

# SEMINAR FOR MODULE 'E' PAPER 13

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# Agenda

- The context
- What to study
- Paper analysis
- How to study
- Reasons behind failure
- Exam techniques
- Paper solution
- Contact information
- Questions/Comments

**There is nothing to fear  
but fear itself!**



# The context

## **ICAP's Vision Statement**

‘The profession of Chartered Accountants in Pakistan should be the benchmark of professional excellence upholding the principles of integrity, transparency and accountability.’



# The context (Contd.)

## ICAP's Mission Statement

'Our mission is to achieve excellence in professional competence, add value to businesses and economy, safeguard public interest; ensure ethical practices and good corporate governance while recognizing the needs of globalization.'



# The context (Contd.)

## Examinations

- Examination process is directly supervised by the Examination Committee appointed by the Council of the Institute.
- Examination is conducted in a transparent manner whereby all candidates are treated fairly and objectively.
- The scope of examination includes the technical knowledge, skills, and competence to become members of the profession.



# The context (Contd.)

## Reasons for introducing IT

- A productivity tool
- No office work without IT
- No audit without IT
- IT audit becoming statutory requirement



# The context (Contd.)

## Student perspective

- We don't need it
- We know it
- It is boring
- It is too technical
- It is common sense
- One more paper to fail students!!



# The context (Contd.)

## Syllabus aims

- Essential body of IT knowledge related to business information systems.
- IT security, control, and governance knowledge related to business information systems.
- Application of knowledge to manage the above and evaluate IT.



# The context (Contd.)

## Syllabus aims (Contd.)

- The Case studies in ICAP study material for this syllabus are designed to assist the students in enhancing their knowledge and skills in: Managerial role; Evaluator role; Enterprise resource planning; and Electronic Commerce.
- Case studies / scenario based questions will be set in the examination.



# The context (Contd.)

## E13 Subject

- IT – information technology
- M – management
- A – audit
- C – control

# What to study

## The Syllabus – ICAP

- See syllabus book, or
- ICAP website



# What to study

The Syllabus – my classification

## Strategic Planning

- Rational planning model
- Business case development
- Strategic planning by Michael Earl
- Information strategies

# What to study

## The Syllabus – my classification (Contd.)

### Organizational Issues

- Centralization-Decentralization
- Simple and quick routine processing
- Constant change
- Knowledge management
- Employment issues
- Customer service
- Customer Relationship Management
- Organizational structure
- Technological effects
- Home/Tele/Remote working
- E-business technologies

# What to study

## The Syllabus – my classification (Contd.)

### Organizational Issues (Contd.)

- Developments in communications
- Security
- Legacy System
- Compatibility
- Backward compatibility
- Open source
- Accounting issues
- Outsourcing (BPO)
- Insourcing
- ASP

# What to study

## The Syllabus – my classification (Contd.)

### Information System Department Personnel and their responsibilities

- IS Director/CIO
- Operations manager
- System Development Manager
- End User Support Manager
- Technical Support Manager
- Quality Assurance Manager
- Systems Analyst/Business Analyst/Management Consultants
- Programmers
- Help Desk/Information Center
- Data Management

# What to study

## The Syllabus – my classification (Contd.)

### Information System Department Personnel and their responsibilities (Contd.)

- Database Administrator (DBA)
- Security Administrator
- System Administrator
- Network Manager/Administrator
- Librarian
- Control group
- Schedulers
- Data Controllers
- Operators
- End-user

# What to study

## The Syllabus – my classification (Contd.)

### Segregation of Information Systems and other organizational functions

- Transaction authorization
- Reconciliation
- Custody of assets
- Access to data
- Authorization forms
- User authorization tables
- Transaction log
- Audit trail
- Exception reporting

# What to study

## The Syllabus – my classification (Contd.)

### Human Resources Policies And Procedures

- Hiring policies
- Promotion policies
- Training policies
- Scheduling and time reporting
- Employee performance evaluation
- Required vacations
- Job rotation
- Termination policies

# What to study

## The Syllabus – my classification (Contd.)

### Information System Management Practices

- Management principles
  - People management
  - Management of change
  - Focus on good processes
  - Security management
  - Handling third parties

