12-22 **(OBJECTIVE 12-2)** The following are partial descriptions of internal controls for companies engaged in the manufacturing business:

1. When Mr. Clark orders materials, an electronic copy of the purchase order is sent to the receiving department. During the delivery of materials, Mr. Smith, the receiving clerk, records the receipt of shipment on this purchase order and then sends the purchase order to the accounting department, where it is used to record materials purchased and accounts payable. The materials are transported to the storage area by forklifts. The additional purchased quantities are recorded on storage records.
2. Every day, hundreds of employees clock in using their employee identification cards at Generous Motors Corporation. The data on these time records is used in the preparation of the labor cost distribution records, the payroll journal, and the electronic payments and payroll checks. The treasurer, Angela Lee, compares the payroll journal with the payroll records, signs the checks, and returns the payroll notifications and checks to Charles Strode, the supervisor of the computer department. The payroll checks and payment notices are distributed to the employees by Strode.
3. The smallest branch of Connor Cosmetics employs Mary Cooper, the branch manager, and her sales assistant, Janet Hendrix. The branch uses a bank account to pay expenses. The account is kept in the name of "Connor Cosmetics—Special Account." To pay expenses, checks must be signed by Cooper or by the treasurer, John Winters. Cooper receives the cancelled checks and bank statements. She reconciles the branch account herself and files cancelled checks and bank statements in her records. She also periodically prepares reports of cash disbursements and sends them to the home office.

Required

a. List the deficiencies in internal control for each of these situations. To identify the deficiencies, use the methodology that was discussed in this chapter.
b. For each deficiency, state the type(s) of misstatement(s) that is (are) likely to result. Be as specific as possible.
c. How would you improve internal controls for each of the three companies?*

12-23 **(OBJECTIVE 12-3)** Internal controls 1 through 5 were tested in prior audits. Evaluate each internal control independently and determine which controls must be tested in the current year's audit of the December 31, 2016, financial statements. Be sure to explain why testing is or is not required in the current year.

1. The general ledger accounting software system automatically reconciles totals in each of the subsidiary master files for accounts receivable, accounts payable, and inventory accounts to the respective general ledger accounts. This control was most recently tested in the prior year. No changes to the software have been made since testing and there are effective controls over IT security and software program changes.
2. The accounts payable clerk matches vendor invoices with related purchase orders and receiving reports and investigates any differences noted. This control was tested in the 2015 fiscal year-end audit. No changes to this control or personnel involved have occurred since testing was performed.
3. The sales system automatically determines whether a customer's purchase order and related accounts receivable balance are within the customer's credit limit. The risk of shipping goods to customers who exceed their credit limit is deemed to be a significant risk. This control was last tested in the December 31, 2014, financial statement audit.
4. The perpetual inventory system automatically extends the unit price times quantity for inventory on hand. This control was last tested in the audit of December 31, 2014, financial statements. During 2016, the client made changes to this software system.
5. The client's purchase accounting system was acquired from a reputable software vendor several years ago. This system contains numerous automated controls. The auditor tested those controls most recently in the 2015 audit. No changes have been made to any of these controls since testing and the client's controls over IT security and software program changes are excellent.

*Based on AICPA question paper, American Institute of Certified Public Accountants.

12-25 **(OBJECTIVE 12-5)** The following are independent situations for which you will recommend an appropriate audit report on internal control over financial reporting as required by PCAOB auditing standards:

1. The auditor identified a material misstatement in the financial statements that was not detected by management of the company.
2. The auditor was unable to obtain any evidence about the operating effectiveness of internal control over financial reporting.
3. The auditor identified several significant deficiencies in internal control. Because of these significant deficiencies, the auditor believes that there is a reasonable possibility that internal control will not prevent or detect material misstatements on a timely basis.
4. The auditor determined that a deficiency in internal control exists that will not prevent or detect a material misstatement in the financial statements.
5. During interim testing, the auditor identified and communicated to management a significant control deficiency. Management immediately corrected the deficiency and the auditor was able to sufficiently test the newly instituted internal control before the end of the fiscal period.
6. As a result of performing tests of controls, the auditor identified a significant deficiency in internal control over financial reporting; however, the auditor does not believe that it represents a material weakness in internal control.

