

ACCOUNTING INFORMATION SYSTEMS/3e  
TURNER / WEICKGENANT/COPELAND  
Test Bank: CHAPTER 1: Introduction to AIS

1NOTE: All new or adjusted questions are in **red**. New questions are identified by the letter A as part of the question number; adjusted questions are identified by the letter X as part of the question number.

End of Chapter Questions:

1. When a company receives returned goods from a customer, the business process to accept the return would most likely be a(n):
  - A. Administrative process
  - B. Conversion process
  - C. Expenditure process
  - D. Revenue process**
2. Which of the following is least likely to be an output of the accounting information system?
  - A. A check
  - B. A report
  - C. An invoice
  - D. A bar code**
3. Which of the following is not true of the supply chain?
  - A. The supply chain includes vendors.
  - B. The supply chain excludes customers.**
  - C. The supply chain includes information flows.
  - D. The supply chain includes secondary suppliers.
4. Which of the following is not an objective of IT enablement?
  - A. Increased accuracy of data
  - B. Reduced cost
  - C. Reduced security problems**
  - D. Increased efficiency
5. The correct order of the computer data hierarchy is:
  - A. Byte, bit, record, field, file, database
  - B. Bit, byte, record, field, file, database
  - C. Bit, byte, field, record, file, database**
  - D. Bit, byte, field, record, database, file
6. The process of searching for identifiable patterns in data is called:
  - A. Sequential processing
  - B. Data warehousing
  - C. Data mining**
  - D. Real-time processing

7. An IT enabled system for purchasing that is an “invoice-less” system is called a(n):
  - A. Automated matching system
  - B. Evaluated receipt settlement**
  - C. E-payables
  - D. Point of sale system
8. The COSO report written for the purpose of assisting managers in the challenge of managing risk in their organization is entitled:
  - A. Internal Control – Integrated Framework**
  - B. Enterprise Risk Management – Integrated Framework
  - C. Corporate Governance Guidance
  - D. IT Governance Guidance
9. Accountants have some form of use of the AIS in all but which role?
  - A. User
  - B. Programmer**
  - C. Auditor
  - D. Designer
10. Which of the following is not true of unethical behavior?
  - A. The only category of unethical behavior for accountants is inflating revenue.**
  - B. Accountants are often pressured to help commit or cover up unethical behavior.
  - C. Hacking is an unethical behavior that accountants should be concerned about.
  - D. An accounting information system can be used to cover up unethical behavior.

#### TEST BANK – CHAPTER 1 – MULTIPLE CHOICE

1. A prescribed sequence of work steps performed in order to produce a desired result for the organization is called a(n):
  - A. Accounting Information System
  - B. Business Process**
  - C. Financial Transaction
  - D. Capital Transaction Process
2. The process that must identify the transactions to be recorded, capture all the important details of the transactions, properly process the transaction details, and provide reports is termed the:
  - A. Revenue Process
  - B. Expenditure Process
  - C. Accounting Information System**
  - D. Business Process
3. An accounting information system serves many functions - which of the following is NOT one of those functions?
  - A. Capture the details of a transaction
  - B. Implement the start of a transaction**
  - C. Provide reports of transactions
  - D. Process the transactions details into appropriate accounts

