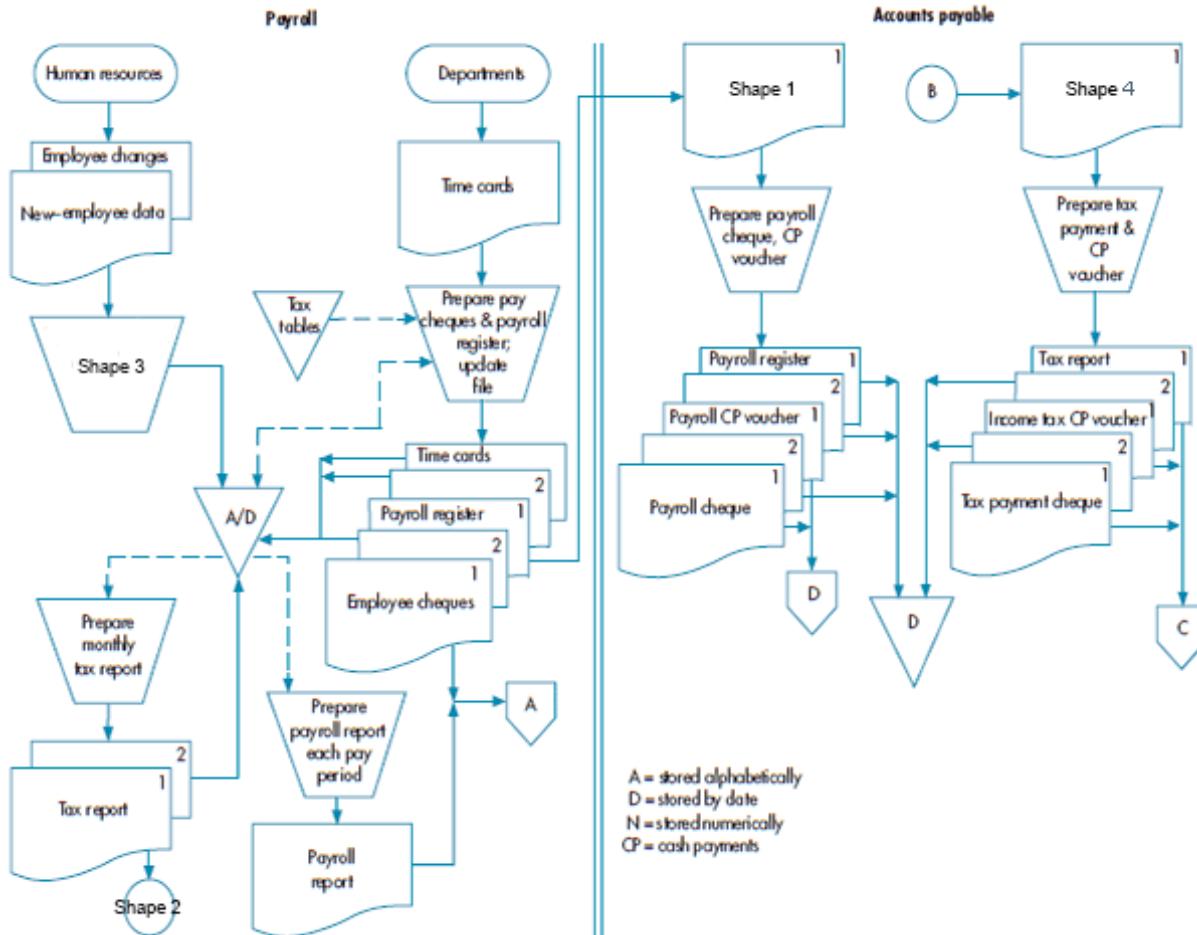
16) \_\_\_\_\_

- A) an arrow.                                      B) two horizontal lines.  
C) a square.                                      D) a circle.

Answer: D

- Explanation:    A)  
                          B)  
                          C)  
                          D)

Refer to the diagram below to answer the following question(s).



17) In the diagram, Human resources is \_\_\_\_\_.

- A) an external party
- C) an input

- B) an output
- D) an internal party

17) \_\_\_\_\_

Answer: A

- Explanation:
- A)
  - B)
  - C)
  - D)



18) The Union Soup Kitchen is a non-profit organisation that collects, stores, prepares and provides food to the homeless in Canberra, Australia. Donations of food are recorded in a database and a receipt is provided to the donor. When food is used, the database is updated so that it always reflects the amounts and types of food that are available. In a data flow diagram, which type of symbol would be used to represent the storage location of data in the system?

18) \_\_\_\_\_

A)



B)



C)



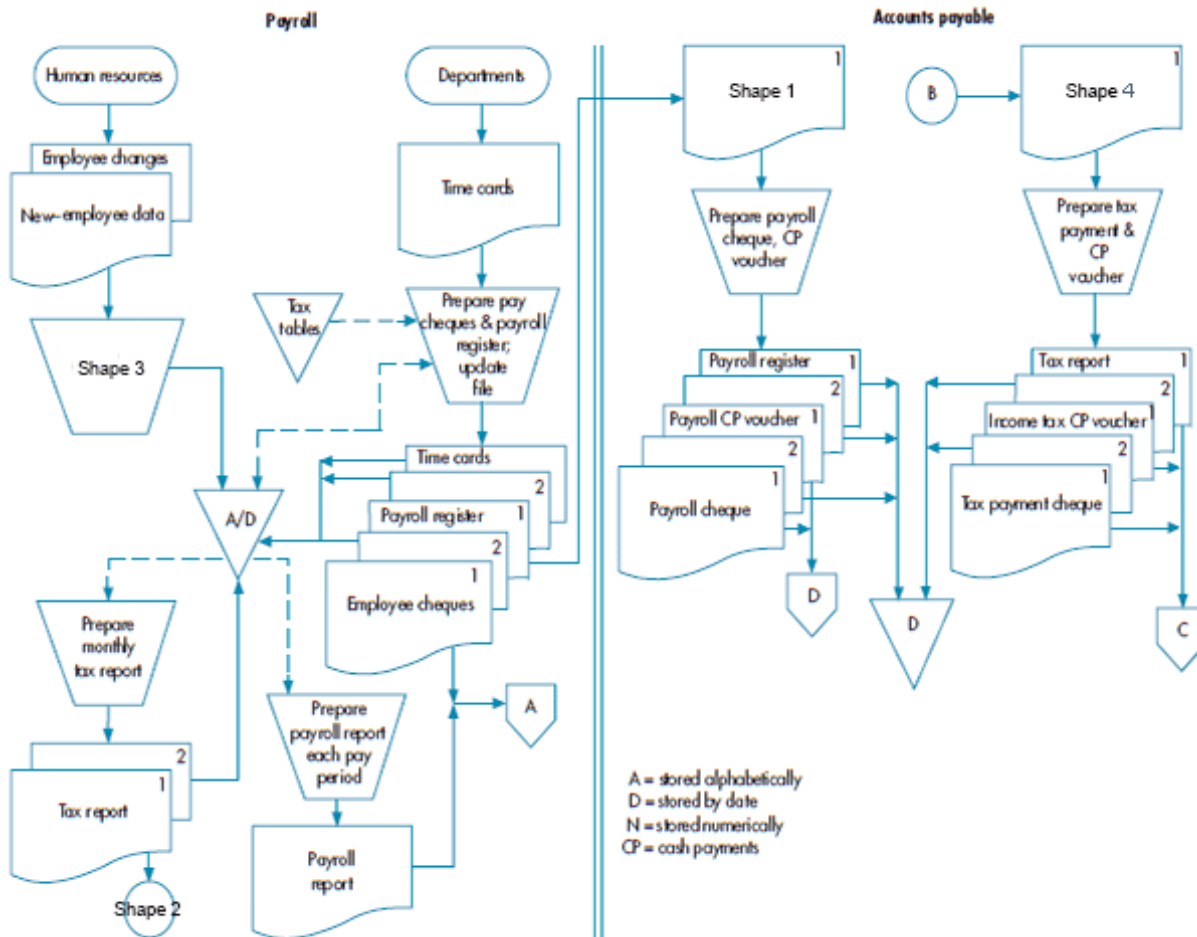
D)



Answer: D

Explanation: A)  
B)  
C)  
D)

Refer to the diagram below to answer the following question(s).



19) According to the rules for drawing flowcharts, which of the following statements regarding the diagram is *true*?

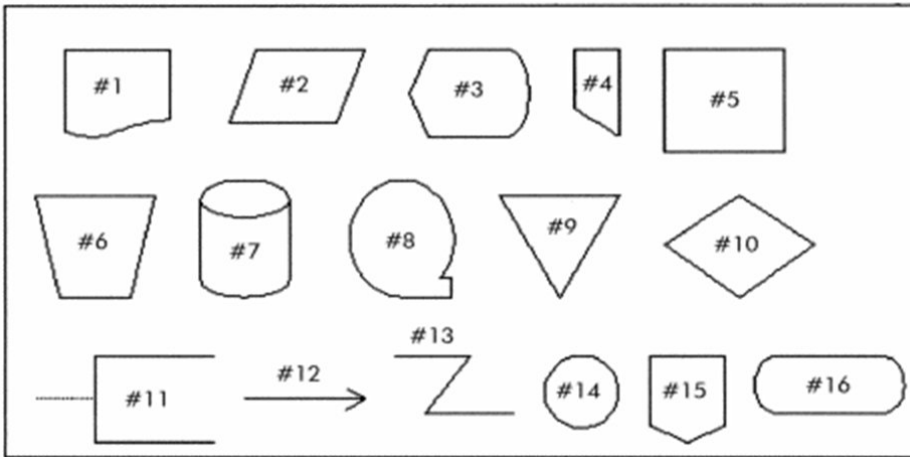
19) \_\_\_\_\_

- A) The 'Departments' shape in the payroll department represents all departments except for payroll.
- B) The 'Departments' shape in the payroll department represents all departments, including payroll and accounts payable.
- C) The 'Departments' shape in the payroll department represents all departments except for payroll and accounts payable.
- D) The 'Departments' shape in the payroll department represents all departments except for accounts payable.

