



**ICMAI**  
**THE INSTITUTE OF  
COST ACCOUNTANTS OF INDIA**

**भारतीय लागत लेखाकार संस्थान**

Statutory Body under an Act of Parliament  
(Under the jurisdiction of Ministry of Corporate Affairs)

[www.icmai.in](http://www.icmai.in)

# **CMA** STUDENT **E-Bulletin**

VOL 10 | NO. 11 | NOVEMBER 2025

*An Initiative of Directorate of Studies*

Behind every successful business decision, there is always a **CMA**



## About the Institute

The Institute of Cost Accountants of India (ICMAI) is a statutory body set up under an Act of Parliament in the year 1959. The Institute as a part of its obligation, regulates the profession of Cost and Management Accountancy, enrolls students for its courses, provides coaching facilities to the students, organizes professional development programmes for the members and undertakes research programmes in the field of Cost and Management Accountancy. The Institute pursues the vision of cost competitiveness, cost management, efficient use of resources and structured approach to cost accounting as the key drivers of the profession. In today's world, the profession of conventional accounting and auditing has taken a back seat and cost and management accountants increasingly contributing towards the management of scarce resources like funds, land and apply strategic decisions. This has opened up further scope and tremendous opportunities for cost accountants in India and abroad.

The Institute is headquartered in New Delhi having four Regional Councils at Kolkata, Delhi, Mumbai and Chennai, 112 Chapters in India and 11 Overseas Centres. The Institute is the largest Cost & Management Accounting body in the world with about 1,00,000 qualified CMAs and over 6,00,000 students pursuing the CMA Course. The Institute is a founder member of International Federation of Accountants (IFAC), Confederation of Asian and Pacific Accountants (CAPA) and South Asian Federation of Accountants (SAFA). The Institute is also an Associate Member of ASEAN Federation of Accountants (AFA) and member in the Council of International Integrated Reporting Council (IIRC), UK.

### Vision Statement

"The Institute of Cost Accountants of India would be the preferred source of resources and professionals for the financial leadership of enterprises globally."

### Mission Statement

"The CMA Professionals would ethically drive enterprises globally by creating value to stakeholders in the socio-economic context through competencies drawn from the integration of strategy, management and accounting."

### Institute Motto

असतोमा सद्गमय  
तमसोमा ज्योतिर् गमय  
मृत्योर्मा मृतं गमय  
ॐ शान्ति शान्ति शान्तिः

From ignorance, lead me to truth  
From darkness, lead me to light  
From death, lead me to immortality  
Peace, Peace, Peace

#### Disclaimer:

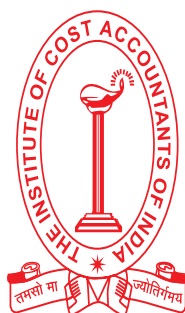
Copyright of this CMA Student E-Bulletin is reserved by the Institute of Cost Accountants of India and prior permission from the Institute is necessary for reproduction of the whole or any part thereof. The write ups published in good faith on the basis of declaration furnished by the authors.



# CMA STUDENT E-Bulletin

VOL 10 | NO. 11 | NOVEMBER 2025

*An Initiative of Directorate of Studies*



**ICMAI**  
**THE INSTITUTE OF**  
**COST ACCOUNTANTS OF INDIA**  
**भारतीय लागत लेखाकार संस्थान**

Statutory Body under an Act of Parliament  
(Under the jurisdiction of Ministry of Corporate Affairs)









# CONTENTS

## CMA STUDENT E-Bulletin

VOL 10 I NO. 11 I November 2025

### Chief Patron

CMA T.C.A. Srinivasa Prasad, President, ICAI

### Patron

CMA Neeraj Dhananjay Joshi, Vice President, ICAI

### Editorial Board Members

CMA Vinayaranjan P., Chairman, T&EF Committee

CMA Bibhuti Bhushan Nayak

CMA Ashwin G Dalwadi

CMA (Dr.) Ashish P. Thatte

CMA Avijit Goswami

CMA Manoj Kumar Anand

CMA Rajendra Singh Bhati

CMA (Dr.) Paritosh Basu, Co-opted

CMA (Dr.) Niranjana Shastri, Co-opted

CMA Akhaya Kumar Swain, Co-opted

### Chief Editor

CMA (Dr.) Debaprosanna Nandy

Secretary (Officiating)

### Managing Editor

CMA Avijit Mondal, Joint Director (Studies)

Secretary, T&EF Committee

### Editorial Team

CMA Samarpita Ghosal, Assistant Director (Studies)

CMA Susmita Ghosh, Sr. Officer (Studies)

### Editorial Office

The Institute of Cost Accountants of India

CMA Bhawan

12, Sudder Street, Kolkata - 700016

✉ studies.ebulletin@icmai.in



### 06 - Chairman's Communique

(Training & Educational Facilities Committee)

### 07 - 22 - CMA Foundation Course

Syllabus 2022

(Paper 1 - 4)

### 23 - 70 - CMA Intermediate Course

Syllabus 2022

Group I (Paper 5 - 8) & Group II (Paper 9 - 12)

### 71 - 118 - CMA Final Course

Syllabus 2022

Group III (Paper 13-16) & Group IV (Paper 17-19)

Electives (Paper 20A - 20C)





## CHAIRMAN'S COMMUNIQUE

Dear CMA Students,

**I**t gives me immense pleasure to connect with you through the November 2025 issue of the CMA Student E-Bulletin. As the Chairman of the Training & Educational Facilities Committee of ICAI, I am excited to share the latest developments and initiatives that aim to enhance your learning experience and professional growth.

At ICAI, our commitment to excellence in education and training remains unwavering. We continuously strive to provide you with the best resources, state-of-the-art facilities, and cutting-edge training programs that will prepare you to excel in the field of cost and management accounting. Your success is our primary motivation, and we are dedicated to supporting you every step of the way.

In today's digital age, leveraging technology to facilitate learning is paramount. We have introduced several innovative learning platforms to ensure that you have access to high-quality education regardless of your location. Our online classes, interactive webinars, and virtual workshops provide you with the flexibility to learn at your own pace while maintaining the highest standards of education.

In addition to theoretical knowledge, practical skills are crucial for your professional development. We have designed a variety of skill development programs that focus on real-world applications and industry-relevant practices. These programs include case studies, simulation exercises, and hands-on training sessions that bridge the gap between academic knowledge and practical implementation. Our collaborations with leading organizations and industry experts provide you with invaluable insights and opportunities to apply your knowledge

in real-world scenarios. Through internships, live projects, and guest lectures, you can gain practical experience and understand the nuances of the industry. These collaborations also open doors to networking opportunities that can be instrumental in your career growth.

