

Name_____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) John has set up a business that sells oil paintings. He has hired five employees. The following lists the duties of each of the five employees: 1) _____

Ting: Manages the painting process and paints most of the oil paintings.

Derek: Sources canvas, oil, and paint from suppliers.

Fiona: Takes calls from customers who have post-sales issues.

Phoebe: Arranges delivery of completed oil paintings to customers.

Marcus: Provide customers with professional advice to help customers choosing a painting that suits their budget and furnishing style.

Which of the following functions in the value chain is Marcus performing?

- A) Outbound logistics
- B) Service
- C) Inbound logistics
- D) Marketing and sales
- E) Operations

Answer: D

Explanation: A)
B)
C)
D)
E)

- 2) Inventory information is provided in real time by a firm's accounting information system. The accuracy of this information is questionable, however, since the production manager often reports stock outs of components that the system indicates are in stock. Which of the following characteristics of useful information is absent in the situation described above? 2) _____

- A) Timely
- B) Complete
- C) Verifiable
- D) Accessible
- E) Reliable
- F) Understandable
- G) Relevant

Answer: E

Explanation: A)
B)
C)
D)
E)
F)
G)

3) Which of the following statements is *false*?

3) _____

- A) A service company does not have an inventory system.
- B) Every organisation should implement every transaction cycle module.
- C) Retail stores do not have a production cycle.
- D) Financial institutions have instalment-loan cycles.

Answer: B

Explanation: A)
B)
C)
D)

4) The value chain concept is composed of two types of activities known as

4) _____

- A) primary and secondary.
- B) technology and support.
- C) support and value.
- D) primary and support.

Answer: D

Explanation: A)
B)
C)
D)

5) John has set up a business that sells oil paintings. He has hired five employees. The following lists the duties of each of the five employees:

5) _____

Ting: Manages the painting process and paints most of the oil paintings.

Derek: Sources canvas, oil, and paint from suppliers.

Fiona: Takes calls from customers who have post-sales issues.

Phoebe: Arranges delivery of completed oil paintings to customers.

Marcus: Provide customers with professional advice to help customers choosing a painting that suits their budget and furnishing style.

Which of the following functions in the value chain is Ting performing?

- A) Inbound logistics
- B) Service
- C) Outbound logistics
- D) Operations
- E) Marketing and sales

Answer: D

Explanation: A)
B)
C)
D)
E)

6) Information is

6) _____

- A) raw facts about transactions.
- B) potentially useful facts when processed in a timely manner.
- C) basically the same as data.
- D) data that has been organised and processed so that it's meaningful.

Answer: D

Explanation: A)
B)
C)
D)

7) One activity within the value chain is research and development. This activity can be identified as a 7) _____

- A) purchasing activity.
- B) firm infrastructure activity.
- C) technology activity.
- D) human resources activity.

Answer: C

Explanation: A)
B)
C)
D)

8) In 2003, Custer Manufacturing implemented a web-based information system that allows all 8) _____

employees to access mission-critical information. The intention was to increase production efficiency. Unfortunately, it had the opposite effect, as deliveries fell behind schedule and costs increased. Jeff Akspen, the director of information technology services, asked Joyce Jenkins to come in and talk with him about the system. Joyce is a long-time employee of Custer, and her opinion is valued by her peers and by her supervisor.

'So, Joyce, how's it going down there in the shop?'

'Not so good, Jeff. Used to be we got a weekly pick list so we knew how to plan production. Now, we got that computer system. Most of us can't figure out how to use it to do our jobs. Is there some way to print out a pick list?'

Jeff thought for a while before responding. 'Well, Joyce, to tell you the truth, I'm not so sure how to do it myself, but there must be a way. We'll bring in the consultants that helped us build the system. Maybe they can help.'

Which of the following characteristics of useful information is absent in the situation described above?

- A) Verifiable
- B) Timely
- C) Relevant
- D) Accessible
- E) Reliable
- F) Complete
- G) Understandable

Answer: G

Explanation: A)
B)
C)
D)
E)
F)
G)

9) Which of the following is *true*?

9) _____

- A) Metcalfe's Law is about the rate at which computer power is accelerating.
- B) Moore's Law is often cited as a description of the rapid growth of the World Wide Web.
- C) The impact of technological change is best described by Metcalfe's Law.
- D) Together, Moore's Law and Metcalfe's Law can be used to explain the rising wave of IT that we are riding through the 21st century.

Answer: C

Explanation: A)
B)
C)
D)

10) When transactions, assets, liabilities and equities processed in the system are measured accurately, the information is said to be

10) _____

- A) accurate.
- B) true and fair.
- C) measurable.
- D) reliable.

