Book No. 1 (containing 28 pages)

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF INDIA

CA Final .... Examination

Group No........ II .... Paper No........... VI

Subject ... Information system Control and Audit

Number of Answer Books used : Main + ... additional sheets

For use by ICAI only

678521

12 MAY 2018

Q.No.	To be ticked (✓) by the candidate against the Questions answered	Marks Awarded (to be filled by Examiner)					Total
		a	b	c	d	e	
1	✓	3½	3½	4	1		12
2	✓	4½	4	3½			12
3							
4	✓	4½	2½	3			10
5	✓	5	4½	3½			13
6	✓	4½	4½	3			12
7		4	3½		3	3½	14
8							
9							
10							
Total							73

Total Marks awarded .... SEVENTY THREE MARKS

Examiner's Signatu............

Use only Blue / Black Ball Point Pen to write and shade the circles.
AVOID RED PEN.
Write the marks in the boxes before shading the respective circles.

Total Marks awarded

73

INSTRUCTIONS TO THE CANDIDATE

Answers are not to be written on this page

...uld be written in figures and words in the allotted space at the right hand corner of the ...y and nowhere else including additional answer book/s and graph paper.

...ber should be written in the box in numbers and darken the appropriate circles of the OMR ... provided in the right hand corner of the cover page with **Black / Blue** ball point pen.

...l particulars such as name of Examination, Group No., Paper No. and subject at the appropriate space at the left hand upper corner.

4. Remove the Bar Code sticker of the particular paper from the Attendance sheet and affix the same on the box provided in the right hand corner of the cover page.

5. Since a machine will read the Roll no., please check and ensure that Roll number written in numbers, words and circles darkened are correct. In case any candidate fills this information wrongly, Institute will not take any responsibility for rectifying the mistake.

6. The answers should be written neatly and legibly

7. The answer to each question must be commenced on a fresh page and question number prominently written at the top of each answer. Alternatively, the question number should be distinctly written in the margin.

8. The answer to each question in all parts should be fully completed in one page, or in a consecutive set of pages, before the next question is taken up.

9. Writing of Roll number in place/s other than the space provided for the purpose or writing distinguishing mark, symbols like "OM", "Sri", "Jesus", "786", etc., will tantamount to adoption of "unfair means"

10. Before submission of answer book to the invigilator after completion of the exam, take care to score out (X) blank pages, if any, that you might have left.

(9) Business Application Area of Expert System :-

(I) <u>Accounting</u> :- Expert system help to organisation in Accounting of sales Purchase, store, Payment etc. Throug Accounting organisation generate its financial data, which is very important for organisation

(II) <u>Marketing</u> :- Now days Expert System widely use in the area of marketing. The main objective is to increase sales of the products.

(III) <u>Manufacturing</u> :- Expert System provide data relating to Production system of organisation; which help to improve the manufachsriy process of organisation.

(IV) <u>Personnal</u> :- Employee are the key assets of organisation. Expert system help to Employee to improve their efficiency. Through the <u>Expert</u> System organisation made proper balance of the Employee.

(v) <u>General Business</u> :- Expert System help organisation in many other task like amalgmation, meger, Expert system provide useful data relating such activity.

$3\frac{1}{2}$

(b) To operate Information system in effective and efficient manner a business Manager should possess the following knowledge :-

(I) Foundation Concept :- A manager should knowledge relating to normal business operation and the issue which come to operate business

(II) Business Application :- A manger should knowledge about various business application and their use for the Making strategy.

(III) Information system :- A manger should have knowledge about Information system and what information system are useful for organisation.

(IV) Management challenges :- A manager should also aware that what challenges he faced during the business and how the problem are overcome.

(v) <u>Development Process</u> :- To understand
to system effectively
a manger should understand the development
process of the system. and what effort
are made to develop the system.

$3\frac{1}{2}$

(c) COSO Provide the guidence on the internal Control of an organisation. To implement internal Control in organisation COSO Provide following interrelated Component

(I) <u>Control Environment</u> :- Each business activity of the enterprise should conduct under the Controled Environment. The Control Environment include the segrigation of duties, authorision procedure, and work done by one Employee check by another.