Answer: C

- Explanation:
- A)
  - B)
  - C)
  - D)

Use the chart below to answer the following question(s) regarding flowchart symbols.



- 20) Which symbol would be used in a flowchart to represent a decision?  
 A) #16                      B) #10                      C) #9                      D) #6

20) \_\_\_\_\_

Answer: B

- Explanation: A)  
 B)  
 C)  
 D)

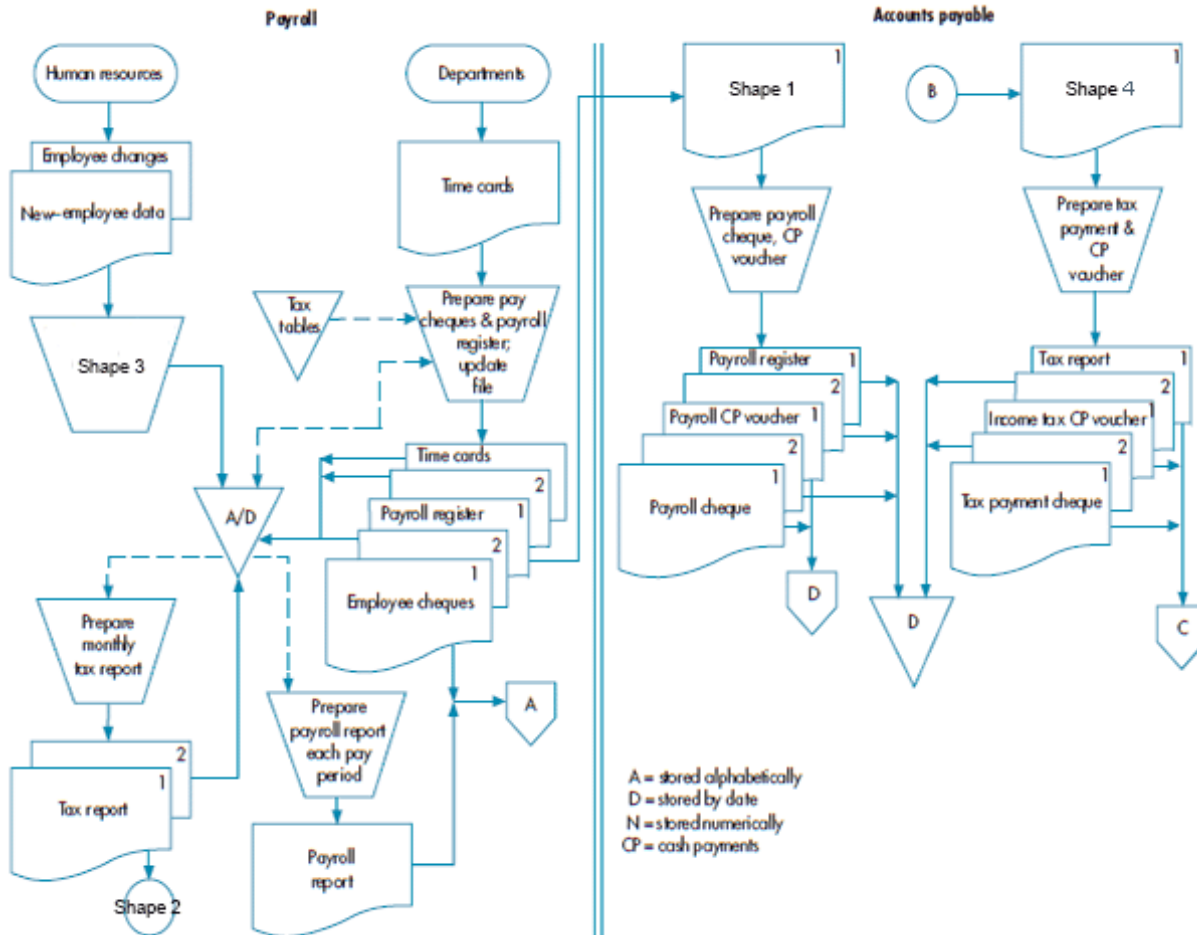
- 21) When preparing a document flowchart, the names of organisational departments or job functions should appear in the  
 A) column headings.  
 B) title of the flowchart.  
 C) written narrative accompanying the flowchart.  
 D) right-hand margin.

21) \_\_\_\_\_

Answer: A

- Explanation: A)  
 B)  
 C)  
 D)

Refer to the diagram below to answer the following question(s).



22) In the diagram, arrows with dashed lines are  
 A) data flow.  
 C) communication link.

B) processing flow.  
 D) document flow.

22) \_\_\_\_\_

Answer: A

Explanation: A)  
 B)  
 C)  
 D)

23) The Union Soup Kitchen is a non-profit organisation that collects, stores, prepares and provides food to the homeless in Canberra, Australia. Donations of food are recorded in a database and a receipt is provided to the donor. When food is used, the database is updated so that it always reflects the amounts and types of food that are available. In a data flow diagram, which type of symbol would be used to represent the processing of donations?

23) \_\_\_\_\_

A)



B)



C)



D)



Answer: B

Explanation: A)  
B)  
C)  
D)

24) Chas Mulligan has been hired by Yardley Security as an assistant to the internal auditor. He has been asked to document the existing accounting information system, and focus on the activities and flow of data between activities. He decides to begin with a summary description of the sources and uses of data in the organisation and how they are processed by the system. The documentation tool that he should employ for this purpose is a

24) \_\_\_\_\_

A) data flow diagram.

B) document flowchart.

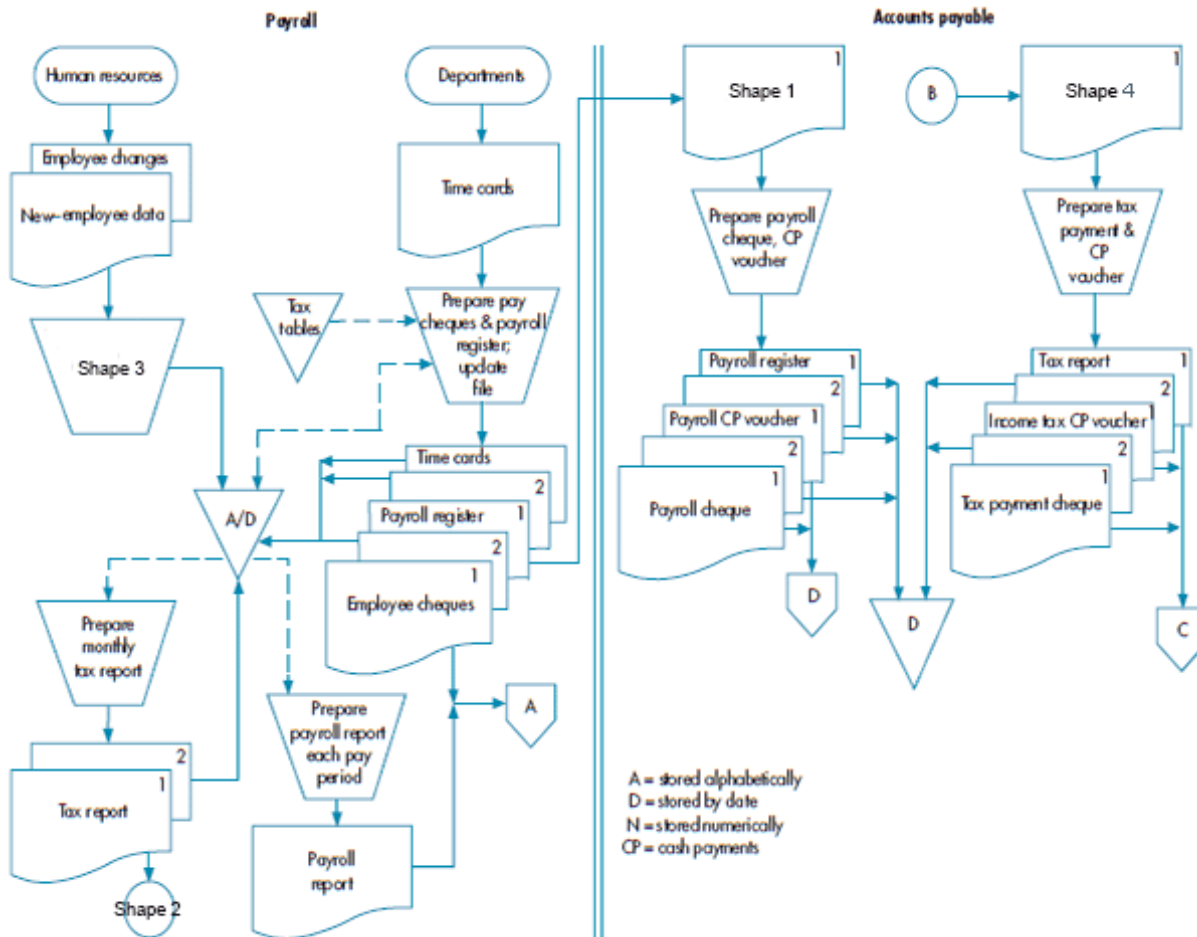
C) system flowchart.