Answer: C

Explanation: A)
B)
C)
D)

11) Information that is free from error or bias and accurately represents the events or activities of the organisation is

11) _____

- A) timely.
- B) relevant.
- C) verifiable.
- D) reliable.

Answer: D

Explanation: A)
B)
C)
D)

12) The process of creating value for customers is the result of nine activities that form a

12) _____

- A) profitable operation.
- B) successful business.
- C) support system.
- D) value chain.

Answer: D

Explanation: A)
B)
C)
D)

13) In value chain analysis, what is the activity of arranging the delivery of products to customers called?

13) _____

- A) Shipping
- B) Delivery
- C) Outbound logistics
- D) Inbound logistics

Answer: C

Explanation: A)
B)
C)
D)

- 14) The value of information can best be defined as 14) _____
A) the extent to which it maximises the value chain.
B) how relevant it is.
C) how useful it is to decision-makers.
D) the benefit produced by the information minus the cost of producing it.

Answer: D

Explanation: A)
B)
C)
D)

- 15) A good example of how an AIS is used to share knowledge within an organisation is 15) _____
A) the use of a corporate database to help staff identify the relevant experts who can help with a particular client.
B) the monitoring of production equipment to watch for defects.
C) the use of point-of-sale data to determine hot-selling items.
D) the use of laptop computers to access a network for messaging worldwide.

Answer: A

Explanation: A)
B)
C)
D)

- 16) Paying payroll taxes is part of which transaction cycle? 16) _____
A) Financing B) Revenue
C) Human resources/payroll D) Expenditure

Answer: C

Explanation: A)
B)
C)
D)

- 17) When two knowledgeable people acting independently each produce the same information, this information is said to be 17) _____
A) verifiable. B) relevant. C) complete. D) reliable.

Answer: A

Explanation: A)
B)
C)
D)

- 18) An example of inbound logistics would consist of 18) _____
- A) the activities that consist of receiving, storing and distributing the materials used as inputs by the organisation to create goods and/or services it sells.
 - B) the activities that provide post-sale support to customers.
 - C) the activities that help customers to buy the organisation's products or services.
 - D) the activities that transform inputs into final products or services.
- Answer: A
- Explanation: A)
B)
C)
D)
- 19) To make effective decisions, organisations must 19) _____
- A) decide how to gather and process data needed to produce information.
 - B) decide what information they need to make decisions.
 - C) decide what decisions they need to make.
 - D) all of the above are correct.
- Answer: D
- Explanation: A)
B)
C)
D)
- 20) Kiama, New South Wales, is a popular tourist destination. During the winter months, the population dwindles to a meagre few, but when summer comes, the size of the town surges. Chuck Hewitt is the town sanitation engineer. When the size of the town surges, so do his responsibilities. Among them is management of the sewage processing volume. In an interview with the local paper, Chuck complained that a report on tourist population that he uses to adjust processing volume refers to data that was collected five days ago and it takes him a week to make adjustments. Which of the following characteristics of useful information is absent in the situation described above? 20) _____
- A) Understandable
 - B) Relevant
 - C) Timely
 - D) Complete
 - E) Verifiable
 - F) Reliable
 - G) Accessible
- Answer: C
- Explanation: A)
B)
C)
D)
E)
F)
G)

21) John has set up a business that sells oil paintings. He has hired five employees. The following lists the duties of each of the five employees: 21) _____

Ting: Manages the painting process and paints most of the oil paintings.

Derek: Sources canvas, oil, and paint from suppliers.

Fiona: Takes calls from customers who have post-sales issues.

Phoebe: Arranges delivery of completed oil paintings to customers.

Marcus: Provide customers with professional advice to help customers choosing a painting that suits their budget and furnishing style.

Which of the following functions in the value chain is Phoebe performing?

- A) Inbound logistics
- B) Operations
- C) Marketing and sales
- D) Outbound logistics
- E) Service

Answer: D

Explanation: A)
B)
C)
D)
E)

22) Who of the following would be *least* likely to be involved in the revenue cycle? 22) _____

- A) Customer
- B) Credit manager
- C) Accounts payable clerk
- D) Cashier

Answer: C

Explanation: A)
B)
C)
D)

23) A set of related, coordinated and structured activities and tasks that are performed by a person, or by a computer or a machine, and help accomplish a specific organisational goal is referred to as 23) _____

- A) a business process.
- B) a task flow.
- C) an accounting information system.
- D) business procedures.