# What to study

## The Syllabus – my classification (Contd.)

### Information System Management Practices (Contd.)

- IS Assessment methods
  - IS Budget
  - Capacity and growth planning
  - User satisfaction
  - Industry Standards/Benchmarking
  - Financial management practices
  - Goal accomplishment
  - System logs

# What to study

## The Syllabus – my classification (Contd.)

### Information System Management Practices (Contd.)

- Quality management
  - General administration
  - HR management
  - Acquisition of hardware and software
  - Software development, implementation, and maintenance
  - Day to day operations
  - Security

# What to study

## The Syllabus – my classification (Contd.)

### Information System Management Practices (Contd.)

- Performance optimization
  - Establishing and updating performance measures
  - Establishing accountability for performance measures
  - Gathering and analyzing performance data
  - Reporting and using performance information

# What to study

## The Syllabus – my classification (Contd.)

### Information System Security Management

- Key Elements of Information Security Management
  - Policies and procedures
  - Organization
- Data classification
- System Access
- Information security management standards
  - Privacy impact analysis
  - CSF for IS management / security
- Computer crimes issues and exposures
  - Threats
  - Perpetrators

# What to study

## The Syllabus – my classification (Contd.)

### Environmental Exposures and Controls

- Environmental issues and exposures
- Environmental controls

# What to study

## The Syllabus – my classification (Contd.)

### Physical Access Exposures and Controls

- Physical Access issues and exposures
- Physical Access controls

# What to study

## The Syllabus – my classification (Contd.)

### Logical Access Exposures and Controls

- Logical Access Exposures
- Paths for Logical access
- Identification and authentication
- Security bypass features:
  - Label processing
  - Special system logon IDs
  - System exits – complex maintenance task, tailoring
- Viruses

# What to study

## The Syllabus – my classification (Contd.)

### Network infrastructure security

- Controls in a network environment
  - Dial/call back modems
  - Turn off call forwarding or divert on terminals
- Internet threats and security
  - Viruses
  - Hackers
- Types of network attacks
  - Passive attack
  - Active attack

# What to study

## The Syllabus – my classification (Contd.)

### Network infrastructure security (Contd.)

- Encryption
  - Private Key
  - Public Key Infrastructure
- Firewall security system
  - Router Packet Filtering Firewall
  - Application Firewall
  - Statefull Inspection Firewall
- Intrusion Detection System (IDS)

# What to study

The Syllabus – my classification (Contd.)

## Application Controls

- Input
- Processing
- Output
- Storage

# What to study

## The Syllabus – my classification (Contd.)

### Business Continuity Planning and Disaster Recovery Planning

- Business Impact Analysis (BIA)
- Developing business recovery strategies
- Develop detailed plans
- Implement plan
- Test and maintain plan

# What to study

## The Syllabus – my classification (Contd.)

### E-Commerce

- E-commerce models
- E-payment methods
- Security solutions

# What to study

## The Syllabus – my classification (Contd.)

### Software

- Supply Chain Management (SCM)
- Enterprise Resource Planning (ERP)
- Customer Relationship Management (CRM)
- Sales Force Automation (SFA)

# What to study

## The Syllabus – my classification (Contd.)

### IT Control Frameworks

- COBIT – Control Objectives on Information and related Technology by ISACA
- SAC – System Accountability and Control by IIA
- COSO – Committee of sponsoring organizations of Treadway commission internal control integrated framework
- SAS – Statement of Auditing Standards by AICPA
- SysTrust and WebTrust by AICPA and CICA

# What to study

## The Syllabus – my classification (Contd.)

### IFAC Guidelines

- Managing security of information
- Managing IT practices for business impacts
- Acquisition of IT
- The implementation of IT solution
- IT service delivery and support summary
- IT Monitoring

# What to study (Contd.)

## Study material

- My module 'D' book
- My Module 'E' notes
- CISA Manual
- Primary text:
  - Information Systems Control and Audit by Ron Weber
  - Strategic Management & Information Systems (Second Edition) by Wendy Robson
  - Auditing in a Computerized Environment by Mohan Bhatia