D) program flowchart.

Answer: A

Explanation: A)  
B)  
C)  
D)

Refer to the diagram below to answer the following question(s).



- 25) Which of the following statements regarding the diagram is *not* true?
- A) A copy of the tax report is sent to another department/function.
  - B) A copy of the employee cheque is sent to another department/function.
  - C) A copy of the payroll cheque is sent to another department/function.
  - D) A copy of the new employee data is sent to another department/function.

25) \_\_\_\_\_

Answer: D

- Explanation:
- A)
  - B)
  - C)
  - D)

26) A data flow diagram

26) \_\_\_\_\_

- A) is a graphical description of the source and destination of data that shows how data flow within an organisation.
- B) is a graphical description of the relationship among the input, processing and output in an information system.
- C) is a graphical description of the flow of documents and information between departments or areas of responsibility.
- D) is a graphical description of the sequence of logical operations that a computer performs as it executes a program.

Answer: A

- Explanation:
- A)
  - B)
  - C)
  - D)

27) In a data flow diagram of the customer payment process, 'customer payment' will appear above or in

27) \_\_\_\_\_




- A) two horizontal lines.
- B) a square.
- C) an arrow.
- D) a circle.

Answer: C

- Explanation:
- A)
  - B)
  - C)
  - D)

28) Chuck and Jill Scruggs travel in their motor home six months of the year and buy unique artifacts. Within hours after the Scruggs make a purchase, they have photographed it, written a description of it, and posted it for sale on eBay with a reservation price. Anything that does not sell is shipped back to Perth, Australia, for display in The House of Curiosities, a retail business that the Scruggs operate during the balance of the year. Which symbol should be used to represent the remote server that is used to store data while the Scruggs are traveling?

28) \_\_\_\_\_

- A) 
- B) 
- C) 
- D) 

Answer: D

- Explanation:
- A)
  - B)
  - C)
  - D)

29) A flowchart that depicts the relationships among the input, processing and output of an AIS is

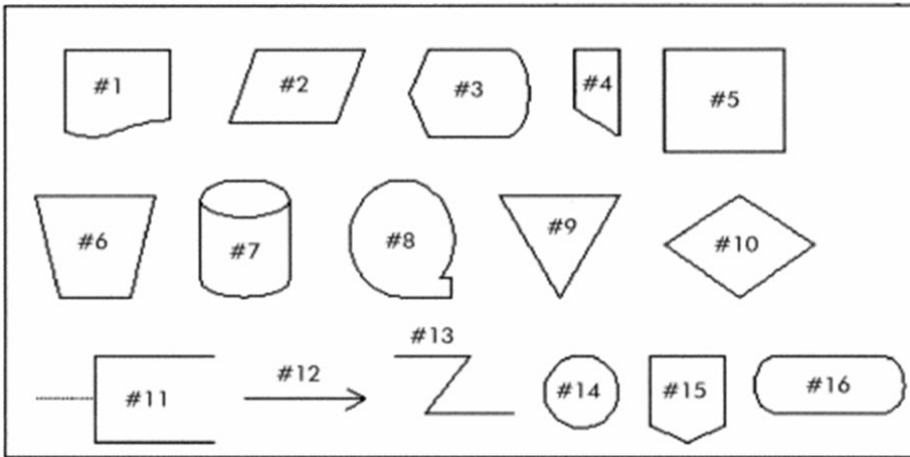
29) \_\_\_\_\_

- A) an internal control flowchart.
- B) a program flowchart.
- C) a document flowchart.
- D) a system flowchart.

Answer: D

- Explanation:
- A)
  - B)
  - C)
  - D)

Use the chart below to answer the following question(s) regarding flowchart symbols.



30) Which symbol would be used in a flowchart to represent a communication link? 30) \_\_\_\_\_  
 A) #14                      B) #15                      C) #12                      D) #13

Answer: D  
 Explanation: A)  
                   B)  
                   C)  
                   D)

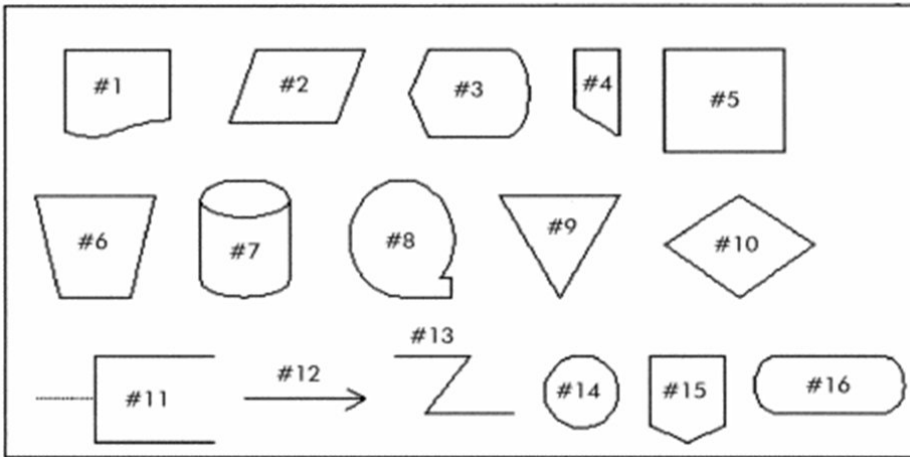
31) In a payroll processing DFD, the 'prepare reports' activity will be represented by \_\_\_\_\_, the 'employee payroll file' will be represented by \_\_\_\_\_, and the 'management' may be represented by \_\_\_\_\_.  
 A) a circle; two horizontal lines; two horizontal lines  
 B) a circle; two horizontal lines; a square  
 C) a square; two horizontal lines; a circle  
 D) a rectangle; a square; a circle

Answer: B  
 Explanation: A)  
                   B)  
                   C)  
                   D)





Use the chart below to answer the following question(s) regarding flowchart symbols.



34) Which symbol would be used in a flowchart to represent a general ledger master file kept on magnetic disk?

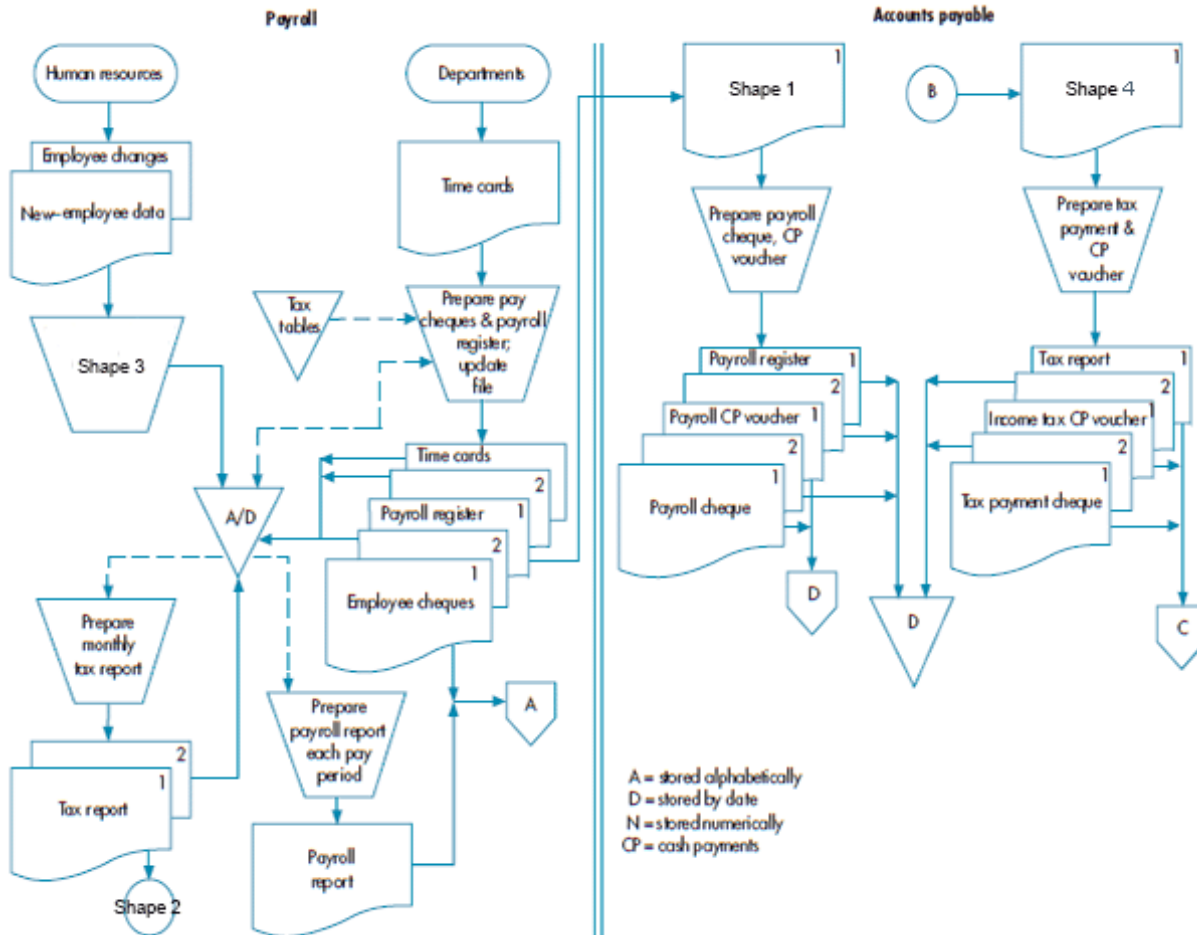
34) \_\_\_\_\_

- A) #8
- B) #7
- C) #2
- D) #5

Answer: B

Explanation: A)  
B)  
C)  
D)

Refer to the diagram below to answer the following question(s).



