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1 Session 1 – External Audit

1.1 Definition and Objective

Definition and objective of External Audit

• Definition:
  It is an examination of the financial statements of an enterprise by independent auditors appointed by statute

• Objective:
  To give an opinion on the financial statements. To provide reasonable assurance that these financial statements are free from material misstatement

1.2 Responsibilities of External Audit

Responsibilities of External Audit

External auditors should
  Comply with auditing standards
  Carry out procedures designed to obtain sufficient audit evidence to determine whether the financial statement are
  - free of material misstatement
  - have been prepared in accordance with relevant legislation and accounting standards
  Issue a report containing a clear expression of their opinion on the financial statement
1.3 Scope of the Audit

Scope of the Audit

External auditors form opinions whether:

- The financial statements show a true and fair view of the financial position at the balance sheet date and of the results for the year ended on that date,
- The financial statements comply with statutory or other legislative or regulatory requirements,
- The financial statement have been prepared using appropriate accounting bases and policies, applied consistently from year to year, the business has maintained proper accounting records,
- The financial statements agree with the accounting records.

1.4 Auditor’s Report Basic Elements

Auditor’s Report Basic Elements

- Title
- Address
- Introductory, scope and opinion paragraphs
- Date of the report
- Auditor’s signature
1.5 Special Features in Public Sector

Special Features of External Audit in Public Sector

- An assurance as to regularity of underlying transactions and
- Of economy, efficiency and effectiveness should be provided
- Have in mind the interest of the general public

Four Main Types of SAIs

- **The Court System**
  There are seven SAIs (Belgium, France, Greece, Italy, Luxembourg, Portugal and Spain) which can loosely be combined together as Courts.

- **The Collegiate Body**
  Is a management board for the SAIs. Netherlands and Germany create the example for using this type of SAIs.

- **An independent Audit Office**
  In the UK, Ireland and Denmark the model of an independent audit office is used.

- **Auditor General within the structure of Government**
  The form of SAIs of an Audit Office headed by an Auditor General within the structure of Government is applied in Sweden and Finland.
### EXTERNAL AUDIT IN THE PRIVATE AND PUBLIC SECTOR

#### EU AND INTERNATIONAL PRACTICE

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### EXTERNAL AUDIT IN THE PRIVATE AND PUBLIC SECTOR

#### IN THE REPUBLIC OF MACEDONIA

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<td>To Shareholders</td>
<td>To Parliament; (Annual Report, Current Audit Report and Quarterly Report)</td>
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1.6 Exercise

Does the auditor:

1. Certify the accuracy of the financial statements? 

2. Take responsibility for the preparation of the financial statements? 

3. Seek to uncover all fraud and error? 

If you have answered “No” to any or the questions, please give your reasons below.
1.7 Questions
The following statements are TRUE or FALSE. You must decide!

1. External auditors are appointed by the shareholders of the company.
2. The audit report is made to the management (directors) of the company.
3. External auditors are responsible for guaranteeing the truth and fairness of the view given by the financial statements.
4. The Companies Act does not set out in detail how the external auditor, should carry out their audit.
5. External auditors have no right to see the records of directors' salaries.
6. If the external auditors find that the books of the company have not been completely written up to the end of the period they are auditing they must write them up immediately.
7. Internal auditors are appointed by the shareholders of the company under the Companies Act 1985.
8. Independence of internal auditors is often very difficult to achieve.
2 Session 2 – Internal Audit

2.1 Definitions of Internal Audit

IIA Definitions

- Internal auditing is an independent appraisal function established within an organization to examine and evaluate its activities as a service to the organization (1978)
- “Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes (1999)

Sawyer’s Definition

Internal auditing is a systematic, objective appraisal by internal auditors of the diverse operations and controls within an organization to determine whether (1) financial and operating information is accurate and reliable; (2) risks to the enterprise are identified and minimized; (3) external regulations and acceptable internal policies and procedures are followed; (4) satisfactory operating criteria are met; (5) resources are used efficiently and economically; and (6) the organization’s objectives are effectively achieved - all for the purpose of consulting with management and for assisting members of the organization in the effective discharge of their governance responsibilities
2.2 Evolution of Internal Auditing

Evolution of Internal Auditing

- From accounting to management orientation
- From junior sibling of public accountant to distinctive discipline
- From adversary to problem-solving partner

External vs. Internal Auditor (Missions)

- EA: Report on company’s financial statements
- IA: Furnish management with needed information
- EA: Narrowly focused on financial matters
- IA: Comprehensive in scope
- EA: Material fraud
- IA: Any fraud
Internal Auditing as a Profession

Professional Practice Framework

- Code of Ethics
- Standards for the Professional Practice of Internal Auditing
  - Attribute Standards (1000 series)
  - Performance Standards (2000 series)
  - Implementation Standards (nnnn Xn)
- Practice Advisories
- Development & Practice Advisories
- Common Body of Knowledge
- Certification Program
- Professional association and publications

2.3 IIA Standards and Practice Advisory Context

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<td>1000-1 1000.C1-1 1000.C1-2</td>
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2.4 Statement of Responsibilities

Statement of Responsibilities

Internal auditors who are members of The IIA were required to subscribe to a Statement of Responsibilities of Internal Auditing. The Statement; first published in 1947, encapsulated the requirements of the Standards and required internal auditors to serve their organizations in a manner consistent with those Standards. The Statement of Responsibilities was discarded in January 1, 2002, when the revised Standards became effective.

2.5 Code of Ethics

Code of Ethics

Internal auditing professionals are bound by the Code of Ethics, and violation of its terms is grounds for forfeiture of CIA membership.

Code deals with requirements for honesty, loyalty, avoidance of conflicts of interest, the proper use of confidential information, the requirement for continued professional development, and the need to follow the Standards.
Code of Ethics

- The Code is divided into:
  - Introduction
  - Fundamental principles
  - Code of conduct
- Code is reported into:
  - Integrity
  - Objectivity
  - Confidentiality
  - Professionalism
  - Competency

2.6 Standards

Standards for the Professional Practice of Internal Auditing (Standards)

- The standards provide guidelines to bind all internal auditor worldwide.
- Purposes of Standards
  - To establish benchmark for evaluating internal audit
  - To provide guidance to internal auditors in carrying out their audits
  - To provide framework for harmonization of Internal audit activities
2.7 Control Self-Assessment

Control Self-assessment

- A nontraditional audit approach
- Employee of subject units
  - Identifying improvements
  - Assessing controls
  - Pinpointing strengths and weaknesses
  - Determining achieving objectives
  - Developing plans
- Internal auditors serve as facilitators
- Use of non-identifying individual input
- Assists in sensitive areas
- Augments traditional internal audit approach
- A new tool – A Control Self-assessment Center
- Certification in self-assessment

2.8 Internal Audit as a Core Function

A Core Function

- A function that is:
  - Integral
  - Essential
  - Unassignable
- Questions that require a “Yes” response:
  - Does internal auditing reflect tone at the top to reflect value added?
  - Does the contribution of internal auditors have a positive and pervasive value?
  - Is the chief audit executive (CAE) astute and knowledgeable?
  - Does the chief audit executive provide vision and leadership for the activities of auditing?
**A Core Function**

– Does the executive committee seek observations, recommendations, and opinions from auditing?
– Does internal auditing serve as a positive ingredient for promotion?
– Is internal auditing responsive to risk assessment and monitoring internal control?
– Is the CAE free to meet with the audit committee, without the CEO and/or executive committee?
– Can the CAE meet with the audit committee without prior permission?
– Does the internal audit staff have proper training and experience?

**2.9 Independence**

**Independence**

• Programming independence
• Freedom from:
  – Managerial interference with audit programs
  – Any interference with procedures
  – Any undue reviews of audit work
• Examining independence:
  – Free access to records, properties, personnel
  – Active cooperation from management
  – Management specification of activities to be examined
  – Personal interests leading to exclusion of audit examination
2.10 Appendix

APPENDIX

- The Internal Auditor as a Consultant
- Informally included in 1978 Standards
- Inferred in scope concept:
  - Efficiency
  - Effectiveness
  - Economy
  - Compliance
- Recommendations were in fact “consulting”
- Guidance Task Force – 1997 formally recognized consulting as an internal audit function
- Consulting not included in Standards January 1, 2002, issuance
- Consulting standards issued – effective July 1, 2002
- Practice Advisory issuances followed
# 2.11 Questions to Session 2

## 1. Which of the following best describes the purpose of the internal audit activity?

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<td>To add value and improve an organization’s operations.</td>
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<tr>
<td>b</td>
<td>To assist management with the design and implementation of risk management and control systems.</td>
</tr>
<tr>
<td>c</td>
<td>To examine and evaluate an organization’s system as a service to management.</td>
</tr>
<tr>
<td>d</td>
<td>To monitor the organization’s internal control system for the external auditors.</td>
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## 2. An internal audit activity’s charter sets forth which of the following items?

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<tbody>
<tr>
<td>a</td>
<td>Organizational structure of the internal audit activity.</td>
</tr>
<tr>
<td>b</td>
<td>Annual engagement work schedule.</td>
</tr>
<tr>
<td>c</td>
<td>Internal auditing objectives.</td>
</tr>
<tr>
<td>d</td>
<td>Purpose, authority, and responsibility of the internal audit activity.</td>
</tr>
</tbody>
</table>

## 3. A written charter approved by the board that formally defines the internal audit activity’s purpose, authority, and responsibility enhances its

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Exercise of due professional care.</td>
</tr>
<tr>
<td>b</td>
<td>Proficiency.</td>
</tr>
<tr>
<td>c</td>
<td>Relationship with management.</td>
</tr>
<tr>
<td>d</td>
<td>Independence</td>
</tr>
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</table>

## 4. Which of the following most seriously compromises the independence of the internal audit activity?

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
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<tbody>
<tr>
<td>a</td>
<td>Internal auditors frequently draft revised procedures for departments whose procedures they have criticized in an engagement communication.</td>
</tr>
<tr>
<td>b</td>
<td>The chief audit executive has dual reporting responsibility to the organization’s chief executive officer and the board of directors.</td>
</tr>
<tr>
<td>c</td>
<td>The internal audit activity and the organization’s external auditors engage in joint planning of total engagement coverage to avoid duplicating each other’s work.</td>
</tr>
<tr>
<td>d</td>
<td>The internal audit activity is included in the review cycle of the organization’s contracts with other organizations before the contracts are executed.</td>
</tr>
</tbody>
</table>
5. **Which of the following statements is true with respect to due professional care?**

<p>| | |</p>
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<tr>
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</thead>
<tbody>
<tr>
<td>a</td>
<td>An internal auditor should perform detailed tests of all transactions before communicating results.</td>
</tr>
<tr>
<td>b</td>
<td>An item should not be mentioned in an engagement communication unless the internal auditor is absolutely certain of the item.</td>
</tr>
<tr>
<td>c</td>
<td>An engagement communication should never be viewed as providing an infallible truth about a subject.</td>
</tr>
<tr>
<td>d</td>
<td>An internal auditor has no responsibility to recommend improvements.</td>
</tr>
</tbody>
</table>

6. **Follow-up activity may be required to ensure that corrective action has taken place for certain observations made in an assurance engagement. The internal audit activity’s responsibility to perform follow-up activities as required should be defined in the**

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<tbody>
<tr>
<td>a</td>
<td>Internal audit activity’s written charter or the agreement with the client.</td>
</tr>
<tr>
<td>b</td>
<td>Mission statement of the audit committee.</td>
</tr>
<tr>
<td>c</td>
<td>Engagement memo issued prior to each engagement.</td>
</tr>
<tr>
<td>d</td>
<td>Purpose statement within applicable engagement communications.</td>
</tr>
</tbody>
</table>

7. **One of the purposes of the Standards for the Professional Practice of Internal Auditing as stated in the Introduction to the current version of the Standards is to**

<p>| | |</p>
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<tbody>
<tr>
<td>a</td>
<td>Encourage the professionalization of internal auditing.</td>
</tr>
<tr>
<td>b</td>
<td>Establish the independence of the internal audit activity and emphasize the objectivity of internal auditing.</td>
</tr>
<tr>
<td>c</td>
<td>Encourage external auditors to make more extensive use of the work of internal auditors.</td>
</tr>
<tr>
<td>d</td>
<td>Establish the basis for the measurement of internal audit performance.</td>
</tr>
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</table>

8. **To avoid being the apparent cause of conflict between an organization’s senior management and the audit committee, the chief audit executive should**

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<tbody>
<tr>
<td>a</td>
<td>Communicate all engagement results to both senior management and the audit committee.</td>
</tr>
<tr>
<td>b</td>
<td>Strengthen the independence of the internal audit activity through organizational status.</td>
</tr>
<tr>
<td>c</td>
<td>Discuss all reports to senior management with the audit committee first.</td>
</tr>
<tr>
<td>d</td>
<td>Request board approval of policies that include internal audit activity relationships with the audit committee.</td>
</tr>
</tbody>
</table>

9. **Which of the following statements is true with respect to due professional care?**

<p>| | |</p>
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</thead>
<tbody>
<tr>
<td>a</td>
<td>An internal auditor should perform detailed tests of all transactions</td>
</tr>
</tbody>
</table>
before communicating results.

b  An item should not be mentioned in an engagement communication unless the internal auditor is absolutely certain of the item.

c  An engagement communication should never be viewed as providing an infallible truth about a subject.

d  An internal auditor has no responsibility to recommend improvements.

10  An internal auditor has some suspicion of, but no information about, potential misstatement of financial statements. The internal auditor has failed to exercise due professional care if (s)he

a  Identified potential ways in which a misstatement could occur and ranked the items for investigation.

b  Informed the engagement manager of the suspicions and asked for advice on how to proceed.

c  Did not test for possible misstatement because the engagement work program had already been approved by engagement management.

d  Expanded the engagement work program, without the engagement client’s approval, to address the highest ranked ways in which a misstatement may have occurred.

11  Due professional care implies reasonable care and competence, not infallibility or extraordinary performance. Thus, which of the following is unnecessary?

a  The conduct of examinations and verifications to a reasonable extent.

b  The conduct of extensive examinations.

c  The reasonable assurance that compliance does exist.

d  The consideration of the possibility of material irregularities

12  Assurance engagements should be performed with proficiency and due professional care. Accordingly, the Standards require internal auditors to

I. Consider the probability of significant non-compliance

II. Perform assurance procedures with due professional care so that all significant risks are identified

III. Weigh the cost of assurance against the benefits

a  I and II only.

b  I and III only.

c  II and III only.

d  I, II, and III.
An internal auditor must have the knowledge, skills, and other competencies needed to perform their individual responsibilities. Which of the following correctly describes the level of knowledge, skill, or other competency required? Internal auditors must have

<p>| | |</p>
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<tbody>
<tr>
<td>a</td>
<td>Proficiency in applying internal auditing standards and procedures without extensive recourse to technical research and assistance.</td>
</tr>
<tr>
<td>b</td>
<td>Proficiency in applying knowledge of accounting and information technology to specific or potential problems.</td>
</tr>
<tr>
<td>c</td>
<td>An understanding of broad techniques used in supporting and developing engagement observations and the ability to research the proper procedures to be used in any engagement situation.</td>
</tr>
<tr>
<td>d</td>
<td>A broad appreciation of accounting principles and techniques during engagements involving the financial records and reports of the organization.</td>
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The function of internal auditing, as related to communicating results, is to

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<tbody>
<tr>
<td>a</td>
<td>Ensure compliance with reporting procedures.</td>
</tr>
<tr>
<td>b</td>
<td>Review the expenditure items and match each item with the expenses incurred.</td>
</tr>
<tr>
<td>c</td>
<td>Determine whether any employees are expending funds without authorization.</td>
</tr>
<tr>
<td>d</td>
<td>Identify inadequate controls that increase the likelihood of unauthorized expenditures.</td>
</tr>
</tbody>
</table>

Recent criticism of an internal audit activity suggested that engagement coverage was not providing adequate feedback to senior management on the processes used in the organization's key lines of business. The problem was further defined as lack of feedback on the recent implementation of automated support systems. Which two functions does the chief audit executive need to improve?

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<tbody>
<tr>
<td>a</td>
<td>Staffing and communicating.</td>
</tr>
<tr>
<td>b</td>
<td>Staffing and decision making.</td>
</tr>
<tr>
<td>c</td>
<td>Planning and organizing.</td>
</tr>
<tr>
<td>d</td>
<td>Planning and communicating.</td>
</tr>
</tbody>
</table>
16 Which of the following statements is false regarding risk assessment as the term is used in internal auditing?

<p>| | |</p>
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<tbody>
<tr>
<td>a</td>
<td>Risk assessment is a judgmental process of assigning monetary amounts to the perceived level of risk found in an activity being evaluated. These amounts allow a chief audit executive to select the engagement clients most likely to result in identifiable savings.</td>
</tr>
<tr>
<td>b</td>
<td>The chief audit executive should incorporate information from a variety of sources into the risk assessment process, including discussions with the board, management, external auditors, review of regulations, and analysis of financial/operating data.</td>
</tr>
<tr>
<td>c</td>
<td>Risk assessment is a systematic process of assessing and integrating professional judgments about events that could affect the achievement of organizational objectives. It provides a means of organizing an engagement work schedule.</td>
</tr>
<tr>
<td>d</td>
<td>As a result of an engagement or preliminary survey, the chief audit executive may revise the level of assessed risk of an engagement client at any time, making appropriate adjustments to the work schedule.</td>
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17 Which of the following is least likely to be included in the engagement work schedule of the internal audit activity?

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<tbody>
<tr>
<td>a</td>
<td>To be consistent with its charter.</td>
</tr>
<tr>
<td>b</td>
<td>To be capable of being accomplished.</td>
</tr>
<tr>
<td>c</td>
<td>To include a list of activities to be performed.</td>
</tr>
<tr>
<td>d</td>
<td>To include the basics of the engagement work program.</td>
</tr>
</tbody>
</table>

18 You became head of the internal audit activity of an organization one week ago. An engagement client as come to you complaining vigorously that one of your internal auditors is taking up an excessive amount of client time on an engagement that seems to be lacking a clear purpose. In handling this conflict with a client, you should consider

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<tbody>
<tr>
<td>a</td>
<td>Discounting what is said, but documenting the complaint.</td>
</tr>
<tr>
<td>b</td>
<td>Whether existing procedures within the internal audit activity provide for proper planning and quality assurance.</td>
</tr>
<tr>
<td>c</td>
<td>Presenting an immediate defence of the internal auditor based upon currently known facts.</td>
</tr>
<tr>
<td>d</td>
<td>Promising the client that you will have the internal auditor finish the work within 1 week.</td>
</tr>
</tbody>
</table>
19. A manager responsible for the supervision and review of other internal auditors needs the necessary skills, knowledge, and other competencies. Which of the following does not describe a skill, knowledge, or other competency necessary to supervise a particular engagement?

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<tbody>
<tr>
<td>a</td>
<td>The ability to review and analyze an engagement work program to determine whether the propose engagement procedures will result in information relevant to the engagement’s objectives.</td>
</tr>
<tr>
<td>b</td>
<td>Assuring that an engagement communication is supported and accurate relative to the information documented in the engagement working papers.</td>
</tr>
<tr>
<td>c</td>
<td>Use risk assessment and other judgmental processes to develop an engagement workschedule for the internal audit activity and present the schedule to the board.</td>
</tr>
<tr>
<td>d</td>
<td>Determine that staff auditors have completed the engagement procedures and that engagement objectives have been met.</td>
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20. The purpose of the internal audit activity’s evaluation of the effectiveness of existing risk management processes is to determine that

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<tbody>
<tr>
<td>a</td>
<td>Management has planned and designed so as to provide reasonable assurance of achieving objective and goals.</td>
</tr>
<tr>
<td>b</td>
<td>Management directs processes so as to provide reasonable assurance of achieving objectives and goals.</td>
</tr>
<tr>
<td>c</td>
<td>The organization’s objectives and goals will be achieved efficiently and economically.</td>
</tr>
<tr>
<td>d</td>
<td>The organization’s objectives and goals will be achieved in an accurate and timely manner and with minimal use of resources.</td>
</tr>
</tbody>
</table>

21. Which of the following best describes the internal audit activity’s purpose in evaluating the adequacy of risk management, control, and governance processes?