Answer: A

Explanation: A)
B)
C)
D)

24) Transaction cycles can be summarised on a high level as 'give-get' transactions. An example of 'give-get' in the revenue cycle would be 24) _____

- A) give cash, get labour.
- B) give goods, get cash.
- C) give cash, get cash.
- D) give cash, get goods.

Answer: B

Explanation: A)
B)
C)
D)

25) Michael called the home office from Perth. 'You have got to help me. I am about to close a great sale, but I have to be able to guarantee delivery by the fourteenth. I can't get through to the company website to verify delivery!' 25) _____

'Thank you for calling. Your call is very important to us. However, all of our lines are currently in use. Please try again later.'

Which of the following characteristics of useful information is absent in the situation described above?

- A) Relevant
- B) Verifiable
- C) Understandable
- D) Complete
- E) Accessible
- F) Timely
- G) Reliable

Answer: E

Explanation: A)
B)
C)
D)
E)
F)
G)

26) When information is available to users when they need it and in a format they can use is, this information is said to be 26) _____

- A) real-time.
- B) understandable.
- C) accessible.
- D) convenient.

Answer: C

Explanation: A)
B)
C)
D)

27) A change in the AIS that makes information more easily accessible and widely available within an organisation is most likely to first influence the 27) _____

- A) production activity.
- B) customer base.
- C) external financial statement users.
- D) organisational culture.

Answer: D

Explanation: A)
B)
C)
D)

- 28) An AIS provides value by 28) _____
A) sharing knowledge.
B) improving the quality and reducing costs of products or services.
C) creating new products.
D) both A and B.

Answer: D

Explanation: A)
B)
C)
D)

- 29) The transaction cycle that includes the events of hiring employees and paying them is known as the 29) _____
A) financing cycle. B) revenue cycle.
C) expenditure cycle. D) human resources management cycle.

Answer: D

Explanation: A)
B)
C)
D)

- 30) Rolleigh Corp. identifies growth by new product development and product improvement as the 30) _____
number one corporate goal. An employee at Wrigley's, one of Rolleigh's wholly-owned subsidiaries, developed an innovation to an existing product that would directly address a shortcoming in the similar product offered by Rolleigh's closest competitor. Wrigley's current Return on Investment (ROI) is 15%, but the product innovation is expected to generate ROI of only 12%. Awarding bonuses to subsidiary managers based on ROI could result in
A) information overload. B) goal congruence.
C) decreased value of information. D) goal conflict.

Answer: D

Explanation: A)
B)
C)
D)

- 31) The force behind the push of globalisation is 31) _____
A) market needs. B) technology.
C) deregulation. D) all of the above are correct.

Answer: B

Explanation: A)
B)
C)
D)

32) The business owners obtain financing from outside investors, which results in an inflow of cash into the company. This transaction is considered to be part of which cycle?

32)

- A) Financing cycle
B) Payroll cycle
C) Revenue cycle
D) Production cycle

Answer: A

Explanation: A)
B)
C)
D)

33) Which of the following is a *true* statement?

33) _____

- A) AIS directly influences information technology, but not business strategy.
B) Organisational culture directly influences business strategy, but not AIS.
C) Information technology directly influences organisational culture, but not business strategy.
D) Business strategy directly influences AIS, but not information technology.

Answer: D

Explanation: A)
B)
C)
D)

34) Which of the following statements below shows the contrast between data and information?

34)

- A) Data is more useful in decision-making than information.
B) Data and information are the same.
C) Data is the output of an AIS.
D) Information is the primary output of an AIS.

Answer: D

Explanation: A)
B)
C)
D)

35) Which of the following statements is *not* true?

35)

- A) Almost all of Australia's communications and banking companies have outsourced their customer relations to offshore call centres.
- B) An enterprise resource planning (ERP) system can integrate all aspects of an organisation's activities into one system, including its traditional AIS.
- C) Describing the change of pace in technology as 'rapid' is fair.
- D) Outsourcing and downsizing are two organisational responses to business pressures.

Answer: C

Explanation: A)
B)
C)
D)

36) In Chapter 1, Figure 1.9 shows the factors that influence the design of AIS. The diagram shows a bi-directional arrow between the organisational culture and the AIS. The reason for this two-way interchange between organisational culture and AIS is

36) _____

- A) the AIS impacts the organisation's key strategies.
- B) because the organisation's culture influences the AIS, and likewise the AIS influences the organisation's culture by controlling the flow of information within the organisation.
- C) due to the transfer of managers between the two corporate elements.
- D) that the AIS should not influence the values of the organisational culture.

Answer: B

Explanation: A)
B)
C)
D)

37) Which of the following is *not* one of the major business processes that form the subsystems of the total accounting information system?