4. The proper order of activity in an accounting information system would be as follows:
- A. Capture, Record, Process, Report**
  - B. Process, Record, Capture, Report
  - C. Capture, Process, Report, Record
  - D. Record, Capture, Process, Report
5. Which of the following is not one of the general types of business processes identified by the textbook?
- A. Revenue Processes
  - B. Expenditure Processes
  - C. Conversion Processes
  - D. Human Resource Processes**
6. A company's \_\_\_\_\_ encompasses the tone of an organization and sets the basis for how risk is viewed and addressed by an entity's people.
- A. Internal Environment**
  - B. Internal Controls Framework
  - C. Code of Ethics
  - D. IT Governance Structure
7. Which of the following statements, related to business processes, is false?
- A. Each business process has a direct effect on the financial status of the organization.**
  - B. A business process is initiated by a particular kind of event.
  - C. A business process has a well-defined beginning and end.
  - D. Each business process is usually completed in a relatively short period.
8. Which of the following is least likely to be part of an accounting information system function?
- A. Record the accounting data in the appropriate records.
  - B. Generation of data to be part of the information system.**
  - C. Process the detailed accounting data.
  - D. Report the summarized accounting data.
9. Work steps that are internal controls within the business process would include:
- A. Using an electronic register to record all sales transactions.
  - B. Combining both manual and computer based records.
  - C. Reconciling a cash register at the end of each day.**
  - D. Preparation of internal reports to monitor the performance of a specific department.
10. Five different components of the accounting information system were presented in the textbook. Which of the following is not one of those components?
- A. Work steps within a business process intended to capture accounting data as the business process occurs.
  - B. Work steps that are internal controls within the business process to safeguard assets and to ensure the accuracy and completeness of the data.
  - C. Work steps that generate both internal and external reports.
  - D. Work steps to assure that all business processes are recorded using computer-based procedures.**

11. Output from an accounting information system would NOT include:
- A. Checks to vendors
  - B. Invoices from vendors**
  - C. Customer statements
  - D. Purchase orders
12. The entities, processes, and information flows that involve the movement of materials, funds, and related information through the full logistics process, from the acquisition of raw materials to the delivery of the finished products to the end use is a set of linked activities referred to as:
- A. Management Information System
  - B. Supply Chain**
  - C. Accounting Information System
  - D. Logistics Management
13. The organization and control of all materials, funds, and related information in the logistics process, from the acquisition of raw materials to the delivery of finished products to the end user is referred to as:
- A. Supply Chain Management**
  - B. Management Information System
  - C. Logistics Management
  - D. IT Enablement
14. When discussing the supply chain:
- A. Any concern about vendors would relate only to those vendors with which a company has direct contact.
  - B. Service providers would not be part of the supply chain.
  - C. Concern would not extend beyond the point where the product is shipped to a customer.
  - D. An entity may not be able to directly control all of the interrelated activities within the supply chain.**
15. Using IT systems to enhance efficiency and effectiveness of internal or supply chain processes is called:
- A. Information Technology Enablement**
  - B. Information Systems Control
  - C. Information Technology Process Engineering
  - D. Information Technology Business Processes
16. The purposeful and organized changing of business processes to make them more efficient is referred to as:
- A. Information Technology Engineering
  - B. Information Systems Management
  - C. Business Process Reengineering**
  - D. Business Process Supply Chain

17. The use of BPR (Business Process Reengineering) is a two-fold: (1) Aligns business processes with the IT systems used to recorded processes and, (2):
- A. Improves the efficiency and effectiveness of these processes.**
  - B. Reduces the cost of these processes.
  - C. Enhances the usefulness of these processes.
  - D. Increases the accuracy of the process.
18. The smallest unit of information in a computer system can have only one of two values, zero or one, and is referred to as a(n):
- A. Field
  - B. Record
  - C. Byte
  - D. Bit**
19. A unit of storage that represents one character is referred to as a:
- A. Byte**
  - B. Bit
  - C. Bat
  - D. Field
20. IT Controls can be divided into two categories, general controls and application controls. Which of the following is an example of a general control?
- A. The alignment of a company's IT strategy with its business strategy
  - B. The use of passwords to allow only authorized users to log into an IT-based accounting system**
  - C. The use of an elaborate set of checks and balances whereby a company's leadership is held accountable for building shareholder value
  - D. A company performing background checks on employees of its IT department
21. A set of related fields is referred to as a:
- A. File
  - B. Record**
  - C. Byte
  - D. Binary Digit
22. Each record is made up of related:
- A. Files
  - B. Bytes
  - C. Name
  - D. Fields**
23. A collection of data stored on a computer in a form that allows the data to be easily accessed, retrieved, manipulated, and stored is referred to as a(n):
- A. Accounting Information System
  - B. Information Technology
  - C. Database**
  - D. Master File