(II). <u>Risk Assessment</u> :- Every business process come with a risk. organisation access these risk. For the assessment of Risk Internal auditor and External auditor also participate. Risk assesment should be based on the Control Environment.

(III) <u>Control Activity</u> :- ~~Each~~ Control activity refer the authentication and authorisation procedure are properly followed

by the organisation. If organisation want to develop for control Environment and Rudces Risk than activity of the organisation should be properly controled.

(IV) <u>Information and Communication</u> :- Information is the key assets of an organisation the information should be in properly controlled and access only through authorise user. An organision made effort to make information Integrity, and availability. the organision also decide that how the information are Communicate.

(V) <u>Monitering</u> :- The mangement continuiously moniter the bwsiness activity. If there are any descripency and found that he should make proper control for it.

4

(d)   • Evaluation Method in post implementation
       review

(1)   The System develop as per the user
      requirement.

(ii) All Control are followed which are required
      by user during the development

(iii) System Testing as per set standard
      and user test also made.

(iv) User requirement are fullfill through
      the system or not

(12)

(a)

Scope & Pre Audit survey

Planning & Prepration

Field work

Analysis

Reporting

Clouser

Step of Information System Audit

(i) **Scope to Pre Audit survey** :— ⟶ This is the primery stage of audit. In this stage auditer decide his scope to conduct the audit. This is based on the audit agreement. The auditer take only the area for which agreement done with Auditee.

(ii) **Planning** :— How to Conduct the audite are include in the stage. The planning is not one time process rather it is Continuously going on during the audit. In this stage Auditer decide the main focus area and resource allocate for the audit work.

(III) field work :- In this stage the auditor visite the auditee place for which audit is conducted. The auditor gather the evidence relating to his audit work to the staff through observation, interview and other method.

(IV) Analysis :- To find useful data in the evidence collected by the auditor in the previous stage, he analyise the data through PEST (Political, Ecormical, social, Technical) method.

(V) Reporting :- After Analyze the evidence auditor make his report and give their opinion on the audit. He subbmit the audit report to the management.

$4\frac{1}{2}$ (VI) Clover :- It is the last stage of audit. In this stage auditor make the important point which useful for future audit.

18.

(b) (I) The data and information of an organisation should be remotely distributed through the network.

(II) The Terminal and Computer operation of the remote location should be properly Controled.

(III) Having physical lock to the terminal extent the security to some level.

(IV) The data and information access remotly Continuously monitered.

(V) The application through which data accessed remotely should be Controled.

4

(VI) Where data send at multipal location than it should ensure that all data file at different location have same information

8.

(C) While reviewing BCM Arrangement the IS auditer would verify that ~~following~~ the BCM program made on the basis of sound

(b) The ~~BCM~~ Methodolgy and the BCM Program also incorporte the followiy :—

(I) The BCM Program incorporate all critical activity of the organisation.

(II) The BCM Program made on the basis of Risk Assessment.

(III) The operational manager and key employee are participate in development of the BCM program.

(IV) The BCM Program should be easy to understand, so that during disaster the program shoud easily implemented.

$3\frac{1}{2}$

(V) The BCM Program has properly recovery mechinision.

(12)

(a)   Major data integrity Policies followed
       by an organization

(I)   • Software Testing :- Before implementation
       the Software . it should
       be properly tested. After Testing and
       proper authorisation a new System implemented
       in organisation.

(II)   offsite Backup :- To Maintain data integrity
       organisation need to take
       the backup of data at another location.
       This backup used in case of disaster and
       other data crises event.

(III) Devision of Environment :- there should
       be proper managed
       Environment where data is Processed and
       Communicate. Such the branch office network
       different from the head office network
       where the strategic decision are taken.

(IV)   Virous signature updating :- The vender
       of software provide
       the update antivirous and if new technology
       are in the environment.

(iv). Recovery :- When the data is lost and crupted than the recovery should be made by organisation.

(VI) Quater end year end Back up :- ~~Instead~~ This backup made whether the normal backup are made or not. This is an addition to the normal Backup. In this the whole year data batup at one time and send at different place For further use.
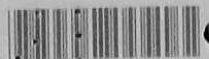
5

(b) <u>Mobile Computing</u> :- Mobile Computing refer Computer, hardware, without wire. This is a <u>wireless technology</u> . which include the mobile phone, smart phone, tablates.