<p>| | |</p>
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<tbody>
<tr>
<td>a</td>
<td>To help determine the nature, timing, and extent of tests necessary to achieve engagement objectives.</td>
</tr>
<tr>
<td>b</td>
<td>To ensure that material weaknesses in internal control are corrected.</td>
</tr>
<tr>
<td>c</td>
<td>To determine whether the risk management, control, and governance processes provide reasonable assurance that the organization’s objectives and goals are achieved efficiently and economically.</td>
</tr>
<tr>
<td>d</td>
<td>To determine whether the risk management, control, and governance processes ensure that the accounting records are correct and that financial statements are fairly stated.</td>
</tr>
</tbody>
</table>
22. **The purpose of the internal audit activity's evaluation of the effectiveness of risk management, control, and governance processes is to determine whether**

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<tbody>
<tr>
<td><strong>a</strong></td>
<td>Management is directing processes so as to provide reasonable assurance that objectives and goals will be achieved.</td>
</tr>
<tr>
<td><strong>b</strong></td>
<td>Management has planned and designed processes to provide reasonable assurance that objectives and goals will be achieved efficiently and economically.</td>
</tr>
<tr>
<td><strong>c</strong></td>
<td>Reasonable assurance is provided that these processes are functioning as intended.</td>
</tr>
<tr>
<td><strong>d</strong></td>
<td>The reliability of financial and operating information has been achieved.</td>
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</table>

23. **The internal audit activity provides information about risk management, control, and governance processes and quality of performance to**

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<tbody>
<tr>
<td><strong>a</strong></td>
<td>Management and the board.</td>
</tr>
<tr>
<td><strong>b</strong></td>
<td>A level in the organization sufficient to ensure acceptance of all recommendations.</td>
</tr>
<tr>
<td><strong>c</strong></td>
<td>Outside agencies for regulatory and financial compliance.</td>
</tr>
<tr>
<td><strong>d</strong></td>
<td>Any member of the organization upon request</td>
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24. **Adequate risk management, control, and governance processes are most likely to be present if**

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<tr>
<td><strong>a</strong></td>
<td>Management has designed them in a manner providing reasonable assurance that the organization's objectives and goals will be achieved efficiently and economically.</td>
</tr>
<tr>
<td><strong>b</strong></td>
<td>Management has exercised due professional care in the design of operating and functional systems.</td>
</tr>
<tr>
<td><strong>c</strong></td>
<td>Operating and functional systems are designed, installed, and implemented in compliance with the law.</td>
</tr>
<tr>
<td><strong>d</strong></td>
<td>Management has designed, installed, and implemented efficient operating and functional systems.</td>
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</table>

25. **Risk management, control, and governance processes are adequate if they provide reasonable assurance.**

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<tbody>
<tr>
<td><strong>a</strong></td>
<td>The organization's profits are maximized and expenses are minimized.</td>
</tr>
<tr>
<td><strong>b</strong></td>
<td>The organization's objectives and goals will be achieved efficiently and economically.</td>
</tr>
<tr>
<td><strong>c</strong></td>
<td>Management decisions are reviewed to determine if they conform to good management practices.</td>
</tr>
<tr>
<td><strong>d</strong></td>
<td>Financial and operating records and reports contain relevant, reliable, and credible information.</td>
</tr>
</tbody>
</table>
The internal audit activity of an organization is an integral part of the organization’s risk management, control, and governance processes because it evaluates and contributes to the improvement of those processes. Select the type of control provided when the internal auditor conducts a systems development review.

- Feedback control.
- Strategic plans.
- Policies and procedures.
- Feedforward control.

Internal auditing is a dynamic profession. Which of the following best describes the scope of internal auditing as it has developed to date?

- Internal auditing involves evaluating the effectiveness and efficiency with which resources are employed.
- Internal auditing involves evaluating compliance with laws, regulations, and contracts.
- Internal auditing has evolved to verifying the existence of assets and reviewing the means of safeguarding assets.
- Internal auditing has evolved to evaluating all risk management, control, and governance systems.

Control techniques for ensuring data accuracy are

- Reasonableness checks, hash totals, document counts, and key verifications.
- Existence checks, range checks, batch sequence checks, and batch controls.
- Computer matching, dependency checks, batch sequence checks, and key verifications.
- Reasonableness checks, range checks, check digit verifications, and key verifications.

Erroneous management decisions might be the result of incomplete information. The best control to detect a failure to process all valid transactions is

- Periodic user submission of test data.
- User review of selected output and transactions rejected by edit checks.
- Controlled output distribution.
- Decollation of output.

Controls that are designed to provide management with assurance of the realization of specified minimum gross margins on sales are

- Directive controls.
- Preventive controls.
- Detective controls.
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<tr>
<th></th>
<th>The requirement that purchases be made from suppliers on an approved vendor list is an example of a</th>
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<tbody>
<tr>
<td>a</td>
<td>Preventive control.</td>
</tr>
<tr>
<td>b</td>
<td>Detective control.</td>
</tr>
<tr>
<td>c</td>
<td>Corrective control.</td>
</tr>
<tr>
<td>d</td>
<td>Monitoring control.</td>
</tr>
</tbody>
</table>

|   | Output controls. |
3 Session 3 – Internal Control System

Growing Importance of Internal Controls

- Increasing completeness of the public administration process
- Increasing requirement of decreasing the opportunity ties of "hand conducted" management
- Increasing force of economical, efficient and effectiveness operation of administrative bodies
- Public administration reforms - restructuring, higher independence of the management

3.1 Internal Control Frameworks

Internal Control Frameworks

- INTOSAI Guidelines for Internal Control Standards
- The Institute of Internal Auditors Research Foundation's Systems Auditability and Control (SAC)
- The Committee of Sponsoring Organizations of the Treadway Commission's Internal Control - Integrated Framework (COSO)
Internal Control Frameworks

- Canadian Institute of Chartered Accountants: The Framework of Criteria of Control (CoCo)
- The American Institute of Certified Public Accountants Consideration of the Internal Control Structure in a Financial Statement Audit (SAS 55 and 78)
- The Information System Audit and Control Foundation's COBIT (Control Objectives for Information and related Technology).

3.2 Definitions

INTOSAI Guidelines: Definition of Internal Controls

The policies, plans, procedures and regulations of an organization, including management's attitude, methods and other measures that provide reasonable assurance that the following objectives are achieved:
INTOSAI Guidelines: Definition of Internal Controls

- Promoting orderly, economical, efficient, and effective operations and quality products and services consistent with the organization's mission
- Safeguarding resources against loss due to waste, abuse, mismanagement, errors, and fraud and other irregularities
- Adhering to laws, regulations, and management directives and
- Developing and maintaining reliable financial and management data and fairly disclosing that data in timely reports

GAO Definition

An integral component of an organization's management that provides reasonable assurance that the following objectives are being achieved:

- Effectiveness and efficiency of operations
- Reliability of financial reporting
- Compliance with applicable laws and regulations

GAO Definition

- A continuous built-in component of operations
- Effected by people
- Provides reasonable assurance, not absolute assurance.
3.3 The COSO and COCO Models

The COSO Model

**Five components**
- Control environment
- Risk assessment
- Control activities
- Information and communication
- Monitoring

Establishing a common definition
To provide reasonable assurance as to:
- Effectiveness and efficiency of operations
- Reliability of financial statements
- Compliance with applicable laws and regulations

Process could help in achieving
- Basic objectives
- Safeguarding assets
- Reliable financial statements
- Compliance with laws and regulations
The COCO Model

A Canadian version of COSO has four components:

- Purpose
- Commitment
- Capability
- Monitoring and learning

Is auditor friendly

3.4 Preventive, Detective and Corrective Controls

Preventive, Detective, and Corrective Controls

Preventive controls:

More cost effective

- Competent, trustworthy people
- Segregation of duties
- Computerized edits
- Etc.
Preventive, Detective, and Corrective Controls

Detective controls:
- More expensive
- Measure effectiveness of preventive controls
- Detect incidents when they occur
- Reviews and comparisons
- Reconciliations
- Physical counts
- Etc.

Corrective controls
- Establishment of controls when incidents occur
- Prevent reoccurrence

Problems
- May obscure objectives
- May become end rather than means
- May result in overcontrol
- May discourage initiative and creativity
- May not consider behavioral aspects
3.5 Means of Achieving Control

Means of Achieving Control

- Organization
- Policies
- Procedures
- Personnel
- Accounting
- Budgeting
- Reporting

- **Organization**: An approved intentional structuring of roles assigned to people and organizations so as to achieve their objectives.
- **Policies**: Stated principles that require, guide, or restrict action. Policies derive from stated principles.
- **Procedures**: Means employed to carry out activities in conformity with stated policies.
- **Personnel**: Personnel hired or assigned should have the qualifications to do the assigned jobs. High standards of supervision are the best form of control.
• **Accounting:** The indispensable means of financial control furnishing a framework for assigned responsibility. Important is the quality and content of the accounting system.

• **Budgeting:** The expected results of operations expressed in numerical terms. It becomes the standard for the input of resources.

• **Reporting:** The conversion of information both financial and operational for all levels of management to serve as decision-making guides.

---

**Standard 2120 – Control**

Should include:
Reliability and integrity of:
- Financial information
- Operational information

Effectiveness and efficiency of information
Safeguarding of assets
Compliance:
- Laws
- Regulations
- Contracts

Confirmation of operating goals and objectives
Are operations consistent with goals and objectives?
Development of criteria to evaluate controls
Has management set criteria to evaluate controls?
3.6 Access and Reporting on Control

### Access and Reporting on Control

(Practice Advisory 2120, A1-1)

**Chief audit executive (CAE) should:**
- Develop audit plan
- Consider relevant work of others

**Evaluate plan:**
- Horizontal adequacy
- Inclusion of variety of:
  - Transactions
  - Business process types

**Audit should evaluate the effectiveness of control systems**

**Report should identify role planned by controls**

---

**Internal Auditor Reports on Internal Control**

Internal auditors are functionally expert in:
- The element of management
- The operation of controls

Periodically the internal audits should report on:
- The appropriateness of controls
- The use of controls by management
Internal Auditor Reports on Internal Control

- Should detail control strengths and weaknesses.
- Should suggest corrective action to be taken and that has already been taken.
- Can be coordinated with traditional audit examination.
- Should go to top management and to the audit committee.
- Control self-assessment workshops

The Audit of Controls

- Are controls in place?
- Are controls sound?
- Will controls achieve desired objectives?
- Are controls being utilized?
- Are controls efficient?
- Are controls effective?
- Is management using control system output?
- Is control risk reasonable?
### 3.7 Questions to Session 3

1. **The cash receipts function should be separated from the related record-keeping function in an organization to:**
   - a. Physically safeguard the cash receipts.
   - b. Establish accountability when the cash is first received.
   - c. Prevent paying cash disbursements from cash receipts.
   - d. Minimize undetected misappropriations of cash receipts.

2. **An audit of the payroll function revealed several instances where a payroll clerk had added fictitious employees to the payroll and deposited the checks in accounts of close relatives. What controls should have prevented such actions?**
   - a. Using time cards and attendance records in the computation of employee gross earnings.
   - b. Establishing a policy to deal with close relatives working in the same department.
   - c. Having the treasurer’s office sign payroll checks.
   - d. Allowing changes to the payroll to be authorized only by the personnel department.

3. **Which of the following situations would cause an internal auditor to question the adequacy of internal controls in a purchasing function?**
   - a. The original and one copy of the purchase order are mailed to the vendor. The copy, on which the vendor acknowledges acceptance, is returned to the purchasing department.
   - b. Receiving reports are forwarded to purchasing where they are matched to purchase orders and sent to accounts payable.
   - c. The accounts payable section prepares documentation for payments.
   - d. Unpaid voucher files and perpetual inventory records are independently maintained.

4. **Internal controls are designed to provide reasonable assurance that:**
   - a. Material errors or irregularities would be prevented or detected and corrected within a timely period by employees in the course of performing their assigned duties.
   - b. Management’s plans have not been circumvented by worker collusion.
   - c. The internal audit department’s guidance and oversight of management’s performance is accomplished economically and efficiently.
   - d. Management’s planning, organizing, and directing processes are properly evaluated.
5. The treasurer makes disbursements by check and reconciles the monthly bank statements to accounting records. Which of the following best describes the control impact of this arrangement?

a. Internal control will be enhanced since these are duties that the treasurer should perform.
b. The treasurer will be in a position to make and conceal unauthorized payments.
c. The treasurer will be in a position to make and conceal unauthorized payments.
d. Controls will be enhanced because the treasurer will have two opportunities to discover inappropriate disbursements.

6. A payroll clerk working through a computerized payroll system increased the hourly pay rate for two employees and shared the resulting overpayments with the employees. Which of the following would have best served to prevent this illegal act?

a. Requiring that all changes to pay records be recorded on a standard form.
b. Limiting access to master payroll records to supervisory personnel in the payroll department.
c. Reconciling pay rates per personnel records with those of the payroll system annually.
d. Monitoring of payroll costs by department heads on a monthly basis.

7. Which of the following best describes an internal auditor's purpose in reviewing the adequacy of the system of internal control?

a. To help determine the nature, timing, and extent of tests necessary to achieve audit objectives.
b. To ensure that material weaknesses in the internal control system are corrected.
c. To determine whether the internal control provides reasonable assurance that the organization's objectives and goals are met efficiently and economically.
d. To determine whether the internal control system ensures that the accounting records are correct and that financial statements are fairly stated.

8. If an auditor's preliminary evaluation of internal controls results in a finding that controls may be inadequate, the next step would be to:

a. Expand audit work prior to the preparation of an audit report.
b. Prepare a flowchart depicting the internal control system.
c. Note an exception in the audit report if losses have occurred.
d. Implement the desired controls.
9. Which of the following exemplifies an inherent limitation of internal control?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>A controller both makes and records cash deposits.</td>
</tr>
<tr>
<td>b</td>
<td>A security guard allows one of the warehouse employees to remove company assets from the premises without authorization.</td>
</tr>
<tr>
<td>c</td>
<td>The company sells to customers on credit without proper credit approval.</td>
</tr>
<tr>
<td>d</td>
<td>An employee who is unable to read is assigned custody of the company’s tape library and run manuals.</td>
</tr>
</tbody>
</table>

10. The requirements that purchases be made from suppliers on an approved vendor list is an example of a:

<p>| | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>a</td>
<td>Preventive control.</td>
</tr>
<tr>
<td>b</td>
<td>Detective control.</td>
</tr>
<tr>
<td>c</td>
<td>Corrective control.</td>
</tr>
<tr>
<td>d</td>
<td>Monitoring control.</td>
</tr>
</tbody>
</table>

11. The control that would most likely ensure that payroll checks are written only for authorized amounts is to:

<p>| | |</p>
<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Conduct periodic floor verification of employees on the payroll.</td>
</tr>
<tr>
<td>b</td>
<td>Require the return of undelivered checks to the cashier.</td>
</tr>
<tr>
<td>c</td>
<td>Require supervisory approval of employee time cards.</td>
</tr>
<tr>
<td>d</td>
<td>Periodically witness the distribution of payroll checks.</td>
</tr>
</tbody>
</table>

12. Which of the following controls would prevent disputes over the charges billed by independent contractors?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Timely recording of both commitments and expenditures.</td>
</tr>
<tr>
<td>b</td>
<td>A written agreement containing provisions for billing charges.</td>
</tr>
<tr>
<td>c</td>
<td>Appropriate segregation of duties between the purchasing and accounts payable departments.</td>
</tr>
<tr>
<td>d</td>
<td>A monthly report comparing actual expenditures with approved budgets.</td>
</tr>
</tbody>
</table>

13. Which of the following controls would be the most appropriate means to ensure that terminated employees are removed from the payroll?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Mailing all checks to individual employee home addresses.</td>
</tr>
<tr>
<td>b</td>
<td>Requiring direct deposit of all payroll checks.</td>
</tr>
<tr>
<td>c</td>
<td>Reconciling payroll and timekeeping records.</td>
</tr>
<tr>
<td>d</td>
<td>Establishing computerized limit checks on payroll rates.</td>
</tr>
</tbody>
</table>
4 Session 4 – Relationship Between Internal Audit, Management and Governance

Relationship between internal audit and general management

Must be based on mutual confidence and understanding

Serving Management

- Monitoring activities
- Identifying and minimizing risks
- Validating reports
- Protecting management in technical areas
- Providing information for decision making
- Reviewing for future
- Helping line managers

4.1 Outsourcing of Internal Auditing

Outsourcing of Internal Auditing

Definition:
external experts perform internal audit works

The main outsourcing options are as follows:

- Assistance (providing specialist skills or additional resources in some areas)
- Assignments (regular packages)
- Specialist areas (Treasury, IT)
- Full outsourcing (to a pre-set plan of full responsibility)
Comments to Outsourcing of Internal Audit Function

- Any work done as part of the internal audit function is part of the company's activities
- Internal auditor can never achieve the same degree of independence as external auditor
- Conflicts of interest

4.2 Corporate Governance

Growing Importance of Corporate Governance

- Recent corporate collapses in the US and in Europe
- Clear need to restore confidence in capital markets
- The US Sarbanes-Oxley Act proposed new rules on corporate governance from the New York Stock Exchange
- Commission's Communication
  - "Modernising Company Law and Enhancing Corporate Governance in the European Union – A Plan to Move Forward"
  - "Reinforcing the Statutory Audit in the EU"
Definition of Corporate Governance

OECD

"Corporate governance involves a set of relationships between a company's management, its board, its shareholders and other stakeholders ... and ... provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined."

Mutual Dependency

Financial Components of Corporate Governance

The intersecting areas include:

- Internal control including financial reporting and accounting policies,
- Oversight by non-executive directors including activities of the audit committee,
- Reporting by external auditors to shareholders and management,
- Internal audit,
- Shareholders' meeting.
4.3 **Internal Control**

**Internal Control**

Governance requirements

- Section 404 of Oxley Act exclusively focuses on control over external financial reporting issues
- EU Communication requires disclosure by listed companies in the annual corporate governance statement of "the existence and nature of a risk management system"
- EU best internal control practices

4.4 **Non-executive Directors**

**Non-executive Directors (NEDs)**

NEDs offer a strong base for managing the risk of companies

Duties of NEDs

To contribute to the overall collegiate responsibility of the board:

- Strategy
- Monitoring
- External reporting
- Solving/preventing conflict of interests

Attributes of a Successful NED function
4.5 Audit Committee

Audit Committee Function

- A key element within the corporate governance framework
- Ideally all listed companies should have an audit committee function
- Corporate governance statement

External Audit

- Attestation function in the public interest
- Supportive function for non-executives/supervisory board
- Preventive function in relation to proper application of accounting standards by management
The Main Factors of Appropriate Regulation of the Audit Profession

- Professional standards on auditors' independence and objectivity
- High quality auditing standards
- Effective and transparent quality assurance systems and disciplinary regimes
- Public oversight arrangements

Auditor Reporting Responsibility

- Independent assurance on the corporate governance statement
- Corporate governance statement – audit reporting requirements
- Extending the scope of the external audit should be reviewed

Internal Audit

- Focusing on a risk based approach
- Reporting relationships:
  - to management
  - to audit committe or Supervisory Board
- Should continue to have a significant focus on assessing the wider aspects of internal control
The Audit Committee should

- Ensure that the Head of Internal Audit has direct access to the chairman of the board/supervisory board as well as to the audit committee
- Ensure that the internal audit function is professionally accountable to the Audit Committee
- Review and assess the internal audit work plans
- Receive regular reports on the execution of work plans and an annual report from the internal audit function

The Audit Committee should

- Review and monitor management's responsiveness to the findings and recommendations of the internal audit function
- Meet the Head of Internal Audit at least once a year
- Monitor and assess the role and effectiveness of the internal audit function
### 4.6 Corporate Governance in the EU

#### Development of Corporate Governance in the EU

- Eighth Company Law Directive of April 1984
- Further Development of EU Corporate Governance

#### EU Commission sees the following initiatives

- Introduction of an Annual Corporate Governance Statement
- Development of a legislative framework aiming at helping shareholders to exercise various rights
- Adoption of a Recommendation aiming at promoting the role of non-executive or supervisory directors
- Adoption of a Recommendation on Directors' Remuneration
- Creation of a European Corporate Governance Forum
5 Session 5 – EU Requirements on Financial Control

5.1 Acquis and Financial Control

Acquis and Financial Control

- Acquis communautaire which is the existing body of EC legislation
- Public Internal Financial Control (PIFC) creates important parts of acquis
- No predetermined model of financial control to be applied by Member Countries

Acquis and Financial Control

- General obligations of the Member States are established by
  - Provisions for budget and financial management
  - Detailed requirements set out in regulations
- Increasing evolvement of national financial control and audit services of Member States
- National budget is the principal instrument for account and control for flows of EU funds
5.2 European Models of Internal Financial Control

European Models of Internal Financial Control

• The traditional, Mediterranean system of heavily centralised ex-ante financial control and accountancy “Third party ex-ante approach” (France, Portugal, Spain)

• North-western European systems public managerial accountability and internal audit “Management responsibility approach” (Netherlands, United Kingdom)

Under „Third party ex-ante approach“, 

• Ex-ante control is performed 
  – by Financial Audit Body or Financial Controllers acting as authorising officers
  – by SAIs.

