





Dear Student,

Many student, have indicated there is too much changes.... surprising many got fear of such change...

This article is one to make you aware what are the changes academically.... BUT MORE IMPORTANTLY TO MAKE YOU AWARE HOW TO READ THE CHANGES IN SUBJECT CALLED IT [remember its like science – in which old base remains – but new discover enhance your knowledge].

“ Change is only the constant”

We strongly recommend, student not to panic for any revision any time... behave like CA... in this revision you are easily observe that, there are comparative less changes, than those you observe in Income tax act changes, AS changes, etc...

Read the revision – by simple comparison.

Addition what you see are regrouping or making more additional content – which I as usually say “you know many thing, but you do not know, you know many things.”

When there is revision, do not panic – believe on yourself... believe me, it shall be easy to incorporate this changes – Remember “You are MAN of 21<sup>st</sup> century” so what you are about to learn more is already known to you in other simple words... what is required is regrouping and more categorization in way of academic.

We do strongly recommend – what so ever deleted – does not mean they are useless or what you have learn additional is waste.... “Never ever think it”

Its mere Academic change.... all you learn will enhance your knowledge... so in future also – what so ever you missed let it be in old revision or old syllabus – it will help you in your practical life. [Hence we do give student old as well as new course and version – so that it not only help them grow academically but can use all the knowledge even after qualification for their growth]

With this, I trust this article though is mainly academically, but its taken in True spirit of learning... Understand revision in all type of subject, No panic, behave like CA....

So, let me brief in one line the changes in syllabus.

- Chp.1 – very minor change of adding old MICS point, as well as office automation system.
- Chp.2 – few SDLC approach added & even testing in brief added.
- Chp.3 – major change of addition of controls.
- Chp.10 – incorporation of IT Act 2008.

So professionals, enjoy more knowledge...

For any query feel free to email me at [vipul@dhullasir.com](mailto:vipul@dhullasir.com)

All the best.

With best regards  
CA.Vipul Dhulla [C.A.,D.I.S.A]

## Chapter 2 :- SDLC

Many student, have indicated there is too much change... however in real sense they are not big in nature... similarly myths of too much change in chapter 2... then if we look at addition, it will be simple to learn extra... deletion of already learned ...is not required.

However there are **deletion**, more summary [MS] hence reduction are been made & **addition**.

In brief.

- Incremental,spiral, agile method added,
- System design phase added which is in summary.
- Testing summary added – conceptual is same in detail given in chapter 4

in my view, if we look at addition only, then additional points are in same wavelength which will not create any conceptual difficulties in understanding. Similarly more summarized points and deletion does not impact concept already learned... However one must understand how to summarized earlier points...simple.

Let's see this changes in detail...

Introduction – MS

SDLC – use of old mics start, then though all types have been indicated, latter in chapter they have **added : overview, is objective for SDLC & risk associated with it**. phases are been MS.

Systems development methodology : same

System development team : same

accountant's involvement in development work : same.

Traditional approach :- MS, with break up in basic pr, adv, disadv.

Preliminary investigation : more summary of intro. & **delineation of scope added.**

Fesibility study : MS of intro & financial, **behavioral & legal feasibility added.**

Cost benefit analysis : MS.

Reporting results to management : same.

### Stage II - Requirements analysis or systems analysis

intro : MS & points.

fact finding techniques : same.

analysis of the present system : same & MS.

systems analysis of proposed systems : same & MS.

### System development tools

intro : same.

*components are same, in some explanation have been MS & some more given.. which where known in your pe2 or ipcc like programing flowchart,decision table, structured english : structured english, also known as program design language (pdl) or pseudo code*

data flowchart : MS

data dictionary : MS

**system requirement specification : added.**

**role in sdlc : added.**

### System design.

intro : MS

**the design phase involves following steps : [added] : MS**

(i) architectural design;

(ii) design of the data / information flow;

(iii) design of the database;

(iv) design of the user-interface;

- (v) physical design; and
- (vi) design and acquisition of the hardware/system software platform.

output objectives : MS in tabular format... similarly input objectives too.

designing printed output : deleted.  
 designing visual display output : deleted.  
 designing of windows : deleted.  
 capturing data for input : deleted.  
 form design with its guidelines: deleted.  
 coding methods & characteristics of a good coding scheme: deleted.  
 designing efficient data entry : deleted.  
 data storage : deleted.  
 design of data communications : deleted.  
 system manual : deleted.

physical design : added.

### System acquisition :

intro :MS

acquisition standards : MS added.

Acquiring systems components from vendors

hardware : MS

software : MS

Steps involved in selection of a computer system : deleted.

validation of vendors' proposals : MS

methods of validating the proposal : MS

hardware contracts and software licenses: MS as contracts, software licenses and copyright violations

a good coded program : added – not to be taken the earlier deletion of good code scheme..points differ.

software development 6 stages, have been reworded and explanation have been in para wise and MS : program coding standards, programming language, program debugging ,test the program, program documentation, program maintenance

### Alternative development methodology:

prototype ... similarly MS, with break up in basic pr, adv, disadv.

end user development approach :- deleted.

systematic approach for development in small organisations : deleted.

rapid application development (rad) : similarly more summary, with break up in basic pr, adv, disadv.

rad methods, components & tools : deleted.

incremental, spiral & agile methodologies : added.