24. A collection of data stored in several small two-dimensional tables that can be joined together in many varying ways to represent many different kinds of relationships among the data is referred to as a(n):
- A. Database
  - B. Master File
  - C. Relational Database**
  - D. Relation Based Accounting Software
25. Accounting software traditionally uses two different types of files. The file type that is relatively permanent and used to maintain the detailed data for each major process is a(n):
- A. General Ledger
  - B. Master File**
  - C. Transaction File
  - D. Subsidiary File
26. Accounting software traditionally uses two different types of files. The file type that is the set of relatively temporary records that will be process to update the permanent file is referred to as a(n):
- A. Master File
  - B. General File
  - C. Transaction File**
  - D. Subsidiary File
27. The chart of accounts would be a good example of a:
- A. Transaction File
  - B. Master File**
  - C. Field
  - D. Record
28. The organization of files in a computer system normally uses one of two different access methods. The access method where the files store records in sequence, with one record stored immediately after another, is referred to as:
- A. Chronological Access
  - B. Sequential Access**
  - C. Random Access
  - D. Numerical Access
29. The organization of files in a computer system normally uses one of two different access methods. The access method where the files are not stored in sequence, one record not stored immediately after another, is referred to as:
- A. Indexed Access
  - B. Batch Access
  - C. Sequential Access
  - D. Random Access**

30. There are two modes of processing transactions in accounting systems. The mode that requires all similar transactions be grouped together and be processed at the same time, is referred to as:
- A. Batch Processing**
  - B. Online Processing
  - C. Real-time Processing
  - D. Sequential Processing
31. There are two modes of processing transactions in accounting systems. The mode that will record transactions, one at a time, is referred to as:
- A. Batch Processing
  - B. Online Processing**
  - C. Real-Time Processing
  - D. Sequential Processing
32. A type of online processing where a transaction is processed immediately so that the output is available immediately is termed:
- A. Virtual Processing
  - B. Sequential Processing
  - C. Real-Time Processing**
  - D. Batch Processing
33. An integrated collection of enterprise-wide data that includes five to ten fiscal years of non-volatile data, used to support management in decision making and planning is referred to as:
- A. Operational Database
  - B. Relational Database
  - C. Data Storage
  - D. Data Warehouse**
34. This type of database contains the data that are continually updated as transactions are processed and includes data for the current fiscal year and supports day-to-day operations is referred to as a(n):
- A. Data Warehouse
  - B. Data Storage
  - C. Relational Database
  - D. Operational Database**
35. The data in the data warehouse are said to be enterprise-wide because:
- A. The data relate to all areas of the business.
  - B. The data are pulled from each of the operational databases and maintained in the data warehouse for many fiscal periods.**
  - C. All areas of the business are able to access the data warehouse.
  - D. All transactions across the all areas of the business are recorded in the data warehouse.

36. The process of searching data within the data warehouse for identifiable patterns that can be used to predict future behavior is referred to as:
- A. Data mining**
  - B. Data digging
  - C. Data housing
  - D. Data querying
37. Two or more computers linked together to share information and / or resources is referred to as a(n):
- A. Computer Intranet
  - B. Computer Internet
  - C. Computer System
  - D. Computer Network**
38. This type of computer network is one that spans a relatively small area - often confined to a single building or group of buildings, and are intended to connect computers within an organization.
- A. Local Area Network**
  - B. Land Arena Network
  - C. Extranet
  - D. Internet
39. The global computer network, or “information super highway”, is the:
- A. WAN
  - B. Intranet
  - C. Internet**
  - D. LAN
40. A company’s private network, accessible only to the employees of that company is the:
- A. WAN
  - B. Intranet**
  - C. Internet
  - D. LAN
41. This computer network is similar to a company’s intranet except that it does allow access to selected outsiders, such as buyers, suppliers, distributors, and wholesalers.
- A. Ultranet
  - B. Internet
  - C. Extranet**
  - D. LAN
42. A contemporary type of computer infrastructure that is used by an increasing number of companies involves the use of shared services, software, and / or data stored on servers at a remote location, which are accessible over a network, is referred to as:
- A. Database
  - B. Cloud Computing**
  - C. Internet
  - D. Relational Internet