Required

For each situation, state the appropriate audit report from the following alternatives:

- Unqualified opinion on internal control over financial reporting
- Qualified or disclaimer of opinion on internal control over financial reporting
- Adverse opinion on internal control over financial reporting

12-26 **(OBJECTIVES 12-2, 12-3)** The Meyers Pharmaceutical Company has the following system for billing and recording accounts receivable:

1. An incoming customer's purchase order is received in the order department by a clerk, who prepares a prenumbered company sales order on which the pertinent information, such as the customer's name and address, customer's account number, and items and quantities ordered, is inserted. After the sales order has been prepared, the customer's purchase order is stapled to it.
2. The sales order is then passed to the credit department for credit approval. Rough approximations of the billing values of the orders are made in the credit department for those accounts on which credit limitations are imposed. After investigation, approval of credit is noted on the sales order.
3. Next, the sales order is passed to the billing department, where a clerk key-enters the sales order information into a data file, including unit sales prices obtained from an approved price list. The data file is used to prepare sales invoices.

   The billing application automatically accumulates daily totals of customer account numbers and invoice amounts to provide "hash" totals and control amounts. These totals, which are inserted in a daily record book, serve as predetermined batch totals for verification of computer inputs. The billing is done on prenumbered, continuous, multicopy forms that have the following designations:

   (a) Customer copy
   (b) Sales department copy, for information purposes
   (c) File copy
   (d) Shipping department copy, which serves as a shipping order

   Bills of lading are also prepared as by-products of the invoicing procedure.
4. The shipping department copy of the invoice and the bills of lading are then sent to the shipping department. After the order has been shipped, copies of the bill of lading are returned to the billing department. The shipping department copy of the invoice is filed in the shipping department.
5. In the billing department, one copy of the bill of lading is attached to the customer's copy of the invoice and both are mailed to the customer. The other copy of the bill of lading, together with the sales order, is then stapled to the invoice file copy and filed in invoice numerical order.

6. The data file is updated for shipments that are different from those billed earlier. After these changes are made, the file is used to prepare a sales journal in sales invoice order and to update the accounts receivable master file. Daily totals are printed to match the control totals prepared earlier. These totals are compared with the "hash" and control totals by an independent person.

Required

a. Identify the important controls and related sales transaction-related audit objectives.
b. List the procedures that a CPA will use in an audit of sales transactions to test the identified controls and the substantive aspects of the sales transactions.

12-27 (OBJECTIVES 12-2, 12-7) Most grocery stores use bar code scanning technologies that interface with cash registers used to process customer purchases. Cashiers use the scanners to read bar code labels attached to each product, which the system then uses to obtain unit prices, calculate transaction totals, including sales taxes, and update perpetual inventory databases. Similarly, cashiers scan bar codes on coupons or member discount cards presented by the customer to process discounts. Along with the scanning technologies, groceries use point-of-sale technologies that allow customers to swipe debit and credit cards for payment, while still maintaining the ability for customers to pay with cash.

Required

a. Which financial statement accounts are impacted by the use of these technologies in a typical grocery store?
b. Identify risks inherent to this business process in a grocery store that might affect the financial statement accounts identified in part a. For each risk, describe how these technologies help reduce the inherent risk.
c. How might an auditor use technology to test the operating effectiveness of a bar code scanner–based check-out system?

12-28 (OBJECTIVES 12-3, 12-7) A CPA's client, Boos & Baumkirchner, Inc., is a medium-size manufacturer of products for the leisure-time activities market (camping equipment, scuba gear, bows and arrows, and so forth). During the past year, a computer system was installed and inventory records of finished goods and parts were converted to computer processing. The inventory master file is maintained electronically. Each record of the file contains the following information:

- Item or part number
- Description
- Size
- Unit-of-measure code
- Quantity on hand
- Cost per unit
- Total value of inventory on hand at cost
- Date of last sale or usage
- Quantity used or sold this year
- Economic order quantity
- Code number of major vendor
- Code number of secondary vendor

In preparation for year-end inventory, the client has two identical sets of preprinted inventory count cards. One set is for the client's inventory counts, and the other is for the CPA's use to make audit test counts. The following information is on each card:

- Item or part number
- Description
- Size
- Unit-of-measure code

In taking the year-end inventory, the client's personnel will write the actual counted quantity on the face of each card. When all counts are complete, the counted quantity will be entered into the system. The cards will be processed against the inventory database, and quantity-on-hand figures will be adjusted to reflect the actual count. A computer-generated edit listing will be prepared to show any missing inventory count cards and all quantity adjustments of more than $100 in value. These items will be investigated by client personnel, and all required adjustments will be made. When adjustments have been completed, the final year-end balances will be computed and posted to the general ledger.