System testing : [though there are addition, but all are more summary of 4th chapter testing... hence concept remains same.]

*different levels of testing added : unit testing, functional tests, performance tests, etc... all MS : added.*

*types of unit testing : added – MS*

*dynamic analysis testing : black box testing, white box testing, gray box testing..*

*integration testing : added.*

*recovery testing, security testing, stress testing, performance testing, etc...*

*final acceptance testing... summary added – but concept of control and testing prevails.*

### Systems implementation

intro : MS :

activities during implementation stage : MS

activities involved in conversion : MS.

Post implementation review and systems maintenance

intro : MS

post implementation review : MS

### System maintenance

intro : MS

corrective maintenance, adaptive, prefective, preventive maintenance : added

operation manuals : added... however in same way length of system manual.

organizational structure of IT department : same

project management structure : same.

-X-

## CHAPTER 3

Naturally, there is major addition in this chapter. However many changes are re-arranging the titles in different head too. In this chapter less deletion, and more addition is been indicated. Majority remains same hence No worry as against concept clarity is concern.

Majority of controls are known by student “You know many things, but you do not know, you know many things” rule apply here also. Its regrouping or say proper catagorization of controls.

In this chapter, various points added are related to how IS auditor shall audit or What's IS auditors role. Naturally understanding the concept shall make audit writeup simple.

It will be simple to learn extra... deletion of already learned ...is not required. Howerer there are **deletion**, more summary [MS] hence reduction are been made & **addition**.

In my view, if we look at addition only, then additional points are in same wavelenght which will not create any conceptual difficulties in understanding. Similarly more summarized points and deletion does not impact concept already learned... However one must understand how to summarized eariler ponts...simple.

Let's see this changes in detail...

**NEED FOR CONTROL** : MS added more points wise bifurcation.

**EFFECT OF COMPUTER ON INTERNAL AUDIT** :- earlier it includes

- (i). changes in the audit trail and audit evidence;
- (ii). change in the internal controls environments;
- (iii). new opportunities and mechanisms for fraud and error; and
- (iv). new audit procedures.

However now it contains (ii). change in the internal controls environments; points only.

Points (i). changes in the audit trail and audit evidence; is made under new heading “Effect of computers on audit” points (iii) and (iv) are deleted.

**EFFECT OF COMPUTERS ON AUDIT** added but it contains old points of (i). changes in the audit trail and audit evidence;

**RESPONSIBILITY FOR CONTROLS** – earlier was MS however currently more details are **added**.

**THE IS AUDIT PROCESS** – **added**.

- Responsibility of IS Auditor – **added**
- Functions of IS Auditor – **added**
- Steps in Information Technology Audit – **added**
- Audit Standards – added [however simple list of all AAS] – MS – **added**
- ISACA (*Information Systems Audit and Control Association*) – *auditing std/guidance, etc to see* -added – MS
- ISO 27001 – brief – **added**

- IIA (The Institute of Internal Auditors) – brief – MS – **added**
- ITIL – brief MS – **added** – however in more detail is already in chapter 8.. so actually nothing new.
- COBIT – same.

**COST EFFECTIVENESS OF CONTROL PROCEDURE** – same but digram and few brief points **added**.

### **INFORMATION SYSTEMS CONTROL TECHNIQUES**

- intro – MS
- Objective of Controls – **added** with digram too.
- Categories of Controls – same as “Auditor’s categorisation of controls”
  - informative digram **added**
    - based on objective – same as in old 3.6.1,
      - Preventive Controls – same as in old 3.6.1,
      - detective controls – same as in old 3.6.1,
      - Corrective controls – same as in old 3.6.1,
      - Compensatory Controls – same as in old 3.6.1.
    - Nature of IS resource
      - Environmental – just brief – more learn latter.
      - Physical Access – just brief – more learn latter. [detail was in old version] -MS
      - Logical Access – just brief – more learn latter.
      - IS Operational – **added**.
      - IS Management – just brief – more learn latter **added**.
      - SDLC – just brief – more learn latter **added**.
    - Functional Nature
      - Internal Accounting – Same earlier indicated in 3.6
      - Operational – Same earlier indicated in 3.6
      - Administrative – Same earlier indicated in 3.6

### **CONTROL TECHNIQUES- **added****

- Organizational Controls - **added**
- Management Controls - **added**
- Financial controls- **added**
- Data processing environment control - **added**
- Physical access control – **added** just brief now, detail learning remainings same – hence no addition
- Logical access control - **added** just brief now, detail learning remainings same – hence no addition
- SDLA controls - **added**
- BCP controls - **added**
- Applicaition controls. - **added**

**AUDIT TRAIL** – same

**AUDIT TRAIL OBJECTIVE** -same

**USER CONTROLS** – changed [**added**] [mainly points added are old syllabus of MICS]

**SYSTEM DEVELOPMENT AND ACQUISITION CONTROLS** – concept remains same. More brief done. Earlier was more detail point wise.