35) What is the label of Shape 1?

- A) Payroll register
- B) Payroll register, time cards and employee cheques
- C) Employee cheques
- D) Time cards

Answer: A

- Explanation:
- A)
  - B)
  - C)
  - D)

35) \_\_\_\_\_

36) The Union Soup Kitchen is a non-profit organisation that collects, stores, prepares and provides food to the homeless in Canberra, Australia. Donations of food are recorded in a database and a receipt is provided to the donor. When food is used, the database is updated so that it always reflects the amounts and types of food that are available. In a data flow diagram, which type of symbol would be used to represent the flow of data from the donor into the system?

36) \_\_\_\_\_

A)



B)



C)



D)



Answer: C

Explanation: A)  
B)  
C)  
D)

37) A well-planned and drawn level 0 data flow diagram for the expenditure cycle would show which of the following processes?

37) \_\_\_\_\_

A) 1.0 Order Goods; 2.0 Receive and Store Goods; 3.0 Pay for Goods

B) 0.1 Order Goods; 1.1 Receive and Store Goods; 2.1 Pay for Goods

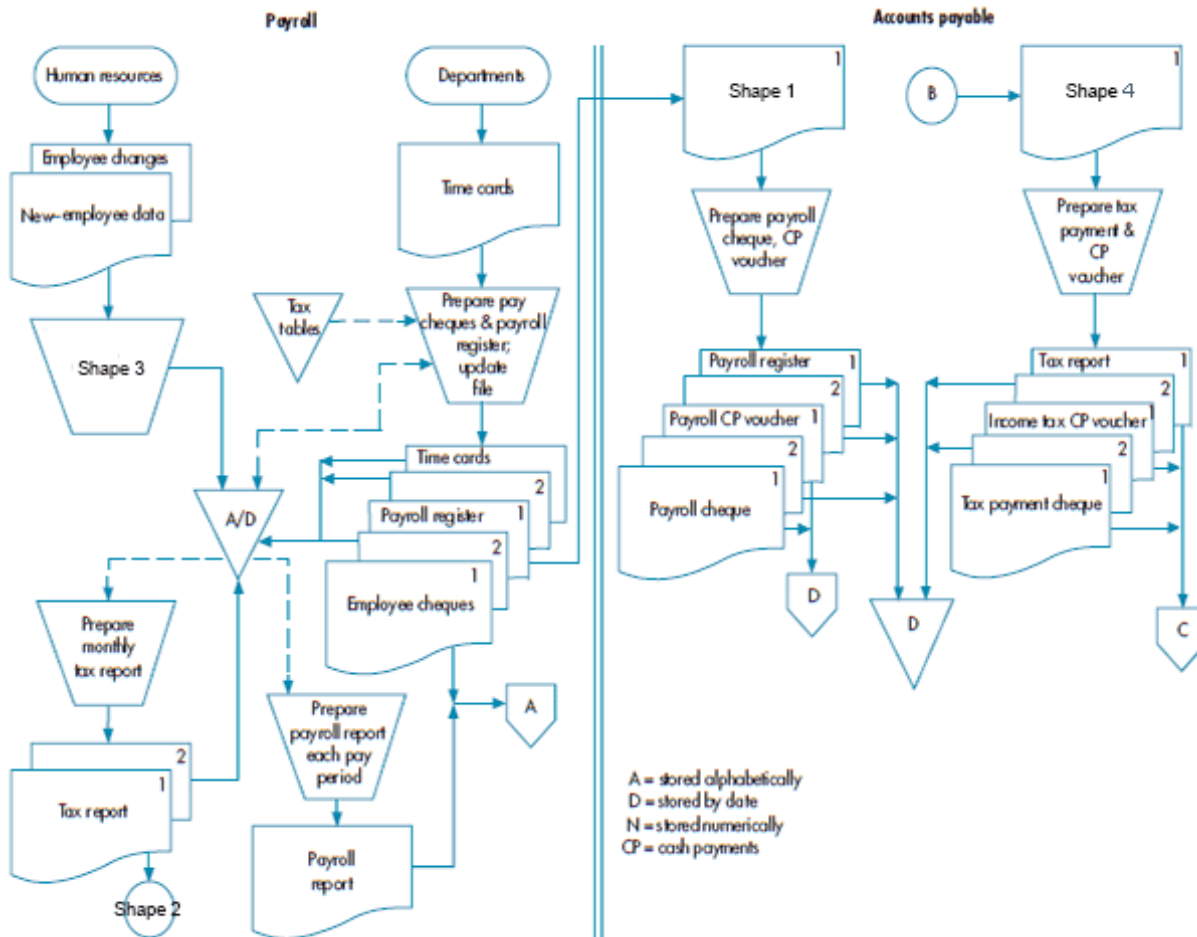
C) 1.0 Order Goods; 1.1 Receive and Store Goods; 1.2 Pay for Goods

D) 0.1 Order Goods; 0.2 Receive and Store Goods; 0.3 Pay for Goods

Answer: A

Explanation: A)  
B)  
C)  
D)

Refer to the diagram below to answer the following question(s).



38) What is the label of Shape 4?

- A) Tax payment cheque
- C) CP voucher

- B) Tax report
- D) None of the above is correct

38) \_\_\_\_\_

Answer: B

- Explanation:
- A)
  - B)
  - C)
  - D)

39) How many on-page connectors are there in the diagram?

- A) Two
- B) Three
- C) Four
- D) Five

39) \_\_\_\_\_

Answer: A

- Explanation:
- A)
  - B)
  - C)
  - D)

40) How many manual operations are there in the diagram? 40) \_\_\_\_\_  
A) Two                                      B) Three                                      C) Four                                      D) Five

Answer: D

Explanation: A)  
                  B)  
                  C)  
                  D)

41) In a data flow diagram of the customer payment process, 'customer' will appear above or in 41) \_\_\_\_\_  
A) two horizontal lines.                                      B) a square.  
C) a circle.    D) none of the above.

Answer: B

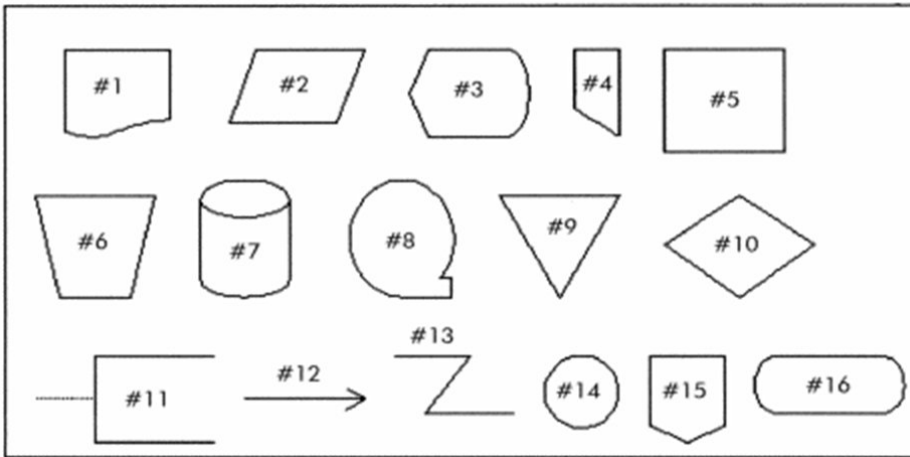
Explanation: A)  
                  B)  
                  C)  
                  D)

42) Which is a *true* statement regarding a document flowchart? 42) \_\_\_\_\_  
A) A document flowchart is particularly useful in analysing the adequacy of internal control procedures.  
B) A document flowchart illustrates the sequence of logical operations performed by a computer.  
C) A document flowchart is not normally used in the systems design process.  
D) A document flowchart should ignore control processes and actions.

Answer: A

Explanation: A)  
                  B)  
                  C)  
                  D)

Use the chart below to answer the following question(s) regarding flowchart symbols.