• The SAIs are involved in authorising public expenditures as part of the financial control process
European Models of Internal Financial Control

Under „Management responsibility approach”, line ministry takes full responsibility for spending its own budget and for ensuring appropriate checks and safeguards.

5.3 Requirements of Candidate Countries

Requirements for Candidate Countries

- Commission developed general guidelines for the reform of the national control systems
  - Latest developments in the international field
  - Best practices in Member States
- Accession Negotiations Progress monitoring of financial control (Chapter 28)
- The latter became the standard by which candidate countries’ financial controls are assessed
EU Concept of Public Internal Financial Control

Three main elements for an effective PIFC

- Strong system of financial management and controls
- An effective, functionally independent internal audit function
- Strong policy function of financial control and internal audit operated by MoF

5.4 Development on PIFC

Development on PIFC

EU PIFC requirements
- Systematic specification of financial management and control elements
- Strong financial management and control systems, including:
  - budget planning and execution;
  - a strong central function of MoF
  - well-trained budget managers and financial staff
  - clear accountabilities
**EU PIFC requirements**

(cont.)

- Internationally compliant standards, their enforcement
- Accounting systems
- A defined audit trail
- Effective ex-ante and ex-post controls
- Effective internal audit function
- Development of systems to prevent and take actions against irregularities, fraud and corruption
- A supplementing strong external audit function and parliamentary oversight

---

**Audit trail**

Description of financial management, implementation and control processes at the organization in textual form, arranged in tables and demonstrated by flow charts containing especially the levels and interconnections of responsibility and information, as well as the management and control processes, making it possible to track and control them. Moreover, it is the document, describing in detail, the financial flows from top to bottom and the flow of information from bottom to up.

---

**Documentation requirements**

The internal control structure, the basic internal regulations including the statement of accounting policies and principles, the responsibilities for authorising transactions and the budget control procedure including audit trail should be clearly documented and the documentation should be readily available for examination.
5.5 OLAF Requirements

OLAF requirements

Preventive effect, mechanisms need to be in place
• To recover amounts lost as a result of irregularities or negligence
• A system to report on irregularities detected
• An authority responsible for the co-ordination and co-operation of the fight against fraud and corruption
• Co-operation with the European Anti-Fraud Office (OLAF).

5.6 Effective Internal Audit Function

Effective Internal Audit Function

Criteria
• Be functionally independent
• Use internationally recognised auditing standards
• Have an adequate audit mandate
• Systems for appropriate co-ordination and supervision
Protection of Communities’ Financial Interest

Main criteria

• To what extent existing systems function preventive
• Is there mechanism for taken actions for cases of irregularities
• Are existing laws/regulations make it possible to recover amounts lost resulting in above cases by the responsible official, as it is defined by the Commission regulations No. 2988/1995, 2185/1996, 396/1999, 1074/1999
6 Session 6 – Risk Assessment

6.1 COSO Philosophy

COSO Philosophy

Risk assessment:
• An ongoing function in the management process
• It should be performed in an organized and orderly fashion
• Critical to internal auditor
• Understanding risk
• Knowledge of tools for managing risk

6.2 Planning for Risk Assessment

Planning for Risk Assessment and Exposure

• Practice Advisory 2010-02
• Audit plan should assess degree of attention to risk
• Audit universe influenced by results of risk management process
• Advisory includes:
  – Audit work schedules
  – Audit approach
  – Audit conduct
  – Reporting
  – Internal control evaluation
Planning for Risk Assessment and Exposure

- Recommended Approach:
- Consider organizational objectives
- Assess risk:
  - Identify
  - Measure
  - Prioritize
- Manage risk:
  - Control and accept
  - Avoid or diversify
  - Share and transfer

6.3 Categories of Objectives

Categories of Objectives as Starting Points

- Operational Objectives
- Financial Reporting Objectives
- Compliance Objectives

Risks to be identified
Determine the optimal control procedures to employ
6.4 Risk Assessment

**Basic Question on Risk**

- New areas of concern
  - Market risk
  - E-business risks
  - Financial structure
  - Personnel at high levels
- Examples of risk factors
  - Significant findings in last audit
  - Scope of last audit
  - Changes in systems, personnel, products/services
  - Asset dollar value
  - Transactions dollar value
  - Liquidity of assets
  - Segregation of duties
  - Sensitivity of information
  - Pressures on executives

**A Risk Inventory**

- Organization of inventory
  - Environment
  - Catastrophe
  - Financial market
  - Ratings
- Internal risks
  - Human resources
  - Integrity
  - Information and technology
  - Accounting and reporting
  - Functional
Risk Assessment by Auditor

Auditor develops the list of risks by
- Analytical approach
- Ingenuity
- Imagination

What could go wrong

Assessment of the controls
- Determine whether the controls are appropriate and adequate in light of the risks
- Auditor will make recommendations on the weaknesses

Risk Assessment IIA Context

<table>
<thead>
<tr>
<th>Internal Audit Area</th>
<th>IIA Standards</th>
<th>Practice Advisories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Management</td>
<td>2110</td>
<td>2100-4</td>
</tr>
<tr>
<td>Consulting engagement</td>
<td>2210.C1</td>
<td></td>
</tr>
</tbody>
</table>
6.5 Audit Risk

Audit Risk and Materiality

Audit risk: Auditors may give an audit opinion that is wrong
Financial loss for the client
• Claim on the auditors for professional negligence
• Loss of reputation

Materiality
Generally an item is considered material if knowledge of the matter would be likely to influence the user of the financial statements
Highly subjective matter

Acceptable and Non-acceptable Risk

There is always a chance of an error or fraud going undetected
Auditors are aiming:
• To discover acceptable, or normal risk parameters
• To seek to apply suitable qualifications to their opinion to exclude any non-acceptable risk factor
Auditors’ Approach

- Keep the risk within acceptable (normal) limits
- Indications that risk is normal
- Indications that risk is higher than normal
  - young business area high-technology sector
  - poor accounting systems, with little or no internal controls
  - dominance by a single person
  - strong possibility of management over-ride
  - problems inherent in the nature of the business-direct cash payments to the beneficiaries from public funds

6.6 Materiality

Materiality Threshold

Definition
A judgement as to the level of overall errors or misstatements that is likely to influence users of the financial statements
What is the maximum tolerable amount by which the financial misstatements may be misstated but acceptable
The higher the threshold, the lower the amount of audit testing necessary

Determination of threshold
- Absolute sum of money
- Using a percentage
- Special cases (by nature, by context)
Using Materiality Threshold

At planning stage
It helps to determine the extent of testing needed to obtain sufficient audit evidence
At reporting stage
It is used to evaluate the importance of errors and irregularities uncovered by the audit

Importance of Materiality Threshold

In public sector
• particular mandate
• generally high concern for matters of legality and regularity
• Materiality thresholds tend to be on the conservative (low) side
For example
• Between 0.5% and 2% of that value which most reasonably reflects the level of financial activity

Defining the Materiality Threshold

The basic figures
• Total revenue
• Total expenditure
• Other figure
Important policy matter
Political sensitivity of the area covered by the financial statements, against planned
Judgements on threshold should be thoroughly documented
6.7 Audit Risk

**Audit Risk**

- **Definition:**
  Audit Risk is the risk that Audit may fail to detect material error or may draw incorrect conclusions from its work

- **Types of risk:**
  - Control risk
  - Inherent risk
  - Detection risk

**Inherent Risk**

**Definition:**
*The risk that errors will occur because of the environment in which the system operates*

**Affected by the:**
- nature of the business
- financial stability of the organisation
- susceptibility of assets to fraud
- nature, volume and value of transactions
- other circumstances creating pressure/uncertainty
- reliability of technology used, i.e. is it new?
- reliability of staff, i.e. staff turnover
Internal Auditing Handbook

Inherent Risk

Assessed by:

• Audit's knowledge of its client
• Audit's knowledge of its clients' operating environment
• Audit's knowledge of each auditable area

Control Risk

Definition:
The risk that internal controls will not prevent or detect errors

Affected by:

• quality of management and staff
• quality of internal controls operating
• level of supervision
• level and quality of internal audit coverage

Assessed by:

• Audit's assessment of each factors above
• time elapsed since last audit

Audit Risk Model

Inherent Risk (IR)

• Definition: The risk that errors will occur because of the environment in which the system operates

Control Risk (CR)

• Definition: The risk that internal controls will not prevent or detect errors

Detection Risk (DR)

• Definition: The risk that audit testing and the review of the financial statements will not detect material errors

Audit risk (AR) model

• The risk model is as follows:
  \[ AR = IR \times CR \times DR \]
6.8 Detection Risk

**Detection Risk**

**Definition:**
The risk that audit testing and the review of the financial statements will not detect material errors

**How addressed?**
- Audit must set appropriate materiality levels and testing levels
- In addition to the level of risk planning should therefore also identify:
  - material or fundamental systems
  - non-material or non-fundamental systems
  OR
  - should build materiality into the risk 'score'

6.9 Examples

**Example 1**

Let us assume that audit risk is set at 5%, i.e. the auditor wants to be 95% sure that the auditor's opinion is correct.

Inherent risk is subjectively estimated by the auditor on the basis of the auditor's knowledge of the factors involved. Let us suppose for this example that inherent risk is estimated at 50% and, based on the results of the auditor's tests of controls to determine the reliability of the controls, the control risk is estimated at 20%. Let us define the percentage of the detection risk. Using the audit risk model the calculation of the detection risk is following:
Example 2

Using the same figures for AR (5%) and IR (50%) but a higher CR of 50%, the calculation of DR is as follows.

Relationship Between the Risks

• The higher the auditor assesses the level of inherent and/or control risk to be, the greater the level of audit work that will be required to lower detect risk sufficiently to achieve the desired level of audit risk
• The more substantive test procedures that the auditor carries out, the greater is the probability that he will detect any material error or irregularity in the financial statements being audited
6.10 The Auditor’s Role

The Auditor’s Role in Risk Management Process

Auditors should expand the area of audit interest to include:
• Risk Control
• Risk Financing
• Risk Administration

Objectives of Risk Management Process (PA 2110-1)

• Risk arising from business strategies
• Management and the board have determined the level of risks acceptable to the organization
• Risk mitigation activities are designed and implemented
• Ongoing monitoring activities are conducted to periodically reassess risk and effectiveness of controls to manage risk
• The board and management receive periodic reports of the results of the risk management processes

Objectives of Risk management process (PA 2110-1)

• Risk arising from business strategies
• Management and the board have determined the level of risks acceptable to the organization
• Risk mitigation activities are designed and implemented
• Ongoing monitoring activities are conducted to periodically reassess risk and effectiveness of controls to manage risk
• The board and management receive periodic reports of the results of the risk management processes
Risk Measurement

Why measure risk?
• to allocate a priority to each Audit task
• to justify audits that management may not want
• to assess the level of audit resources needed
• to support auditors’ intuition

Risk indexation:
• any method of quantifying the level of risk associated with auditable area
• should be tailored to each organisation
• can be simple or complex

A Simple Risk Index

Inherent risk X Control risk = Total risk

<table>
<thead>
<tr>
<th>Inherent Risk</th>
<th>Score</th>
<th>Control risk</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature of balance, i.e. risk of theft of loss.</td>
<td>1-4</td>
<td>Organisational controls, e.g. sep. of duties manuals</td>
<td>1-4</td>
</tr>
<tr>
<td>Value, i.e. total and individual transactions</td>
<td>1-4</td>
<td>Control Environment, e.g. commitment to control, ability of managers.</td>
<td>1-4</td>
</tr>
<tr>
<td>Complexity; i.e. risk of error</td>
<td>1-4</td>
<td>Supervisory controls, e.g. authorisation, supervisory checks</td>
<td>1-4</td>
</tr>
<tr>
<td>Other factors, e.g. new system</td>
<td>1-4</td>
<td>Time since last audit in years</td>
<td>1-4</td>
</tr>
<tr>
<td>Total</td>
<td>4-16</td>
<td>Total</td>
<td>4-16</td>
</tr>
</tbody>
</table>

Detection risk is taken account of by:
• building materiality into the scoring process
• by carefully selecting test samples
## The Disadvantages of Risk Indexation

Judgement is an overriding factor in the outcome

Therefore:
- clients may claim subjectivity
- different auditors will reach different scores, i.e. comparison is invalid

The process of gathering data to make a judgement is time consuming

### 6.11 Questions

1. According to the COSO study, a precondition to risk assessment is:
   - A. Establishing an internal audit department.
   - B. Establishing control procedures or activities.
   - C. Establishing objectives.
   - D. Establishing a monitoring method.

2. Which of the following is a risk?
   - A. A commitment to competence.
   - B. A Code of Ethics.
   - C. A personnel policy manual.
   - D. A significant improvement in the competitor's products.

3. The COSO study defines the objectives of internal control in three **broad categories**. It also discusses five components that make up the system of control. Which of the following is an objective?
   - A. Effectiveness and efficiency of operations
   - B. Risk assessment.
   - C. Control activities.
   - D. Information and communication.

4. The personal computer has significantly improved the practicality of which of the following analytical methods?
   - A. Flowcharting.
   - B. Internal control questionnaires.
   - C. Matrix analysis.
   - D. Control index method.
5 Which of the following explanations suggests the least amount of relative risk stemming from a failure to compare a purchased order to an approved price list?
   A. A temporary employee processed the purchase order.
   B. The comparison is not required by company policy.
   C. The vendor is one used often by the company.
   D. The director of the purchasing department approved the purchase order.

6 The current level of risk, considering the performance of the controls in place, is the:
   A. Inherent risk.
   B. Control risk.
   C. Achievable risk.
   D. Detection risk.

7 A public statement on internal control is made by:
   A. Management.
   B. Independent auditors.
   C. Internal auditors.
   D. Regulatory examiners.

8 According to the COSO study, how many components comprise the internal control system?
   A. 3.
   B. 5.
   C. 9.
   D. 15.

9 Which component is the foundation of all other components in the internal control structure?
   A. Control environment.
   B. Risk assessment.
   C. Control activities.
   D. Information and communication.

6.12 Case Study on Risk

You are a recently appointed auditor within a public sector body. The body runs its own printing unit, which recharges other departments within the body for its work.

Recharges are set by reference to labour and paper costs and are increased each year in line with rises in these costs (wages increases and paper cost inflation).
Until two years ago the unit always made a reasonable surplus on its trading activities. A small loss was made last year and a significant one this year. The volume of activity in the unit, as well as its staffing, have remained constant. The main reason for the growing losses is the year-end stock adjustment.

You have been asked to investigate the losses in the unit.

**Requirement:**
Prepare an audit brief for discussion with your manager which:

(a) Outlines the main risks of running the print unit and the key controls you would expect to find to address those risks.

(b) Lists the audit tests you would perform to ascertain the effectiveness of the controls, including budgetary control within the print unit.

(Total 25 marks)
7 Session 7 - Audit Stages

7.1 Audit Stages

The performance of audit activities includes different stages of audit work.

**Audit Stages**

- Preliminary Survey
- Audit Programs
- Field Work
  - Audit Objectives
  - Process of Field Work
  - Working Papers
  - Audit Evidence
- Audit Reporting
  - Audit Findings and Recommendations

7.2 Preliminary Survey

Preliminary surveys can be the auditor’s best tool for gaining the insight, information, and perspective needed to support a successful audit. A competent preliminary survey is likely to result in a competent audit program, and a competent audit program is likely to result in a competent audit. As a result, an audit's success or failure may well depend on the survey. When preliminary surveys are carefully planned and executed, they become more than an effective familiarization tactic; they also represent a powerful determinant for the success of the audit.

**Preliminary Survey**

In the preliminary survey internal auditors identify
- Operating objectives
- Risks
- Operating conditions
- Controls
**Basic Steps of the Survey**

Internal auditors should approach the survey through seven basic steps:

- Initial study
- Documenting
- Meeting
- Gathering information
- Observing
- Flowcharting
- Reporting

7.3 Audit Programs

The internal audit program is a guide to the auditor and a contact with audit supervision that certain audit steps will be taken. The audit steps are designed (1) to gather audit evidence and (2) to permit internal auditors to express opinions on the efficiency, economy, and effectiveness of the activities to be reviewed. The program lists directions for the examination and evaluation of the information needed to meet audit objectives within the scope of the audit assignment.

**Audit Programs**

Are designed to tell the auditor:

- What is to be done.
- When it is to be done.
- How it is to be done.
- Who will do it.
- How long it will take
7.3.1 Benefits of Audit Programs

Well-constructed audit programs may offer many **benefits**. These audit programs:

- Set forth a systematic plan for each phase of the audit work, a plan that can be communicated both to audit supervision and to audit staff.
- Provide a basis for assigning work to auditors.
- Provide a means, through time budgets, of controlling and evaluating the progress of the audit work.
- Permit audit supervisors and managers to compare what was performed with what was planned.
- Assist in training inexperienced staff members in the work steps of an audit.
- Provide a summary record of work done.
- Help familiarize subsequent auditors, through programs for past audits, with the kind of audit work carried out and how long it took.
- Benefit supervisors by reducing the amount of direct supervision needed.
- Present appraisers of the internal audit function with a starting point from which to evaluate the audit effort.

7.3.2 Pro Forma Programs

**Pro Forma Programs**

Are useful when

- Audits will be carried out by inexperienced auditors
- The same kind of audit will be performed at a number of different locations
- Comparable information is needed for each location
- Similar or consolidated reports will be issued
- Operations being audited are relatively similar

Pro forma programs should be given a trial run by expert internal auditors.
7.3.3 Criteria for Audit Programs

Criteria for Audit Programs

The Paragraph 410 of the IIA Internal Auditing Standards states that audit programs should:

- Document the internal auditor’s procedures for collecting, analysing, interpreting, and documenting information during the audit
- State the objectives of the audit
- Set forth the scope and degree of testing required to achieve the audit objectives in each phase of the audit
- Identify technical aspects, risks, processes, and transactions which should be examined
- State the nature and extent of testing required
- Be prepared prior to the commencement of audit work and modified, as appropriate, during the course of the audit.

7.4 Field Work

Field work is a systematic assurance process of objectively gathering evidence about an entity's operations, evaluating it, and
(1) finding out whether those operations meet acceptable standards and achieve established objectives; and
(2) providing information for management decisions.

Field Work

In the field work auditors gather evidence about
- the effectiveness of control systems
- the efficiency of operations
- the accomplishment of objectives
- the effects of risks on the enterprise

7.4.1 Audit Objectives

Objectives are what one aims at - a purpose or end. Procedures are the techniques employed to achieve one's objectives. Internal auditors deal with different sets of objectives and different sets of procedures in their work. These include operating objectives and procedures and audit objectives and procedures.

Operating objectives are the ends to be achieved by operating managers and their people. Internal auditors are unable to evaluate an operation if they
do not understand fully what that operation is designed to achieve - its objectives.