At ICAI, we believe in the holistic development of our students. Alongside academic excellence, we emphasize the importance of soft skills such as communication, leadership, and teamwork. Our comprehensive training programs include workshops and seminars focused on developing these essential skills, ensuring that you are well-rounded professionals ready to take on leadership roles.

I am confident that the initiatives and programs we have implemented will significantly enhance your learning experience and prepare you for a successful career. I encourage you to take full advantage of these opportunities and remain dedicated to your goals.

I extend my best wishes to all of you. Your hard work, determination, and passion are the driving forces behind our efforts. Let us continue to work together to achieve excellence and elevate the standards of the cost and management accounting profession.

Warm regards,

**CMA Vinayranjan P.**

Chairman, Training & Educational Facilities  
Committee, ICAI



# CMA FOUNDATION COURSE

## Syllabus 2022



## Topic

Fundamentals of  
Business Laws -

Module 3:  
Sales of Goods Act,  
1930

Business  
Communication -

Module 5:  
Business  
Communication

## FOUNDATION

### Paper-1

Fundamentals of  
Business Laws and  
Business  
Communication  
(FBLC)



## SECTION – A: FUNDAMENTALS OF BUSINESS LAWS

### MULTIPLE CHOICE QUESTIONS (MCQ)

1. A seller agrees to supply “premium quality apples”. The apples delivered are fresh but not premium quality. What is the buyer entitled to?
  - a) Reject the goods
  - b) Only claim damages
  - c) No remedy
  - d) Pay reduced price only
2. In which case can the seller exercise the right of lien?
  - a) After delivery of goods
  - b) When buyer refuses to accept goods
  - c) When price is unpaid and seller still possesses goods
  - d) When seller has received partial payment
3. A buyer knowingly accepts defective goods and later files a complaint. Which principle applies?
  - a) Caveat venditor
  - b) Nemo dat rule
  - c) Caveat emptor
  - d) Bona fide purchase
4. A agreed to buy 500 kgs of wheat from B. Under the contract, the wheat was to be “weighed and bagged” before ownership would pass. Before weighing, a flood destroyed the entire stock without fault of either party. Who bears the loss?
  - a) A, because contract existed
  - b) B, because property had not yet passed
  - c) Both, because risk is shared
  - d) A, because risk passed on agreement
5. X buys a laptop from Y by fraud. Before Y rescinds the contract, X sells it to Z, a bona fide buyer for value. Who gets good title?
  - a) Y
  - b) X
  - c) Z
  - d) No one
6. When goods are sold on credit for 30 days and delivered immediately, seller’s lien ends:
  - a) When goods are delivered
  - b) After 30 days
  - c) When payment is made
  - d) Only when buyer accepts the goods
7. A mercantile agent M is authorized to sell goods only at a minimum price of ₹ 3,00,000. Acting in ordinary course, he sells to P for ₹ 2,50,000. P buys in good faith without knowing of the limitation. Is the sale valid?
  - a) Yes, if agent acted in ordinary course
  - b) No, because agent exceeded authority
  - c) Yes, but only if seller ratifies
  - d) No, buyer must return goods
8. In a sale on approval, ownership transfers to the buyer when:
  - a) Goods are delivered
  - b) Buyer retains goods without rejecting them within fixed time
  - c) Seller consents
  - d) Payment is made
9. A buyer refuses to take delivery on the due date. Seller may claim:
  - a) Damages for non-acceptance
  - b) Special damages only
  - c) No remedy
  - d) Criminal compensation
10. Goods were delivered to R “on approval.” Before communicating acceptance, R becomes insolvent but retains the goods. Ownership lies with:
  - a) R
  - b) Seller
  - c) Official receiver
  - d) Jointly with seller and R
11. A seller sells goods that he has no title to, and buyer purchases them in good faith. Ownership passes:
  - a) Always to the buyer
  - b) Never to the buyer
  - c) Only if seller later acquires title



- d) Only if buyer pays full price
12. Seller unilaterally dispatches goods of the right description without obtaining buyer's assent to appropriation. Property passes:
- Immediately
  - On buyer's assent
  - On delivery
  - Never
13. In a sale by sample and description, goods must satisfy:
- Only the description
  - Only the sample
  - Both sample and description
  - Either sample or description
14. The implied warranty of quiet possession ensures that:
- Buyer will not face disturbance in using goods
  - Goods will be replaced if defective
  - Seller transfers full title only
  - Goods match the description
15. A buyer validly rejects goods delivered to him. The seller refuses to take them back despite proper notice. In law, the buyer must now hold the goods:
- As bailee for the seller
  - As agent of the seller
  - As unpaid seller
  - As owner of the goods
16. A seller delivers goods to the buyer. After delivery, the seller learns that the buyer was insolvent at the time of delivery. Which right can the seller exercise?
- Right of lien
  - Right of stoppage in transit
  - None of the unpaid seller rights; seller may only sue for the price/damages
  - Right to rescind the contract automatically
17. A sells goods to B. B sells them to C before paying A. Goods are still with transporter and A stops them in transit. Who gets possession?
- B
  - C
  - A
  - Transporter
18. At an auction, the highest bid is ₹80,000 but the reserve price is ₹1,00,000. Auctioneer mistakenly accepts highest bid. Contract of sale is:
- Valid
  - Void
  - Voidable
  - Not concluded
19. Perishable goods were rejected by buyer. Seller resells without notice and incurs loss. Can seller recover loss?
- Yes
  - No, notice is mandatory
  - Yes, because goods were perishable
  - Only if court permits
20. Buyer orders ordinary cotton but seller delivers half ordinary and half premium cotton. Buyer's rights:
- Accept whole
  - Reject whole
  - Accept correct part and reject rest
  - Any of the above
21. Seller delivers fragile goods to carrier with poor packaging. Goods get damaged in transit. Who bears loss?
- Buyer, because risk passed at delivery to carrier
  - Carrier
  - Seller, due to negligent packing
  - Joint responsibility
22. J shows K a unique antique vase with the intention of selling it, but before the contract can be concluded, the vase accidentally breaks; what is the legal position of the contract in this situation?
- It is a valid contract
  - It is a void contract
  - It is a voidable contract
  - It is an enforceable contract
23. A carrier mistakenly delivers goods to an unauthorized person. Goods cannot be recovered. Who bears the loss?
- Buyer
  - Carrier
  - Seller
  - Buyer and seller equally