43) Which symbol would be used in a flowchart to represent the addition of information about a step represented in another symbol on the flowchart? 43) \_\_\_\_\_

- A) #11                      B) #15                      C) #5                      D) #1

Answer: A

- Explanation: A)  
B)  
C)  
D)

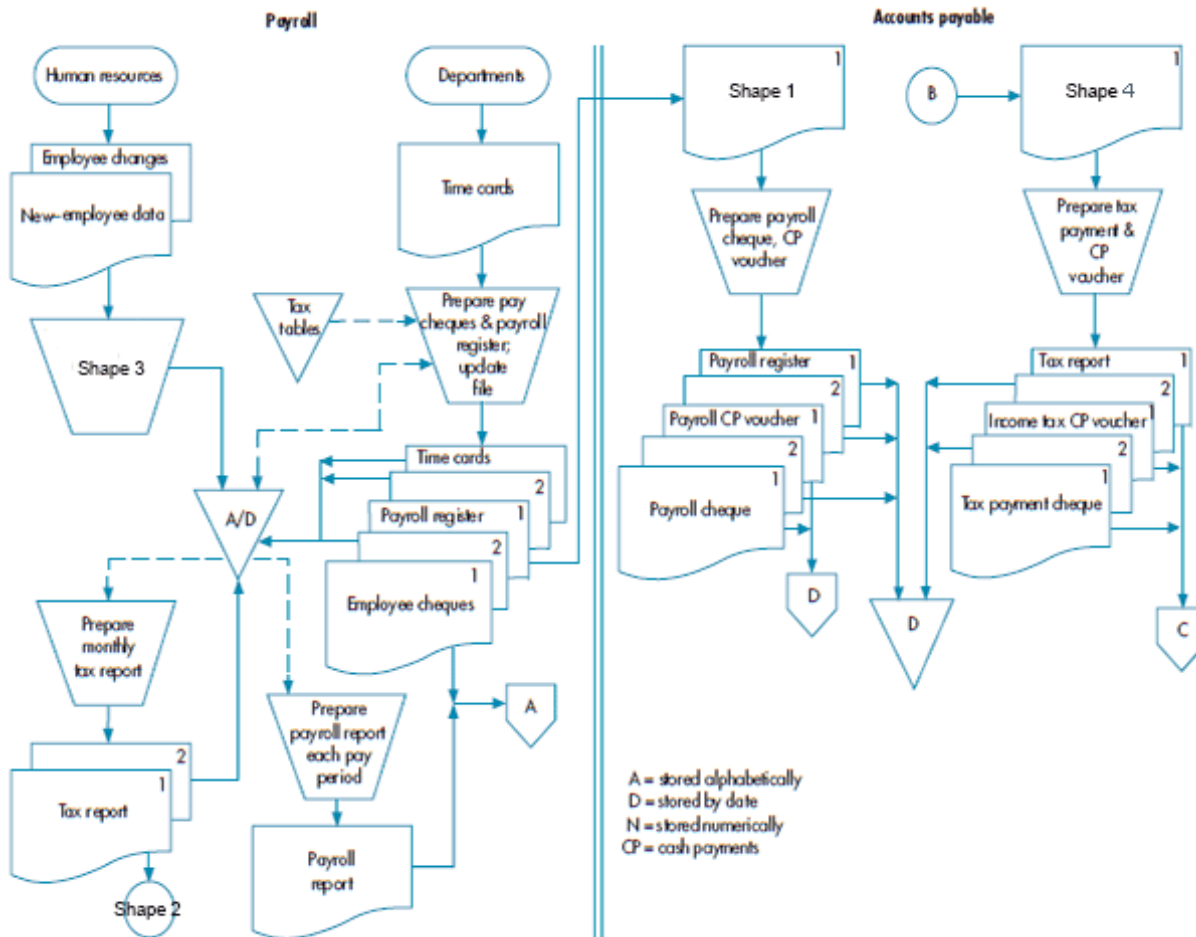
44) Which symbol would be used in a flowchart to represent a beginning, an ending or a connection to another procedure? 44) \_\_\_\_\_

- A) #16                      B) #14                      C) #15                      D) #9

Answer: A

- Explanation: A)  
B)  
C)  
D)

Refer to the diagram below to answer the following question(s).



45) What is the label of Shape 3?

- A) Update employee/payroll file and store forms in file
- B) Update time cards and payroll register, and create employee cheques
- C) Update tax tables using new-employee data
- D) None of the above is correct

45) \_\_\_\_\_

Answer: A

- Explanation:
- A)
  - B)
  - C)
  - D)

46) All of the following are guidelines for preparing data flow diagrams *except*

- A) show the most detail in the highest-level DFD.
- B) uniquely name all data flows.
- C) include all storage files, even if they are only temporary.
- D) sequentially number process bubbles.

46) \_\_\_\_\_

Answer: A

- Explanation:
- A)
  - B)
  - C)
  - D)





49) Which of the following statements regarding the diagram is *not* true?

49) \_\_\_\_\_

- A) The employee changes are only filed in the payroll department.
- B) The payroll report is filed in the payroll department.
- C) A copy of the tax report is sent to another department/function.
- D) The payroll register is filed in the accounts payable department.

Answer: B

- Explanation:
- A)
  - B)
  - C)
  - D)

50) A DFD created at the highest-level or summary view is referred to as a

50) \_\_\_\_\_


- A) overview diagram.
- B) context diagram.
- C) process diagram.
- D) content diagram.

Answer: B

- Explanation:
- A)
  - B)
  - C)
  - D)

51) The Union Soup Kitchen is a non-profit organisation that collects, stores, prepares and provides food to the homeless in Canberra, Australia. Donations of food are recorded in a database and a receipt is provided to the donor. When food is used, the database is updated so that it always reflects the amounts and types of food that are available. In a data flow diagram, which type of symbol would be used to represent the process of updating inventory records in the system?

51) \_\_\_\_\_

- A) 
- B) 
- C) 
- D) 

Answer: B

- Explanation:
- A)
  - B)
  - C)
  - D)

52) Which of the following is *not* a true statement?

52) \_\_\_\_\_

- A) Data flow diagrams and flowcharts are difficult to prepare and revise using software packages.
- B) Documentation tools are used extensively in the systems development process.
- C) Data flow diagrams and flowcharts are the two most frequently used systems development documentation tools.
- D) Documentation tools save an organisation both time and money.

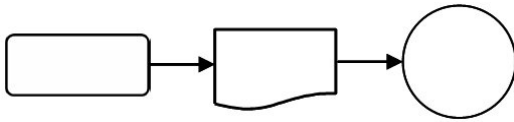
Answer: A

- Explanation:
- A)
  - B)
  - C)
  - D)

53) An employee receives a paycheck prepared in the payroll process. Which one of the following diagrams represents this activity?

53) \_\_\_\_\_

A)



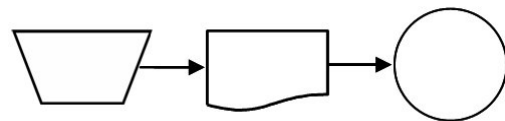
B)



C)



D)



Answer: B

Explanation: A)  
B)  
C)  
D)

54) Chuck and Jill Scruggs travel in their motor home six months of the year and buy unique artifacts. Within hours after the Scruggs make a purchase, they have photographed it, written a description of it, and posted it for sale on eBay with a reservation price. Anything that does not sell within a week is shipped back to Perth, Australia, for display in The House of Curiosities, a retail business that the Scruggs operate during the balance of the year. Which symbol should be used to represent the transfer of data to eBay in a context diagram of this process?

54) \_\_\_\_\_

A)



B)



C)



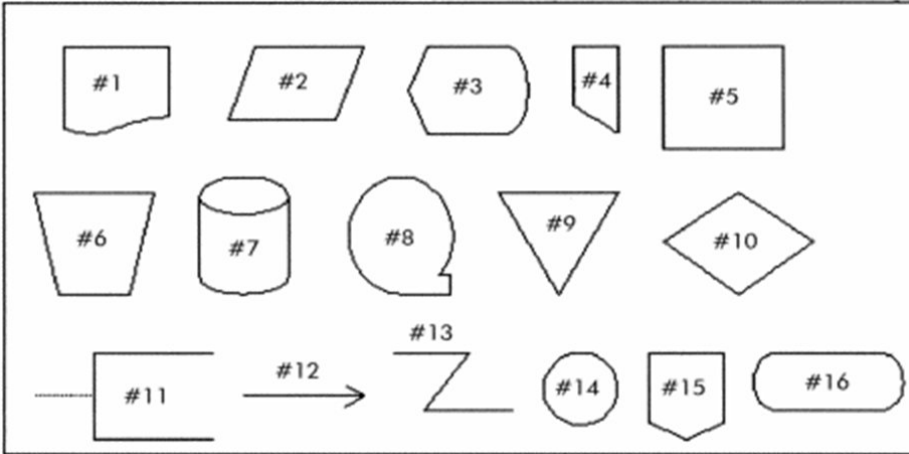
D)



Answer: C

Explanation: A)  
B)  
C)  
D)

Use the chart below to answer the following question(s) regarding flowchart symbols.



55) Which symbol would be used in a flowchart to represent a flow of data or documents? 55) \_\_\_\_\_  
 A) #12                      B) #14                      C) #13                      D) #15

Answer: A  
 Explanation: A)  
                   B)  
                   C)  
                   D)

56) Which is a *true* statement regarding the use of the manual processing symbol in a flowchart? 56) \_\_\_\_\_  
 A) Do not connect two documents when moving from one column to another.  
 B) Each manual processing symbol should have an input and an output.  
 C) Use a manual processing symbol to indicate a document being filed.  
 D) If a document is moved from one column to another, show the document only in the last column.

Answer: B  
 Explanation: A)  
                   B)  
                   C)  
                   D)

57) In general, a data destination will be shown by 57) \_\_\_\_\_  
 A) no arrows, only two horizontal lines.                      B) an arrow pointing in.  
 C) an arrow pointing away.                                      D) arrows pointing both ways.

Answer: B  
 Explanation: A)  
                   B)  
                   C)  
                   D)

58) The Union Soup Kitchen is a non-profit organisation that collects, stores, prepares and provides food to the homeless in Canberra, Australia. Donations of food are recorded in a database and a receipt is provided to the donor. When food is used, the database is updated so that it always reflects the amounts and types of food that are available. In a data flow diagram, which type of symbol would be used to represent donors?