**Audit objectives** can be general or specific. General audit objectives are pursued in all engagements. Specific audit objectives are linked to the operating objectives. Audit procedures are the techniques the auditor employs to determine whether operating objectives have been met.

### Audit Objectives

- **Control Objectives**
  - are defined as those objectives, which an internal control system must meet if the auditors can hope to rely on the system

- **Audit Objectives**
  - Identify the *purpose* of the audit
  - Should govern the scope of the audit work

- **Audit methodology**
  - a set of documented *audit procedures* defined to achieve planned audit objectives

#### 7.4.2 Process of Field Work

The purpose of field work is to assist in assurance by performing the audit procedures that are spelled out in the audit program, in response to the audit objectives. When reduced to its barest essentials, fieldwork is simply the gathering of evidence for measurement and evaluation.

Preparing for the field work phase requires the same attention and rigorous planning as does the preparation for the overall audit.

### Elements of Planning the Field Work

1. Personnel requirements
2. Need for outside resources
3. Audit staff organization
4. Authority and responsibility
5. Structuring of field work
6. Timing of field work
7. Methods of field work
8. Method of documentation
10. Contingency plans

#### 7.4.3 Working Papers

The explanation of the INTOSAI Auditing Standards (Paragraph 3.5.5) states:
“Auditors should adequately document the audit evidence in working papers, including the basis and extent of the planning, work performed and the finding of the audit.”

**Working Papers**
- Documentation of evidence
- Should be
  - Complete
  - Clear
  - Logical
  - Well organised
  - Indicate source
  - Contain substantive material
- Supervisory review

**Importance of Working Papers**
- Indicates professionalism
- Documents work performed
- Evidences conditions found
- Supports audit reports
- Facilitates reviews by others
- Provides documents under Foreign Corrupt Practices Act

**Benefits of Adequate Documentation**
- facilitates planning
- provides a record of weaknesses, errors and irregularities detected by the audit
- confirms and supports the auditor’s judgements, opinions and reports
- serves as a source of information for preparing report or answering enquiry’s from the audited entity or from any other party, and provides a record of work done for future reference
- shows compliance with Auditing Standards and Guidelines
- supports or provides a defence against claims, law suits and other legal processes
- helps and provides evidence of the auditor’s professional development
- facilitates review, supervision and quality assurance.
Standards for Working Papers

Documentation

• Neat
• Uniform
• Understandable
• Relevant
• Economical
• Reasonably complete
• Simple

Contents of Working Papers

For each audit test completed, a working paper should be prepared showing:

• Auditee (organization, department)
• Who prepared it, and when
• Audit file reference
• Purpose of test and reference to audit programme
• Results of test
• Conclusions on the results (and cross-reference to audit summary points or audit report if necessary)
• Initials of reviewer

Pro Forma Working Papers

• Working paper templates using standard information
• Content of working paper
  – Audit program objective
  – Steps in the audit activity
  – Purpose of the work
  – Work done
  – Conclusions
• Separate formats for interviews
  – Interviwee
  – Time/location
  – Key points to cover
  – Record of discussion
Reviewing Working Papers

What to look for:
• Explanations
• Conclusions
• Summaries
• References
• Open issues

Audit Files

are a sign of an efficient and well-managed audit section

Current files contain all of the working papers and reports relating to the current individual audit

Permanent files contain data which are needed be used year after year successive audits in a specific area

Retention of Audit Documentation

• Have a clear policy for the storage and retention
• Include
  – Length of retention
  – Standard file contents
  – Indexing
  – Retrieval procedures

7.4.4 Audit Evidence

Audit evidence is the information internal auditors obtain through observing conditions, interviewing people, and examining records. Audit evidence
should provide a factual basis for audit opinions, conclusions, and recommendations.

Audit Evidence

- The substance of the audit
- Audit evidence is classified as:
  - Physical
  - Testimonial
  - Documentary
  - Analytical
- Standards of evidence:
  - Sufficient
  - Competent
  - Relevant

Methods of Obtaining Evidence

- Physical examination and count
- Observation of processes or procedures
- Inquiry and confirmation
- Particularly strong evidence when supplied by sources outside the organisation
- Computation
- Checking posting
- Analysis of financial statements
Reliability of Audit Evidence

The following three factors have an influence on the reliability of audit evidence:

- **Sources**
  - Evidence generated directly by the auditor is more reliable than that obtained from others;
  - Evidence obtained from third parties is more reliable than that obtained from the audited entity;
  - Increased assurance is gained when evidence obtained from several sources is consistent.

- **Methods of obtaining**
  - Inspection of documents or assets;
  - Observation of processes or procedures;
  - Inquiry and confirmation;
  - Computation;
  - Analysis;

- **Nature**
  - Documentary;
  - Visual;
  - Oral;

8 Session 8 – Audit Concepts and Techniques

8.1 Audit Tests

Audit Tests

Audit tests are:
- System
- Compliance
- Substantive

**System review** seek to provide an appraisal on the adequacy of the elements of internal control systems as designed. Does the appropriate control exist?
Audit Tests

- **Compliance tests** seek to provide audit evidence that internal control system and procedures are being applied prescribed. Did the control operate?
- **Substantive tests** of transactions and other procedures such as analytical review. On completeness, accuracy and validity of the information. Is the entry right?

8.2 Audit Concepts

Audit Concepts

The system-based approach

No internal control system guarantee:
- Efficient administration
- Completeness and accuracy of the records
- Proof against fraud

Besides system and compliance tests, substantive testing is needed
The Objectives of Controls – Auditor’s Point of View

- To ensure the completeness, accuracy and validity of the information contained in the accounting records or financial statements;
- To ensure the efficient and orderly running of the business’s operations and procedures.

Audit Concepts

- Application controls
- General controls
- Audit Objective
  - The specific goals of the audit
  - Audit object identifies the area to be audited
  - Audit objectives should govern the scope of the audit work
8.3 Auditing Techniques

Auditing Techniques

Techniques for recording systems
- Narrative notes
- Flowcharts
- Internal Control Questionnaires (ICQs)

Flowcharting

Definition: It is a method of analyzing operations for efficiency and control. Flowcharts are two-dimensional graphic representations of an operation.

The main types of flowchart
- Overview flowchart
- Procedural or document flowchart
- Computer run structure chart
Flowcharting

Advantages
They present
• Steps in a chronological order
• Gaps in the record of the system
• Division of duties and control
• Amendments for changes can be added easily

Disadvantages
• No explain why the system is good
• Too detailed
• No appraise the system

8.4 Evaluating the Internal Control Systems

Evaluating the Internal Control Systems

• Goal to determine whether the controls in the system are adequate to meet control objectives
• First basic control objectives should be defined
8.5 Example Control Objectives

Example control objectives

- Manage Budget Execution and cash availability
- Manage expediting planned receipts and expenditures
- Ensure that expenditures agree with appropriations approved by Parliament
- Ensure that the approved level of deficit is not exceeded
- Make debt service and contingent liability payments

Example control objectives (cont.)

- Manage loans to municipalities
- Ensure that cash availability is forecasted and it is matched with expenditures and government borrowing
- Use cash optimisation strategies
- Provide experienced staff – plan their training
- Provide appropriate level of IT for the treasury operations
- Prevent unauthorised or fraudulent transactions
General Ledger/Management Accounts

- Ensure accuracy, completeness and validity of the general ledger (GL)
- Appropriate structure and form of GL
- Comply with relevant accounting regulations and laws
- Ensure that accounting data can be used to generate the required statutory published accounts

Control objectives – Controls

Example

Completeness is irrelevant here, because people underpaid, or not paid, will soon complain. Validity
- Foreman to authorise weekly time sheets
- Foreman and manager to review payroll
- Exception report of high hours, rates, pay
- Separate personnel department responsible for authorising starters and leavers, and amending the master file.
8.6 Techniques for Evaluating Systems

An Internal Control Questionnaire (ICQ) is a list of questions about the controls in the various logical parts of a system for instance ordering, receiving, invoicing of goods in a stores purchases system. The questions are phrased so that a YES answer is a good thing, while a NO answer suggests there may be a weakness in that particular area of the system.

The auditor should
• identify the strengths and weaknesses in the system, and to evaluate the system with a view to relying on the controls
• investigate the consequences of weaknesses and subsequently to recommend improvements to management.

ICQ as a box-ticking exercise, they are not easily to be tailored to suit a particular system

Internal Control Checklists (ICC) are lists of in a logical sequence, designed to bring out speedily the key features of the particular system being evaluated.

More flexibility
### Combined evaluation

<table>
<thead>
<tr>
<th>Conclusions of the in-depth evaluation of the system of internal control before tests of control</th>
<th>Tests of Control reveals no exceptions</th>
<th>Test of Control reveals only some minor exceptions</th>
<th>Tests of Control reveals some major exceptions</th>
<th>Tests of Control reveals widespread failures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control system seems excellent. All major risks addressed and controls likely to be effective = Excellent</td>
<td>High</td>
<td>Medium</td>
<td>Low/Nil</td>
<td>Nil</td>
</tr>
<tr>
<td>Control system seems reasonable. Most major risks addressed and/or controls likely to be generally effective = Good</td>
<td>Medium</td>
<td>Medium/ Low</td>
<td>Low/Nil</td>
<td>Nil</td>
</tr>
<tr>
<td>Control system seems generally reasonable, but danger of some control failures = Fair</td>
<td>Low</td>
<td>Low/Nil</td>
<td>Low/Nil</td>
<td>Nil</td>
</tr>
<tr>
<td>Control system seems unsatisfactory. Risks not addressed and/or control failures likely = Poor</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
</tr>
</tbody>
</table>

---

### 8.7 Analytical Review

**ANALYTICAL REVIEW (AR)**

- Increasingly used by auditors to:
- To assist Planning
- As a substantive test

**Purposes**

- To highlight areas that need further investigation

**Or**

- To give assurance that transactions are materially correct.
ANALYTICAL REVIEW (AR) Methods

Some examples are:
- Ratio Analysis
- Trend Analysis
- Actual performance vs budget
- Current year with previous year
- Month by month totals
- Regression analysis
- Linear programming

Notes:
- AR not normally an end in itself it raises queries which should be investigated
- Explanations for AR variations should be independently verified where possible
8.8 Sampling

Why Sampling

- Cost of 100% check of transactions would be not economic in terms of audit resources would be prohibitive. It would take so much true that FS became outdated before user saw them valid conclusions could be reached.

- We define sampling as the application of audit procedures to less than 100% of the items to be examined obtaining and evaluating the evidence about source characteristic of items selected in order to form conclusion concerning the whole population.

- Audit Standards allow it if it is:
  - Sufficient
  - Relevant
  - Reliable

- If the application of method is well done Statistics show a 100% check not need to get a representative view

- IT Techniques – 100% check

Sampling Methods

- Two methods to sampling are:
  - Statistical
  - Judgmental (Non-statistical)

  A statistical sample is where the sample size is determined by statistical theory given the degree of confidence the auditors wish to have in their conclusion.

  A judgement’s or non-statistical sample is where the auditors’ judgement is used to decide:
  - the sample size
  - the basis of its selection
  - The conclusion to be drawn from the results

  The method of sampling used by the auditors will be determined on a Cost/benefit basis
Statistical Sampling

Statistical sampling is particularly useful in error-testing large volumes of transactions. Population of at least 1,000 items

To the auditor has to
• determine the sample size;
• evaluate the results quantitatively; and
• estimate the sampling risk, and thus draw conclusions regarding the whole population.

Benefits of a Statistical Sample

• May save time and staff cost supposing we avoid oversampling
• Result is objective = unbiased
• Result is defensible
• Sample size is objectively chosen
• Provides an estimate of sample size before work starts
• Provides an estimate of the sampling error (the auditors risk)

Some Disadvantages of Statistical Sampling

• As a technique it is not always fully understood so that false conclusions may be drawn from the results
• Time is spent playing with mathematics which might better be spent on auditing
• Audit judgement takes second place to precise mathematics
• It is inflexible
• Often several attributes of transactions or documents are tested at the same time. Statistics do not easily incorporate this.
Attribute Sampling

Attribute sampling is concerned with one characteristic of the items in a population.

for example:

• Did a key control work or did it not
• Does the value on the purchase invoice agree to the purchase order or does it not?

Three variables in attribute sampling:

• confidence
• precision
• sample size

Integrated Auditing

A technique of 1950s now coming into frequent use.
Combined audits of financial and performance aspects.

Includes:

• Balance sheet and income statement audits with performance audits.
• Conduct various phases of audit together.
• Use of participative auditing techniques.
• Combining of:
  – Financial auditing
  – Performance auditing
  – Information systems auditing

Integrated Auditing (cont.)

Degree of integration depends on:

• Size of staff
• Skills of staff
• Audit philosophy
• Level of technology
• Cost benefits
## 8.9 Questions to Session 8

1. The Standards require that internal auditors establish plans to carry out audit assignments. Such plans include:

   - **a** Reviewing the reliability and integrity of financial and operating information.
   - **b** Establishing audit objectives and scope of work to be performed.
   - **c** Determining whether assets are properly safeguarded.
   - **d** Appraising the economy and efficiency with which resources are employed.

2. What action should an internal auditor take upon discovering that an audit area was omitted from the audit program?

   - **a** Document the problem in the work papers and take no further action until instructed to do so.
   - **b** Perform the additional work needed without regard to the added time required to complete the audit.
   - **c** Continue the audit as planned and include the unforeseen problem in a subsequent audit.
   - **d** Evaluate whether completion of the audit as planned will be adequate.

3. Which of the following audit techniques would be most persuasive in determining that significant inventory values on the books of an organization being acquired are correctly stated?

   - **a** Obtain a management representation letter stating that inventory values are correctly stated.
   - **b** Flowchart the inventory and warehousing cycle and form an opinion based on the quality of internal controls.
   - **c** Conduct a physical inventory and bring in an independent expert if necessary to value the inventory items.
   - **d** Interview purchasing and materials control personnel to ascertain the quality of internal controls over inventory.

4. When faced with an imposed scope limitation, the chief audit executive should:

   - **a** Delay the audit until the scope limitation is removed.
   - **b** Communicate the potential effects of the scope limitation to the audit committee of the board of directors.
   - **c** Increase the frequency of auditing the activity in question.
   - **d** Assign more experienced personnel to the engagement.

5. A standardized internal audit program would not be appropriate for which of the following situations?

   - **a** A stable operating environment undergoing only minimal changes.
   - **b** A complex or changing operating environment.
6. An auditor, nearly finished with an audit, discovers that the director of marketing has a gambling habit. The gambling issue is not directly related to the existing audit and there is pressure to complete the current audit. The auditor notes the problem and forwards the information to the chief audit executive but does no further follow-up. The auditor’s actions would:

b. Be in violation of the Standards because the auditor did not properly follow up on a red flag that might indicate the existence of fraud.
c. No be in violation of either The IIA’s Code of Ethics or Standards.
d. Both a and b.

7. Which of the following is the best means of determining if an internal audit department’s goals are being met?

a. Having the audit committee periodically review the quality of the department’s goals being met.
b. Developing measurement criteria to accompany departmental goals.
c. Scheduling an outside peer review of the department every three years.
d. Having the external auditors review and evaluate the work of the department.

8. In an audit of a non-profit organization’s special fund, the primary audit objective would be to determine if the entity:

a. Complied with existing fund requirements and performed specified activities.
b. Managed its resources economically and efficiently.
c. Prepared its financial statements in accordance with generally accepted accounting principles.
d. Applied the funds in a way that would benefit the greatest number of people.

9. In the performance of an audit, audit risk is best defined as the risk that an auditor:

a. Might not select documents that are in error as part of the examination.
b. May not be able to properly evaluate an activity because of its poor internal accounting controls.
c. May fail to detect a significant error or weakness during an examination.
d. May not have the expertise to adequately audit a specific activity.

10. The primary audit objective for a compliance audit of restricted funds at a
government-supported university would be the determination of:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Compliance with accepted accounting principles.</td>
</tr>
<tr>
<td>b</td>
<td>Adequacy of the institution’s budget process.</td>
</tr>
<tr>
<td>c</td>
<td>Accuracy of financial reports.</td>
</tr>
<tr>
<td>d</td>
<td>Approval for expenditure of restricted funds.</td>
</tr>
</tbody>
</table>

11 Directors may use a tool called “risk analysis” in preparing work schedules. Which of the following would not be considered in performing a risk analysis?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Financial exposure and potential loss.</td>
</tr>
<tr>
<td>b</td>
<td>Skills available on the audit staff.</td>
</tr>
<tr>
<td>c</td>
<td>Results of prior audits.</td>
</tr>
<tr>
<td>d</td>
<td>Major operating changes.</td>
</tr>
</tbody>
</table>

12 An activity appropriately performed by the internal auditing department is:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Designing systems of control.</td>
</tr>
<tr>
<td>b</td>
<td>Crafting procedures for systems of control.</td>
</tr>
<tr>
<td>c</td>
<td>Reviewing systems of control before implementation.</td>
</tr>
<tr>
<td>d</td>
<td>Installing systems or control.</td>
</tr>
</tbody>
</table>

13 Which of the following statements is true about audit evidence?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Physical observation provides the most reliable evidence of the existence of accounts receivable.</td>
</tr>
<tr>
<td>b</td>
<td>Purchase orders are relevant evidence that goods paid for have been received.</td>
</tr>
<tr>
<td>c</td>
<td>An appropriate conclusion about a population based on a sample requires that the sample be representative of the population.</td>
</tr>
<tr>
<td>d</td>
<td>A copy of an original document is as reliable as the original document.</td>
</tr>
</tbody>
</table>

14 A letter in response to an auditor’s inquiry is an example of:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Physical evidence.</td>
</tr>
<tr>
<td>b</td>
<td>Testimonial evidence.</td>
</tr>
<tr>
<td>c</td>
<td>Documentary evidence.</td>
</tr>
<tr>
<td>d</td>
<td>Analytical evidence.</td>
</tr>
</tbody>
</table>

15 In evaluating the quality of housekeeping services performed in a large hospital, the most reliable source of evidence would be:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Interviews with a sample of medical personnel.</td>
</tr>
<tr>
<td>b</td>
<td>A review of survey forms returned by medical personnel directly to the manager of housekeeping services.</td>
</tr>
<tr>
<td>c</td>
<td>A review of housekeeping records maintained by the medical records department of the hospital.</td>
</tr>
<tr>
<td>d</td>
<td>Interviews with top hospital officials.</td>
</tr>
</tbody>
</table>
# 8.10 Handout 1 to Session 8

## Substantive Test Programme

<table>
<thead>
<tr>
<th>System Evaluation</th>
<th>ST Ref</th>
<th>Test Objective</th>
<th>SALARIES AND WAGES</th>
<th>WP Ref</th>
<th>Initials &amp; Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>From a sample selected carry out the following tests</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Validity &amp; accuracy</td>
<td></td>
<td></td>
<td>From a sample selected carry out the following tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Validity &amp; accuracy</td>
<td></td>
<td></td>
<td>From a sample selected carry out the following tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Validity &amp; accuracy &amp; completeness</td>
<td></td>
<td></td>
<td>From a sample selected carry out the following tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Validity &amp; accuracy &amp; completeness</td>
<td></td>
<td></td>
<td>From a sample selected carry out the following tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5i Validity &amp; accuracy &amp; completeness</td>
<td></td>
<td></td>
<td>From a sample selected carry out the following tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5ii</td>
<td></td>
<td></td>
<td>From a sample selected carry out the following tests</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### EXAMPLES OF SUBSTANTIVE TEST PROGRAMMES