43. The use of electronic means to enhance business processes is termed:
- A. E-business**
  - B. Electronic data interchange
  - C. Point of sale system
  - D. E-commerce
44. The intercompany, computer-to-computer transfer of business documents in a standard business format is called:
- A. E-business
  - B. E-commerce
  - C. Local area network
  - D. Electronic data interchange**
45. Which of the following is NOT an objective of IT usage to support business processes?
- A. Increased efficiency of business processes
  - B. Increased data to use in the data analytics process**
  - C. Reduced cost of business processes
  - D. Increased accuracy of the data related to business processes
46. Which of the following is NOT one of the three components of electronic data interchange?
- A. Commerce - encompasses all forms of electronic trading.**
  - B. Intercompany - two or more companies conducting business electronically.
  - C. Standard business format - necessary so that the various companies can interact and trade electronically.
  - D. Computer to computer - indicates that each company's computers are connected via a network.
47. This term refers to a system of hardware and software that captures retail sales transactions by standard bar coding.
- A. E-business
  - B. Electronic data interchange
  - C. Point of sale system**
  - D. E-commerce
48. When a point of sale system is used and a customer checks out through a cash register, which of the following processes occurs?
- A. Net income is computed.
  - B. Inventory values are updated.**
  - C. Accounts payable balances are updated.
  - D. Replacement inventory is purchased.
49. A system of computer hardware and software in which the software matches an invoice to its related purchase order and receiving report is called:
- A. Point of sale system
  - B. Electronic data interchange
  - C. Automated matching**
  - D. Evaluated receipt settlement

50. An invoice-less system in which computer hardware and software complete an invoice-less match that is a comparison of the purchase order with the goods received is termed:
- A. Evaluated receipt settlement**
  - B. Automated matching
  - C. Electronic invoice presentation and payment
  - D. Enterprise resource planning
51. This system enables a vendor to present an invoice to its trading partner via the internet, eliminating the paper, printing, and postage costs of traditional paper invoicing.
- A. Evaluated receipt settlement
  - B. Electronic invoice presentation and payment**
  - C. Automated matching
  - D. Electronic data interchange
52. A multi-module software system designed to manage all aspects of an enterprise usually broken down into modules such as financials, sales, human resources, and manufacturing, is referred to as a(n):
- A. Electronic data system
  - B. Electronic data interchange
  - C. Enterprise resource planning**
  - D. Electronic resource program
53. Management has the responsibility, and the ability, to take action to reduce risks or to lessen the impact of nearly all risks an organization faces. The steps taken by management to lessen the risk or reduce the impact of the risk, are referred to as:
- A. Programs
  - B. Risk assessment
  - C. Information evaluation
  - D. Controls**
54. IT Controls can be divided into two categories, general controls and application controls. Which of the following is an example of a general control?
- A. The alignment of a company's IT strategy with its business strategy.
  - B. The use of passwords to allow only authorized users to log into an IT-based accounting system.**
  - C. The use of an elaborate set of checks and balances whereby a company's leadership is held accountable for building shareholder value.
  - D. A company performing background checks on employees of its IT department.
55. Which of the following groups of professionals within an organization have a history of designing and implementing the controls to lessen risks?
- A. Management
  - B. Accountants**
  - C. Human Resources
  - D. Lawyers