In the Modern era of business the work on mobile computing increasily continuously Many organisation shift their work on the mobile.

Through the Mobile Computing organisat. able to increase its business growth. Now Custome give order through mobile, sale person receive the order on mobile and deliver the order at the location of receipient through the help of mobile.

In mobile Computing use GPRS (Globle Packet Ratio service) and GSM to provide service through id.

The Mobile Computing have following Component.

(1) <u>Mobile Hardware</u> :- .Mobile Hardware is the <u>small</u> size equipment which have all facility like memory.

Storage, Processing unit. Mobile Hardware have Capacity to hold data as Computer and its Capacity may expand. The Mobile device have its own power source i.e. it can easiy use any whare without any extra Power.

(II) Mobile Software :- Mobile Software with the mainuplation of Hardware do many Computer related task. Through the mobile software we do all office work on the mobile. The software in the mobile should be based on new technology to proper utilisation of the mobile resources.

(iii) Mobile Network :-- Through the mobile network we access the corporate information from anywhere at any time. The mobile network service provider are the public Network provider. Hence while accessing data through public network in the mobile there is a risk to lost the information. Through the GPRS use the network to access the network through mobile.

$4\frac{1}{2}$

(c)   The valid Consideration for acquisition of
both hardware and Software. ⑳

(1) Vendor selection :- Vendor should be selected
on the basis of standard
set by organisation. Vendor selection
should be made on the basis of Request
for proposel. RFP send to selected
vendor. The selection of vendor also important
which include the Goodwill of vender,
financial viability of vendor and local
support of vendor.

(11) Geographical location of vender :- The
Vendor should
have local, sapp which help to organisation
in future in case any support requirement
from vendor. If vendor are not local
then RFP not accepted and no further
discussion on it.

(111) Presentation by selected Vendor :- The
selected vendor are present
their hardware, software their efficieny
and technical Capacity.

Presentation by vendor shall be evaluate the technique like Benchmark, Point scoring.

(iv) <u>User signoff</u> :- After presentation by selected vendor the <u>best</u> among the vender are take into consideration for acquiring hardware and software.

$3\frac{1}{2}$

⑬

(a) <u>Misconceptions about MIS</u>

    (I)   MIS is a Computer based Information System.

    (II)   MIS is a reporting System.

    (III) MIS is a management technique

    (IV) MIS is a bunch of technology.

    (V)   Study of MIS is all about use of Computer

    (VI) Accuracy play vital role in reporting

    (VII) More data generate more report for the Management.

4

(e) Type of system testing

(1) <u>Recovery Test</u> :- In this testing, The system is tested that how the recovery are made by system in case of desaster. Whether the system is efficient to make full recovery or not.

(II) <u>Stouchral Test</u> :- In this testing the logical Processing of the system is testing. For Example a system is made for tex Calculation than it is check how the data manuplate and processing made to Calculate such Test. In this the Actual resut are Compared with the System resut

(III) <u>Stress / Volume Test</u> :- This is the testing of system beyond the normal processing. sometime it is upto its break even. In this testing it is evaluate that how the system handle unusal sihvation or in More demand are made on sothware how it react.

(IV) <u>Performance Test</u> :- In this what system do and also check what systems not to do. In this testing the normal precessing of system evaluat. What time taken by the system and How the exception are handle.

$3\frac{1}{2}$

(d)   Metrics of Risk Management

(I)   The Percentage of IT Assets, IT Investment IT issue covered in the Risk Assessment

(II)   The Perstange of IT Risk which are not identified in the Risk Assessment

(III)   The frequency of the Risk assessment Policy are update.

(IV)   Perstange of Risk assessement made only for IT in the organisation.

3

18

(b) Characteristics of Public Cloud

(1) strength service level Agreement :- In public cloud the service provide by third Party hence stric service level Agreement are required

(II) less secure :- The public cloud meant for general public, hence it is less secure then other cloud.