37) _____

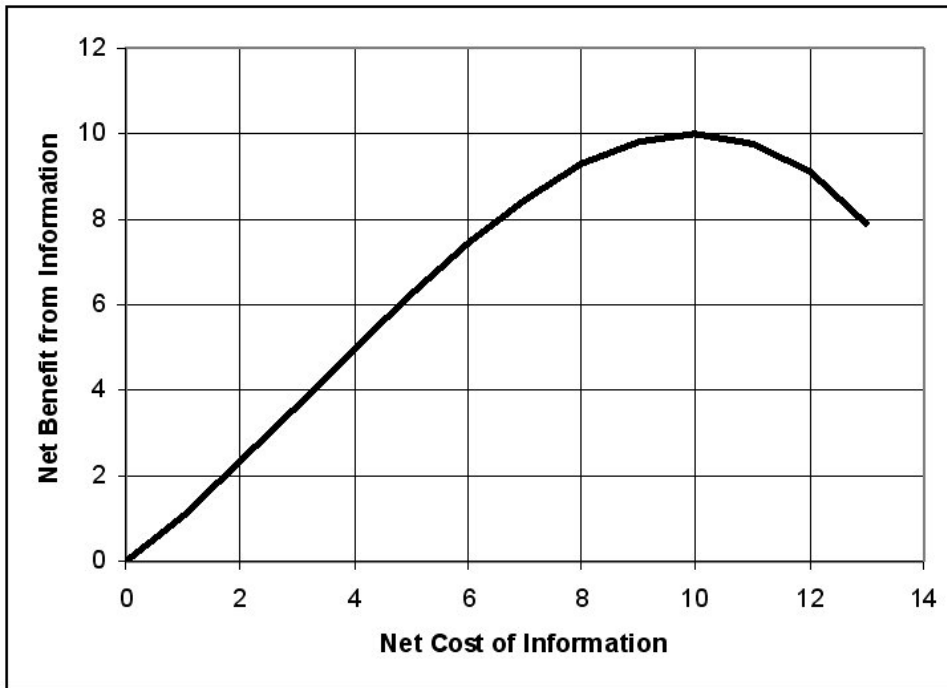
- A) Human resources management cycle
- B) Revenue and expenditure cycle
- C) Production and financing cycle
- D) Budgeting cycle

Answer: D

Explanation: A)
B)
C)
D)

38)

38) _____



Refer to the chart above. At what point, measured in terms of the net cost of information, does information overload begin?

- A) 5 B) 10 C) 12 D) 0

Answer: B

Explanation: A)
B)
C)
D)

39) Many modern accounting software packages offer separate transaction cycle modules. What is the reason for this?

39) _____

- A) Every organisation does not need to implement all of the available transaction cycle modules.
B) Most businesses do not need the revenue cycle module as part of their AIS.
C) A properly designed AIS does not use the concept of separate business transaction cycles to process transactions.
D) The nature of a given transaction cycle is the same irrespective of the type of organisation.

Answer: A

Explanation: A)
B)
C)
D)

40) Information that reduces uncertainty, improves decision-makers' ability to make predictions, or confirms or corrects their prior expectations, is said to be

40) _____

- A) complete. B) reliable. C) relevant. D) timely.

Answer: C

Explanation: A)
B)
C)
D)

- 41) Information that does not omit important aspects of the underlying events or activities that it measures is 41) _____
A) relevant. B) accessible. C) complete. D) timely.

Answer: C

Explanation: A)
B)
C)
D)

- 42) The AIS must include controls to 42) _____
A) safeguard an organisation's assets. B) safeguard an organisation's data.
C) safeguard an organisation's efficiency. D) both A and C.

Answer: D

Explanation: A)
B)
C)
D)

- 43) John has set up a business that sells oil paintings. He has hired five employees. The following lists the duties of each of the five employees: 43) _____

Ting: Manages the painting process and paints most of the oil paintings.

Derek: Sources canvas, oil, and paint from suppliers.

Fiona: Takes calls from customers who have post-sales issues.

Phoebe: Arranges delivery of completed oil paintings to customers.

Marcus: Provide customers with professional advice to help customers choosing a painting that suits their budget and furnishing style.

Which of the following functions in the value chain is Fiona performing?

- A) Inbound logistics
- B) Operations
- C) Service
- D) Marketing and sales
- E) Outbound logistics

Answer: C

Explanation: A)
B)
C)
D)
E)

- 44) An accounting information system must be able to perform which of the following tasks? 44) _____
A) Collect transaction data B) Provide adequate controls
C) Process transaction data D) All of the above

Answer: D

Explanation: A)
B)
C)
D)

45) Which of the following tradeoffs between characteristics of useful information is *least* objectionable?