56. Which of the following is not one of broad categories of controls?
- A. The risk that assets will be stolen or misused.
  - B. The risk of errors in accounting data or information.
  - C. The risk of loss due to a natural disaster.**
  - D. The risk of fraudulent activity by employees.
57. Which of the following is not a risk inherent in an IT system?
- A. Computer security breaches.
  - B. Computers being stolen.**
  - C. Erroneous input of data.
  - D. Hardware or software failure.
58. A comprehensive report on enterprise risk management was issued by this organization.
- A. American Accounting Association
  - B. New York Stock Exchange
  - C. Institute of Internal Auditors
  - D. Committee on Sponsoring Organizations**
59. A process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives is referred to as:
- A. Enterprise resource planning
  - B. Enterprise risk management**
  - C. IT system control structure
  - D. Corporate governance structure
60. In order to achieve the objective of managing risk, management should establish control structures that include, at a minimum:
- A. Accounting internal controls.
  - B. Accounting internal controls, IT controls, corporate governance, enterprise risk management, and IT governance.
  - C. IT controls, IT governance, corporate governance, and accounting internal controls.**
  - D. IT controls and accounting internal controls.
61. The company's development and adherence to this should reduce the opportunities for managements or employees to conduct fraud.
- A. Code of ethics**
  - B. Internal control structure
  - C. Application controls
  - D. Corporate governance
62. The COSO report, Internal Controls – Integrated Framework, identified interrelated components of internal control. Which of the following is not one of those components?
- A. Monitoring
  - B. Risk assessment
  - C. Control activities
  - D. Enterprise risk management**

63. IT controls can be divided into two categories. Which of the following is a correct statement of one of those categories?
- A. Application controls apply overall to the IT accounting system.
  - B. Application controls apply to the prevention of erroneous or incomplete input or processing of data.
  - C. Application controls are used specifically in accounting applications to control inputs, processing, and output.**
  - D. Application controls are used to prohibit fraudulent financial reporting.
64. \_\_\_\_\_ is accomplished through ongoing management activities, separate evaluations, or both.
- A. Control activities
  - B. Risk Assessment
  - C. Risk Response
  - D. Monitoring**
65. An elaborate system of checks and balances, whereby a company's leadership is held accountable for building shareholder value and creating confidence in the financial reporting processes, is referred to as:
- A. Enterprise risk management
  - B. Corporate governance**
  - C. Application controls
  - D. Internal control structure
66. The purpose of this 2002 act was to improve financial reporting and reinforce the importance of corporate ethics.
- A. Foreign Corrupt Practices Act
  - B. Sarbanes-Oxley Act**
  - C. Securities and Exchange Act
  - D. Treadway Act
67. Which of the following is not one of the corporate functions interrelated within the corporate governance system?
- A. Management Oversight
  - B. Ethical Conduct
  - C. Risk Assessment**
  - D. Financial Stewardship
68. The proper management, control, and use of IT systems are known as:
- A. IT Governance**
  - B. IT Controls
  - C. IT Risk Management
  - D. IT Code of Ethics

69. Accountants have several possible roles related to accounting information systems. Which of the following is not normally one of those roles?

- A. Auditor of an AIS
- B. User of the AIS
- C. Programmer of the AIS**
- D. Design of the AIS

70. Which of the following is not a part of risk analysis?

- A. Risk management**
- B. Event Identification
- C. Risk Response
- D. Risk Assessment

71. There are many reasons for accountants to become aware of potential unethical behaviors. Which of the following is not one of the reasons identified by the authors?

- A. Accountants are responsible for identifying unethical and illegal activities.**
- B. Accounts assist in developing and implementing internal control structures that should decrease the chance of unethical actions.
- C. Accountants are often pressured to assist in, or cover up, unethical actions.
- D. Accountants deal with assets or records that could easily tempt accountants to engage in unethical behavior.