**PAYROLL CHECK**

<table>
<thead>
<tr>
<th>PAYROLL GROUP OR DEPARTMENT</th>
<th>WEEZ/MONTH ENDED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If affirmative answer - Tick below in appropriate column. If negative – enter comments on separate sheet, with suitable cross-reference, and enter “E” in appropriate column.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Individual Checks (if not applicable enter N/A in appropriate column)</th>
<th>(1) Name Works No.</th>
<th>(2) Name Works No.</th>
<th>(3) Name Works No.</th>
<th>(4) Name Works No.</th>
<th>(5) Name Works No.</th>
<th>(6) Name Works No.</th>
<th>(7) Name Works No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPOINTMENT AND HISTORY RECORDS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. a) was the post and grading for pay properly authorised?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Was the recognised appointment procedure followed?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Is the post within the approved establishment?</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>2. Does the current data held on computer paper tape, as evidenced by print out. Agree with current entries on personal record card?</td>
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<tr>
<td>CALCULATION OF GROSS PAY</td>
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<td>3. Is the current rate of pay</td>
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<td>Individual Checks (if not applicable enter N/A in appropriate column)</td>
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<td>correct and the basic weekly/monthly amount correctly calculated?</td>
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<td>4. Have all &quot;additional payments&quot; been properly authorised and correctly calculated?</td>
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<td>5. Is a satisfactory record maintained of overtime worked within the department?</td>
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<td>6. Are satisfactory attendance records maintained?</td>
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</tbody>
</table>

**DEDUCTIONS AND NET PAY**

7. Have all deductions due to be made actually been made and are they correctly assessed and calculated, in respect of
   a) Superannuation
   b) National insurance
   c) Tax
   d) Car loan
   e) Rent
   f) Rates
   g) Mortgage
   h) Savings
   i) Union
   j) Attached earnings
   k) Other (specify on separate sheet)

**PAYMENT OF WAGES/SALARY**

8. If paid in cash:
   a) Has timesheet been signed with employee's normal signature?
Individual Checks (if not applicable enter N/A in appropriate column)

<table>
<thead>
<tr>
<th></th>
<th>1) Name Works No.</th>
<th>2) Name Works No.</th>
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<th>7) Name Works No.</th>
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<tbody>
<tr>
<td>b) Is a satisfactory record being kept of unclaimed wages and the disposal thereof?</td>
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<td>c) Are security arrangements for custody of cash drawn from bank and kept as unclaimed wages, satisfactory?</td>
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<tr>
<td>9. If paid by cheque, has paid cheque been examined and found to be in order?</td>
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<tr>
<td>10. If paid by credit transfer, has the amount been agreed with computer print-out, and does the total of the print-out agree with the debit in the bank statement?</td>
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**ACCOUNTING AND COSTING RECORDS**

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<tbody>
<tr>
<td>11. If paid by postal order, examine counterfoils and agree amounts with net pay.</td>
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<td>12. If pay forwarded to home address, is there satisfactory reason for this, and does the name and address appear in register of electors?</td>
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<td>13. Has receipt far wages been sent?</td>
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<td>14. If so, check returned receipt for employee's signature etc.</td>
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<td>Individual Checks (if not applicable enter N/A in appropriate column)</td>
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<td>15. Is allocation of gross pay including, any costing analysis correct?</td>
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<td>16. Does timesheet give adequate detail for verification of coding allocation?</td>
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<tr>
<td><strong>SUBSIDIARY RECORDS</strong></td>
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<tr>
<td>17. Have all advances, grants, loans, etc. which are recoverable, or may be ecoverable on leaving been properly recorded?</td>
<td></td>
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<tr>
<td><strong>SICKNESS AND LEAVE</strong></td>
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<td>18. Is a proper record of sickness annual or special leave being maintained?</td>
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<tr>
<td>19. Have any sickness payments made been correctly calculated and the payments correctly recorded?</td>
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<td>20. Is amount of leave recorded as taken, within the official entitlement or authorised if special leave?</td>
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<td>Individual Checks (if not applicable enter N/A in appropriate column)</td>
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<td>GENERAL</td>
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<td>21. Are timesheets completed in ink?</td>
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<td>22. Are they certified by authorised foreman/supervisor?</td>
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<tr>
<td>23. Check the employee's signature at &quot;true record of work&quot; agrees with his &quot;receipt for wages&quot;.</td>
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<td>24. Enter on separate sheet any comments on internal control and procedures generally.</td>
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</table>

CHECK CARRIED OUT BY

Note: If check is carried out by more than one officer, each must initial items dealt with Enc Ref File Ref
8.12 Case Study to Session 8

SCHOOL CLEANING WAGES CASE STUDY

You have been asked to carry out the internal audit of the wages system of the Gerbilee comprehensive school. It is a 1500 pupil site, all cleaning services being provided on site by a staff of 27, which includes a caretaker, who is the responsible officer, two assistant caretakers and twenty four part time cleaners.

Cleaning Arrangements
The headmaster has stated that all cleaning must be carried out outside school hours. The caretaker and his assistants organise their time on a rota to cover the hours between 6 am and 9 pm. This ensures that a supervisor is available at all times cleaners are present and that a „handyman” is available during school hours.

Responsibilities of Staff

The area supervisor is responsible for:
• checks that work allocations to cleaners conform with work study scheme
• periodic checks to confirm that schools are being properly cleaned
• review of overtime
• dealing with complaints from headteachers, teachers or cleaning staff.

The caretaker is responsible for:
• appointment of cleaners
• allocation of work based on square footage of rooms cleaned
• training cleaners as necessary
• supervision during the working hours
• certification of weekly timesheets
• pay out of wage packets
• some cleaning responsibilities where cleaning machinery is required to be used
• ’handyman' duties during the school day.

The assistant caretakers are responsible for all the above except the first two.

The cleaners are responsible for:
• tidying and straightening classroom furniture
• closing windows
• cleaning floors
• cleaning black boards
• emptying waste paper bins.

Work Allocation
The premises requiring cleaning have been surveyed by the work study team. Careful measurement and calculation has resulted in the fixing of

- maximum hours per school week, required for cleaning the premises
- methods used, including cleaning plant and machinery
- maximum areas to be cleaned per cleaning hour.

The school is divided up into sections of 2 hour and 3 hour units; that is units which require 2 or 3 hours time to complete fully the cleaning duties each evening after school.

**Procedures in the wages system**

The procedures in use have been described to you and are recorded below. These match up with a memorandum from the Chief Education Officer issued to all schools on 15.10.8 which is posted on the noticeboard of the caretakers office and copied to the Area Office and Chief Financial Officer department.

1. All staff enter their name and time of arrival in the signing in book when they enter the school to start work.

2. The signing-in book is kept in the caretakers office and the caretaker oversees the cleaners making entries therein.

3. After finishing work the cleaner signs out at the time of leaving.

4. If a cleaner is sick, or absent for any reason he/she rings up in the morning to notify the caretaker.

5. He will either, obtain a relief cleaner selected from his list of stand-by reliefs, or allocate overtime to other cleaners who attend that evening.

6. At the end of Thursday each week, a timesheet is prepared by all staff. This covers the period from the previous Sunday through to the following Saturday inclusive.

7. The cleaners and assistant caretakers sign the timesheet before leaving.

8. The caretaker checks the timesheets against the signing-in book confirming times entered on the timesheets and checking the calculations of hours worked.

9. The caretaker prepares his own timesheet and submits this with the others to the Area Office.

10. At the end of Friday, the caretaker prepares a rota for the following week which includes any known overtime hours. All cleaners are expected to examine the rota and note the times they are scheduled to attend.
11 On arrival at the Area Office the timesheets are examined by a clerk. He checks that they have been prepared correctly and signs them and sends them off to the payroll section.

12 He then batches the timesheets together using the standard batch header slip. The week number is entered as well as the number of timesheets and the total value of hours worked on all timesheets. He then sends them off to the payroll section of the Chief Financial Officer's department.

13 Payroll section check that the timesheets have been signed by the area office clerk and then submit the batch of timesheets to the computer control section.

14 They hand the timesheets to punch operators who prepare tape input.

15 This is passed back to the computer control section. The control clerk checks the total on the tape summary against the batch header and then prepares a run sheet specifying the master file required in processing.

16 The computer generates output as follows:

- full payroll showing names and locations of people to be paid, gross amount with deductions and net amount;
- where payment is by open cheque, the cheques;
- where payment is by cash, a list of names and the amount due along with a denomination analysis;
- a pay slip;
- a record of postings to the general ledger.

17 These are passed to computer control which prepares the output to be passed on to the payroll office.

18 Payroll Officer checks that total of gross pay on payroll is equal to total on batch summaries before passing on for making up.

19 The payroll office puts the cheques in a pay window envelope along with the appropriate pay slip and assembles the envelopes in pay round order.

20 Cash is collected from the bank in the correct denominations and the cash pay packets are made up under dual control.

21 The payroll officer organises visits to each school by taxi on the following Friday and hands the packets and a list of payees, with amounts, to the caretaker who arranges the pay out.

22 The caretaker obtains a signature for all pay packets on pay-out.

Appointment Procedures

23 Caretaker interviews cleaners and if suitable adds them to the waiting list or asks them to prepare a starters form. If the cleaner is taken from the list he/she prepares a starters form.
24 Caretaker checks starters form, signs it and submits to payroll clerk.
25 When the cleaner arrives on his/her first day, the caretaker indicates the duties and explains the administrative systems. Each cleaner is allocated either a two hour or three hour unit.
26 Payroll clerk checks that the form is correctly completed and checks correctness of starting pay and conditions against NJC manual.
27 After checking and evidencing this by signature, the payroll clerk prepares a master file amendment form and submits this to computer control for processing.
28 On return of the amendment form and master file amendment advice, the payroll clerk checks that entries are correct and then files them together in date order.

Leaving Procedures

29 Cleaner gives one weeks notice to caretaker.
30 Caretaker completes leaving form and submits it to payroll clerk.
31 Payroll clerk assembles final week's pay, holiday pay and cards and sends to school on normal pay day.

N.B. For the purpose of this case study, where the term "caretaker" is used, candidates should assume that this may be a caretaker or the assistant caretaker, whoever is on duty at the time.

Questions to be answered by stages.

Stage 1
Record the controls in the system and evaluate the system against appropriately designed criteria.

Stage 2
Design audit procedures for each control you have identified.

Stage 3
Record the aspects for which you would wish to design substantive tests, giving your reasons. Record the audit procedures you would perform in these circumstances.
9 Session 9 - Internal Audit Reports

9.1 Purpose and Function of Audit Reports

The primary purpose of the internal audit report is to record and communicate the auditor's findings and to recommend courses of action to correct weaknesses.

<table>
<thead>
<tr>
<th>Purpose and Function of Audit Reports</th>
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<tbody>
<tr>
<td><strong>Purpose</strong></td>
</tr>
<tr>
<td>• To record</td>
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<tr>
<td>• To communicate</td>
</tr>
<tr>
<td><strong>Functions</strong></td>
</tr>
<tr>
<td>• To inform reader</td>
</tr>
<tr>
<td>• To persuade reader as to conditions</td>
</tr>
<tr>
<td>• To obtain results</td>
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</tbody>
</table>

9.2 External Audit Reports

Chapter IV of the INTOSAI Auditing Standards includes the Reporting Standards in Government Auditing Paragraph 407(a) states: “At the end of each audit the auditor should prepare a written opinion or report, as appropriate, staging out the findings in an appropriate form; its content should be easy to understand and free from vagueness or ambiguity, include only information which is supported by competent and relevant audit evidence, and be independent, objective, fair and constructive.”

9.3 Internal Audit Reports

In the case of internal audit the process of reporting will be determined by the organization concerned, by senior management or the board.
Common Components of External and Internal Reporting

• Debriefing session with line management at the end of the field work
• Written report to senior and line management at the end of each assignment
• Summary of activities to senior management and/or to the board at the end of each period
• Formal assessment on accounting systems in some countries (e.g. UK) for external review agency

9.4 Standards for Audit Reporting

IIA Standards for Reporting

• A signed, written report should be issued after the audit examination is completed
• Internal auditors should discuss conclusions and recommendations at appropriate levels of management before issuing final written reports
• Reports should be objective, clear, concise, constructive, and timely
• Reports should present the purpose, scope, and results of the audit; and, where appropriate, should contain an expression of the auditor’s opinion

INTOSAI Guidance on Reports

The auditor must have specific regard to the following aspects of the report:

• Title
• Signature and date
• Objectives and scope
• Completeness
• Addressee
• Identification of subject matters
• Legal basis
• Compliance with standards
• Timeliness
9.5 Audit Findings and Recommendations

Audit findings emerge by a process of comparing what should be with what is. Conclusions (opinions) are the internal auditor's evaluations of the effects of the findings on the activities reviewed. They usually put the findings in perspective based upon their overall implications. Recommendations are based on the internal auditor's findings and conclusions. They call for action to correct existing conditions or improve operations. Recommendations may suggest approaches to correcting or enhancing performance as a guide for management in achieving desired results.

Audit Findings

- Conditions requiring correction
- Something which:
  - Should have been done but was not
  - Should not have been done but was
  - Was done improperly

Degrees of Significance of Findings

<table>
<thead>
<tr>
<th>Major</th>
<th>Preventing the meeting of a major objective</th>
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<tr>
<td>Minor</td>
<td>W warranting reporting but not affecting a major objective</td>
</tr>
<tr>
<td>Insignificant</td>
<td>Random human errors not warranting reporting</td>
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</table>
Attributes of Findings

Findings should be based on the following attributes:

- Criteria - What should exist
- Condition - What does exist
- Cause - Why the difference exists
- Effect - Impact of the difference

The Record of Audit Finding

Purpose:
- Organise the audit finding
- Basis for client discussions
- Support for audit report content
- Reference to working papers
- Record of supervisory review

Conclusions and Recommendations

Conclusions are the internal auditor’s evaluations of the effects of the findings on the activities reviewed

Recommendations are based on the internal auditor’s findings and conclusions

Types of Recommendations
- General
- Specific
9.6 Questions to Session 9

1. According to the Standards, the chief audit executive should ensure follow-up of prior audit findings and recommendations:

   a. To determine if corrective action was taken and is achieving the desired results.
   b. Unless management rejected the recommendation in their initial response.
   c. Unless audit schedule does not allow time for follow-up.
   d. Unless management has accepted the recommendation.

2. Which of the following is the most appropriate method of reporting disagreement between the auditor and the client concerning audit findings and recommendations?

   a. State the auditor's position because the report is designed to provide the auditor's independent view.
   b. State the client's position because management is ultimately responsible for the activities reported.
   c. State both positions and identify the reasons for the disagreement.
   d. State neither position. If the disagreement is ultimately resolved, there will be no reason to report the previous disagreement. If the disagreement is never resolved, the disagreement should not be reported, because there is no mechanism to resolve it.

3. A primary purpose of the closing conference is to:

   a. Implement audit findings.
   b. Gather audit evidence.
   c. Resolve remaining issues.
   d. Determine the scope of the audit.
An audit report recommendation should address what attribute of an audit finding?

- Cause.
- Statement of condition.
- Criteria.
- Effect.

After an audit report with adverse findings has been communicated to appropriate client personnel, proper action is to:

- Schedule a follow-up review.
- Implement corrective action indicated by the findings.
- Examine further the data supporting the findings.
- Assemble new data to support the findings.

The Standards require auditors to discuss conclusions and recommendations at appropriate levels of management before issuing final written reports. Auditors usually accomplish this by conducting exit conferences. Which of the following best describes the purpose of exit conferences?

- To allow clients to get started implementing recommendations as soon as possible.
- To allow auditors to explain complicated findings before a written report is issued.
- To allow auditors to "sell" findings and recommendations to management.
- To insure that there have been no misunderstandings or misinterpretations of facts.

Recommendations in audit reports may, or may not, actually be implemented. Which of the following best describes the role of internal auditing in follow-up on audit recommendations? Internal auditing:

- Has no role; follow-up is a management’s responsibility.
- Should be charged with the responsibility for implementing audit recommendations.
- Should follow up to ascertain that appropriate action is taken on audit recommendations.
- Should request that independent auditors follow up on audit recommendations.

9.7 Example for Internal Audit Report

**REPORT DIGEST**

**DEPARTMENT OF**
PUBLIC HEALTH
FINANCIAL AND COMPLIANCE AUDIT
(In Accordance with the Federal Single Audit Act and OMB Circular A-133)
For the Two Years Ended: June 30, 1999

Summary of Findings:
Total this audit 9
Total last audit 12
Repeated from last audit 7
Release Date:
April 12, 2000

State of Illinois
Office of the Auditor General
WILLIAM G. HOLLAND
AUDITOR GENERAL
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Springfield, IL 62703
(217)782-6046 or TDD (217) 524-4646

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http://www.state.il.us/auditor

SYNOPSIS

• Procedures established by the Department for follow-up on lead poisoning case files were not being followed.
• Mandated reporters were not reporting abuse or neglect of residents in long-term care facilities on a timely basis.
• Due to a misclassification, one nursing home neglect case was not investigated within the required time frame.
• The Department’s internal audit program did not meet statutory requirements of the Fiscal Control and Internal Auditing Act.

{Expenditures and Activity Measures are summarized on the reverse page.}
## EXPENDITURE STATISTICS

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<tr>
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<tbody>
<tr>
<td>Total Expenditures (All Funds)</td>
<td>$169,607,665</td>
<td>$161,534,108</td>
<td>$452,315,202</td>
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<tr>
<td><strong>OPERATIONS TOTAL</strong></td>
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<tr>
<td>% of Total Expenditures</td>
<td>78.0%</td>
<td>77.3%</td>
<td>29.6%</td>
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<tr>
<td>Personal Services</td>
<td>$44,169,431</td>
<td>$41,381,113</td>
<td>$44,217,110</td>
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<tr>
<td>% of Operations</td>
<td>33.4%</td>
<td>33.1%</td>
<td>33.0%</td>
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<tr>
<td>Expenditures</td>
<td>1,258</td>
<td>1,224</td>
<td>1,389</td>
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<tr>
<td>Average No. of Employees</td>
<td></td>
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<tr>
<td>Other Payroll Costs (FICA, Retirement)</td>
<td>$10,260,489</td>
<td>$8,119,006</td>
<td>$8,211,719</td>
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<td>% of Operations</td>
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<td>6.5%</td>
<td>6.1%</td>
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<tr>
<td>Expenditures</td>
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<td>Contractual Services</td>
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<td>7.2%</td>
<td>9.0%</td>
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<tr>
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<td>$59,936,076</td>
<td>$61,218,748</td>
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<td>Lump Sum</td>
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<td>48.1%</td>
<td>45.7%</td>
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<tr>
<td>% of Operations</td>
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</tr>
<tr>
<td>Expenditures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Other Operations Items</td>
<td>$6,725,563</td>
<td>$6,358,237</td>
<td>$8,133,940</td>
</tr>
<tr>
<td>% of Operations</td>
<td>5.1%</td>
<td>5.1%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Expenditures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GRANTS TOTAL</strong></td>
<td>$37,314,516</td>
<td>$36,708,147</td>
<td>$318,471,179</td>
</tr>
<tr>
<td>% of Total Expenditures</td>
<td>22.0%</td>
<td>22.8%</td>
<td>70.4%</td>
</tr>
<tr>
<td><strong>Cost of Property and Equipment</strong></td>
<td>$25,705,000</td>
<td>$28,552,000</td>
<td>$26,865,000</td>
</tr>
</tbody>
</table>

## SELECTED ACTIVITY MEASURES
(unaudited)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Doses of Vaccines Distributed</td>
<td>1,599,000</td>
<td>1,650,000</td>
<td>2,250,000</td>
</tr>
<tr>
<td>Percentage of Fully Immunized Two-Year Olds</td>
<td>76%</td>
<td>76%</td>
<td>77%</td>
</tr>
<tr>
<td>Specimens Tested for HIV Antibodies</td>
<td>77,000</td>
<td>77,000</td>
<td>94,000</td>
</tr>
<tr>
<td>Central Complaint Registry Hot-Line Calls</td>
<td>24,708</td>
<td>23,671</td>
<td>20,500</td>
</tr>
</tbody>
</table>

## AGENCY DIRECTOR

During Audit Period: John R. Lumpkin, M.D.  
Currently: John R. Lumpkin, M.D.

## FINDINGS, CONCLUSIONS, AND
Department's review of a local Public Health department noted 49 of 103 children did not receive a home visit. Of 54 home visits made only 2 were made within 10 days.

Six of ten cases tested were not reported timely.