24. When goods are delivered in instalments contrary to the contract terms, the buyer may:
- Reject the instalments
  - Cancel the entire contract
  - Accept some instalments
  - Any of the above
25. In a virtual meeting, participants frequently speak at the same time because of a slight audio delay, leading to confusion and repeated clarifications.
- This communication issue arises from which barrier?
- Semantic barrier
  - Technological barrier
  - Emotional barrier
  - Perceptual barrier
26. A manager writes an email with accurate data but uses long, complex sentences, making the message difficult for employees to follow.
- The communication lacks which “C” of effective communication?
- Conciseness
  - Concreteness
  - Consideration
  - Courtesy
27. During a team meeting, a member interprets a colleague’s constructive suggestion as criticism because of personal insecurity. What type of communication barrier is this?
- Semantic barrier
  - Psychological barrier
  - Physical barrier
  - Organizational barrier
28. When two departments exchange reports weekly to coordinate tasks, but follow a rigid format mandated by organizational policy, the communication is best described as:
- Informal horizontal communication
  - Formal horizontal communication
  - Diagonal informal communication
  - External formal communication
29. A company’s customer service chatbot responds instantly to consumer queries using automated scripts. This form of communication is:
- Machine-assisted communication
  - Non-verbal communication
  - Upward communication
  - Grapevine communication
30. During a merger discussion, the negotiators rely heavily on tone, stress, and pauses to interpret intentions beyond the spoken words. These elements belong to:
- Kinesics
  - Proxemics
  - Paralanguage
  - Haptics

### Answer:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
a	c	c	b	c	a	a	b	a	b	c	b	c	a	a
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
c	c	d	c	d	c	b	b	d	b	a	b	b	a	c



## Topic

Fundamentals  
of Financial  
Accounting -

Module 1:  
Accounting  
Fundamentals

Module 5:  
Fundamentals of  
Cost Accounting

## FOUNDATION

### Paper-2

Fundamentals of  
Financial and Cost  
Accounting (FFCA)



Serial No.	MCQ	Answers				Correct Answer
		A	B	C	D	
1	Drawings reduce:	Profit	Capital	Assets	Liabilities	B
2	Capital at end =	Capital at beginning + drawings + profit	Capital at beginning – drawings + profit	Capital at beginning + drawings – profit	None	B
3	Salary paid includes prepaid salary. Adjustment requires:	Add to salary	Deduct prepaid portion	Ignore	Add as Asset	B
4	Cost of goods sold =	Opening stock – Purchases + Closing stock	Opening stock + Purchases – Closing stock	Purchases – Opening stock + Closing stock	None	B
5	Manufacturing account is prepared to find:	Cost of goods sold	Cost of production	Gross profit	Net profit	B
6	Deferred revenue expenditure is shown in Balance Sheet as:	Liability	Asset	Reserve	Profit	B
7	Drawings of goods by proprietor are valued at:	Sales Price	Cost Price	Market Price	None	B
8	Interest on capital is:	Expense	Appropriation of profit	Asset	Liability	B
9	Income received in advance is a:	Current Assets	Income	Current Liability	Capital	C
10	Wages paid for installation of machinery is treated as:	Revenue Expenditure	Capital Expenditure	Deferred Revenue Expenditure	Indirect Expenses	B
11	Balance Sheet shows -	Total Profit	Total Capital	Financial position	Total Debts	C
12	Net Profit is -	Asset of the Business	Liability of Business	Income of Business	None	B
13	Provision Account having Debit Balance is the Provision on-	Assets	Liabilities	Expenses	Incomes	B
14	Which assets having 'no value' -	Fixed	Current	Fictitious	Liquid	C
15	Interest on Drawings is -	Expenses for Business	Gain for Business	Loss for Business	Profit for Business	B
16	Which type of Assets can't be realized in Cash -	Current Assets	Fixed Assets	Fictitious Assets	Liquid Assets	C



Serial No.	MCQ	Answers				Correct Answer
		A	B	C	D	
17	To create Provision for discount on Creditors, Provision for Discount account will be -	Debited	Credited	Deleted	None	A
18	Closing stock appearing in Trial Balance will be shown in -	Trading Account	Profit & Loss Account	Balance Sheet	None	C
19	Opening stock of WIP is shown in -	Manufacturing Account	Trading Account	Profit & Loss Account	Balance Sheet	A
20	Closing Stock is valued at -	Cost	Cost or Market price whichever is higher	Cost or Market price whichever is lower	Market Price	C
21	Which is not included in Cost-	Consumable Stores	Dividend	Distribution Overhead	Indirect Labour	B
22	Which is not Selling & Distribution Expenses -	Cost of Samples	Carriage outward	Bad Debts	Primary Packing cost	D
23	Shrinkage is an example of -	Normal wastage	Abnormal wastage	Normal spoilage	Abnormal spoilage	A
24	Loss due to inherent nature of material is -	Scrap	Wastage	Abnormal Waste	Normal waste	D
25	Time wage system means wages paid for	Time worked	Idle Time	Units produced during that time	None	A
26	Bad Debts are -	Office expenses	Selling expenses	Distribution expenses	Financial expenses	B
27	Conversion cost includes :	Direct Material + Direct Labour	Direct Material + Direct Labour + Works cost	Direct Material + Indirect Labour + Other Expenses	Labour + Manufacturing Expenses	D
28	When Cost is ₹800 and Profit on Sale is 20%, Profit shall be :	₹160	₹80	₹100	₹200	D
29	Insurance of Goods in transit to a Customer is a :	Administrative Expenses	Selling and Distribution Expenses	Direct Expenses	None	B
30	Cost of Production is equal to +	Prime Cost plus Works Cost	Total Cost minus Prime Cost	Works Cost plus Administrative Cost	Prime Cost Plus Administrative Cost	C



## Topic

Fundamentals  
of Business  
Mathematics -

Module 2:  
Algebra

Fundamentals of  
Business Statistics -

Module 8:  
Index Numbers and  
Time Series

## FOUNDATION

### Paper - 3

Fundamentals  
of Business  
Mathematics and  
Statistics (FBMS)



In this issue we will carry out MCQs on Algebra & Index Time Series – refer Module 2 and Module 8 of Study guide.