TEST BANK – CHAPTER 1 – TRUE/FALSE:

1. A business process has a well-defined beginning and end.  
TRUE
2. Each business process has a direct effect on the financial status of an organization.  
FALSE: The process could have an indirect effect.
3. Few accounting information systems rely on computer hardware and software to track business processes.  
FALSE: Most accounting information systems rely on computer hardware and software.
4. The rethinking and redesigning that occur during business process reengineering are aided by the use of information technology.  
TRUE
5. There are very few business processes that have the potential to be improved by IT enablement.  
FALSE
6. Business process reengineering should leverage the capabilities of information technology to improve the efficiency of business processes.  
TRUE
7. It is important for accountants to have some understanding of basic computer terminology.  
TRUE

8. When files are organized as sequential access, and the user needs to access record number 250, the previous 249 records will be read by the computer before reading record number 250.  
TRUE
9. When files are organized as sequential access, the sequence is normally based on one key record in each file.  
FALSE: the key is a field – not a record
10. Batch processing is best suited to applications that have large volumes of similar transactions that can be processed as regular intervals.  
TRUE
11. Online processing is the opposite of real-time processing.  
FALSE: Online processing is the opposite of batch processing.
12. Batch processing is best suited to sequential access files.  
TRUE
13. Online processing is best suited to sequential access files.  
FALSE: random access files, not sequential access files.
14. Online processing is best suited to situations where there is a large volume of records but only a few records are needed to process any individual transaction.  
TRUE
15. Each time a new transaction is completed, parts of the data warehouse must be updated.  
FALSE: parts of the operational database must be updated.
16. Data in the data warehouse are called nonvolatile because they do not change rapidly in the same way that operational data change.  
TRUE
17. A system of local area networks connected over any distance via other network connections is called a WAN, or wide area network.  
TRUE
18. E-business is a type of e-commerce.  
FALSE: e-commerce is a type of e-business
19. The “intercompany” component of electronic data interchange means that two or more companies are conducting business electronically.  
TRUE
20. In order to have an automated matching system it is necessary to have access to paper copies of purchase orders and invoices.  
FALSE: All of the related files need to be online.

21. When automated matching is used, the system will not approve an invoice for payment unless the items and quantities match with the packing slip and the prices match the purchase order prices.  
TRUE
22. The evaluated receipt settlement system is an IT enabled system that reduces the time and cost of processing customer payments.  
FALSE: processing vendor payments.
23. ERP systems are based on a relational database system.  
TRUE
24. Traditional accounting software is much more comprehensive and encompassing than ERP software.  
FALSE
25. Before ERP software systems, modules such as human resources were in separate software but well integrated with the accounting software.  
FALSE: were NOT well integrated.
26. Although accountants are heavily involved in the creation, implementation, and monitoring of the control structure, management has the ultimate responsibility to establish a control environment.  
TRUE
27. Once a company has decided on the control processes needed, it is not necessary to have an ongoing assessment of risks.  
FALSE: it is necessary to have an ongoing assessment of risks.
28. A code of ethics should reduce opportunities for employees to conduct fraud if management emphasizes the cost and disciplines or discharges those who violate it.  
TRUE
29. IT systems are to be chosen and implemented to support the attainment of strategies and objectives.  
TRUE
30. It is likely that an accountant will select a career path, within accounting, that will not in some way, involve the use of an accounting information system.  
FALSE
31. An auditor cannot make informed decisions necessary to complete the audit without an understanding of the accounting information system.  
TRUE
32. The accounting information system is often the tool used to commit or cover up unethical behavior.  
TRUE

**Question 1. SO 1 Types of business processes**

Describe the four general types of business processes typical in organizations that were discussed in chapter 1 of the text. Describe two transaction types or transaction processes included in each business process.

**Answer:**

1. Revenue processes (Discussed in detail in chapter 8)
  - a. Sales processes
  - b. Sales return processes
  - c. Cash collection processes
2. Expenditure processes (Discussed in detail in chapters 9 and 10)
  - a. Purchasing processes
  - b. Purchase return processes
  - c. Cash disbursement processes
  - d. Payroll processes
  - e. Fixed asset processes
3. Conversion processes (Discussed in detail in chapter 11)
  - a. Planning processes
  - b. Resource management processes
  - c. Logistics processes
4. Administrative processes (Discussed in detail in chapter 12)
  - a. Capital processes
  - b. Investment processes
  - c. General ledger processes

**Question 2. SO2 Overview of Accounting Information Systems - Real World Example**

One of the real word examples in chapter 1 discussed a recent trend in the fast food restaurant industry where remote order-taking is completed at a drive-through window. In the case of McDonald's, an experimental order-taking center takes drive-through orders for several different McDonald's locations.