(III) scalability :- Public Cloud Provide various service to various user, hence it is scalable.

(IV) Affordable :- In public cloud the IT Infrastructure managed and operate by third Party and cloud charge only used resources by organisation

$3\frac{1}{2}$

(14)

(a) While auditing environmental control the auditer should check

(I) Whether the Infrastructure Processing facility (IPF) are properly tested. and type of material used in the building at the time of Construction

(II) The auditer check the operational failure MTBF (Main time between failure) to MTTR (Mein time to Repair) and its gap.

(III) Whether the environmental Control Equipment like air conditioner, hiter are installed

(IV) The smoke deductor, waster deductor properly worked or not.

(V) There is properly testing of fire Extingusher and its refilling date and Continue inspection by fire Department team

(VI) The fire exists are clearly marked and employee understand the Emergency Procedure and evaction Procedure in case of incident.

$4\frac{1}{2}$

(b) A Company may adopt ISO 27001 for the following reason

(I) It create market differenciation and take extra goodwill to the Company

(II) If a Company certify one its is accepted globby.

(III) Demonstrate organisation as internationally accepted security standard.

(IV) It is the extension of current security followed by organisation

(V) It is suitable for all type of organisation whether public or private.

(vi) Demonstrate organisation credibility in the holastic manner.

4½
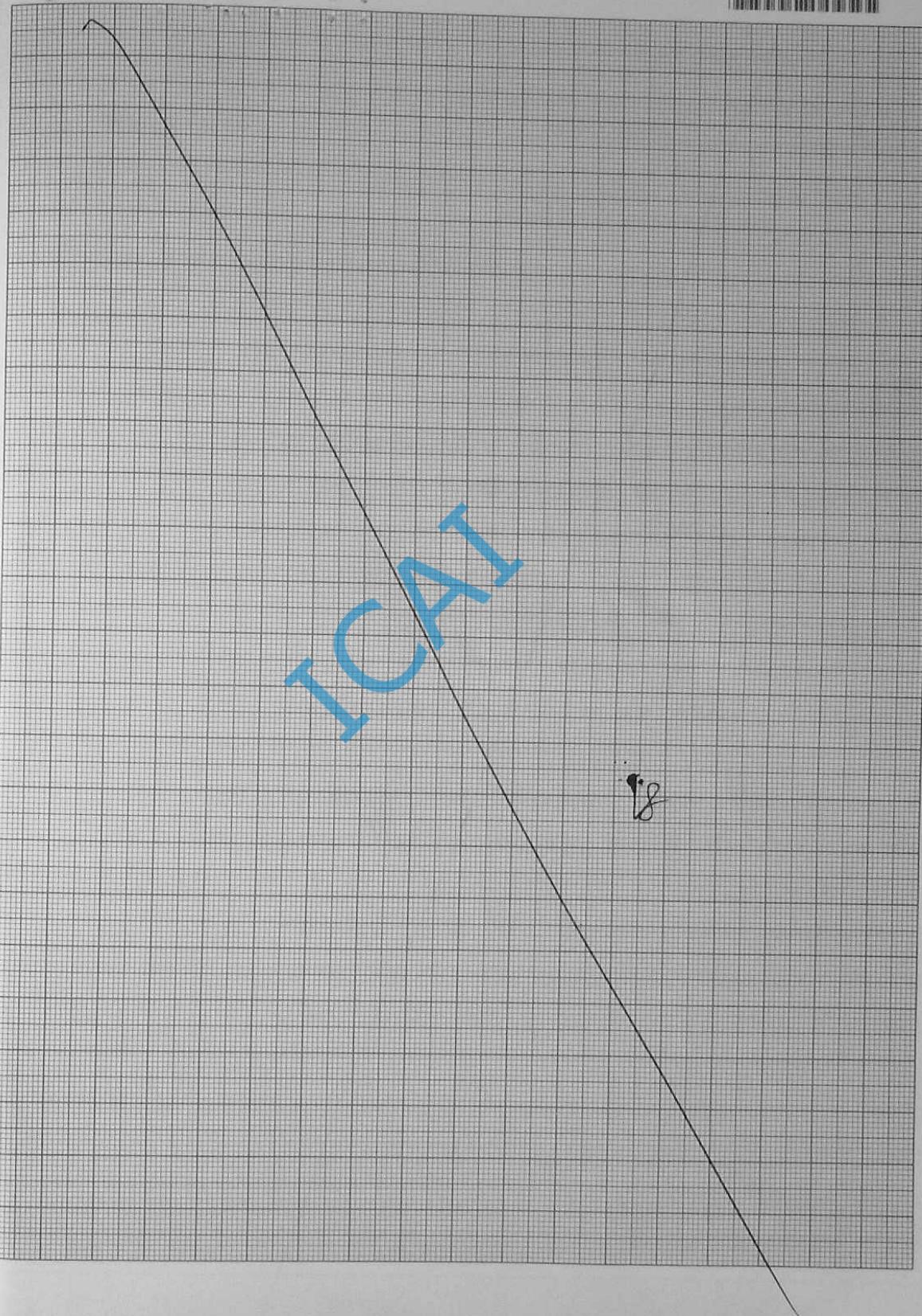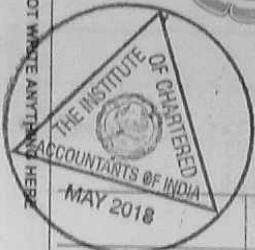
Q. 6