RECOMMENDATIONS

GUIDELINES NOT FOLLOWED FOR MONITORING HIGH LEAD BLOOD LEVELS IN CHILDREN

The Department contracts with local health departments for lead poisoning management and follow-up. Based on a Departmental review, a local health department did not adhere to guidelines providing follow-up visits to children with blood lead levels greater than 20. Only 54 of 103 received a home visit and only two of the 54 received a visit within 10 days. According to guidelines in effect during the period reviewed, all 103 children should have received a home visit within 10 days. (Finding 8, page 32)

We recommended the Department continue to work with all subcontractors to ensure the guidelines prescribed for lead poisoning are followed.

Department officials stated they will conduct a review of the local health department's Childhood Lead Poisoning Prevention Program within 12 months, and its lead poisoning follow-up efforts will be closely monitored. Additionally, the Department changed guidelines to require a home visit within 10 to 20 days for children with blood levels above 20 because a 10-day requirement was too constraining for large local Public Health agencies.

MANDATED REPORTS OF ABUSE OR NEGLECT NOT TIMELY

Mandated reporters were not reporting abuse or neglect of residents in a long-term care facility on a timely basis. Six of ten cases tested were not reported to the Department within 24 hours after facility administration became aware of the alleged abuse or neglect. The administrators waited from 2 to 12 days before notifying the Department of alleged incidents.

State statute requires all reports of suspected abuse or neglect be immediately reported to the Department and be reported in writing within 24
hours after having reasonable cause to believe that the condition of the resident resulted from abuse or neglect. (Finding 5, page 29)

We recommended the Department continue to encourage mandated reporters to contact the Department on a timely basis and take appropriate action when facilities do not report timely.

Department officials stated they will continue to encourage mandated reporters to report within the required time frames and will, if appropriate, take action against those that do not report timely.

**NURSING HOME NEGLECT CASE NOT INVESTIGATED TIMELY**

The Department did not properly classify a reported neglect case against a nursing home and, as a result, did not investigate the case within the required seven-day period. The complaint alleged patient overdose by a nurse that resulted in the patient's death. According to Department procedures, if the complaint had been properly classified it would have been assigned a seven-day investigation period. Due to the misclassification the case was assigned a thirty-day investigation period and was not investigated for 16 days. (Finding 9, page 33)

We recommended the Department carefully review complaints to properly classify cases and ensure investigations are performed within the time frame required by the Nursing Home Care Act.

Department officials stated they will conduct quarterly meetings between the Long-Term Care Field Operations personnel and the Central Complaint Registry personnel to improve communications. During the meetings, special emphasis will be placed on time frames recommended by the Complaint Registry and submitted to Field Operations in order to assure that proper time frames are assigned.

**NONCOMPLIANCE WITH THE FISCAL CONTROL AND INTERNAL AUDITING ACT**
The Department's internal audit program does not meet statutory requirements of the Fiscal Control and Internal Auditing Act (FCIAA) (30 ILCS 10/1001 et seq.). During our audit we noted the following:

- twelve internal audits were performed during the two year period, which fell short of the FCIAA requirement that all major systems be reviewed at least once every two years; and

- for fiscal year 1998, the Department had not implemented procedures and a program within the internal audit area to review the design of major new electronic data processing systems and major modifications of those systems before their installation to ensure the systems provide for adequate audit trails and accountability.

According to Department personnel, these conditions were caused by a lack of sufficient staff in the Division of Audits. (Finding 1, pages 20-21) This finding has been repeated since 1987.

Department officials concurred with our recommendation to strengthen its internal audit program by allocating sufficient resources to its Division of Audits to allow statutory compliance and adherence to the FCIAA Act. (For previous Department responses see digest footnote number 1.)

OTHER FINDINGS

The remaining findings were less significant and officials have responded that corrective action is in progress. We will review progress toward implementation of our recommendations during our next audit.

Mr. Darrel Balmer, Chief Internal Auditor, provided the Department's responses to our findings and recommendations.

AUDITORS' OPINION

Our auditors report the financial statements of the
Illinois Department of Public Health as of and for the years ended June 30, 1999 and 1998 are fairly presented in all material respects.

WILLIAM G. HOLLAND, Auditor General

WGH:GSS:pp

SPECIAL ASSISTANT AUDITORS

Our special assistant auditors for this audit were Kerber, Eck & Braeckel LLP.

DIGEST FOOTNOTES

#1 NONCOMPLIANCE WITH THE FISCAL CONTROL AND INTERNAL AUDITING ACT (FICAA) - Previous Department Responses.

1997: "The Department concurs with this finding and recommendation. The Division of Audits has made progress in meeting the goals and objectives established in the two year audit plan. However, due to lack of adequate resources, all of the requirements of the Fiscal Control and Internal Auditing Act have not been met. The Division will continue to strive to meet the statutory mandates and as additional funding is made available further improvements can be expected."

1995: "The Department concurs with the finding and recommendation. The Division of Audits has made progress in meeting the goals and objectives established in the two year audit plan. However, due to lack of adequate resources, all of the requirements of the Fiscal Control and Internal Auditing Act have not been met. The Division will continue to strive to meet the statutory mandates and as additional funding is made available further improvements can be expected. In regard to the lack of required audit work relative to the EDP systems, the Department has hired an Information Systems Auditor."

"The Department will examine the feasibility of reassigning the program monitoring function within its current organizational pattern."

1993: "The Department concurs with the finding and recommendation. The Division of audits has made progress in meeting the goals and objectives established in the two-year audit plan. However, due to lack of adequate resources, all of the requirements of the Fiscal Control and Internal Auditing Act have not been met. The Division will continue to strive to meet the statutory mandates and as additional funding is made available further improvements can be accomplished."

"The Department will examine the feasibility of reassigning the program monitoring function within its current
organizational pattern."

1991: "The Department concurs with the finding and recommendation. The Division’s inability to meet all of the requirements of the Fiscal Control and Internal Auditing Act are attributable to the factors mentioned below and key vacancies within the Division during a major portion of the audit period."

"With the filling of two key positions, the Division of Audits anticipates that additional progress will be achieved in meeting the goals and objectives established in the Division’s two year audit plan."

"While the Department acknowledges that the internal audit function did not fully meet the requirements of the Fiscal Control and Internal Auditing Act, several notable accomplishments were realized during the current audit period. Foremost among these, was the successful, yet time-consuming, implementation of the certification requirement of Article 3 of the Fiscal Control and Internal Auditing Act. The Division of Audits assumed the responsibility for implementing and coordinating this effort." (Response continues outlining areas in which the internal audit functions has improved).

1989: "The Department concurs in the finding and recommendation. The finding correctly states that the emphasis during the audit period has been on developing the foundation for an effective program of internal auditing. The groundwork has now been laid with the development of a two year audit plan and an audit procedures manual. We have also pursued an aggressive program of staff professional development. The division has experienced significant staff variances that have inhibited the quality and quantity of work necessary to meet the statutory requirements of the Internal Auditing Act." (Response continues with an explanation concerning changes that are anticipated to be made in the Internal Audit area).

1987: "The Department concurs in the finding and recommendation. Several changes have occurred within Audit Operations which address some of the concerns and recommendations cited." (Response continues with an explanation concerning changes made in Audit Operations).
10 Session 10 – Performance Audit

10.1 Definition

Definition of Performance Audit

INTOSAI Auditing Standards, 2001 - 1.0.40
Performance audit is concerned with the audit of economy, efficiency and effectiveness and embraces:

• audit of the economy of administrative activities in accordance with sound administrative principles and practices, and management policies;
• audit of the efficiency of utilisation of human, financial and other resources, including examination of information systems, performance measures and monitoring arrangements, and procedures followed by audited entities for remedying identified deficiencies; and
• audit of the effectiveness of performance in relation to the achievement of the objectives of the audited entity, and audit of the actual impact of activities compared with the intended impact.

CIPFA
An audit methodology in which auditors are required, to satisfy themselves by examination of the financial records and otherwise, that the audited organization has made proper arrangements for securing economy, efficiency and effectiveness in the use of resources.

10.2 Value for Money Concept

Value For Money (VFM) Concept

Definition:
„Achieving the desired level and quality of service at the most economical cost”

There are three VFM considerations:
– Economy
– Efficiency
– Effectiveness
10.3 Economy, Efficiency and Effectiveness

**Economy**

Definition:
It requires that the resources used by the Community body for the pursuit of its activities shall be made available in due time, in appropriate quantity and quality and at the best price.

Examples of Audit Areas:
- Evidence over staffing
- Weaknesses in the purchases system
- Weak tendering procedures
- Uncontrolled bonus schemes

**Efficiency**

Definition:
Is concerned with the best relationship between resources employed and results achieved.

Examples of Audit Areas:
- High proportion of unproductive time e.g. sickness
- Efficiency ratios e.g. „X” per employee
- Work methods
- Audit test reveal regular errors
Effectiveness

Definition:
is concerned with attaining the specific objectives set and achieving the intended results

Examples of Audit Areas:
- Clarity of objectives
- Outputs which are not targeted

10.4 Performance Audit Considerations

Performance Audit Considerations

Inputs → Processes → Outputs → Objectives

Economy

Compare = Efficiency
Compare = Effectiveness
Responsibility for Performance Audit in the UK

Management:
Are responsible for ensuring the funds and other resources of the organisations are used in the most economic, efficient and effective manner

Internal Audit:
Per the APC Guidance for Internal Auditors their role is to assist management in the pursuit of value for money.

External Audit:
Local Government and NHS
Have to satisfy themselves that the audited body has made proper arrangements for securing VFM (S15 LGFA 1982).
Central Government
Seek to provide independent information to Parliament about VFM and to identify ways of improving it. (National Audit Act 1983).

The Discharge of Performance Audit Responsibility

External Audit fulfils its Performance Audit responsibility by:

• Considering Performance Audit when doing any audit work
• Carrying out local Performance Audit projects
• Carrying out National Performance Audit projects
• Auditing 1992 Act PI’s (set by Audit Commission)
• Putting clients in contact with each other

Performance Audit Considerations

Auditors should always be alert to:

Waste, e.g.
– Error
– Misunderstanding
– Inefficiency

Extravagance, e.g.
– Excessive specifications
– Excessive quantities purchases/stock
– Year end budget spending

Poor Planning, e.g.
– Large over spends vrs budget
– Prestigious projects
– Prioritisation of work
The Discharge of Internal Audit’s VFM Role

- Locally researched Performance Audit Projects
- Purchase and use audit guides
- ALWAYS! aware of waste
- Deterrent against extravagance

10.5 National Performance Audit Project

National Performance Audit Project

- Study area identified following consultation
- Research Task formed
- Visits to authorities
- Consult Professionals
- Consult Pressure Groups
- Good practice identified, performance measures designed
- Draft Audit Guide prepared
- Draft National Report prepared
- Draft Audit carried out
- Final issued
- Reassessed
- Final issued
- Audited carried out locally
10.6 The Focus of Performance Audit Work

The Focus of Performance Audit Work

Three parts:
- Inputs - Appropriate?
- Activities - Efficient?
- Outputs - Are objectives achieved?

Inputs Review

FOCUS : COST

ASK ABOUT:
- Costs vrs activity?
- Cost control?
- Overhead levels?
- Staffing levels/mix?
- Income generation?
Activities Review

FOCUS : SYSTEMS/METHODS

ASK ABOUT:

• Why is each activity necessary?
• Are the best methods used?
• How often are methods reviewed?
• Is the activity best „in house”?
• How are prices set?

Outputs Review

FOCUS : WHAT IS ACHIEVED

ASK ABOUT:

• The objectives of the service?
• How performance is reviewed?
• How objectives are re-addressed?
• How performance is reported?
10.7 Combined Approach to Performance Audit

Combined Approach to Performance Audit

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fact find/research the area to be reviewed</td>
</tr>
<tr>
<td>2</td>
<td>Establish in detail exactly “what” the client does and why</td>
</tr>
<tr>
<td>3</td>
<td>Consider if the resources used are appropriate</td>
</tr>
<tr>
<td>4</td>
<td>Consider how methods compare to best practice</td>
</tr>
<tr>
<td>5</td>
<td>Develop and compare PI’s</td>
</tr>
<tr>
<td>6</td>
<td>Consider if objectives are being achieved</td>
</tr>
<tr>
<td>7</td>
<td>Review the adequacy of management information</td>
</tr>
<tr>
<td>8</td>
<td>Critically review the evidence collected and conclude if performance could improve</td>
</tr>
<tr>
<td>9</td>
<td>Report constructively to management making positive recommendations</td>
</tr>
<tr>
<td>10</td>
<td>Follow up reports at a later date</td>
</tr>
</tbody>
</table>
10.8 Exercise 1 to Session 10

The stages of an input based review are as follows:
1. identify one or more performance measures
2. calculate the performance measures
3. compare them with the same measures elsewhere, identifying and apparent problems
4. investigate the reasons for the apparent problems.

We will consider the four stages of the input based review in the context of a simple example, namely, the grass cutting department of a local authority.

Identify a performance measure to relate costs (i.e. resources) to output.

A suggestion of costs per acre cut word be acceptable. What problems might you have in calculating costs per acre cut?
10.9 Exercise 2 to Session 10
Suppose that in stage 3 of this input based review, you determine that the cost per acre cut is significantly higher than the average. What could be the reasons?

10.10 Exercise 3 to Session 10
Stage 3 compares performance measures with the same measures elsewhere. What sources of comparison are available?
10.11 Performance Audit Case Study

1. Imagine that you are the new audit manager for the audit of District Council. A member of your staff is currently half way through a value for money project on Housing Supervision and Maintenance at Tidbury and has prepared the following information for you to review:
   a) general background to the authority and this project (appendix A);
   b) the Audit Commission's performance indicators comparing the authority's performance in 2001/2 to “good practice” levels; (appendix B)
   c) summary of matters noted so far during the audit, prepared by the relevant member of staff (appendix C).

2. Identify what you think are the main matters arising from the work so far undertaken and describe what further work you want undertaken. (For information which is not provided, assume what seems reasonable.)

APPENDIX A

General background on the Authority and this specific project

1. Tidbury is a medium sized District Council with a population of approximately 100,000. Our experience to date suggests that the authority is generally well managed and it has enthusiastically implemented recommendations from past Performance audit projects.

2. The Audit Commission profiles indicate however that the authority's costs on "Housing Supervision & Management" are significantly above the "family" average. The Chief Executive and the leader of the Council have both expressed concern with this situation and are anxious to take action to reduce costs. An internal review of the Housing Department undertaken by management services in 2001/2 was largely ineffectual and did not identify any significant reasons for the high costs.

3. The cost of Housing Supervision and Management in 2002/3 was £1.49 million. Total expenditure on Housing was £7.5 million in the same year.

4. The number of dwellings managed by the authority is as follows:

   At 31 March 2001    5695
   At 31 March 2002    5594
   At 31 March 2003    5491
   At 31 March 2004    5335 (estimated).
## APPENDIX B

Performance Indicators Relating to 2001/2

<table>
<thead>
<tr>
<th>Area of Activity</th>
<th>This Authority</th>
<th>Good Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) General Supervision and Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Insurance cost per dwelling £1.20</td>
<td>£1.20</td>
<td>£1.80</td>
</tr>
<tr>
<td>(ii) Central administration charges per dwelling £40.00</td>
<td>£20.00</td>
<td></td>
</tr>
<tr>
<td>(iii) Admin. staff per 1000 dwellings 1.35</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>(IV) Sale of dwellings (staff involved) 3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>(V) Waiting list staff 1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>(VI) Lettings staff 3.2</td>
<td>2.9</td>
<td></td>
</tr>
<tr>
<td>(VII) Rent arrears as % of gross debit (March 1985) 1.8%</td>
<td>1.7%</td>
<td></td>
</tr>
<tr>
<td>(VIII) Vacant dwellings as % of total (March 1985) 1.1%</td>
<td>0.4%</td>
<td></td>
</tr>
<tr>
<td>(IX) Estate management staff (per 10,000 dwellings) 2.2</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>b) Special Supervision and Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(I) Cost of dwellings for the elderly (Sheltered Accommodation) £240,000</td>
<td>£140,000</td>
<td></td>
</tr>
<tr>
<td>(II) Caretakers per 100 dwellings 0.2</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>(III) Central heating gross costs per dwelling involved £215</td>
<td>£210</td>
<td></td>
</tr>
<tr>
<td>(IV) Cost of maintaining housing open space £95,000</td>
<td>£45,000</td>
<td></td>
</tr>
<tr>
<td>(V) Communal lighting cost per dwelling involved £13</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

Note:
1. There are two types of indicators included in the above list:
   a. those marked with an asterisk take account of relevant factors which affect the level of activity in these areas. (For example, the indicator related to the number of staff involved in lettings was calculated to take account of the total number of dwellings offered for let and the proportion of offers refused;
b. the other indicators are of a more simplified nature and merely relate costs or staffing levels of an activity to the number of the authority's dwellings involved in that activity.

2. It should be noted that performance indicators do not exist for all the areas of activity covered by supervision and management. Thus not all the reasons for high cost will necessarily be covered by the above indicators.

APPENDIX C
Summary of matters noted during audit so far

1. Central Establishment Charges (CEC) to the Housing Department are all charged to "general supervision and management". The total recharged in 2001/2 was £240,000 and had increased to £400,000 in 2003/3. 2002/3 was the first year that Central Establishment Charges were fully reallocated to service departments. A separate Performance audit projeto is being undertaken on the cost of central administration in the authority.

2. Administrative staff - Tidbury's indicator was high for administrative staff because they have three people based in the Housing Department (out of a total of seven administrative staff) who in most authorities would be based in the Finance Department. It is not clear whether other authorities would have included comparable staff in their figures. Administrative procedures in the department seem to be efficient from the brief review undertaken during the audit.

3. The authority made an intensive effort to promote the sale of dwellings 2 years ago and almost 2000 dwellings have been sold since 1999. It is expected that the rate of sales will slow down dramatically in the next two years.

4. The cost per completed sale was £250 in 2002/3. In 2001/2 Audit Commission cited a figure of £170 as "good practice".

5. The average time taken between an application for the purchase of a dwelling being received and an offer being made was four weeks. The statutory period allowed is eight weeks and the Director of Housing is extremely proud of progress at Tidbury.

6. Rent arrears have increased dramatically since March 2002 and at 31/1/2003 were 3.9% of the gross debit. The Housing Department took over responsibility for rent collection in April 2002. The relevant staff in the Housing Department considered that the main reason for the increase was the "downturn in the economy". The gross rent debt for 2002/3 is approximately £7.7 million. Work on the authority's final accounts is 2001/2 identified a number of weaknesses in recovery procedures and various recommendations were made in the "Final Accounts report issued to the Director of Finance".

7. At 31/3/2003 there were 21 dwellings vacant.
8. The authority maintains around 600 'sheltered' dwellings for the elderly. The major or costs involved in 2001/2 were:

   a) cost of resident wardens in all blocks (£140,000)
   b) cost of relief wardens (£20,000)
   c) net cost of central heating (£50,000)

9. It was noted during the audit that the authority provides resident wardens in its 'category 1' dwellings (cost £40,000). The Audit Commission guide indicates that this is not general practice for category 1 dwellings. Since 2001/2 the authority has introduced a community alarm system for all sheltered dwellings at a cost of £30,000 per year. It is felt that the authority should be encouraged to review its policy on resident wardens in category 1 dwellings, taking into account the practice of other authorities and the introduction of the community alarm system which to a large extent should replace the need for wardens in this category of dwelling. The director of Housing seemed to accept this point but indicated that the members may be difficult to persuade following a case in a neighboring authority where an old person had collapsed in her flat and, was not discovered for over a day.

10. Central heating is provided only to sheltered dwellings. The gross cost in 2001/2 was £223,000 while charges for central heating totaled £174,000. These charges are increased each year by the rate of inflation. It is understood that neighboring authorities have a policy of recovering 100% of costs. Central heating is usually turned on 1st September and switched off on 1st May.

11. The area of open space maintained for the housing department is not known. The Director thinks that some of the areas they are charged for may actually be the responsibility of the county council. The work is done by the Technical Department who won the work in a recent tender. A comparison of the frequencies of various types of work (e.g. mowing) to the practice of other authorities showed no significant variations.