58) \_\_\_\_\_

A)



B)



C)



D)



Answer: A

Explanation: A)  
B)  
C)  
D)

59) Chas Mulligan has been hired by Yardley Security as an assistant to the internal auditor. He has been asked to thoroughly document the existing accounting information system in preparation for making recommendations for improvements. He decides to begin by meeting with the information technology staff in order to develop an understanding of the computer programs used by the system. The documentation tool that he should employ for this purpose is a

59) \_\_\_\_\_

A) data flow diagram.

B) document flowchart.

C) system flowchart.

D) program flowchart.

Answer: D

Explanation: A)  
B)  
C)  
D)

60) In a DFD, a 'data sink' is also known as a

60) \_\_\_\_\_

A) data store.

B) data flow.

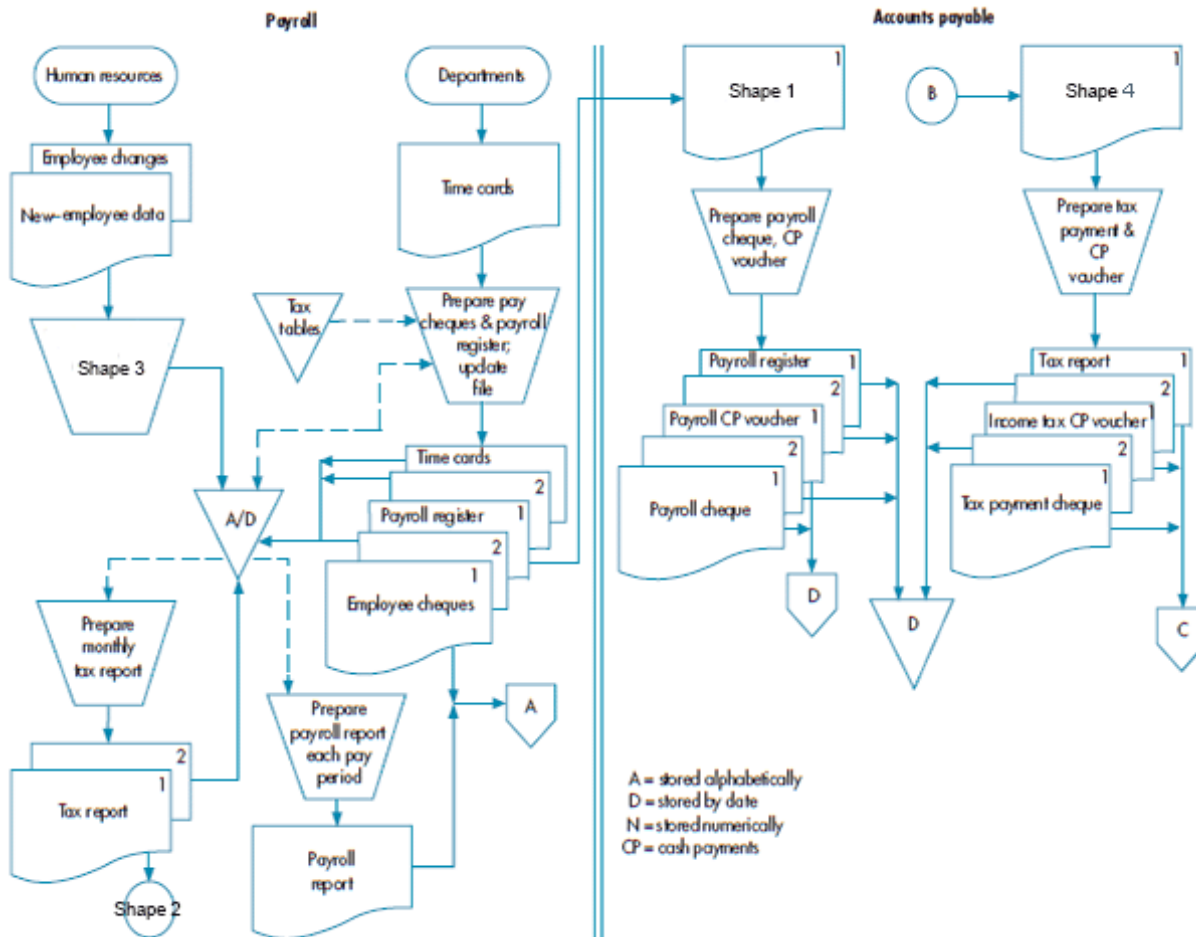
C) transformation process.

D) data destination.

Answer: D

Explanation: A)  
B)  
C)  
D)

Refer to the diagram below to answer the following question(s).



61) How many terminals are there in the diagram?

A) Two

B) Three

C) Four

D) Five

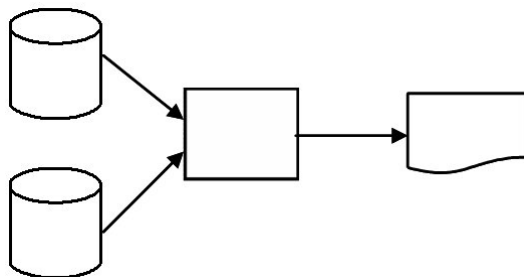
61) \_\_\_\_\_

Answer: A

Explanation: A)  
B)  
C)  
D)

62) A materials requisition order document is prepared from the inventory file and the materials file, both of which are stored on disk. Which one of the following diagrams represents this activity?

A)



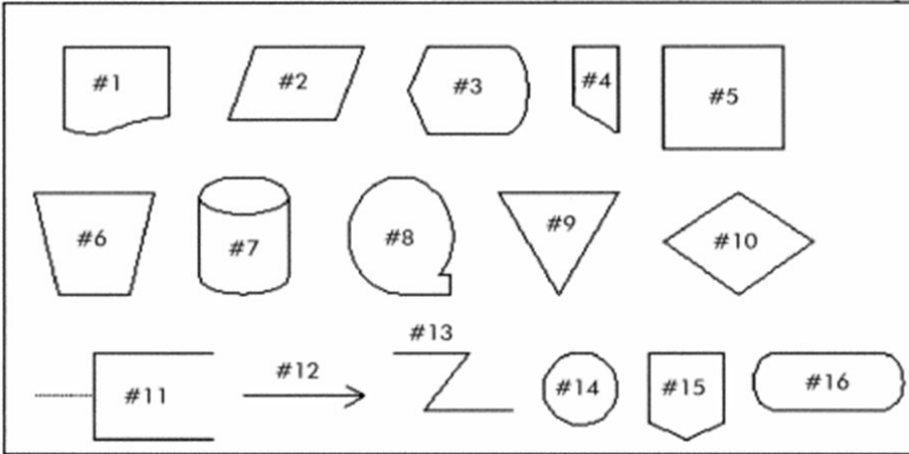
62) \_\_\_\_\_







Use the chart below to answer the following question(s) regarding flowchart symbols.



- 66) Which symbol would be used in a flowchart to represent an invoice sent to a customer?  
 A) #2                      B) #1                      C) #6                      D) #15

66) \_\_\_\_\_

Answer: B  
 Explanation: A)  
                   B)  
                   C)  
                   D)

- 67) Which symbol would be used in a flowchart to represent a connection to another part of the flowchart on the same page?  
 A) #13                      B) #4                      C) #15                      D) #14

67) \_\_\_\_\_

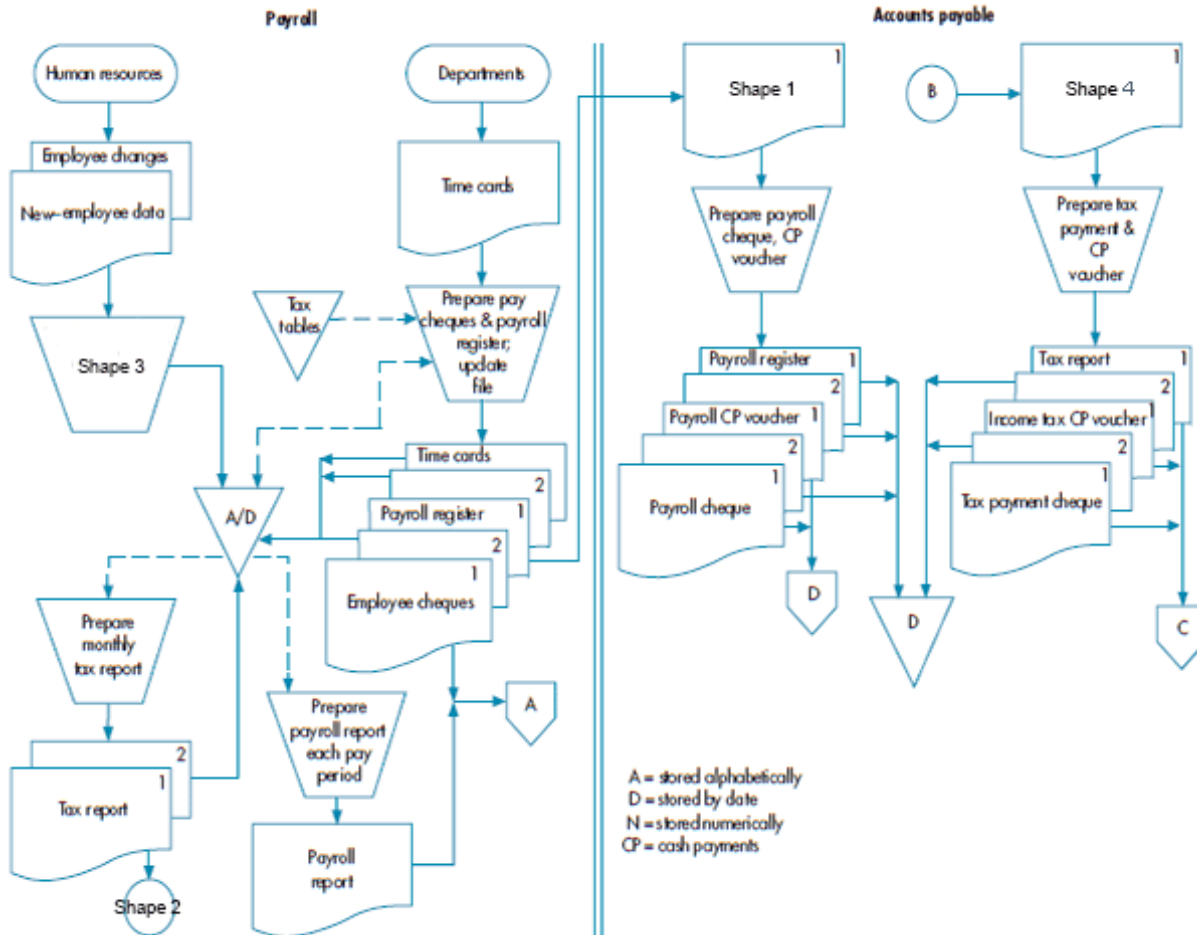
Answer: D  
 Explanation: A)  
                   B)  
                   C)  
                   D)