1. If  $a^3 \cdot a^5 = a^n$ , then  $n = ?$ 
  - (a) 8
  - (b) 15
  - (c) 2
  - (d) 5
2. The value of  $(27)^{2/3}$  is:
  - (a) 9
  - (b) 6
  - (c) 3
  - (d) 27
3.  $1/a^3$  is equal to:
  - (a)  $(a^3)$
  - (b)  $(a^{-3})$
  - (c)  $(1/a^3)$
  - (d)  $(-a^3)$
4. If  $x^{1/2} = 5$  then  $x = ?$ 
  - (a) 10
  - (b) 25
  - (c) 5
  - (d) 2
5. The number of permutations of 5 objects taken 3 at a time is:
  - (a) 10
  - (b) 20
  - (c) 60
  - (d) 120
6. The number of ways to select 2 students from a group of 6 is:
  - (a) 12
  - (b) 30
  - (c) 15
  - (d) 10
7. How many 3-digit numbers can be formed using digits 1, 2, 3, 4 if repetition is not allowed?
  - (a) 24
  - (b) 64
  - (c) 12
  - (d) 256
8.  $(n_{p_0})$  is equal to:
  - (a) 0
  - (b) 1
  - (c)  $n$
  - (d)  $(n!)$
9. The solution(s) of  $(x^2 - 9 = 0)$  is/are:
  - (a) 3 only
  - (b) -3 only
  - (c) 3, -3
  - (d) 0
10. The discriminant of  $(ax^2 + bx + c = 0)$  is:
  - (a)  $(b^2 - 4ac)$
  - (b)  $(b^2 + ac)$
  - (c)  $(b^2 - ac)$
  - (d)  $(4ac - b)$
11. If the quadratic equation has equal roots, then:
  - (a)  $(b^2 - 4ac > 0)$
  - (b)  $(b^2 - 4ac = 0)$
  - (c)  $(b^2 - 4ac < 0)$
  - (d) Roots do not depend on discriminant
12. The roots of  $(x^2 + 5x + 6)$  are:
  - (a) -2, -3
  - (b) 2, 3
  - (c) -1, -6
  - (d) 1, 6



- 13.** Index numbers are primarily used to measure:
- (a) Changes in qualitative variables
  - (b) Changes in price or quantity over time
  - (c) Relationship between two variables
  - (d) Dispersion in a distribution
- 14.** Which of the following is a weighted index number?
- (a) Simple aggregate index
  - (b) Simple average of relatives
  - (c) Laspeyres index
  - (d) Un-weighted quantity index
- 15.** Laspeyres Price Index uses which year's weights?
- (a) Current year
  - (b) Base year
  - (c) Average of current and base year
  - (d) None of these
- 16.** Paasche Price Index uses:
- (a) Base year quantities
  - (b) Current year quantities
  - (c) Both base and current quantities
  - (d) No quantities
- 17.** Fisher's Ideal Index is called "ideal" because:
- (a) It uses minimal data
  - (b) It is easy to calculate
  - (c) It satisfies both time reversal and factor reversal tests
  - (d) It requires no weights
- 18.** The Consumer Price Index (CPI) is also known as:
- (a) Wholesale index
  - (b) Retail price index
  - (c) Industrial index
  - (d) Quantity index
- 19.** The base year index number is always taken as:
- (a) 0
  - (b) 50
  - (c) 100
  - (d) Depends on the series
- 20.** Which index number shows inflation rate most commonly used by government?
- (a) Quantity index
  - (b) CPI
  - (c) WPI
  - (d) Fisher index
- 21.** Simple aggregate price index suffers mainly from:
- (a) Difficulty in selecting base year
  - (b) Not considering relative importance of items
  - (c) Complex calculations
  - (d) Irrelevance of quantities
- 22.** If  $P_{01} = 120$ , what does it mean?
- (a) Prices decreased 20%
  - (b) Prices increased 20%
  - (c) Prices doubled
  - (d) No change
- 23.** A time series is a set of observations collected:
- (a) At one point in time
  - (b) Over a period of time
  - (c) From different samples
  - (d) At random intervals only
- 24.** Which of the following is not a component of time series?
- (a) Trend
  - (b) Seasonal variations
  - (c) Cyclical variations
  - (d) Dispersion



25. Long-term movement in a time series is known as:

- (a) Trend
- (b) Seasonal
- (c) Cyclical
- (d) Irregular

26. Short-term regular fluctuations occurring within a year are called:

- (a) Trend
- (b) Seasonal variations
- (c) Cyclical variations
- (d) Random variations

27. Cyclical variations repeat roughly every:

- (a) Month
- (b) Quarter
- (c) 1 year
- (d) More than 1 year

28. Irregular variations in a time series are caused by:

- (a) Climate
- (b) Long-term economic forces

(c) Sudden unexpected events

(d) Seasonal factors

29. The method used to measure trend by fitting a straight line is:

- (a) Semi-average method
- (b) Moving average method
- (c) Least squares method
- (d) Link relative method

30. A 4-year moving average is used mainly to reduce:

- (a) Seasonal variations
- (b) Cyclical variations
- (c) Irregular variations
- (d) Both b and c

**Answer:**

1	2	3	4	5	6	7	8	9	10
a	a	a	b	c	c	a	b	c	a
11	12	13	14	15	16	17	18	19	20
b	a	b	c	b	b	c	b	c	c
21	22	23	24	25	26	27	28	29	30
b	b	b	d	a	b	d	c	c	a

### Suggestions:

*The study guide needs to be read thoroughly. Supplementary readings could be made from other resources. In this issue MCQs are based on basic concepts taught in the respective modules/sub modules of the study guide. Students should try to solve individual questions with expertise gathered from studying guide book to understand the correct answer of each question. Formula used here are all covered in study guide.*

*Best Wishes.*



## Topic

Fundamentals of  
Business Economics -

Module 1 :  
Basic Concepts

Module 2:  
Forms of Market

Module 3 :  
Money and Banking

Module 5 :  
Fundamentals of  
Managemen

## FOUNDATION

### Paper-4

Fundamentals of  
Business Economics  
and Management  
(FBEM)



Let us start our mock test once again.

**I. Choose the correct answer:**

1. Who was the proponent of the growth definition of economics?
  - A. Adam Smith
  - B. Alfred Marshall
  - C. Lionel Robbins
  - D. Abba P. Samuelson
2. The concave shape to the origin of the PPF curve implies
  - A. Increasing opportunity cost
  - B. Decreasing opportunity cost
  - C. Constant opportunity cost
  - D. None of the above
3. According to the marginal utility theory, a consumer gains maximum utility when
  - A.  $MU = P$
  - B. MU is falling
  - C. Both A and B
  - D. None of the above
4. If there is conspicuous consumption of a product, the demand curve will be
  - A. Horizontal
  - B. Vertical
  - C. Negatively sloped
  - D. Positively sloped
5. The market demand curve for a commodity can be derived from the
  - A. Vertical summation of the individual demand curves
  - B. Horizontal summation of individual demand curves
  - C. Cumulative summation of individual demand curves
  - D. None of the above
6. When the demand is elastic, then with a fall in the price, TR will
  - A. Rise
  - B. Fall
  - C. Remain unchanged
  - D. None of the above
7. Ceteris paribus means other things remaining
  - A. Variable
  - B. Negative
  - C. Constant
  - D. None of the above
8. For the increase in demand
  - A. Demand curve will shift rightward
  - B. Demand curve will shift leftward
  - C. Along the same demand curve, the consumer will move to the right
  - D. None of the above
9. When the price elasticity of demand is infinitely elastic, then MR will be
  - A. Greater than price
  - B. Equal to price
  - C. Less than price
  - D. None of the above
10. For a giffen good, the shape of the demand curve will be
  - A. Downward falling to the right
  - B. Upward rising to the right
  - C. A horizontal curve
  - D. A vertical curve
11. The production function:  $X = \text{square root of } (K.L)$  is homogeneous of degree
  - A. One
  - B.  $>1$
  - C.  $<1$
  - D. None of the above
12. Production function indicates the relationship between
  - A. Demand and supply
  - B. Input and output
  - C. Both A and B
  - D. None of the above
13. Two iso-quants will
  - A. Intersect each other at one point only
  - B. Intersect each other at more than one point
  - C. Never intersect each other
  - D. None of the above