12. It was noted during the audit that the profile statistics for special supervision and management were based on the total number of dwellings in the authorities and not just those dwellings to which the cost of special supervision relate (i.e. sheltered accommodation). These statistics are therefore misleading.
11 Session 11 – System Based Audit (SBA)

11.1 Definition of SBA

**Definition**

The systems Based Audit (SBA) is an approach whereby the auditor seeks to obtain the required level of assurance by:

- Establishing that an effective system exists to record transactions accurately
- Evaluating and compliance testing the internal controls in operation, and
- Depending on the assessment of the system carrying out a reduced level of substantive testing

11.2 Use and Stages of SBA

**Use of SBA**

The SBA approach is used by both Internal Audit and External Audit, although their emphasis differs:

- **External Audit** concentrates on:
  - The adequacy of each system for the provision of accounting information that „presents fairly” the client’s activity and financial position
  - Activities being „intra vires”
- **Internal Audit** concentrates on:
  - Economy, efficiency and effectiveness
  - The security of assets
  - The reliability of records
  - Compliance with internal rules and regulations
Stages of systems based auditing

Recording the System
From information gained by interviewing the relevant staff, a record of the system is produced. This record will normally consist of flowcharts and notes.

Walk through Tests
To confirm that the record of the system is correct, a small number of transactions are followed (walked) through the entire system.

Stages of systems based auditing
(Cont.)

Evaluating the Internal Controls-system design
The auditor will determine whether the controls in the system are adequate to meet the control objectives of the system. Evaluation of the system as designed. Key controls.

Tests of Controls system operation
Tests of Control are compliance tests which seek to provide audit evidence that internal control procedures are being applied or operated as prescribed and intended by management.

Stages of systems based auditing
(Cont.)

Substantive Testing
Substantive tests are tests of transaction and balances also analytical reviews which seek to provide audit evidence as to the completeness, accuracy and validity of the information contained in the accounting records or in the financial on statement. reduced substantive testing.

Two broad groups:
Direct Substantive Testing (DST)
Analytical Review Techniques (ART)
11.3 The Two Types of Audit Approaches

The Systems-based-approach (SBA):

it is based on the reliance on the internal control systems of the entity. The four stages of the SBA are the following:

- identify and evaluate key-controls, and assess the extent to which they can be relied upon (provided they operate effectively)
- test the operation of these controls to check whether they have operated as planned

The Two Types of Audit Approaches (Cont.)

- evaluate the results of the tests to establish the extent to which the controls can actually be relied upon
- carry out substantive testing of a number of transactions to determine whether the audit objectives are achieved
The Direct substantive testing approach (DST):

- it is not based on the reliance on the internal control systems of the entity. Therefore, the amount of substantive testing necessary to achieve the audit objectives will be greater than in the SBA approach;
- it is a matter of judgment for the auditor to decide which approach will be the most cost-effective to achieve the audit objectives in the circumstances of the audit;

11.4 Accounting Assertions

Accounting Assertions
Balance sheet or asset records

**COMPLETENESS**
- Have all of the assets and liabilities been recorded.

**OWNERSHIP**
- Are the assets owned by the enterprise and are the liabilities properly those of the enterprise.

**VALUATION**
- Have the amounts attributed to the assets and liabilities been arrived at: in accordance with stated accounting principles on an acceptable and consistent basis.
Balance sheet or asset records
(Cont.)

EXISTENCE
• Do the recorded assets exist

DISCLOSURE
• Have the assets, liabilities, capital and reserves been properly disclosed

Accounting Assertions
Statements on income and expenses

COMPLETENESS
• Have all income and expenses been recorded.

OCCURRENCE
• Did the recorded income and expenditure transactions in fact occur.

MEASUREMENT
• Have the income and expenses been measured in accordance with the stated accounting policies on an acceptable and consistent basis

Statements on income and expenses
(Cont.)

PROPRIETY
• Are transactions a correct charge on the organization.

DISCLOSURE
• Have income and expenses been properly disclosed where appropriate.
11.5 Specific Issues

Specific Issues
Applicable to Public Sector Organisations

AUTHORITY
• Has appropriate authority been obtained for activities, operational policies and arrangements.

AUTHORISATION
• Have transactions been authorised in accordance with internal rules and regulations or other appropriate arrangements.

TIMELINESS
• Have transactions been initiated and/or recorded within a reasonable time-scale.

Specific Issues
Applicable to Public Sector Organisations
(Cont.)

REGULARITY
• Do transactions, record preparation, systems, schemes and activities conform with any relevant statutory or other regulations.

SECURITY
• Assets, prime documents and computerised systems are secure from unauthorised access.

SUBSTANTIATION
• Asset records are periodically substantiated against the physical assets
Specific Issues for Internal Audit in a Public Sector Organisation

Regularity of records - Are records prepared in accordance with internal rules
• Regularity of transactions and activities
• Are transactions
  - in accordance with statutory authority and
  - in accordance with the authority of the budgetary organisation and
  - authorised in accordance with internal rules.

SBA is not appropriate where

• The number of transactions through a system is very low

• Preliminary enquiries indicate that there is no formal control system

Note:
Internal Audit may well want to review the informal systems and make recommendations for its improvement.
11.6 Advantages and Disadvantages of SBA

**Advantages of SBA**

**SBA**
- Gives audit assurance and allows audit add value by recommending how to improve control
- Saves time in future years if substantive testing could be reduced
- Is more interesting/demanding for auditors

**Disadvantages of SBA**

**SBA**
- Is time consuming in its first year
- Is time consuming when systems change
- Requires more skilled auditors
- Can be overly rigid
11.7 Conducting a Systems Review

To Conduct a Systems Review

The Auditor needs to:

• Know the systems control objectives
• Know what controls are expected
• Ascertain the main controls that achieve these objectives
• Confirm documentation by „walk through tests”
• Identify potential errors or omissions by „analytical review”, and
• Verify the Accuracy/validity of transactions by „substantive testing”

SBA Approach to Forming an Opinion on Systems

11.8 Exercise to Session 11

This test has been designed to help you confirm that you can distinguish between the establishment and exercise of control and compliance controls.

Method

Please answer the questions below by striking out the response which you believe to be incorrect. The following are examples of:
<table>
<thead>
<tr>
<th>Establishment of Control</th>
<th>YES / NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Documenting a new system is a manual.</td>
<td></td>
</tr>
<tr>
<td>2 Checking to make sure that instructions are carried out</td>
<td></td>
</tr>
<tr>
<td>3 Preparation of an inventory.</td>
<td></td>
</tr>
<tr>
<td>4 Signing a document.</td>
<td></td>
</tr>
<tr>
<td>Exercise of Control</td>
<td></td>
</tr>
<tr>
<td>5 Preparing an accounting reconciliation.</td>
<td></td>
</tr>
<tr>
<td>6 Checking that all entries in an accounting reconciliation</td>
<td></td>
</tr>
<tr>
<td>7 Marking off an order.</td>
<td></td>
</tr>
<tr>
<td>8 Checking details on a document.</td>
<td></td>
</tr>
<tr>
<td>9 Physical check against an inventory to confirm that:</td>
<td></td>
</tr>
<tr>
<td>- all items are recorded</td>
<td></td>
</tr>
<tr>
<td>- items are entered correctly</td>
<td></td>
</tr>
<tr>
<td>Compliance controls</td>
<td></td>
</tr>
<tr>
<td>10 Checking to make sure that operating arrangements and</td>
<td></td>
</tr>
<tr>
<td>operating policies have been complied with.</td>
<td></td>
</tr>
<tr>
<td>11 Checking that an order has not been marked off before</td>
<td></td>
</tr>
<tr>
<td>certifying an invoice for payment.</td>
<td></td>
</tr>
<tr>
<td>12 Checking that all items of remittances have been banked by</td>
<td></td>
</tr>
<tr>
<td>the cashier.</td>
<td></td>
</tr>
<tr>
<td>13 Checking that clerk has maintained a receipts and payments</td>
<td></td>
</tr>
<tr>
<td>account up to date.</td>
<td></td>
</tr>
</tbody>
</table>
12 Session 12 – Audit Management

Establishing the Audit Activity

- Essentials
- Practical independence to assure objectivity
- Adequate status to assure action on findings
- Understanding the politics and culture to survive
- A charter to permit meeting audit objectives

12.1 Audit Managerial Activities

Audit Managerial Activities

- Planning, determining what are the objectives of the audit
- Delegating, briefing motivating
- Controlling, co-ordinating, entails monitoring the progress
- Reporting to the interested parties
**Reporting Lines**

- Administrative: to senior management or/and Board
- In a professional sense on
  - Planning and proceeding
  - General issues of financial audit
  - The results of specific audit exercises
  - Fraud, negligence or other discovered irregularities
  - Issues of value for money

**Policy Statement Missions**

- Review efficiency and effectiveness of management
- Determine effectiveness of controls.
- Review reliability and integrity of financial and operating information
- Review compliance with policies, plans, procedures, laws, and regulations
- Review means of safeguarding assets
- Appraise economy and efficiency of resource application
- Determine if operations results conform to objective and goals

**The Role of Manager in Conducting an Audit**

- Monitoring the progress of the audit against the timetable and budget, and controlling audit costs
- Resolving issues as they are identified by the senior on site and by the audit staff
- Supervising and coaching the senior and providing guidance to other professional staff as required
- Reviewing the audit work papers
- Supervising the preparation of report
12.2 Use of Specialists and Outsourcing

Use of Specialists

- Actuary’s advice in relation to the audit of a pension scheme
- A surveyor’s opinion in relation to the valuation of property
- The advice of a specialists in environmental matters
- Legal opinion relating to material contracts

Outsourcing

Use of experts not a part of the auditing organisation

- Assist in audits:
  - Specialized areas
  - International
  - Eliminate travel
- Specialized areas:
  - Engineering
  - Medicine
  - Actuarial science
  - Health services
  - Veterinary medicine
  - Marketing
  - Advertising
12.3 Staff Development

Selecting and Developing the Staff

- Hiring and Developing Staff
- Internal auditing requires a staff with high qualifications and experience
- An evaluation program to identify weaknesses and opportunities
- Continuing education to train staff and maintain capabilities
- High standards of individual behavior as an example to others

Staff Development

- Sources
  - Universities and colleges
  - Public accounting
  - Within the organization
  - The IIA
  - The Internet

- Selection
  - Interviewing
  - Testing
  - Orientation
12.4 Performance Monitoring

Internal Audit Performance Indicators

Quantitative measures of performance and qualitative indicators of effectiveness:

- The comparison of man days spent on an audit against those planned
- To balance measures of input e.g. man days against measures of output such as system weaknesses identified as a result of the audit

Performance Monitoring

- The budget will be used as the main basis
- Monitor performance on a wider front than the purely financial
- Quality issues, such as speed of reporting
- The number of recommendations made, compared with the number implemented after 6 months
- The value of potential savings identified, and the value of savings actually achieved
- The extent to which actual audit coverage has met the approved plan
12.5 Audit Planning

Audit Planning

Overall Objectives of Audit planning:

• To ensure that the available audit resources are used as efficiently and effectively as possible
• Sufficient evidence are obtained to support the audit opinion required

General Objectives of Audit Planning

• To identify the objectives, scope and anticipated outputs of audits
• To define how the audit evidence, necessary to achieve the objectives, will be obtained and analysed
• To identify the resources that will be needed and actually employed on audits and establish cost and time budgets
• To allow audit management to supervise and control individual audits
Strategic Planning – Risks

- Assessments to justify budgets
- Using risk modelling software
- Audit judgment – the key ingredient
- Factors to take into account

12.6 Quality Assurance Program

Quality Assurance Program

Elements:

- Supervision
- Internal reviews
- External reviews
Quality Assurance Program
(Cont.)

• Supervision
  - Conformance with internal auditing standards, departmental policies, and audit programs
    a) Adequate planning and providing suitable instructions to subordinates
    b) Determination that the approved audit program has been carried out and documented

Quality Assurance Program
(Cont.)

• Internal reviews
  - Should be performed periodically by members of the internal auditing staff to appraise the quality of the audit work performed
  - Self Reviews: Reviews of Audit Files by Senior Auditors

Quality Assurance Program
(Cont.)

• External reviews made by external auditors
  - The experience and qualifications of internal audit staff
  - The degree of independence exercised by internal audit
  - The basis on which internal audit plan their assignments
  - Review arrangements within internal audit
  - Competence in specialist areas e.g. computer or contract audit
• External reviews made by qualified reviewers
12.7 Questions to Session 12

1 The Standards require the performance of periodic internal reviews by members of internal auditing staff. This function is designed to primarily serve the needs of:

   a  The audit committee
   b  The chief audit executive
   c  Management
   d  The internal auditing staff

2 To properly evaluate the operations of an internal auditing department, a quality assurance program should include:

   a  Periodic supervision of internal audit work on a sample basis.
   b  Internal reviews, by other than the internal audit staff, to appraise the quality of department operations
   c  External reviews at least once every three years by qualified persons who are independent of the organization
   d  Periodic rotation of audit managers.

3 Which of the following aspects of evaluating the performance of staff members would ~ be considered a violation of good personnel management techniques?

   a  The evaluator should justify very high and very low evaluations because of their impact on the employee
   b  Evaluations should be made annually or more frequently to provide the employee with feedback about competence
   c  The first evaluation should be made shortly after commencing work to serve as an early guide to the new employee.
   d  Because there are so many employees whose performance is completely satisfactory, it is preferable to use standard evaluation comments.

4 The best means for the internal auditing department to determine whether its goal of implementing broader audit coverage of functional activities has been met is through

   a  Accumulation of audit findings by auditable area.
   b  Comparison of the audit plan to actual audit activity
   c  Surveys of management satisfaction with the internal auditing function
   d  Implementation of a quality assurance program
5 Having been given the task of developing a performance appraisal system for evaluating the audit performance of a large internal audit staff, you should:

a  Provide for an explanation of the appraisal criteria methods at the time the appraisal results are discussed with the internal auditor.

b  Provide general information concerning the frequency of evaluations and the way evaluations will be performed without specifying their timing and uses

c  Provide primarily for the evaluation of criteria such as diligence, initiative, and tact.

d  Provide primarily for the evaluation of specific accomplishments directly related to the performance of the audit program.

6 Which of the following is most essential for guiding the audit staff in maintaining daily compliance with the department's standards of performance?

a  Quality control reviews

b  Position descriptions

c  Performance appraisals

d  Policies and procedures

7 The interpretation related to quality assurance given by the Standards is that:

a  Quality assurance reviews can provide senior management and the audit committee - with an assessment of the internal audit function.

b  Appropriate follow-up to an external review is the responsibility of the internal auditing director's immediate supervisor

c  The internal audit department is primarily measured against The IIA's Code of Ethics

d  Continual supervision is limited to the planning, examination, evaluation report, and follow-up process.

8 Which of the following is not ordinarily an objective of a quality assurance review? To determine compliance with:

a  Applicable laws and regulations

b  The general standards for the professional practice of internal auditing

c  The specific standards for the professional practice of internal auditing

d  The goals of the internal audit function.

9 The use of teams in total quality management is important because:

a  Well-managed teams can be highly creative and are able to address complex problems better than individuals can.

b  Teams are quicker to make decisions thereby helping to reduce cycle time.

c  Employee motivation is higher for team members than for individual contributors.
| d | The use of teams eliminates the need for supervision, thereby allowing a company to become leaner and more profitable. |
12.8 Examples of Analysing and Forecasting in Audit Management

As mentioned above most aspects of audit work now involve analytical and or forecasting techniques. For example:

- audit planning would normally include the collection of a wide range of data for analysis to assess likely levels of risk so that audit resources concentrate on the highest risk areas
- the planning of individual audit tasks would normally start with an analytical review to identify material areas where activity, financial or other information looks doubtful. A forecast of the likely time required to complete the audit work is also required
- audit can employ a technique called "Variables Sampling" whereby the range that the total of a population e.g. income from the sale of tickets to a theatre is expected to be within is compared to the actual income, expenditure or activity recorded
- audit managers have to annually forecast the Unit's costs and income for budget/business planning purposes. This includes forecasting, for example, staff turnover, sickness level, productive days and client demand for audit services
- ratio analysis is a useful tool to identify where certain processes are not effective. For example, a low stock turnover could indicate poor stock control or uneconomic purchasing systems, a low debtors turnover ratio could indicate ineffective debt collection procedures, wastage or error rates could point to poor quality control
- comparative analysis with, for example, other Organisations can identify areas of activity where value for money audit work may be useful
- a comparison of expected and actual banking amounts and frequencies can indicate frauds as could the comparison of an actual compared to intended profit margin for a trading activity e.g. a bar
- the use of correlation may be used to calculate the strength of a relationship between two variables. For example, we may suspect that complaints levels about a service are related to a reduction in staff levels. We could test the theory by calculating how strong the relationship is, although, a strong relationship may be coincidental
- whenever sampling exercises reveal errors audit needs to evaluate what the results indicate about the level of error in the test population taking account of the:
  - basic precision inherent in all sampling exercises,
  - most likely error rate from the test results
  - precision gap widening adjustment reflecting the incidence of errors

Conclusion:
The above represent a few examples of the use of analysis and forecasting by audit. With a little creativity most audit work can benefit from some analytical input.
12.9 Handout 1 to Session 12

Sample Internal Audit Charter

MISSION AND SCOPE OF WORK

The mission of the internal audit department is to provide independent, objective assurance and consulting services designed to add value and improve the public organization's operations. It helps the public organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.

In order to fulfil its tasks, the internal audit service prepares analyses, collects and assesses information, provides proposals and recommendations for the head of public organization (hereinafter: HPO) regarding the audited processes.

The scope of work of the internal audit service is to determine - and give assurance supported by appropriate evidences - whether the public organization’s network of risk management, control, and governance processes, as designed and represented by the HPO, is adequate and functioning in a manner to ensure that:

Risks endangering the achievement of the public organization’s objectives are appropriately identified and managed;
Interaction with the various governance groups occurs as needed;
Significant financial, managerial, and operating information is accurate, reliable, and timely;
Employees’ actions are in compliance with applicable laws and policies, furthermore with internationally accepted standards, guidelines and methodologies published by the Ministry of Finance;
Resources are acquired economically, used efficiently, and adequately protected;
Programs, plans, and objectives are achieved;
Quality and continuous improvement are fostered in the public organization’s control process;
Significant legislative or regulatory issues impacting the public organization are recognized and addressed appropriately.

The opportunities for improving financial management and control (FM/C) system and its efficiency that were identified during audits shall be communicated to the HPO. Internal audit service – as an activity supporting the HPO – does not exempt the HPO from the obligation to manage risks and to operate FMC system. For improving the public organization’s FM/C system the internal audit service shall elaborate proposals, however, the implementation of the proposals and the initiation of other measures is the responsibility of the HPO only.
REPORTING

The chief audit executive shall report to the HPO:

Provide annually an overall assessment on the FM/C and risk management systems of the public organization and assess the adequacy and efficiency of the systems;
Report significant issues related to the FM/C system of the public organization, including potential improvements to those processes;
Periodically provide information on the status and results of the annual audit plan and the sufficiency of department resources.
Coordinate with and provide oversight of other control and monitoring functions (risk management, compliance, security, legal, ethics, environmental, external audit) and inform periodically the HPO on it.

INDEPENDENCE

To provide for the independence of the internal audit department, its personnel report to the chief audit executive, who reports directly to the HPO.

RESPONSIBILITY

The chief audit executive and staff of the internal audit department have responsibility to:

Develop a strategic, a mid-term and an annual audit plan using an appropriate risk-based methodology, including any risks identified by HPO. The chief audit executive shall submit the audit plans and the proposals for their modifications to the HPO for endorsement.
Implement the annual audit plan, as endorsed, including as appropriate any special tasks or projects requested by HPO.
Maintain a professional audit staff with sufficient knowledge, skills, experience, and professional certifications to meet the requirements of this Charter.
Evaluate and assess significant merging/consolidating functions and new or changing services, processes, operations, and control processes coincident with their development, implementation, and/or expansion.
Issue periodic reports to the HPO summarizing results of audit activities.
Keep the HPO informed of measurable objectives and the respective achievements.
Consider the scope of work of the external auditors and regulators, as appropriate, for the purpose of providing optimal audit coverage to the public organization at a reasonable overall cost.
AUTHORITY

The internal audit unit derives its authority from the Act on Public Finance.