# What to study (Contd.)

## Study material (Contd.)

- Supplementary text:
  - Information Technology Management, Audit and Control, Student Study Guide and Revision Material by ICAP
  - Information Technology Management, Audit and Control Study Text and Revision Series by SBS Pakistan
  - Information Technology Management, Audit and Control Study Text and Revision Series by Professional Business Publications (PBP)
  - Information Technology Management Audit & Control by Mohammad Amjad Bhatti and Muhammad Qaiser Sheikh
  - International Information Technology Guidelines developed by IFAC's IT Committee, available at IFAC's website
  - Guidelines, research papers and checklists from [www.ifac.org](http://www.ifac.org) and [www.isaca.org](http://www.isaca.org)

**The great aim of education is  
not knowledge but action.**



# Papers Analysis

[ITMAC Paper Analysis upto Dec 10.xls](#)



# How to study

## Working for success

- Go to class
- Don't cram
- Find a good studying environment
- Use note cards
- Find a classmate to study with
- Get a good night's sleep
- Eat breakfast
- Lay off the caffeine
- Relax
- Reward yourself



# Reasons behind failure

- Not attempting sufficient questions
- Poor time management or poor question selection
- Irrelevant content – shows lack of ability to **judge what's important**
- Not providing an answer with enough **depth**



## Reasons behind failure (Contd.)

- There are also plenty of other things like:
  - Not using black or blue ink
  - Not showing clearly which question you're attempting
  - Scattering question parts throughout your answer booklet
  - Not showing clearly workings or the results of your calculations
  - Long paragraphs lacking headers not helping markers and hence won't help you



# Reasons behind failure (Contd.)

- Going panic
  - Not prepared
  - Reaching late
  - Don't have complete 'tools'
- Teasing examiner
  - Wrong filling of your details
  - No legit writing
  - Wrong question number



# Exam techniques

## What is a Case Study?

- An account of what happened to a business or industry over a period.
- A distillation of real events to provide data sufficient to help evaluate alternative courses of action.
- Systematically arranged problems reported from life.



# Exam techniques (Contd.)

## Analyzing the case study

- Examine closely the issues with which the company is confronted.
- Read the case at least twice:
  - Once to grasp the overall picture of what is happening to the company
  - Next to discover and grasp the specific problems

# Exam techniques (Contd.)

## Case study tips

- Understand the underlying problem and the question
- Break the problem down into a logical structure
- Address the issues one at a time
- Address important issues, not just ones you feel comfortable with
- Reach a conclusion
- Try to isolate on the actual problem(s), not just the most visible/obvious symptoms
- Give specific and practical recommendations
- Stay organized
- Relax and enjoy the process – you are not alone, everyone is with you



# Exam techniques (Contd.)

## Some common mistakes

- Misunderstanding the question or answering the wrong question
- Proceeding in a haphazard fashion – not identifying the major issues that need to be examined or jumping from one issue to another
- Force-fitting familiar business frameworks to every case question
- A failure to identify alternative approaches and/or an over emphasis on model without reference to the scenario
- A failure to relate thinking to the scenario

# Exam techniques (Contd.)

## Some common mistakes (Contd.)

- An over concentration on performing an analysis at the expense of other requirements implied by the question
- A failure to distinguish the requirements of the questions
- A temptation to list/discuss a number of techniques without relating them to the case
- Weak relationship between the technique and its application to the scenario
- A lack of time taken
- A repetition of points made earlier
- Failing to synthesize a point of view even



# Exam techniques (Contd.)

## Examiner's help

- Scenario
- Key words
- Marks



# Exam techniques (Contd.)

## Question solving tips

- Breakdown question
- One paragraph for one mark



# Exam techniques (Contd.)

## Time calculation

- 100 marks – 100 paragraphs – 100 minutes
- 60 minutes – brainstorming
- 20 minutes review



# Exam techniques (Contd.)

## Mock exam

- Simulating exam conditions
- Self assessment
- Read examiner comments
- Identifying weak areas
- Strengthening weak areas



# Paper solution

- Winter 2010 paper



# Contact information

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# Thanks and Best of Luck



**Questions or Comments!**