(c)   Objective of Performing BCP Test

(I)   ☑ Through BCP Test the performance of
      BCP are evaluate. whether organisation proced-
      -ure are able to recover all its critical activity
      in case of disaster.

(II) Through BCP the ability of Personal who
      responsible for this, are tested.

(III) Whether the procedure and the Employee
      who are responsible for BCP are obtainable

3

(IV) Through BCP Test organisation evaluate
      any further improvement required in
      the BCP.

⑫

18.

(a)   Key management Practices to implement risk Management

(I).   <u>Collect Data</u> :- The management are required to collect data relating to its assests and their associate risk.

(II)   <u>Analyize theRisk</u> :- The Mangement on the basis of assets analyize the different type of risk and their probability.

(III)   <u>Maintain a Risk Profile</u> :- Mangement should Maintain Risk Profile based on the impact of Risk, frequency of Risk, type of Risk.

(IV)   <u>Articulate Risk</u> :- Management required to define the Risk and their impact of risk if it take place on the organisation

(V)   <u>Define the Risk Management Action Portfolio</u> :- Based on the nature and its impact the management seprate all such risk and

VI) <u>Respond to Risk</u> :- Key Management , on
the basis of materility
of Risk and impact of the Risk Respond
such as tolsate ; treminate or other strategy
~~all~~ followed.

4½

(C)   Advantage and disadvantage of full Backup

Advantage :-
    (I) Create backup easily.
    (II) less Complexity to take Recovery of the backup.

Dis advantage
    (I) It take grater storage Capacity
3   (II) It take much time when the Recovery made.
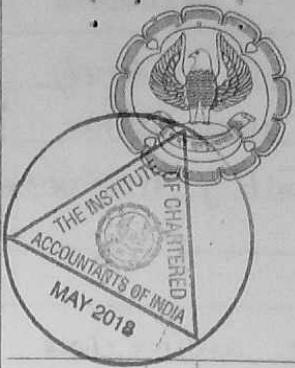
Q.4 (b)

(b)   The Audit issue relating to operational
lyer are following

(I) User Profile :- The auditor check whether
to make user profile are under
control of the organisation. In Case the
Employee leave the organisation the user
ID deactivate by the Management. one
Use should assign one use profile, and
which is unique to each user. The auditor
check the authority who make the user id
are properly authorised.

(II) Password Management :- The auditor check
whether the Password
management are properly carried out
or not. The password not like name,
Date of Birth etc. The password maintain
by the user must be strong.

The Password should be updated on timely basis. The auditor check that their is no policy in the organisation for writing the Password in the file or anywhere.

(iii) <u>Bevellage management</u> :— The auditor check that the authority given to Employee for respective job are Capable to do such job. The auditor check what Employee give authority only for their respective job. Where in Case of demosution or promotion of Employee who assign the new task relating to System application.

$2\frac{1}{2}$

(10)