Describe how this real world example relates to each of the components of an accounting information system.

**Answer:** Answers will vary. The following was discussed in the chapter.

**Accounting information system** comprises the processes, procedures, and systems that capture accounting data from business processes; record the accounting data in the appropriate records; process the detailed accounting data by classifying, summarizing, and consolidating; and report the summarized accounting data to internal and external users.

The accounting information system has several components. The following example from McDonalds lists each component of the accounting information system.

- 1) Work steps within a business process intended to capture accounting data as that business process occurs.



- When McDonald's employees greet a customer at the cash register, they have several work steps to complete a sale, some of which are accounting related and some of which are not. Greeting the customer with a smile may be an important step, but it has no impact on accounting records. However, using the touch screen at the cash register to conduct the sale does have an accounting effect: sales amounts in the sales records should be increased and cash amounts in cash records should be increased.
- 2) The manual or computer-based records to record the accounting data from business processes
    - As is true of most companies, McDonald's has a system of computers and computer processes to record the appropriate data from the sale process. These systems usually have a combination of manual and computerized steps. For McDonald's, the manual process is that a person must operate the cash register. The remainder of the McDonald's system is computer-based, and the computer records the sale and all related data.
  - 3) Work steps that are internal controls within the business process to safeguard assets and to ensure accuracy and completeness of the data
    - As mentioned before, the requirement that a manager closes and reconciles the cash register at the end of the day is an example of an internal control within the sales processes.
  - 4) Work steps to process, classify, summarize, and consolidate the raw accounting data
    - For example, sales at each McDonald's franchise must be summarized and consolidated into a single total of sales revenue to be reported on the income statement. At McDonald's, these steps are accomplished by the computer system and the accounting software. In some companies, there may be manual or handwritten accounting records, although currently most organizations use IT systems to conduct some or all of the accounting recording and summarizing processes.
  - 5) Work steps that generate both internal and external reports.
    - McDonald's needs many types of internal reports to monitor the performance of individual franchise locations and regions. In addition, year-end external financial statements such as the income statement, balance sheet, and statement of cash flows must be prepared for external users.

These five components are part of any accounting information system but are likely to be applied differently in different business organizations. Exhibit 1-1 provided an overview of an accounting information system:

**Question 3. SO3 Supply Chain**

Explain the term supply chain and identify the organizations or individuals that would be part of a supply chain for a company that produces products for sale.

**Answer:** Supply Chain - processes and information flows that involve the movement of materials, funds, and related information through the full logistics process, from the acquisition of raw materials to the delivery of finished products to the customer or end user.

The supply chain includes all:

- Vendors
- Service providers
- Customers
- Intermediaries

**Question 4. SO4 IT Enablement**

Explain the term IT enablement and identify three objectives of adding IT enablement to an organization.

**Answer:** IT ENABLEMENT OF BUSINESS PROCESSES: Information technology is defined as the computers, ancillary equipment, software, services, and related resources as applied to support business processes.

IT enablement to support business processes accomplishes one or more of the following objectives:

1. Increased efficiency of business processes
2. Reduced cost of business processes
3. Increased accuracy of the data related to business processes

Any business process has the potential to be improved by IT enablement. In many cases, using IT to enable processes leads to a completely different approach to those processes. Applying IT to business processes is an opportunity to “think outside the box” and consider completely different methods for business processes. This concept of revising processes as IT enabling occurs is called business process reengineering.

**Question 5. SO4 IT Enablement and Business Process Reengineering**

Explain the term Business Process Reengineering (BPR) and identify BPR’s relationship to IT enablement at an organization.