45) _____

- A) Irrelevant information received in an understandable format.
- B) Unreliable information easily accessible.
- C) Incomplete information received on a timely basis.
- D) Verifiable information received in an unreadable format.

Answer: C

Explanation: A)
B)
C)
D)

46) John has set up a business that sells oil paintings. He has hired five employees. The following lists the duties of each of the five employees:

46) _____

Ting: Manages the painting process and paints most of the oil paintings.

Derek: Sources canvas, oil, and paint from suppliers.

Fiona: Takes calls from customers who have post-sales issues.

Phoebe: Arranges delivery of completed oil paintings to customers.

Marcus: Provide customers with professional advice to help customers choosing a painting that suits their budget and furnishing style.

Which of the following functions in the value chain is Derek performing?

- A) Operations
- B) Outbound logistics
- C) Service
- D) Inbound logistics
- E) Marketing and sales

Answer: D

Explanation: A)
B)
C)
D)
E)

47) One group that relies on both the adequate collection and transformation of data for decision-making purposes for an organisation is

47) _____

- A) management.
- B) the government.
- C) competitors.
- D) interested outsiders.

Answer: A

Explanation: A)
B)
C)
D)

48) Which of the following is *not* an example of how an AIS adds value to an organisation? 48) _____

- A) A customer service representative can find a customer's account data, purchase history, payment history and salesperson's name while on the phone with the customer, to resolve issues quickly.
- B) All employees at a hospital can access and update patient records from any computer terminal in the hospital.
- C) Client tax files are encrypted and made available on the CPA firm's network to any employee with an access code.
- D) Suppliers are able to access sales data directly from the point-of-sale system of a retailer and deliver inventory automatically when needed.

Answer: B

Explanation: A)
B)
C)
D)

49) When the AIS provides information in a timely and accurate manner, it stands as an example of 49) _____

- A) improved decision-making.
- B) improving efficiency.
- C) improving the quality and reducing the costs of products or services.
- D) all of the above.

Answer: D

Explanation: A)
B)
C)
D)

50) Which of the following is a primary activity in the value chain? 50) _____

- A) Technology
- B) Marketing and sales
- C) Purchasing
- D) Infrastructure

Answer: B

Explanation: A)
B)
C)
D)

51) Which of the following can result in a decline in decision-making quality and an increase in the cost of providing that information? 51) _____

- A) Information overload only
- B) Data overload only
- C) Both A and B
- D) Neither A nor B

Answer: C

Explanation: A)
B)
C)
D)

- 52) Transaction cycles can be summarised on a high level as 'give-get' transactions. An example of 'give-get' in the expenditure cycle would be 52) _____
- A) give cash, get goods. B) give cash, get labour.
C) give cash, get cash. D) give goods, get cash.
- Answer: A
Explanation: A)
B)
C)
D)
- 53) Accounting information systems play major roles in managerial decision-making by 53) _____
- A) providing a basis for choosing among alternative actions.
B) identifying situations requiring management action.
C) reducing uncertainty.
D) all of the above.
- Answer: D
Explanation: A)
B)
C)
D)
- 54) An accounting information system (AIS) processes _____ to provide users with _____. 54) _____
- A) data; benefits B) information; data
C) data; information D) data; transactions
- Answer: C
Explanation: A)
B)
C)
D)
- 55) Joe Marzetti has been the controller of Fairview Tyres for 25 years. Ownership of the firm recently changed hands and the new owners are conducting an audit of the financial records. The audit has been unable to reproduce financial reports that were prepared by Marzetti. While there is no evidence of wrongdoing, the auditors are concerned that the discrepancies might contribute to poor decisions. Which of the following characteristics of useful information is absent in the situation described above? 55) _____
- A) Reliable
B) Verifiable
C) Understandable
D) Timely
E) Relevant
F) Complete
G) Accessible
- Answer: B
Explanation: A)
B)
C)
D)
E)
F)
G)

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

56) Identify the components of an accounting information system.

56) _____

Answer: There are six components of an AIS:

1. people who use a system
2. procedures and instructions used to collect, process and store data
3. data about an organisation and its business activities
4. software used to process data
5. IT infrastructure, including computers, external devices (e.g. printers, external hard drives) and network communications devices used in an AIS
6. internal controls and security measures that safeguard AIS data.

Explanation:

57) Define an accounting information system.

57) _____

Answer: An AIS is a system that collects, records, stores and processes data to produce information for decision-makers.