The CPA has available generalized audit software that will run on the client's computer and can process the client's electronic records.

Required

a. In general and without regard to the facts in this case, discuss the nature of generalized audit software and list the various types and uses.
b. List and describe at least five ways generalized audit software can be used to assist in all aspects of the audit of the inventory of Boos & Baumkirchner, Inc. (For example,

9. Use audit software to foot the accounts receivable trial balance and compare the balance with the general ledger.

Required

a. For each audit procedure, identify the transaction cycle being audited.
b. For each audit procedure, identify the type of evidence.
c. For each audit procedure, identify whether it is a test of control or a substantive test.
d. For each substantive audit procedure, identify whether it is a substantive test of transactions, a test of details of balances, or a substantive analytical procedure.
e. For each test of control or substantive test of transactions procedure, identify the transaction-related audit objective or objectives being satisfied.
f. For each substantive analytical procedure or test of details of balances procedure, identify the balance-related audit objective or objectives being satisfied.

13-26 (OBJECTIVES 13-1, 13-4, 13-5) The following are independent internal controls commonly found in the acquisition and payment cycle. Each control is to be considered independently.

1. Before a check is prepared to pay for acquisitions by the accounts payable department, the related purchase order and receiving report are attached to the vendor's invoice being paid. A clerk compares the quantity on the invoice with the receiving report and purchase order, compares the price with the purchase order, recomputes the extensions, re-adds the total, and examines the account number indicated on the invoice to determine whether it is correctly classified. He indicates his performance of these procedures by initialing the invoice.
2. At the end of each month, an accounting clerk accounts for all prenumbered receiving reports (documents evidencing the receipt of goods) issued during the month and traces each one to the related vendor's invoice and acquisitions journal entry. The clerk's tests do not include testing the quantity or description of the merchandise received.
3. The cash disbursements clerk is prohibited from handling cash. The bank account is reconciled by another person even though the clerk has sufficient expertise and time to do it.
4. Before a check is signed by the controller, she examines the supporting documentation accompanying the check. At that time, she initials each vendor's invoice to indicate her approval.
5. After the controller signs the checks, her secretary writes the check number and the date the check was issued on each of the supporting documents to prevent their reuse.

Required

a. For each of the internal controls, state the transaction-related audit objective(s) the control is meant to fulfill.
b. For each control, list one test of control the auditor could perform to test the effectiveness of the control.
c. For each control, list one substantive test the auditor could perform to determine whether financial misstatements are actually taking place.

13-27 (OBJECTIVES 13-1, 13-4, 13-5) The following internal controls for the acquisition and payment cycle were selected from a standard internal control questionnaire.

1. Approved purchase orders are required for all acquisitions of goods.
2. Prenumbered receiving reports are prepared as support for acquisitions and numerically accounted for.
3. Dates on receiving reports are compared with vendors' invoices before entry into the acquisitions journal.
4. Account classifications are reviewed by someone other than the preparer.
5. All supporting documents are cancelled after checks are signed or electronic funds transfers are approved.
6. The authorized signer compares data on supporting documents with checks and electronic funds transfer authorizations.
7. Vendors' invoices are recalculated before payment.
8. All checks are signed by the owner or manager.
9. Checks are mailed by the owner or manager or a person under her supervision after signing.

10. The accounts payable master file is updated, balanced, and reconciled to the general ledger monthly.

Required

a. For each control, identify which element of the five categories of control activities is applicable (separation of duties, proper authorization, adequate documents or records, physical control over assets and records, or independent checks on performance).
b. For each control, state which transaction-related audit objective(s) is (are) applicable.
c. For each control, write an audit procedure that could be used to test the control for effectiveness.
d. For each control, identify a likely misstatement, assuming that the control does not exist or is not functioning.
e. For each likely misstatement, identify a substantive audit procedure to determine whether the misstatement exists.

13-28 **(OBJECTIVES 13-4, 13-7)** Following are evidence decisions for the three audits described in Figure 13-3 on page 417:

Audit A Ineffective client internal controls
Audit B Very effective client internal controls
Audit C Somewhat effective client internal controls

Evidence Decisions

1. The auditor decided it was possible to assess control risk below the maximum.
2. The auditor identified effective controls and also identified some deficiencies in controls.
3. The auditor performed extensive positive confirmations at the balance sheet date.
4. The auditor performed tests of controls.
5. The auditor performed extensive tests of controls and minimal substantive tests.
6. The auditor performed substantive tests.
7. This audit was likely the least expensive to conduct.
8. The auditor confirmed receivables at an interim date.