- 68) Which symbol would be used in a flowchart to represent a connection to another part of the flowchart on a different page?  
 A) #13                      B) #14                      C) #4                      D) #15

68) \_\_\_\_\_

Answer: D  
 Explanation: A)  
                   B)  
                   C)  
                   D)

Refer to the diagram below to answer the following question(s).



69) In the diagram, arrows with solid lines are  
 A) communication link.  
 C) document flow.

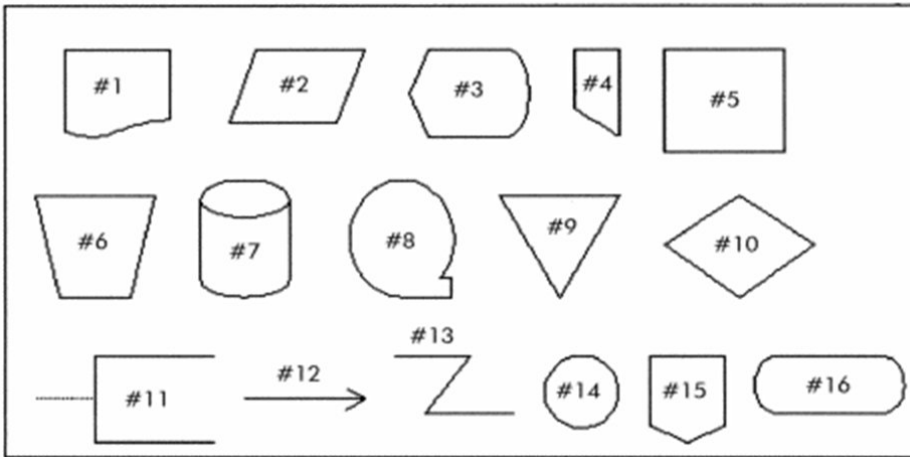
B) data flow.  
 D) information flow.

69) \_\_\_\_\_

Answer: C

Explanation: A)  
 B)  
 C)  
 D)

Use the chart below to answer the following question(s) regarding flowchart symbols.



70) Which symbol would be used in a flowchart to represent a computer process?

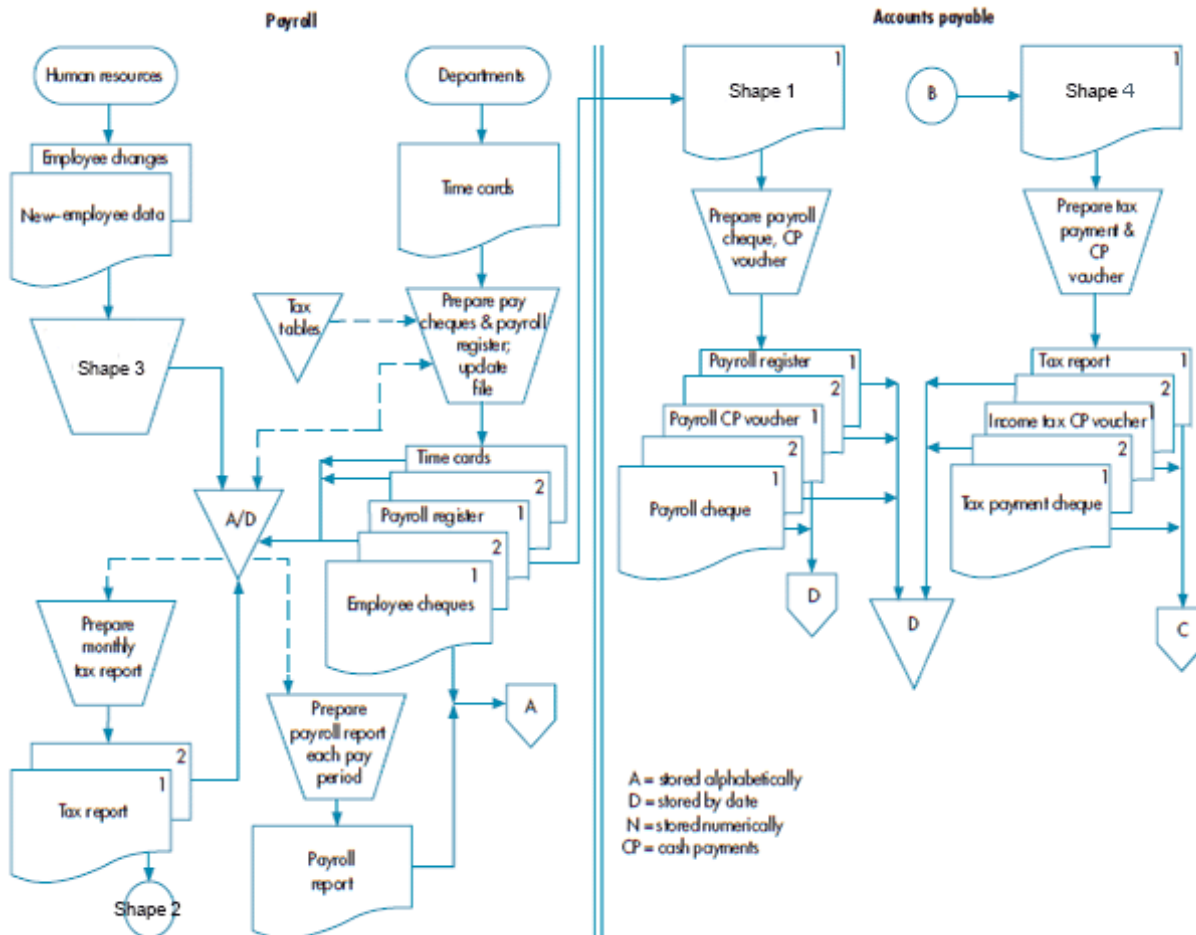
- A) #15
- B) #5
- C) #2
- D) #1

70) \_\_\_\_\_

Answer: B

- Explanation:
- A)
  - B)
  - C)
  - D)

Refer to the diagram below to answer the following question(s).



71) How many files are there in the diagram?

- A) Two                      B) Three                      C) Four                      D) Five

71) \_\_\_\_\_

Answer: B

Explanation: A)  
B)  
C)  
D)

72) Most processes on a DFD can be identified by

- A) data flows both into or out of a process.                      B) data inflows only.  
C) data outflows only.                      D) always being followed by a data store.

72) \_\_\_\_\_

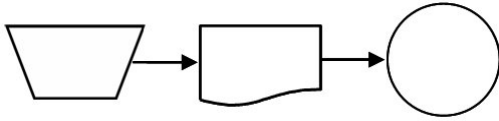
Answer: A

Explanation: A)  
B)  
C)  
D)

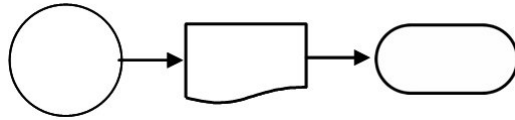
73) A student manually prepares a homework assignment and then turns it in to her teacher. Which one of the following diagrams represents this activity?

73) \_\_\_\_\_

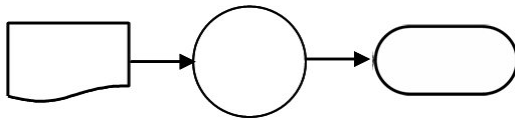
A)



B)



C)



D)



Answer: D

Explanation: A)  
B)  
C)  
D)

74) Which of the following is *true*?

74) \_\_\_\_\_

- A) Paragraph 18 in the Auditing Standard ASA 315 is similar to that of New Zealand's ISA (NZ) 315.
- B) Auditing Standard ASA 315 sets the requirements as to why an auditor needs to understand an organisation's information systems and business processes.
- C) Both A and B are true.
- D) Neither A nor B is true.