Explanation:

58) How does a well-designed AIS add value to an organisation?

58) _____

Answer: A well-designed AIS can add value to an organisation by:

1. improving the quality and reducing costs of products or services
2. improving efficiency
3. sharing knowledge
4. improving efficiency and effectiveness of its supply chain
5. improving the internal control structure
6. improving decision-making.

Explanation:

59) How can a well-designed AIS improve the efficiency and effectiveness of a company's value chain?

59) _____

Answer: The AIS can be designed to allow customers direct access to a company's inventory and sales order entry systems. This allows the customer to do more of the work that traditionally has been done by sales, marketing and administration personnel. This allows for faster ordering and cuts the company's labour costs. It may also have the effect of allowing the customer more control in a purchase transaction that may bring more satisfaction and value to the customer.

Explanation:

60) Why are ethical issues of vital importance to AIS?

60) _____

Answer: Computer technologies are revolutionising how organisations do business and disseminate information. But this proliferation of computers and information systems are creating ethical dilemmas. New issues need to be faced in relation to rights and responsibilities in the use of information. However, the law seems to lag behind the speed at which technologies are implemented and information is disseminated. This makes it difficult to capture, in standards and codes of conduct, what the right thing to do is. Thus employees may not have good guidelines on what is appropriate behaviour in their use of company computer resources.

There are moral choices to be made by staff in relation to data that is gathered from customers and suppliers as well as employees. These revolve around issues of control and access to private and confidential data, and misuse of data stored in large databases and data warehouses. These concerns are heightened when that type of data leaves an organisation across networks and when people other than employees have access to data, such as suppliers. With the use of the internet and cloud-based storage of data, accountants are faced with new challenges about control and access.

Another issue that produces ethical dilemmas is the proliferation of computers within an organisation. Everyone in a firm has a PC or terminal on their desk. Most business activities and processes are conducted through a digital device whether hand-held or on a desktop. This may mean that sometimes staff may use the technology for other than business purposes.

All of these suggest that ethical issues are of vital importance to AIS.

Explanation:

61) How can an AIS help improve business decision-making?

61) _____

Answer: An AIS can help improve decision-making in several ways:

- a. it can identify situations requiring management action
- b. it can reduce uncertainty and thereby provide a basis for choosing among alternative actions
- c. it can store information about results of previous decisions, which provides valuable feedback that can be used to improve future decisions
- d. it can provide accurate information in a timely manner
- e. it analyses sales data to discover items that are purchased together, and it uses such information to improve the layout of merchandise to encourage additional sales of related items.

Explanation:

62) Why have accounting software packages been designed with separate transaction modules? 62) _____

Answer: Since every organisation does not necessarily use all of the transaction cycles in its operations, it is to the advantage of the organisation to be able to 'pick and choose' from among various software modules that track and record different transaction cycles. For example, a law firm would have no need to implement a production cycle module. Also, the nature of a transaction cycle varies across the broad spectrum of business organisations. Again, a law firm would have a revenue cycle, but it would not involve the purchase, receipt and payment for products or merchandise; likewise a retail store chain may not sell any consulting services to its customers.

Explanation:

63) Define data, information and how the value of information is determined. 63) _____

Answer: Data: facts that are collected, entered, recorded, stored and processed by an AIS.
Information: data that has been organised and processed and is meaningful to its users. Such information is accessible, relevant, timely, reliable, verifiable, complete and understandable. Information is of value when the benefits received from using or acting upon it outweighs the cost to produce the information.

Explanation:

64) Define the concept of a system. 64) _____

Answer: A system is a set of two or more interrelated components that interact to achieve a goal.

Explanation:

65) What is the purpose behind the five primary activities in the value chain? 65) _____

Answer: The goal of the five primary activities in the value chain is to facilitate the business in providing value to its customers. The five primary activities allow the business to create, market and deliver its products and services to its customers, as well as providing post-sale support.

Explanation:

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

66) Discuss the concept of a system and the issues of goal conflict and goal congruence.

Answer: A system is a set of two or more components that are somehow interrelated and interact together to achieve a specific goal. A system usually consists of smaller components called subsystems. These subsystems have specific and defined functions, which interact with and support the larger system. The concept of systems is key to information technology and AIS. All systems, including the AIS, must work to achieve one or more organisational goals. Goal conflict results when a decision or action of a subsystem is inconsistent with another subsystem or the system (organisation) as a whole. Goal congruence results when a subsystem achieves its goals while contributing to the organisation's overall goal. Subsystems should maximise organisational goals.

67) Why do you need to study AIS?