14. Under perfect competition, if the long run production function of a firm satisfies constant returns to scale, then the LAC curve is
  - A. Upward rising
  - B. Downward falling
  - C. U-shaped
  - D. Horizontal
15. The rising MC at the equilibrium level of output of a competitive firm is considered as the
  - A. Necessary condition for profit maximization
  - B. Sufficient condition for profit maximization
  - C. Additional condition for profit maximization
  - D. None of the above
16. In perfect competition, firms and consumers are
  - A. Price makers and quantity takers respectively
  - B. Price influencers and quantity takers respectively
  - C. Price takers and quantity deciders respectively
  - D. Price takers and quantity adjusters respectively
17. In which market form, firm is identical to industry?
  - A. Monopolistic competition
  - B. Monopoly
  - C. Perfect competition
  - D. None of the above
18. Quasi-rent will appear
  - A. Only in the short run
  - B. Only in the long run
  - C. In both short run and long run
  - D. None of the above
19. Indian money market is governed by
  - A. SEBI
  - B. RBI
  - C. ADBI
  - D. None of the above
20. Inflation can be controlled by
  - A. The purchase of Govt. bonds in the open market
  - B. Decreasing the Bank rate
  - C. Increasing the Bank rate
  - D. None of the above
21. Treasury Bill is defined as
  - A. Short term instrument of money market issued by the Govt.
  - B. Long term instrument of money market issued by the Govt.
  - C. Long term instrument of money market issued by the private enterprises
  - D. Short term instrument of money market issued by the private enterprises
22. Brain storming is one of the
  - A. Creative techniques
  - B. Participative techniques
  - C. Heuristic techniques
  - D. None of the above
23. The selection of best alternative from many alternatives is known as
  - A. Selection
  - B. Decision-making
  - C. Organizing
  - D. Budgeting
24. The technique for observing the behavior of a system under several alternative conditions in an artificial setting is known as
  - A. Game theory
  - B. Simulation
  - C. Linear programming
  - D. Network
25. Decisions into programmed decisions and non-programmed decisions is adopted by
  - A. Peter Drucker
  - B. Herbert Simon
  - C. M. Lopez
  - D. John Mc Donald
26. A decision to launch a new production plant is
  - A. Programmed decision
  - B. Non-routine decision
  - C. Personal decision
  - D. Organizational decisions
27. The first step in the decision making process is
  - A. Identification and diagnosing the real problem



- B. Evaluation of alternatives  
 C. Developing alternatives  
 D. Selection of an alternative
28. Programmed decisions are made by  
 A. Lower level managers  
 B. Top level managers  
 C. Middle level managers  
 D. None of the above
29. Decisions to attend a wedding ceremony is  
 A. Basic decisions  
 B. Organizational decisions  
 C. Programmed decisions  
 D. Personal decisions
30. Decisions that are repetitive and routine are called  
 A. Organizational decision  
 B. Non-routine decisions  
 C. Programmed decisions  
 D. Non-programmed decisions

**Answer:**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
D	A	C	D	B	A	C	A	B	B	A	B	C	D	B
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
D	B	A	B	C	A	A	B	B	B	B	A	A	D	C

*So friends,*

*I hope you have enjoyed the mock test. Please solve all the problems honestly by hiding the KEY. You may find only one problem pretty difficult i.e., problem number 11. Please consult any standard mathematics book on “Homogeneous function” and you will be through.*

*Best of luck in your final exam!!*



# CMA INTERMEDIATE COURSE

## Syllabus 2022



## Topic

Module 12:  
Companies Act,  
2013

# INTERMEDIATE

## Group I - Paper-5

### Business Laws and Ethics (BLE)



## Understanding Types, Promotion, and Formation of Companies under the Companies Act, 2013

The Companies Act, 2013 represents a significant turning point in India's corporate regulatory framework. It replaces the Companies Act of 1956 and brings India in line with global governance standards by emphasizing transparency, accountability, shareholder rights, and ease of doing business. While the Act contains 470 sections, Sections 1 to 122 are fundamental to the identity, structure, and formation of companies. These sections outline how companies are conceptualized, incorporated, governed, and classified, and they also detail the roles of promoters, foundational documents, and procedural obligations.

This article explores these key provisions in a clear and engaging manner, including illustrative case studies to demonstrate their application in real-world business scenarios.

### Scope and Conceptual Definitions

Sections 1 and 2 outline the scope and provide a glossary of definitions that form the foundation of the legislation. These definitions clarify how corporate relationships are understood. For example, they distinguish between a subsidiary and an associate company, as well as between public and private companies.

One of the key definitions is that of a "promoter" (Section 2(69)). This term is not limited to individuals who invest capital; it also includes anyone who influences the early stages of a company's formation, planning, or control.

#### Case Insight: SEBI v. Ankit Deb (2015)

*The Securities and Exchange Board of India (SEBI) investigated a promoter group that influenced the pricing and disclosure decisions of the company's Initial Public Offering (IPO) without being formally recognized as "promoters." The judiciary upheld SEBI's position by applying a functional test of promotion, emphasizing that anyone exercising control, influence, or decision-making power in the formation or management of the company may be regarded as a promoter.*

*This case underscores the significance of Section 2(69) and the broad interpretation that courts apply to the identity of a promoter.*

### Types of Companies

The Act categorizes companies in several ways to provide flexibility for businesses of varying scales and purposes.

#### 1. Based on Liability

- Company limited by shares (most common)
- Company limited by guarantee (often used for non-profit objectives)
- Unlimited company (rare, but offers the maximum contractual freedom)

#### 2. Based on Number of Members

- OPC, enabling solo entrepreneurs
- Private Company, balancing operational freedom with limits on ownership
- Public Company, offering unlimited membership and ability to raise capital via public markets

#### 3. Based on Control and Ownership

- Government Companies
- Holding and Subsidiary Companies
- Associate Companies
- Section 8 Companies
- Foreign Companies

These classifications influence governance, disclosure requirements, audit obligations, and shareholder rights.