**Answer:** Business process reengineering (BPR) is the purposeful and organized changing of business processes to make them more efficient. BPR not only aligns business processes with the IT systems used to record processes, it also improves efficiency and effectiveness of these processes

**Question 6. SO5 IT Enablement and Business Process Reengineering**

Explain the following data structure terms and the interrelationship of the terms in an accounting information system.

Bit, or binary digit  
Byte  
Field  
Record  
File  
Database

**Answer:**

Accounting data is stored in computer files, and an accountant should have some understanding of data structures in IT systems. Data is explained and organized in a data hierarchy in computer systems, as follows:

(1) Bit, or binary digit

- a. Smallest unit of information in a computer system
- b. Can only have one of two values: zero or one

(2) Byte

- a. Unit of storage represents one character
- b. One byte is made up of eight bits

(3) Field

- a. One item within a record

(4) Record

- a. Set of related fields for the same entity

(5) File

- a. Entire set of related records

(6) Database

- a. Collection of data stored on the computer in a form that allows data to be easily accessed, retrieved, manipulated, and stored

**Question 7. SO5 Batch verses online or real time processing**

Explain the two modes of processing transactions, batch processing and online or real time processing.

**Answer:**

Two modes of processing transactions:

(1) Batch processing

- a. Requires that all similar transactions be grouped together for a specified time; then this group of transactions is processed as a batch

(2) Online processing

- a. Opposite of batch processing
- b. Transactions are not grouped into batches, but each transactions is entered and processed one at a time

- c. Some online processing systems are also real-time processing systems, meaning that the transaction is processed immediately, and in real time, so that the output is available immediately

**Question 8. SO6 IT Enablement**

Identify and explain three examples of IT systems that use IT enabled business processes.

**Answer:**

Examples of systems applied by companies today that use IT-enabled business processes:

- **E-Business**
  - o the use of electronic means to enhance business processes
  - o encompasses all forms of online electronic trading—consumer- based e-commerce and business-to-business transactions, as well as the use of IT for process integration inside organizations
- **Electronic Data Interchange (EDI)**
  - o the intercompany, computer-to-computer transfer of business documents in a standard business format
- **Point of Sales system**
  - o a system of hardware and software that captures retail sales transactions by standard bar coding. Nearly all large retail and grocery stores use POS systems that are integrated into the cash register
- **Automated Matching**
  - o a computer hardware and software system in which the software matches an invoice to its related purchase order and receiving report. Traditional systems rely on a person to do this matching, whereas an automated matching system does not.
- **Evaluated receipt Settlement**
  - o is an invoice-less system in which computer hardware and software complete an invoice-less match comparing the purchase order with the goods received
- **E-Payables and Electronic Invoice Presentment and Payment**
  - o are both terms that refer to Web-enabled receipt and payment of vendor invoices. EIPP enables a vendor to present an invoice to its trading partner via the Internet, eliminating the paper, printing, and postage costs of traditional paper invoicing.
- **Enterprise Resource Planning Systems**
  - o is a multi-module software system designed to manage all aspects of an enterprise
  - o ERP software system is much more comprehensive and encompassing than traditional accounting software. ERP systems include modules to handle accounting functions, but, as previously mentioned, they also incorporate modules for manufacturing, marketing, logistics, and human resources

**Question 9. SO 7 IT Controls and Organizational Risks Addressed**

Accountants have a long history of being the professionals within the organization who help design and implement controls to lessen risks that have an impact on the financial standing of

the organization. List the four broad categories of risks described in the text that accountants design controls to mitigate.

**Answer:**

1. The risk that assets will be stolen or misused
2. The risk of errors in accounting data or information
3. The risk of fraudulent activity by employees, managers, customers, or vendors
4. The risks inherent in IT systems, such as

**Question 10. SO 7 IT Controls and Organizational Risks Addressed**

List four control risks that are inherent in an IT system

**Answer:**

- a. Erroneous input of data
- b. Erroneous processing of data
- c. Computer fraud
- d. Computer security breaches
- e. Hardware or software failure
- f. Natural disasters that can interrupt computer system operations