Answer: Since accounting data comes from an AIS, AIS knowledge and skills are critical to an accountant's career success. Interacting with an AIS is one of the most important activities that accountants perform.

Many of the courses you study in your accounting program focus on your role as a user or provider of information (e.g. preparing financial statements), such as financial, managerial, tax and auditing. Most of these courses assume that data has been collected and stored and you have access to that data. But these courses do not describe or discuss how the data is collected and protected. The information system is treated as a 'black box' into which data is poured and information comes out. Some people assume that if a computer has produced information 'it must be right'. This assumption is not valid because things can go wrong, even with a computer. As an accountant you need to provide advice, if not a full solution, to issues that arise from an AIS.

All accounting bodies in Australia, New Zealand and Asia require the inclusion of information systems design, development and applications in accredited accounting degrees. Some bodies make it compulsory where others recommend the AIS area to be included. The reason for this is that it is important if you are going to pursue a career in public accounting, industry, government, not-for-profit organisations or management consulting. As an auditor you need to be able to evaluate the accuracy and reliability of information produced from an AIS. To do so you need to understand how a system is developed, how it operates and how you can instigate controls. You will also now need to understand that an organisation's AIS may be vulnerable to attack from inside and outside of the firm you audit as companies become more virtual due to the effects of globalisation and competition. You or your peers may become an accountant in the private or public sector where you could eventually become involved in development of strategy. With continuous change in the IT sector, you need to keep up with future trends so that as the main advisor on accounting and finance matters, you can make suggestions and recommendations that do not lock your firm into outdated technologies in the medium to long term.

The other important reason that you need to understand accounting information systems is that as IT pervades all organisations, it makes it easier and easier for employees to act unethically by committing fraud, misappropriating assets, accepting bribes and misstating a company's financial position. Ethics is a major issue for the accounting and auditing professions as they have been found to collude with management to sign-off statements that do not show a 'true and fair' view of a company's position. A framework for analysing an ethical issue is available to help you make an appropriate decision should you uncover unethical behaviours.

68) How can an AIS become part of the firm's value chain and add value to the business?

Answer: The AIS can add value by: helping to improve products and services an organisation offers for sale; increasing the quality of products and services; creating greater efficiency by reducing costs and saving time; and improving the overall efficiency of the organisation. Decision-making is enhanced by the better availability of timely, complete, reliable, verifiable and relevant information. A firm can enjoy a competitive advantage with better customer ordering, billing and customer service made possible by an improved AIS. The AIS can also enhance overall communication and use of knowledge in a business by making the knowledge readily available to interested parties.

69) Discuss the seven characteristics of useful information.

Answer: The seven characteristics of useful information are: relevant, reliable, complete, timely, understandable, verifiable and accessible. These characteristics are qualities that information should possess to be useful in a business environment. Briefly stated, in order for information to be useful it must be: 1) relevant, meaning that it reduces uncertainty and adds to the decision-making process; 2) reliable information is information that is free from error, and is accurate in its nature; 3) complete information is information that does not omit any important data, facts or aspects about events or activities; 4) information is timely when it is fully available to enable the decision-making process to proceed; 5) understandable information must be both in an intelligible and useful format; 6) information is considered verifiable if two people, acting independently of each other, produce the same information or the same results; 7) information is accessible if it is available to users when they need it and in a format they can use.

70) Explain what an AIS is, describe the basic tasks it performs in an organisation, and give some examples of the types of accounting transactions it processes.

Answer: An AIS consists of six components: people; procedures and instructions; data; software; information technology infrastructure; and internal controls and security measures. The AIS performs three major functions: 1) it collects and stores data about activities and transactions so that the organisation's management, employees and interested outsiders can review what has happened; 2) the AIS processes data (that is, facts that have been collected and stored) into information that is useful for making decisions, and is of value to the organisation; and 3) the AIS provides adequate controls designed to safeguard the organisation's assets, including its data and information. Common examples of accounting transactions that an AIS helps to process and track are the sales of products to customers, cash collections, cash payments and the recording and payment of the employees' payroll.

71) How can the value of the information produced by an accounting information system be determined? What would a measurement and verification expert think about quantification and verification of such information?

Answer: A well-designed AIS improves the efficiency and effectiveness of the value chain by improving the quality and lowering the overall cost of products or services, improving efficiency of operations, improving decision-making, and enhancing the sharing of knowledge. These are the benefits of possessing and using information. Drawbacks to possessing and using such information are the costs of obtaining and maintaining such information. These costs include investments in people, processes, and computing and networking hardware and software on an ongoing basis. Costs of the information are quantifiable to some extent. However, some of the benefits of using the information involve numerous estimates and assumptions. As such, the quantification of the benefits of utilising such information depends on the accuracy of the assumptions.