#### Case Insight: Vodafone International Holdings v. Union of India (2012)

*Although this case predates the 2013 Act, its implications for ownership, control, and subsidiary status are significant. The Supreme Court clarified that "control" should be understood not only in terms of shareholding but also through participative influence. This interpretation affects how Section 2(87) defines a subsidiary.*

*This ruling played a crucial role in shaping the corporate control provisions in the 2013 Act.*

### Promotion

Promotion is the ideation stage where the business concept is born, validated, and prepared for formal incorporation. The promoter plays a central role here.

#### Duties and Liabilities of Promoters

Promoters must:

- Avoid making secret profits
- Not misrepresent facts
- Disclose all transactions and material information
- Maintain fiduciary responsibilities

#### Case Insight: Erlanger v. New Sombrero Phosphate Co. (1878)

*This widely cited UK case is notable in India for establishing the principle that promoters have a fiduciary relationship with the company. In this case, the promoters purchased an island at a low price and sold it to the company at a significantly higher price without disclosing their initial purchase cost.*



*The court held the contract voidable, reinforcing that promoters must not misuse their position.*

Indian courts frequently refer to this ruling while interpreting promoter obligations under the 2013 Act.

## Formation and Incorporation

Sections 3 to 22 outline the process of turning a business idea into a legally recognized company.

### 1. Selecting Company Type

The choice affects regulatory burden, decision-making structure, investor participation and long-term strategy.

### 2. Name Reservation (Section 4)

The Act mandates that company names must not be identical or misleading. Names must also reflect their company type, such as “Ltd.” or “Private Ltd.”

### 3. Memorandum and Articles of Association

These documents serve as the constitution of the company:

- The MOA defines the scope and purpose
- The AOA governs internal rules, powers, and procedures

### 4. Registration under Section 7

The Registrar of Companies (ROC) verifies incorporation documents, director details, registered office proof, and declarations before issuing the Certificate of Incorporation.

### 5. Commencement of Business (Section 10A)

After the 2019 amendment, companies must file proof of subscription money and confirm the operational status of the registered office before starting operations.

#### **Case Insight: Incorporation Fraud - The V. Krishnan Case (NCLT, 2018)**

*In this case, the promoters used forged documents to incorporate multiple shell companies. The NCLT held that ROC must carefully scrutinize promoter declarations and documents as required under Section 7(4).*

*The court cancelled the fraudulent incorporations and penalized the promoters, reinforcing the importance of document accuracy and promoter integrity during incorporation.*

## Altering the Company's Constitution

Sections 12 to 22 outline rules for:

- Changing the registered office
- Altering MOA/AOA

- Converting company types
- Shifting registered offices across states

A change in company name, object clause, or state requires special resolutions and, in certain instances, Central Government or Regional Director approval.

#### **Case Insight: DLF Ltd. v. ROC (2017)**

*DLF sought alteration of its object clause to diversify operations. Minority shareholders challenged the decision, claiming it diluted the company's original purpose.*

*The court upheld the alteration but stressed that Section 13 requires transparent disclosure, ensuring all stakeholders understand how changes impact company direction.*

## Capital Structure and Membership (Sections 61-72)

Sections 61-72 emphasize transparency and fairness in altering share capital, issuing shares, debentures, redeemable preferences, and conducting buybacks.

#### **Case Insight: Sahara India Real Estate Corp. v. SEBI (2012)**

*This landmark case revolved around Sahara's hybrid securities issued to millions of investors without proper public offering procedures.*

*The Supreme Court held that issuance of securities must comply strictly with Sections governing public offers and private placements, reinforcing the core principle of investor protection embedded in the Act.*

## Governance and Administration (Sections 88-122)

### 1. Registers and Records (Section 88)

Companies must maintain statutory registers of members, debenture holders and beneficial owners, forming the basis for determining ownership rights.

### 2. Annual Returns (Section 92)

These returns ensure transparent disclosure of shareholding, corporate activity and governance structures.

### 3. Meetings and Resolutions (Sections 96-122)

These sections regulate AGMs, EGMs, board meetings, notice periods, quorum requirements and types of resolutions.

#### **Case Insight: Tata Consultancy Services (TCS) AGM Dispute (2020)**

*Minority shareholders challenged the validity of resolutions passed at TCS's virtual AGM, alleging inadequate opportunity to vote during technical difficulties.*



*The regulator later emphasized that under Sections 101-108, companies must ensure fair access to meetings and voting, especially when switching to virtual formats.*

This case highlighted the dynamic interpretation of meeting norms in a digital era.

### One Person Company (OPC)

Section 122 provides simplified governance for OPCs such as no mandatory AGM and a single-board meeting requirement. OPCs reflect the Act's objective of promoting entrepreneurship and reducing compliance burdens for small businesses.

### Case Insight: OPC Conversion Case - M/s. Priya Enterprises (NCLT, 2021)

*An OPC sought conversion into a private company to expand operations. The NCLT highlighted that such conversions must strictly follow procedural requirements, including special resolutions and ROC filings, showing that even simplified structures must maintain statutory discipline.*

### Why These Sections Matter?

Sections 1-122 craft the foundational framework that ensures:

#### 1. Corporate Transparency

Through registers, filings, and meeting requirements.

#### 2. Investor Protection

Through clear rules on share capital, public offers, and disclosures.

#### 3. Entrepreneurial Flexibility

Through OPCs, Section 8 companies and simplified incorporation.

#### 4. Good Governance

Via resolutions, board structures, fiduciary duties, and alteration procedures.

#### 5. Legal Certainty

By defining corporate forms, control, promoter roles and foundational documents.

### Conclusion

Sections 1 to 122 of the Companies Act, 2013 form the foundation of corporate India, outlining how a company is defined, formed, governed, and managed. These provisions guide real business behavior, as seen in case studies like Sahara and TCS. For students, researchers, practitioners, and entrepreneurs, these sections offer key insights into corporate governance and legal responsibilities, serving as the essential introduction to India's corporate ecosystem.

## A Comprehensive Analysis of Shareholder Rights: Legal, Economic, and Governance Perspectives

Shareholders occupy a central position in the corporate governance framework of modern companies. While directors steer the management and day-to-day affairs, shareholders form the foundational constituency that provides capital and collectively shapes the strategic direction of the enterprise. Their rights, whether statutory, contractual, or fiduciary, serve as the bedrock of corporate democracy.

This article presents a comprehensive analysis of the rights of shareholders, with a balanced blend of legal analysis, practical relevance, and governance perspectives. It also situates shareholder rights within the contemporary corporate environment in India, where evolving regulatory norms under the Companies Act, 2013 and SEBI regulations have significantly strengthened shareholder protection.

### 1. Understanding Shareholder Rights: Concept and Importance

At the heart of corporate law lies the separation of ownership and management. Shareholders, as owners, typically do not manage the company; instead, they

entrust decision-making to the board of directors. This structural separation makes the protection of shareholder rights essential. These rights ensure transparency, accountability, equitable treatment, and participation in corporate decision-making.