- Management of the change process – **added**
- Entry and feasibility assessment – **added**.
- Analysis of the existing system - **added**
- Formulation of strategic Requirements (System Design) - **added**
- Organizational and job design – **added**
- Information processing systems design – **added**
- Application Software Acquisition/Selection Process – **added**.

**CONTROL OVER SYSTEM AND PROGRAM CHANGES - modified**

- **Management of the change process** – added. [earlier 'change management control' was heading]
- **System Change Controls** – added.
- **Program Change Controls** – added.
- **Authorization Controls** – same but few more details added.
- **Document Controls** – same but few more details added.
- **Testing and Quality Controls** – same but one para added. Hence no addition is considered.

**QUALITY CONTROL** – same but few more details added.

- **Quality standards**
  - **CMM -Capability Maturity Model Integration** – brief note – its not treated addition as detail in chp 8
  - **9000 Quality Management and Quality Assurance Standards (ISO)** – its same indicated in earlier “Quality control” in page 3.24 of module.
- **Quality reviews** – same
- **Auditor’s Role** – same - **3.9.5 IS Auditor’s Role**
- **Copyright Violations** – added
- **Contract / Warranties** – added
- **Service Level Agreements (SLA)** - added

**CONTROLS OVER SYSTEM IMPLEMENTATION - modified**

- **Procedures Development** - added
- **Conversion** – similar to conversion learned in SDLC. **Phased and pilot implementation terminology** added.
  - **Auditors role in conversion** – same. 3.8.2 Role of IS Auditor – only points related to conversion considered. - as remaining used in acceptance testing given below
- **User Final Acceptance testing** – same to 3.8.1 Acceptance testing
  - **Auditors role - 3.8.2 Role of IS Auditor same** – only points related to acceptance testing considered.
- **User training** - added.

**SYSTEM MAINTENANCE** - added.**POST IMPLEMENTATION REVIEW** – same.

**Tabular format indicating various control** – is same Key Maintainability Controls – which was under 3.7 SYSTEM DEVELOPMENT AND ACQUISITION CONTROLS

**CONTROL OVER DATA INTEGRITY, PRIVACY AND SECURITY**

- **Information Classification with tabular** – same
- **Data Integrity with tabular** – same
- **Data Integrity Policies** – added.
- **Data Security** – added.

**SECURITY CONCEPTS AND TECHNIQUES**

- **Cryptosystems** – same
- **Data Encryption Standard (DES)** – same
- **Public Key Infrastructure (PKI)** – same

**DATA SECURITY AND PUBLIC NETWORKS** – same 3.15. DATA SECURITY AND PUBLIC NETWORKS

- **Firewalls** – same 3.14.4
  - **Comparative Analysis between types of firewalls** – added.

**UNAUTHORISED INTRUSION** – same**HACKING**

- **What are Hackers, carker and damage done by them** – same
- **How do Hackers hack?**- same
- **Auditor’s Role** – added.



diagram of “Types of attacks” - which is indicating 8 attacks which were explained.

## **RISK IDENTIFICATION : Qualitative techniques added along with digram on risk evaluation**

in RISK ANALYSIS AND ASSESSMENT FORM – action plan para in last is been added.

### **Chapter 1**

In this chapter also, no major change. Actually few points from old MICS syllabus are back. So also some diagram are added. More summarized in some area.

In brief – ERP briefing, Expert system details & office automation system are addition.

In details changes are given below :

Type of system – diagrammatic representative. **added**

Open /closed / relative closed system – diagram **removed**.

Entropy **added**.

General model of system – diagram changed **modified**.

Simplification – **added**.

Decoupling – **added**.

System stress and system change – **added**.

Computer-based business system – **modified** – Input,process,output & storage brief added and more MS

Attributes of Information :-

cost benefit analysis. - **deleted**

Adequacy – **added**.

Categories of IS – diagram **added**.

Operating Support System [OSS] – **added**. Brief note.

TPS :- components, features – **added**.

ERP : **added** – but its intro, objective, **integration of business process**, myths – are actual addition but characteristic, benefits, limitation – are in chapter 7. However as far concept is concern chp.7 takes care in totality.

Management Support System [MSS] – brief **added**.

Implementation of database – added. [ its database component point in DSS]. More details provided.

**The tools of decision support systems – deleted.**

**Characterstic of EIS added.**

**Expert system – added.**

**Office automation system – added.**

-X-

*Hope student, you fill comfortable with this changes.*

*Kindly note, this are mere comparative changes noted by us. Student are request, to go through the module and identify the same. This comparison is just for benefit of student community at large.*

*Any correction/omission/ suggestion kindly revert to us.*

*We believe this summary and clarification give relief.*

*Please do share your valuable view and feedback at [info@dhullasir.com](mailto:info@dhullasir.com)*