Answer Key
Testname: C1

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

Answer Key

Testname: C1

- 51) C
- 52) A
- 53) D
- 54) C
- 55) B
- 56) There are six components of an AIS:
 - 1. people who use a system
 - 2. procedures and instructions used to collect, process and store data
 - 3. data about an organisation and its business activities
 - 4. software used to process data
 - 5. IT infrastructure, including computers, external devices (e.g. printers, external hard drives) and network communications devices used in an AIS
 - 6. internal controls and security measures that safeguard AIS data.
- 57) An AIS is a system that collects, records, stores and processes data to produce information for decision-makers.
- 58) A well-designed AIS can add value to an organisation by:
 - 1. improving the quality and reducing costs of products or services
 - 2. improving efficiency
 - 3. sharing knowledge
 - 4. improving efficiency and effectiveness of its supply chain
 - 5. improving the internal control structure
 - 6. improving decision-making.
- 59) The AIS can be designed to allow customers direct access to a company's inventory and sales order entry systems. This allows the customer to do more of the work that traditionally has been done by sales, marketing and administration personnel. This allows for faster ordering and cuts the company's labour costs. It may also have the effect of allowing the customer more control in a purchase transaction that may bring more satisfaction and value to the customer.
- 60) Computer technologies are revolutionising how organisations do business and disseminate information. But this proliferation of computers and information systems are creating ethical dilemmas. New issues need to be faced in relation to rights and responsibilities in the use of information. However, the law seems to lag behind the speed at which technologies are implemented and information is disseminated. This makes it difficult to capture, in standards and codes of conduct, what the right thing to do is. Thus employees may not have good guidelines on what is appropriate behaviour in their use of company computer resources.

There are moral choices to be made by staff in relation to data that is gathered from customers and suppliers as well as employees. These revolve around issues of control and access to private and confidential data, and misuse of data stored in large databases and data warehouses. These concerns are heightened when that type of data leaves an organisation across networks and when people other than employees have access to data, such as suppliers. With the use of the internet and cloud-based storage of data, accountants are faced with new challenges about control and access.

Another issue that produces ethical dilemmas is the proliferation of computers within an organisation. Everyone in a firm has a PC or terminal on their desk. Most business activities and processes are conducted through a digital device whether hand-held or on a desktop. This may mean that sometimes staff may use the technology for other than business purposes.

All of these suggest that ethical issues are of vital importance to AIS.

- 61) An AIS can help improve decision-making in several ways:
- a. it can identify situations requiring management action
 - b. it can reduce uncertainty and thereby provide a basis for choosing among alternative actions
 - c. it can store information about results of previous decisions, which provides valuable feedback that can be used to improve future decisions
 - d. it can provide accurate information in a timely manner
 - e. it analyses sales data to discover items that are purchased together, and it uses such information to improve the layout of merchandise to encourage additional sales of related items.
- 62) Since every organisation does not necessarily use all of the transaction cycles in its operations, it is to the advantage of the organisation to be able to 'pick and choose' from among various software modules that track and record different transaction cycles. For example, a law firm would have no need to implement a production cycle module. Also, the nature of a transaction cycle varies across the broad spectrum of business organisations. Again, a law firm would have a revenue cycle, but it would not involve the purchase, receipt and payment for products or merchandise; likewise a retail store chain may not sell any consulting services to its customers.
- 63) Data: facts that are collected, entered, recorded, stored and processed by an AIS. Information: data that has been organised and processed and is meaningful to its users. Such information is accessible, relevant, timely, reliable, verifiable, complete and understandable. Information is of value when the benefits received from using or acting upon it outweighs the cost to produce the information.
- 64) A system is a set of two or more interrelated components that interact to achieve a goal.
- 65) The goal of the five primary activities in the value chain is to facilitate the business in providing value to its customers. The five primary activities allow the business to create, market and deliver its products and services to its customers, as well as providing post-sale support.
- 66) A system is a set of two or more components that are somehow interrelated and interact together to achieve a specific goal. A system usually consists of smaller components called subsystems. These subsystems have specific and defined functions, which interact with and support the larger system. The concept of systems is key to information technology and AIS. All systems, including the AIS, must work to achieve one or more organisational goals. Goal conflict results when a decision or action of a subsystem is inconsistent with another subsystem or the system (organisation) as a whole. Goal congruence results when a subsystem achieves its goals while contributing to the organisation's overall goal. Subsystems should maximise organisational goals.

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