#### Shareholder rights serve several objectives:

- Protecting investment interests
- Ensuring fair treatment vis-à-vis majority shareholders and management
- Promoting good governance
- Facilitating efficient capital markets
- Ensuring that corporate actions remain aligned with stakeholder expectations

The Companies Act, 2013, SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 (LODR), and SEBI (Substantial Acquisition of Shares and Takeovers) Regulations, 2011 collectively form the backbone of these rights.



## 2. Statutory Rights of Shareholders under the Companies Act, 2013

The Companies Act, 2013 has dramatically expanded shareholder empowerment compared to the previous legislative regime. Key rights may be categorized as economic rights, participatory rights, information rights, and remedial rights.

### A. Economic Rights

These rights determine shareholders' financial interests in the company.

#### 1. Right to Dividend (Sections 123 - 127)

Shareholders are entitled to receive dividends when declared by the company. The declaration of dividends lies within the discretion of the board and approval of shareholders, but once declared, it becomes a debt due to shareholders.

#### 2. Right to Share in Surplus Assets upon Winding Up

In case of liquidation, shareholders receive their residual claim after settling debts and liabilities. Preference shareholders are paid before equity shareholders.

#### 3. Right to Transfer Shares (Section 56)

Shares are freely transferable in a public company. Restrictions may exist in private companies but must be reasonable.

### B. Participatory Rights

These rights ensure shareholder involvement in governance.

#### 1. Right to Vote (Section 47)

Each equity shareholder has a voting right proportionate to shareholding. Preference shareholders gain voting rights only upon non-payment of dividend for specified periods.

#### 2. Right to Attend General Meetings (Section 96 - 103)

Shareholders can attend, participate, and vote on resolutions in Annual General Meetings (AGMs) and Extraordinary General Meetings (EGMs). E-voting has further expanded participatory access.

#### 3. Right to Appoint and Remove Directors (Sections 152 - 169)

Shareholders play a crucial role in the composition of the board.

#### 4. Right to Approve Major Corporate Actions

Such actions include:

- Altering share capital
- Mergers and amalgamations

- Sale of substantial assets
- Related-party transactions (for certain companies)
- Change in object clause

These checks ensure that strategic decisions affecting ownership rights require shareholder consensus.

### C. Information Rights

Transparency lies at the core of shareholder protection.

#### 1. Right to Obtain Financial Statements (Section 136)

Shareholders must receive audited financial statements, reports of directors and auditors, and subsidiary accounts.

#### 2. Right to Inspect Registers and Records

Shareholders may inspect:

- Register of members
- Register of charges
- Minutes of general meetings
- Statutory registers

These rights promote transparency and regulatory compliance.

#### 3. Right to Demand Poll (Section 109)

This ensures that voting outcomes reflect actual shareholding strength rather than mere show of hands.

### D. Remedial and Protective Rights

Minority shareholders, particularly, are vulnerable to oppression by majority shareholders or management. The Act provides robust remedial mechanisms.

#### 1. Right to Approach NCLT in Cases of Oppression and Mismanagement (Sections 241 - 242)

Shareholders holding a minimum prescribed percentage of shares can petition the Tribunal if they face:

- Oppressive conduct
- Mismanagement
- Acts prejudicial to the company's or public interest

NCLT may order changes in management, annul transactions, or regulate future conduct.

#### 2. Right to Class Action Suits (Section 245)

This allows a group of shareholders to initiate a suit against:

- Directors
- Auditors
- Advisors, or
- Any person involved in wrongful acts



Such suits deter corporate misconduct and enhance accountability.

### 3. Right to Seek Investigation (Section 210 - 216)

Members may request the government to investigate the affairs of the company in cases of suspected fraud or irregularities.

### 3. Rights of Minority Shareholders

Indian corporate law has progressively strengthened minority protections.

Key rights include:

- Protection against oppression and mismanagement
- Class action rights
- Right to exit in cases of takeover or delisting
- Prohibition of insider trading and unfair related-party transactions
- Mandatory valuation mechanisms for buy-backs and reductions

The Companies Act, 2013 and SEBI regulations collectively ensure that minority voices are not overshadowed in corporate environments.

### 4. Case Studies Illustrating Protection of Shareholder Rights

#### *Case Study 1: Tata - Mistry Dispute*

*This landmark corporate governance case illustrates the importance of shareholder rights, particularly in relation to oppression and mismanagement.*

*When Cyrus Mistry was removed as Chairman of Tata Sons, the matter escalated to the NCLT and later the Supreme Court.*

#### **Key takeaways:**

Courts recognize the prerogative of the board to manage the company.

However, shareholders especially those with significant minority stakes may seek remedies if removal stems from oppressive conduct.

The case highlighted the importance of transparent governance, board independence, and shareholder confidence.

Although the Supreme Court ultimately upheld Tata Sons' actions, the public discourse strengthened the framework for shareholder rights and oversight.

#### *Case Study 2: Satya Narayan Murthy v. Karnataka Soaps & Detergents Ltd. (2019)*

*This case dealt with a shareholder's right to inspect records. The court affirmed that refusal to share*

*information violates statutory obligations under the Companies Act.*

#### **Key takeaway:**

Information rights are fundamental and cannot be diluted by management discretion.

#### *Case Study 3: National Textile Workers' Union v. P.R. Ramakrishnan (1983, SC)*

*Though focused on workers' rights during winding-up, the judgment broadened the understanding of stakeholder participation in corporate matters. It reinforced that shareholder rights exist within a broader ecosystem of fairness.*

#### **Key takeaway:**

Corporate rights are not absolute; they coexist with public interest considerations.

### 5. Shareholder Rights under SEBI Regulations

For listed companies, SEBI provides an additional protective layer.

#### **A. Disclosure and Transparency Obligations (LODR Regulations)**

Shareholders must receive timely and reliable information regarding:

- Financial performance
- Corporate announcements
- Related-party transactions
- Shareholding patterns
- Insider trading restrictions

#### **B. Takeover Regulations**

Minority shareholders receive:

- Exit opportunities
- Fair valuation in takeover scenarios
- Open offer rights if control changes hands

#### **C. Shareholder Grievance Redressal (SCORES)**

SEBI's online grievance redressal system allows shareholders to escalate unresolved corporate issues.

### 6. Emerging Trends: Shareholder Activism and ESG Rights

The modern corporate landscape has expanded shareholder engagement beyond traditional financial and governance rights.

#### **A. Rise of Shareholder Activism**

Shareholders increasingly challenge:



- Executive compensation
- Environmental impact
- Corporate strategy
- Governance lapses

Institutional investors like mutual funds, pension funds, and proxy advisory firms play a pivotal role in driving accountability.