Required

a. Explain why Audit B represents the maximum amount of reliance that can be placed on internal control. Why can't all the audit assurance be obtained by tests of controls?
b. Explain why the auditor may not place the maximum extent of reliance on controls in Audit B and Audit C.
c. For each of the eight evidence decisions, indicate whether the evidence decision relates to each of the audits described above. Every evidence decision relates to at least one of the audits, and some may relate to two or all three audits.

13-29 **(OBJECTIVES 13-3, 13-4)** Following are several decisions that the auditor must make in an audit of a nonpublic company. Letters indicate alternative conclusions that could be made.

Decisions	Alternative Conclusions
1. Determine whether it is cost effective to perform tests of controls.	A. It is cost effective B. It is not cost effective
2. Perform substantive tests of details of balances.	C. Perform reduced tests D. Perform expanded tests
3. Complete initial assessment of control risk.	E. Controls are effective F. Controls are ineffective
4. Perform tests of controls.	G. Controls are effective H. Controls are ineffective

Required

a. Identify the sequence in which the auditor should make decisions 1 to 4.
b. For the audit of the sales and collection cycle and accounts receivable, an auditor reached the following conclusions: A, D, E, H. Put the letters in the appropriate sequence and evaluate whether the auditor's logic was reasonable. Explain your answer.

Audit 3– Although the auditors gained an understanding of internal control, no tests of controls were performed over acquisitions and payments. However, extensive substantive tests of transactions were performed, and confirmations were sent as part of the extensive testing of year-end accounts payable. Although this company was smaller than the first two companies, the total audit time spent testing accounts payable was greater than for the first two audits.

Angela is confused by the apparent inconsistency in the audit approach on the three audits, and concludes that the audit approach and amount of audit evidence to collect depends on the audit partner in charge of the engagement.

Required

a. Match each engagement with one of the following descriptions:
   (1) Extensive reliance on controls was planned for this audit engagement, but control risk was increased after tests of controls.
   (2) This audit is likely for a public company, and is also the most efficient audit.
   (3) This company has ineffective controls, and may also have fraud risks present.
b. What other factors likely explain the different approaches to the audit of acquisitions and payments and accounts payable for these three engagements?
c. What could Angela's supervisors have done to improve her understanding of the audit strategy for each engagement?

13-32 (OBJECTIVES 13-4, 13-6, 13-7) The following are parts of a typical audit for a company with a fiscal year-end of July 31.

1. Understand internal control and assess control risk.
2. Perform substantive analytical procedures for accounts payable.
3. Confirm accounts payable.
4. Perform tests of controls and substantive tests of transactions for the acquisition and payment and payroll and personnel cycles.
5. Perform other tests of details of balances for accounts payable.
6. Perform tests for review of subsequent events.
7. Accept the client.
8. Issue the audit report.
9. Set acceptable audit risk and decide preliminary judgment about materiality and performance materiality.

Required

a. Identify the phase of the audit in which each activity occurs.
b. Put parts 1 through 9 of the audit in the sequential order in which you would expect them to be performed in a typical audit.
c. Identify those parts that will frequently be done before July 31.

13-33 (OBJECTIVES 13-2, 13-3) Auditors develop overall audit plans to ensure that they obtain sufficient appropriate audit evidence. The timing and extent of audit procedures auditors use is a matter of professional judgment, which depends upon a number of factors. Decisions about the mix of audit procedures and the timing of procedures significantly impact the date on which the audit report is issued. Visit the company Web sites for Google, Inc. (www.google.com), Boeing (www.boeing.com), and Microsoft (www.microsoft.com). Search under "Investor Relations" for the most recent annual report and locate the independent auditor's report.

Required

a. Identify the year-end for each company. Does any company have a year-end other than December 31? Will the company's year-end have any impact on the audit procedures used and their timing?
b. Indicate the number of days between each company's year-end and the date of the audit report. What factors may impact the number of days to issue the audit report?
c. Based on the number of days between each company's year-end and the date of the audit report, and your knowledge of each company's operations, on which audit do you think the auditors place the greatest reliance on substantive tests of details of balances? Explain.