The chief audit executive and staff of the internal audit department are authorized to:

- Have unrestricted access to all functions, records, property.
- Have full and free access to the HPO.
- Allocate resources, set frequencies, select subjects, determine scopes of work, and apply the techniques required to accomplish audit objectives.
- Obtain the necessary assistance of personnel in units of the public organization where they perform audits, as well as other specialized services from within or outside the public organization.

The chief audit executive and staff of the internal audit department are not authorized to:

- Perform any operational or management duties for the public organization.
- Initiate or approve accounting transactions external to the internal audit department.
- Direct the activities of any public organization employee not employed by the internal audit department, except to the extent such employees have been appropriately assigned to auditing teams or to otherwise assist the internal auditors.

STANDARDS OF AUDIT PRACTICE

Internal auditors shall perform their work in accordance with the rules of law, the internationally accepted internal audit standards, the methodologies and model manuals issued by the Ministry of Finance and the internal audit manual elaborated by the chief audit executive and endorsed by the HPO.

______________________________
Chief Audit Executive

______________________________
Head of Public Organization

Dated ___________________________
12.10 Handout 2 to Session 12

The content of internal audit manual

a) The Internal Audit Charter establishing the scope, responsibilities and objectives of the internal audit activity,
b) The Code of Ethics of internal auditors,
c) An organigramm supporting the functional independence of the internal audit activity,
d) Internal rules, procedures and methodological guidelines relating to the internal audit process and its phases for regularity/legality, financial, system-based audits, performance audits and IT-audits, etc.,
e) Risk analysis methodology,
f) Internal audit quality assurance rules,
g) Documentation rules for audit work, the rules for their archiving and filing,
h) Templates for standard working papers,
i) Requirements concerning the structure and content of audit reports,
j) Rules for the contradictory procedure and for the action plan
k) Procedures to be followed in the case of individual or system errors and in the case of serious irregularities or fraud,
l) The basic principles for the sustainable training of internal auditors,
m) Rules for involving external experts,
n) Supports for the findings of the audit.
13 Session 13– Information Systems Controls and Auditing

13.1 Introduction

In recent years, increased attention has been devoted to the term "control", "internal control" by managers legislators, auditors and IT people.

References

We only refer to the recent efforts made by the:
- Information Systems Audit and Control Foundation
- Institute of Internal Auditors Research Foundation
- Treadway Commission and Cadbury Committee
- American Institute of Certified Public Accountants
- European Commission etc.

The results of their efforts are:

- COBIT: Control Objectives for Information and Related Technology
- SAC: Systems Auditability and Control
- COSO: Internal Control - Integrated Framework
- SAS 78: Consideration of Internal Control in a Financial Statement
  Audit an Amendment to SAS 55

The documents differ in the audience addressed, the purpose, and the level of detail of guidance provided.

13.2 Historical Perspective and Milestones

Historical Perspective

1967 Generalised audit software development
1968 AICPA "Auditing and EDP" by Gordon Davis
1969 EDPAA formed. (Now ISACA - Information Systems Audit and Control Association)
1973 Equity Funding case broke
1974 The AICPA issued SAS 3 "Effects of EDP on the Auditors’ Study and Evaluations of Internal Control"
  "Audit Guide for Service Centre Produced Records" was also issued
1975 The CICA issued their "Computer Audit Guidelines"
  The IIA publishes Touche Ross "Computer Control and Audit."
  The concept of control matrices was born.
1977 The IIA published SAC "Systems Auditability and Control Study,"
  The AICPA published "The Auditors' Study and Evaluation of Internal Control and EDP Systems,"
  The Foreign Corrupt Practices Act, and its mandate for internal controls became law.
13.3 Control Concepts

COBIT takes its definition of control from COSO. IT Control Objectives are taken from SAC. SAS 78 is using the internal control concept from COSO report. (With minor modification that SAS 78 emphasises the reliability of financial reporting objective by placing it first.)

COBIT views internal control as a process, which includes policies, procedures, practices and organizational structures that support business processes and objectives.

SAC Classification Schemes

SAC provides five very practical and useful classification schemes for internal controls in information systems:

- preventive, detective, corrective
- discretionary and non-discretionary
- voluntary and mandated
- manual and automated
- general and application controls

COSO emphasises internal control as a process, and internal control should be an integrated part of ongoing business activities. The most widely accepted definition is that set out in the COSO report.
SAS 78 is using the same definition as COSO, but emphasise the reliability of financial reporting objective.

13.4 The Control Framework Based on COSO

It is true to say that perfect internal control is not achievable, at least in computerised systems. What is needed is some way of balancing the cost of control with the problems that could occur in its absence. This is why an assessment of risk plays an important part in getting the right level of internal information systems control.

As information systems auditors we are particularly interested in systems. Translating this into systems terms, we may think of the layers of control as follows:

<table>
<thead>
<tr>
<th>Control Layers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Corporate Controls</strong></td>
</tr>
<tr>
<td>• Executive management</td>
</tr>
<tr>
<td>• Controls culture and values</td>
</tr>
<tr>
<td>• Corporate policies</td>
</tr>
<tr>
<td>• Business risk evaluation</td>
</tr>
<tr>
<td><strong>Management Controls</strong></td>
</tr>
<tr>
<td>• Planning &amp; performance monitoring</td>
</tr>
<tr>
<td>• Accountabilities</td>
</tr>
<tr>
<td>• Risk evaluation</td>
</tr>
<tr>
<td><strong>Business Process Controls</strong></td>
</tr>
<tr>
<td>• Authorisation</td>
</tr>
<tr>
<td>• Validation</td>
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<tr>
<td>• Reconciliation</td>
</tr>
<tr>
<td><strong>Transaction Controls</strong></td>
</tr>
<tr>
<td>• Accuracy</td>
</tr>
<tr>
<td>• Consistency</td>
</tr>
<tr>
<td>• Completeness</td>
</tr>
<tr>
<td>• Compliance</td>
</tr>
</tbody>
</table>

Traditionally a consideration of internal control has focused on the lower levels of transaction controls and business process, but really effective control has to cover the whole organization from top to bottom, from corporate to transaction controls.

13.5 The Control Framework Based on COBIT

13.5.1 IT Governance

The management of IT related risk is now being understood as key part of enterprise governance. Within enterprise governance, IT governance is becoming more and more prominent and process to direct and control the enterprise goals by adding value while balancing risk versus return over IT and its processes.

13.5.2 COBIT’s Golden Rule

COBIT main focus is the establishment of a reference framework for security and control in information technology. It defines a linkage between information systems controls and business objectives. It also provides control objectives for each IT process, which gives control guidance to all interested parties. COBIT also facilitates communications among management, users and auditors regarding information systems controls. COBIT outlines 4 domains, 34 processes...
COBIT bridges the gap between broader business control models and technical information systems control models and IT security standards available worldwide.

COBIT incorporates the five components presented in the COSO report and focuses them within the information technology internal control environment.

13.5.3 COBIT IT Processes

COBIT examines control procedures relative to a computerised information system. Also classifies controls into 32 processes grouped into four domains. This classification is applicable to any information-processing environment.
COBIT IT Processes

COBIT is applicable to all IT platforms, and all sizes and types of organizations—government, public or private.

Audit Guidelines enable the review of IT process against COBIT’s 318 recommended detailed control objectives to provide management assurance and advice for improvement.

In Management Guidelines COBIT provides maturity models for control over IT processes, so that management can map where the organization is today. Critical success factors define implementation guidelines to achieve control over IT processes.

Key goal indicators define measures whether an IT process has achieved it business requirement. Key performance indicators define measures of how well the IT processes are performing in enabling the goal to be reached.

13.5.4 Internal Control in a Computer Environment

The international audit guidelines and standards note on this topic that the objectives of internal control are not effected by the means used to process data and apply equally to manual and computerised systems.
General (Environmental) Controls

relate to and influence all of the IT operations and activities. This category of controls tends to be transparent to the average “lay” user. General Controls address such issues as:

- Plan of organization and operation of all IT activity (i.e., organization is sufficiently independent, existence of steering committee, etc.).
- Procedures for documentation, review, test, and approval of functions/activities and changes thereto (i.e., installation/testing of hardware, hardware configuration, standards by which application programs/systems are developed, etc.).
- Controls built into equipment and software by the vendor.
- Controls over access to equipment and data files.
- Other data and procedural controls affecting the company’s overall data processing operations (i.e., IT disaster recovery plans, IT production control group, etc.)

It is important to keep in mind that the application executes under the direct control and influence of the general control environment. The weaker the general controls, the more extensive the degree of application controls which need to be designed and utilised.
Application Controls Include

- Input controls – provide assurance of authorisation (approval) for and of processing, as well as the completeness and accuracy of input.
- Processing controls – provide assurance of authorisation, accuracy, and completeness of data as it is passed/processed from program to program and as it updates data master files, as well as assuring data integrity through editing (error identification and correction) routines.
- Output controls – provide assurance of authorisation, accuracy, and completeness of reports (or other media) produced as output by the system, as well as appropriate security/access to computer records and reports.

13.5.5 Classification of IT Controls According to their Role

### Classification of IT Controls by Role

<table>
<thead>
<tr>
<th>Control Type</th>
<th>Function</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Preventive</strong></td>
<td>1. Deter problems before they arise. &lt;br&gt;2. Monitor both operation and inputs. &lt;br&gt;3. Attempt to predict potential problems before they occur and make adjustments. &lt;br&gt;4. Prevent an error, omission or malicious act from occurring.</td>
<td>Employ only qualified personnel. &lt;br&gt;Segregate duties (deterrent factor). &lt;br&gt;Control access to physical facilities. &lt;br&gt;Use well-designed documents (prevent errors). &lt;br&gt;Establish suitable procedures for authorisation of transactions. &lt;br&gt;Programmed edit checks. &lt;br&gt;Use of access control software that allows only authorized personnel to access sensitive files.</td>
</tr>
<tr>
<td><strong>Detective</strong></td>
<td>Controls that detect that an error, omission or malicious act has occurred and report the occurrence</td>
<td>Hash totals &lt;br&gt;Check points in production jobs &lt;br&gt;Echo controls in telecommunications &lt;br&gt;Error messages over tape labels &lt;br&gt;Duplicate checking of calculations &lt;br&gt;Periodic performance reporting with variances &lt;br&gt;Past due account reports &lt;br&gt;Internal audit functions</td>
</tr>
</tbody>
</table>

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Responsibility for Controls

The management of an organization is responsible for ensuring the achievement of the organization’s goals, thereby ensuring the continued successful operation of the enterprise. An effective control structure is an integral feature necessary to achieve corporate goals and to attain the objective of continued operations.

Application Controls Design

In developing new systems, making major modifications to existing systems, or purchasing package systems, the responsibility for development and/or review of controls rests jointly with the applicable user department(s) and the Information Systems Department.

Generally, controls should be implemented at key points where: a potential exposure (risk of loss) exists, unauthorised processing alternatives exist which could potentially cause exposures; and, the frequency or effects of the identified exposures are significant enough to warrant the control expense to limit them.

Application Control Accountability

The form of the controls or the manner in which they are applied, may be different in a computerised system. The guidelines declare that management is responsible for maintained an adequate internal control system to the extent appropriate to the size and nature of the business.

These guidelines describe the common characteristics of IT environment, including the factors that affect the organization and structure, nature of processing, design and procedural aspects of the system of internal control.

The principal changes - based on these guidelines are as follows:

---

### Classification of IT Controls by Role

<table>
<thead>
<tr>
<th>Control Type</th>
<th>Function</th>
<th>Examples</th>
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<tr>
<td>Corrective</td>
<td>Minimise the impact of a threat</td>
<td>Contingency planning</td>
</tr>
<tr>
<td></td>
<td>Remedy problems discovered by detective controls</td>
<td>Back-up procedures</td>
</tr>
<tr>
<td></td>
<td>Identify the cause of a problem</td>
<td>Re-run procedures</td>
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<tr>
<td></td>
<td>Correct errors arising out of a problem</td>
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<tr>
<td></td>
<td>Modify the processing system(s) to minimise future occurrences of the problem</td>
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**Principal Changes - Organisational Structure**

- **Concentration of functions and knowledge.** Certain data processing personnel may be the only ones with a detailed knowledge of the interrelationship between the source of data, how it is processed and the distribution and use of output.

- **Concentration of programs and data.** In the absence of appropriate controls, there is an increased potential for unauthorised access to, and alteration of, programs and data.

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The use of computers may result in the design of systems that provide less visible evidence than manual systems.

**Principal Changes - Nature of Processing**

- **Absence of input documents.** Written evidence of individual data entry authorisation may be replaced by other procedures.

- **Lack of visible transaction trail.** The transaction trail may be partly in machine-readable form.

- **Lack of visible output.** The lack of visible output may result in the need to access data retained on files readable only by the computer.

- **Ease of access to data and computer programs.** There is an increased potential for unauthorised access to, an alteration of, data and programs by persons inside or outside the organization.
Design and Procedural Aspects

The different design and procedural aspects of computerised information systems include:

- Consistency of performance. A not correctly programmed and tested system may consistently process transactions erroneously.
- The nature of computer processing allows the design on internal control procedures in computer programs.
- Single transactions update of multiple or data base computer files.
- Certain transactions may be initiated by the computer system itself, which may not be evidenced by visible input documentation.
- Data may be stored on portable or fixed storage media and these media are vulnerable to theft, loss, or intentional or accidental destruction.

These are just characteristics and does not mean that computer systems are less controlled than manual systems. The internal controls over information systems help to achieve the overall control objectives of internal control.

The overall effectiveness of such a control system requires from us as "control professionals" - who design, operate, or evaluate controls - to be able to rationally explain how or why we selected the controls that we incorporate into the organization or information systems.

13.5.6 The role of internal/external IS audit in evaluating controls

- A strong internal information systems auditing function help to assure a proper control environment and promotes accuracy and efficiency in an institution's IT operations. External auditing complements this function by providing an objective outside view on the IT controls.

- External auditors may review information systems internal control procedures in their overall evaluation of internal controls when auditing the company’s financial statement. As mentioned earlier, auditing standards require auditors to consider the effects of information systems activity in each significant application.
13.5.7 Computer Assisted Audit Techniques

The IS Auditor should have a thorough understanding of computer assisted techniques and know where and when to apply them.

This understanding should include both the use of generalised audit software and other techniques such as test data generators and integrated test facility techniques. In addition to selecting the appropriate technique, the IS Auditor should understand the importance of documenting the results of such tests for audit evidence purposes.

Examples of CAATs

- **Test Data Generator** – Prepare a computerised test data file for use in testing and verify the logic of application programs
- **Expert Systems** – Software applications developed to hold a base of expert knowledge and logic provided by experts in a given field. Such a software application permits the computerised use of the decision – making processes of these experts
- **Standard Utilities** – Resident in software packages that specify the status of parameters used to install the package
- **Software Library Packages** – Verify the integrity and appropriateness of program changes
- **Snapshot** – This technique involves taking “pictures” of a transaction as it flows through the computer system. Audit software routines are embedded at different points in the processing logic to capture images of the transaction as it progresses through the various stages of processing. Such a technique permits the IS Auditor to track data and evaluates the computer processes applied to this data throughout the various stages of processing.
- **System Control Audit Review File** – Involves embedding audit software modules within an application system to provide continuous monitoring of the system’s transactions. The information is collected into a special computer file that can be examined by the IS Auditors.
- **Specialised Audit Software** – Used to perform specific audit steps for the IS Auditor, such as sampling, footing and matching.

13.5.8 Continuous audit approach

The continuous audit provides a method for the IS Auditor to collect evidence on system reliability while normal processing takes place. The approach allows IS Auditors to monitor the operation of such a system on a continuous basis and to gather selective audit evidence through the computer.
Types of Continuous Audit Techniques

- Systems Control Audit Review File and Embedded Audit Modules (SCARF/EAM)
- Snapshots
- Audit Hooks
- Integrated Test Facilities (ITF)
- Continuous and Intermittent Simulation (CIS)
### 13.6 Questions to Session 13

#### 1
An IS auditor, performing a review of an application’s controls, discovers a weakness in system software, which could materially impact the application. The IS auditor should:

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<tr>
<td>a</td>
<td>disregard these control weaknesses as a system software review is beyond the scope of this review</td>
</tr>
<tr>
<td>b</td>
<td>conduct a detailed system software review and report the control weaknesses.</td>
</tr>
<tr>
<td>c</td>
<td>include in the report a statement that the audit was limited to a review of the application’s controls</td>
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<tr>
<td>d</td>
<td>review the system software controls as relevant and recommend a detailed system software review</td>
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#### 2
The reason for having controls in an IS environment:

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<tr>
<td>a</td>
<td>remains unchanged from a manual environment, but the implemented control features may be different</td>
</tr>
<tr>
<td>b</td>
<td>changes from a manual environment, therefore the implemented control features may be different.</td>
</tr>
<tr>
<td>c</td>
<td>changes from a manual environment, but the implemented control features will be the same.</td>
</tr>
<tr>
<td>d</td>
<td>remains unchanged from a manual environment and the implemented control features will also be the same</td>
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#### 3
Which of the following types of risks assumes an absence of compensating controls in the area being reviewed?

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<td>a</td>
<td>Control risk</td>
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<tr>
<td>b</td>
<td>Detection risk</td>
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<tr>
<td>c</td>
<td>Inherent risk</td>
</tr>
<tr>
<td>d</td>
<td>Sampling risk</td>
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#### 4
An IS auditor is conducting substantive audit tests of a new accounts receivable module. The IS auditor has a tight schedule and limited computer expertise. Which would be the BEST audit technique to use in this situation?

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<tr>
<td>a</td>
<td>Test data</td>
</tr>
<tr>
<td>b</td>
<td>Parallel simulation</td>
</tr>
<tr>
<td>c</td>
<td>Integrated test facility</td>
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<tr>
<td>d</td>
<td>Embedded audit module</td>
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#### 5
The PRIMARY purpose of compliance tests is to verify whether:

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<tr>
<td>a</td>
<td>controls are implemented as prescribed</td>
</tr>
<tr>
<td>b</td>
<td>documentation is accurate and current</td>
</tr>
<tr>
<td>c</td>
<td>access to users is provided as specified</td>
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<tr>
<td>d</td>
<td>data validation procedures are provided</td>
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<td>Question</td>
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<td>--------------------------------------------------------------------------</td>
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| 6 | Which of the following BEST describes the early stages of an IS audit?   | a  Observing key organizational facilities  
    |                                                                         | b  Assessing the IS environment  
    |                                                                         | c  Understanding business process and environment applicable to the review.  
    |                                                                         | d  Reviewing prior IS audit reports.                                      |
| 7 | The document used by the top management of organizations to delegate authority to the IS audit function is the: | a  long-term audit plan  
    |                                                                         | b  ,  audit charter  
    |                                                                         | c  audit planning methodology  
    |                                                                         | d  steering committee minutes                                             |
| 8 | Before reporting results of an audit to senior management, an IS auditor should: | a  Confirm the findings with auditees  
    |                                                                         | b  Prepare an executive summary and send it to auditee management  
    |                                                                         | c  Define recommendations and present the findings to the audit committee  
    |                                                                         | d  ,  Obtain agreement from the auditee on findings and actions to be taken  
| 9 | While developing a risk-based audit program, which of the following would the IS auditor MOST likely focus on? | a  Business processes  
    |                                                                         | b  Critical IT applications  
    |                                                                         | c  Corporate objectives  
    |                                                                         | d  Business strategies                                                   |
| 10| Which of the following is a substantive audit test?                      | a  Verifying that a management check has been performed regularly  
    |                                                                         | b  Observing that user IDs and passwords are required to sign on the computer  
    |                                                                         | c  Reviewing reports listing short shipments of goods received  
    |                                                                         | d  Reviewing an aged trial balance of accounts receivable                 |