Answer: C

Explanation: A)  
B)  
C)  
D)

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

75) Describe the different levels of DFDs.

75) \_\_\_\_\_

Answer: The highest-level or summary view DFD, which shows major inputs/outputs and a single process, is called a context diagram. The DFD itself shows inputs, major processes and outputs; each process in the DFD can be 'exploded' or shown in greater level of detail with the subprocesses and related data flows.

Explanation:

- 76) How is a DFD different from a flowchart? 76) \_\_\_\_\_
- Answer: The purpose of a DFD is to diagram the origins, flow, transformation, storage and destination of data. The purpose a flowchart is to present a graphical description of the flow of documents, relationships among input, processing and output, or the sequence of logical operations in an information system or program. A DFD is limited to basic symbols and lines, and focuses on the flow and use of data. A flowchart will generally be more complex, and more focused on the managerial, AIS or IS aspects of the organisation.
- Explanation:
- 77) Describe a system flowchart. Describe a program flowchart. How are the two interrelated? 77) \_\_\_\_\_
- Answer: Systems flowcharts depict the relationships among the input, processing and output of an AIS. The program flowchart illustrates the sequence of logical operations performed by a computer in executing a program. System flowcharts identify processing areas but do not show how the processing is done. The detailed logic used by the computer to perform the processing is shown on a separate program flowchart.
- Explanation:
- 78) Explain two reasons why it is important to have a working knowledge of DFDs and flowcharting. 78) \_\_\_\_\_
- Answer: First, SOX and Auditing Standard ASA 315 require auditors to evaluate internal control systems. Data flow diagrams and flowcharts are the two most frequently used development and documentation tools used in practice. Second, since systems development is extremely complex, DFDs and flowcharts are tools that are used to create order from chaos and complexity. Third, documentation tools and concepts are covered on exams leading to professional accreditations, such as the CPA and the CA.
- Explanation:
- 79) What does the Auditing Standard ASA 315 require that is relevant to documentation tools? 79) \_\_\_\_\_
- Answer: The Auditing Standard ASA 315 requires that independent auditors understand the automated and manual procedures an entity uses. One of the best ways to gain this understanding is to use the flowcharts to document the internal control system, as weaknesses and strengths are more easily spotted from such graphic portrayals.
- Explanation:
- 80) Discuss the ways in which information professionals interact with documentation tools and the various levels of understanding necessary. 80) \_\_\_\_\_
- Answer: At a minimum, a professional should be able to read documentation. A professional may also be called upon to evaluate internal control system documentation in order to identify control strengths and weaknesses or recommend improvements. A professional may be engaged to prepare documentation, which requires the greatest amount of skill and understanding of a particular system.
- Explanation:

ESSAY. Write your answer in the space provided or on a separate sheet of paper.

81) What is the value of using a context diagram when working with DFDs?

Answer: In order to create a useful DFD, the analyst must determine system boundaries—what is to be included or excluded from the system. A context diagram will help to achieve this goal, since it is a good way to depict the boundaries of the system. The analyst first creates a context diagram by placing a circle in the middle of the diagram. The circle represents the system under consideration. On either side of the circle, boxes are created which represent outside entities the system interacts with directly. Data flow lines are drawn to show the direction of the flow of data. After this pictorial representation has been completed, the analyst can then better assess the boundaries of the system and amount of interaction between the system and outside entities.

82) Discuss the idea of a data flow.

Answer: A data flow is a graphic representation of the flow of data between processes, data stores, and data sources and destinations. A data flow is really a form of communication. When the analyst draws a curved or straight line with an arrow at one end, what is represented is a form of communication among the other elements of the data flow process. Consider, for example, a data source being depicted by a box. The box represents a data source. Data then is sent from the source to a circle, which represents a transformation process. The source of data sends the flow to the transformation process, which will process the data and somehow use the data or turn it into useful information. Note that data flows can represent one or more pieces of datum. Because data flows may have more than one data element, the analyst must determine whether to show one or more lines. Good DFDs and data flow lines in such diagrams eliminate the need for users and analysts to 'infer' what type of information is flowing.

83) Identify at least five important guidelines for drawing a DFD.

Answer: Understand the system. Ignore certain aspects of the system (such as control processes and control actions). Determine system boundaries. Develop a context diagram. Identify data flows. Group data flows. Identify transformation processes. Group transformation processes. Identify all files or data stores. Identify all data sources and destinations. All DFD elements are named. Subdivide the DFD. Give each process a sequential number. Repeat the process. Prepare a final copy.

84) Identify at least five important guidelines for drawing a flowchart.

Answer: Use interviews, questionnaires or narrative descriptions to understand the system before flowcharting it. Identify the different entities to be flowcharted such as departments, job functions or external parties. Also identify documents and information flows along with the activities or processes performed on the data. Organise the flowchart using columns when several entities are involved in the process. Focus on the normal operations and include all relevant procedures and processes. Flowcharts should flow from top to bottom and from left to right. The origin and disposition of documents should be clearly identified by a clear beginning and end in the flowcharts. Use standard flowchart symbols. Multiple documents should be identified by numbers shown in the top right-hand corner of the document symbol. Documents do not directly connect with each other, except when moving from one column to another. Use on-page and off-page connectors to organise flowcharts. Use arrowheads to direct the flow of documents. Clearly label the pages, such as 1 of 3, 2 of 3, and 3 of 3. Documents or reports should be first shown in the column in which they originate and then moved to other columns. Use computer processing symbols to show movement of data in and out of the computer system. Filing operations can be directly shown with one line, no manual processing symbol required. Flowcharting is an iterative process. The first attempt should be a rough draft that is refined with each successive pass. Do not clutter flowcharts; redesign the flowchart as necessary. Review the flowchart for accuracy. On the final copy of the flowchart, the name of the flowchart, date and the preparer's name should be shown.

Answer Key  
Testname: C3

- 1) C
- 2) D
- 3) D
- 4) D
- 5) B
- 6) B
- 7) D
- 8) A
- 9) B
- 10) C
- 11) B
- 12) B
- 13) B
- 14) C
- 15) C
- 16) D
- 17) A
- 18) D
- 19) C
- 20) B
- 21) A
- 22) A
- 23) B
- 24) A
- 25) D
- 26) A
- 27) C
- 28) D
- 29) D
- 30) D
- 31) B
- 32) B
- 33) D
- 34) B
- 35) A
- 36) C
- 37) A
- 38) B
- 39) A
- 40) D
- 41) B
- 42) A
- 43) A
- 44) A
- 45) A
- 46) A
- 47) A
- 48) C
- 49) B
- 50) B



## Answer Key

Testname: C3

- 51) B
- 52) A
- 53) B
- 54) C
- 55) A
- 56) B
- 57) B
- 58) A
- 59) D
- 60) D
- 61) A
- 62) A
- 63) B
- 64) C
- 65) B
- 66) B
- 67) D
- 68) D
- 69) C
- 70) B
- 71) B
- 72) A
- 73) D
- 74) C
- 75) The highest-level or summary view DFD, which shows major inputs/outputs and a single process, is called a context diagram. The DFD itself shows inputs, major processes and outputs; each process in the DFD can be 'exploded' or shown in greater level of detail with the subprocesses and related data flows.
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Answer Key

Testname: C3

- 81) In order to create a useful DFD, the analyst must determine system boundaries—what is to be included or excluded from the system. A context diagram will help to achieve this goal, since it is a good way to depict the boundaries of the system. The analyst first creates a context diagram by placing a circle in the middle of the diagram. The circle represents the system under consideration. On either side of the circle, boxes are created which represent outside entities the system interacts with directly. Data flow lines are drawn to show the direction of the flow of data. After this pictorial representation has been completed, the analyst can then better assess the boundaries of the system and amount of interaction between the system and outside entities.
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- 83) Understand the system. Ignore certain aspects of the system (such as control processes and control actions). Determine system boundaries. Develop a context diagram. Identify data flows. Group data flows. Identify transformation processes. Group transformation processes. Identify all files or data stores. Identify all data sources and destinations. All DFD elements are named. Subdivide the DFD. Give each process a sequential number. Repeat the process. Prepare a final copy.
- 84) Use interviews, questionnaires or narrative descriptions to understand the system before flowcharting it. Identify the different entities to be flowcharted such as departments, job functions or external parties. Also identify documents and information flows along with the activities or processes performed on the data. Organise the flowchart using columns when several entities are involved in the process. Focus on the normal operations and include all relevant procedures and processes. Flowcharts should flow from top to bottom and from left to right. The origin and disposition of documents should be clearly identified by a clear beginning and end in the flowcharts. Use standard flowchart symbols. Multiple documents should be identified by numbers shown in the top right-hand corner of the document symbol. Documents do not directly connect with each other, except when moving from one column to another. Use on-page and off-page connectors to organise flowcharts. Use arrowheads to direct the flow of documents. Clearly label the pages, such as 1 of 3, 2 of 3, and 3 of 3. Documents or reports should be first shown in the column in which they originate and then moved to other columns. Use computer processing symbols to show movement of data in and out of the computer system. Filing operations can be directly shown with one line, no manual processing symbol required. Flowcharting is an iterative process. The first attempt should be a rough draft that is refined with each successive pass. Do not clutter flowcharts; redesign the flowchart as necessary. Review the flowchart for accuracy. On the final copy of the flowchart, the name of the flowchart, date and the preparer's name should be shown.