

IT Audit and Control

Level CPA PII Subject Code PP401 Exam Marks 100

Assessment Level: Advanced/Conceptual/Practical/Expert/Professional

Assessment Strategy

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| Section A: MCQ's 05(5Marks) | Competency Questions 4 (10Marks) | Case Studies/Scenario base Question 1 (10Marks) |
| Section B: MCQ's 05(5Marks) | Competency Questions 5 (20Marks) | Case Studies/Scenario base Question 1(10Marks) |
| Section C: MCQ's 05(5Marks) | Competency Questions 5 (15Marks) | Case Studies/Scenario base Question 1(10Marks) |
| Section D: MCQ's | Competency Questions 2 (05Marks) | Case Studies/Scenario base Question 1(05Marks) |

Syllabus

| Section | Lead Topics | Indicative Syllabus |
|----------------|-------------------------------------|--|
| Section A: 25% | Foundation for IT Audit and Control | IT Environment: Why are Controls and Audit Important?; IT Today and Tomorrow; Information Reliability, Integrity and Validity Importance; Control and Audit: A Global Concern; E-Commerce and EFT; Legal Issues Impacting IT; Privacy on the Info Superhighway; Security Privacy and Audit, Audit Standards; Importance of Audit Independence; GAAP; GAAS; IT Auditing: What is IT?; Need for the IT Audit Function; Auditors must have Independence; Auditor: Knowledge, skills and Abilities; Role of IT Auditor; IT Auditor as a Counselor; IT Auditor as Investigator Audit Universe; Risk Assessment; Audit Plan; Developing an Audit Schedule; Audit Budget; Audit Process; Design Audit Procedures; Fieldwork and Implementing Audit Methodology; Validation of Work Performed; Substantive Testing; Documenting results; Communication Strategy, Auditor Productivity Tools; Using CAAT in the Audit Process; Flowcharting Techniques; Flowcharting as an Analytical Tool; CAAT for Operational reviews; CAAT for Operational Reviews; Webmetrics; Web metrics as an Audit Tool; Computer Forensics |

| Section | Lead Topics | Indicative Syllabus |
|----------------|-------------|---|
| Section B: 35% | Controls | Risks and exposures in computer-based information systems IT Control Frameworks: COBIT, ITCG, SysTrust, WebTrust, etc, Effectiveness, efficiency, economy of operation; Reliability of financial reporting; Effectiveness of control ; IT asset safeguarding; Compliance with applicable laws and regulations; System reliability; Data integrity Societal Organizational environment Technology infrastructure Software Business process, External regulatory controls; Board/audit committee governance; Management philosophy and operating style; Plans/structure of organization; Method to communicate the assignment of authority and responsibility; Management control methods, Economic, technical, operational behavioral; Main reason for failure of computer Projects; Error, fraud , vandalism/abuse, business interruption, competitive disadvantage, excessive cost, deficient revenues, statutory sanctions, social costs, etc. Quantitative / qualitative, Monetary, non-monetary; Balancing costs of controls vs. costs of unmitigated risks |

| Section | Lead Topics | Indicative Syllabus |
|----------------|-----------------------------------|--|
| Section C: 30% | IT Acquisition and Implementation | Organizing Projects; Project Planning; Project Management Body of Knowledge; Auditor's Role in Project management Process; Importance of Project Planning and Control in SDLC; Approaches to Software development; SW Development Process; End-User Development; System Implementation Process; User Acceptance Testing; Auditor's Role in the Development Process; SDLC; Application Risks; End-User Computing Application Risks; EDI Application Risks; Application Controls; ASLC; Change Control; Vulnerabilities in SW Development and Change Control; IT Change Management; Change Management System; Controls Over changes; Emergency Change Process; Organizational Change Management; Audit Involvement; Information Security Management; Logical Access Controls; Network Security Controls; Environmental Controls; Physical Security Controls; Auditing Asset Protection |

| Section | Lead Topics | Indicative Syllabus |
|----------------|-----------------|---|
| Section D: 10% | Advanced Topics | IT Operation Issues in Network Installation; Types of WANs; Elements of WANS; Tools of Network Monitoring; Feature of Intranets and other networks; Interconnected Systems and E-Commerce; Exploiting the TCP/IP Holes; Recommendation to IT Auditors; Intranet/ Extranet Security; Wireless Technology |