## **B. ESG (Environmental, Social, Governance) Considerations**

Shareholders now expect:

- Sustainable business practices
- Social responsibility
- Robust governance architecture

Regulators increasingly encourage boards to integrate ESG disclosures, giving shareholders more tools to evaluate long-term corporate health.

## **7. Challenges in Enforcement of Shareholder Rights**

Despite strong statutory frameworks, several hurdles persist:

- Information asymmetry

- Low investor awareness
- Cultural reluctance toward litigation
- Dominance of promoter-driven shareholding in India
- Delays in dispute resolution

Bridging these gaps requires proactive regulatory evolution, institutional strengthening, and greater shareholder education.

## **Conclusion**

Shareholder rights constitute the cornerstone of corporate governance and economic democracy. The Companies Act, 2013, supplemented by SEBI regulations, has significantly enhanced transparency, accountability, and participatory mechanisms. Shareholders today possess not only economic and voting rights but also robust legal remedies and greater influence over corporate conduct.

Yet, the effectiveness of these rights depends on active shareholder engagement, responsible management, and vigilant regulatory oversight. As India's corporate ecosystem grows more complex and globalized, shareholder rights will continue to evolve, shaping the accountability and sustainability of corporate enterprises for decades to come.



## Topic

Module 3:  
Preparation of  
Final Accounts  
of Commercial  
Organisations,  
Not-for-Profit  
Organisations and  
from Incomplete  
Records

## INTERMEDIATE

### Group I - Paper-6

### Financial Accounting (FA)



## Preparation of Financial Statements of Commercial Organisations and Preparation of Financial Statements of Not-for-Profit Organisation

### Preparation of Financial Statements of Commercial Organisations

Preparation of financial statements for commercial organizations is a vital aspect of financial reporting and provides a comprehensive view of a company's financial performance, position, and cash flows.

Preparing financial statements for commercial organizations involves several key steps and considerations.

**Gather Financial Data:** Collect all relevant financial information including transactions, receipts, invoices, bank statements, etc.

**Organize Transactions:** Categorize transactions into appropriate accounts such as assets, liabilities, equity, revenue, and expenses.

**Recording Transactions:** Enter transactions into the accounting system. This could be done manually or using accounting software like QuickBooks or Xero.

**Adjusting Entries:** Make any necessary adjusting entries to ensure that revenues and expenses are recorded in the correct accounting period and that assets and liabilities are properly recognized.

**Prepare Trial Balance:** Create a trial balance to ensure that debits and credits are equal and the books are in balance.

#### Prepare Financial Statements:

**Income Statement (Profit and Loss Statement):** Summarizes revenues and expenses over a period of time to determine the company's profitability.

**Balance Sheet:** Presents the company's financial position at a specific point in time, showing assets, liabilities, and equity.

**Cash Flow Statement:** Reports cash generated and used by operating, investing, and financing activities during a period.

**Statement of Changes in Equity (if applicable):** Shows changes in equity during the reporting period, including shareholder transactions and changes in retained earnings.

**Analysis and Interpretation:** Analyze the financial statements to assess the company's financial health, performance, and liquidity. Look for trends, ratios, and other indicators to understand the company's strengths and weaknesses.

**Disclosure and Presentation:** Ensure that the financial statements comply with relevant accounting standards

(e.g., GAAP, IFRS) and include all necessary disclosures and footnotes.

**Review and Audit:** Review the financial statements for accuracy and completeness. In some cases, an external audit may be required by regulatory authorities or stakeholders.

**Distribution and Communication:** Share the financial statements with stakeholders such as investors, creditors, management, and regulatory bodies as required.

It's essential to follow accounting principles and standards relevant to your jurisdiction and industry while preparing financial statements to ensure accuracy, transparency, and compliance. Additionally, seeking assistance from accounting professionals or consultants can be beneficial, especially for complex accounting issues or regulatory requirements.

### Preparation of Financial Statements of Not-for-Profit Organisation

Preparing financial statements for a not-for-profit (NFP) organization involves similar steps to those for commercial organizations, with some key differences due to the nature of NFP operations. Here's an overview tailored to NFPs:

**Gather Financial Data:** Collect all financial information including donations, grants, program revenues, expenses, and other income sources.

**Organize Transactions:** Categorize transactions into appropriate accounts such as contributions, program expenses, administrative expenses, fundraising expenses, and investment income.

**Recording Transactions:** Enter transactions into the accounting system, ensuring accurate recording of all income and expenses related to the organization's activities.

**Adjusting Entries:** Make any necessary adjustments to ensure that revenues and expenses are recorded correctly and in accordance with generally accepted accounting principles (GAAP) for not-for-profit organizations.

**Prepare Trial Balance:** Create a trial balance to verify that debits and credits are equal and that the accounting records are in balance.

#### Prepare Financial Statements:

**Statement of Financial Position (Balance Sheet):** Presents the organization's assets, liabilities, and net assets (equity) at a specific point in time.



**Statement of Activities (Income Statement):** Summarizes revenues and expenses for a period, showing the organization's financial performance.

**Statement of Cash Flows:** Reports cash inflows and outflows from operating, investing, and financing activities during the reporting period.

**Statement of Functional Expenses:** Breaks down expenses by function (e.g., program services, management and general, fundraising) to provide transparency on how resources are utilized.

**Analysis and Interpretation:** Analyze the financial statements to assess the organization's financial health, efficiency in resource utilization, and sustainability. Evaluate key ratios and metrics relevant to not-for-profit organizations, such as program expense ratios and fundraising efficiency ratios.

**Disclosure and Presentation:** Ensure that the financial statements comply with applicable accounting standards for not-for-profit organizations, such as the Financial

Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 958, and include all required disclosures and footnotes.

**Review and Audit:** Review the financial statements for accuracy and completeness. Depending on regulatory requirements and organizational policies, an external audit may be conducted to provide assurance to stakeholders.

**Distribution and Communication:** Share the financial statements with stakeholders such as donors, grantors, board members, and regulatory bodies as required. Transparent communication of financial information is crucial for maintaining trust and accountability in the organization.

It's essential for not-for-profit organizations to adhere to accounting standards specific to their sector and to accurately report on the allocation of resources towards achieving their mission and objectives. Seeking guidance from accounting professionals with expertise in not-for-profit accounting can ensure compliance and effective financial management.

## Importance of preparation of Financial Statements for Commercial Organisations and Not-for-Profit Organisations

The preparation of financial statements holds significant importance for both commercial organizations and not-for-profit (NFP) organizations, albeit with some differences in their objectives and stakeholders. Here's a comparison of their importance:

### Commercial Organizations:

**Decision Making and Investor Confidence:** Financial statements provide crucial information for decision-making by investors, creditors, suppliers, customers, and management in commercial organizations. Investors rely on financial statements to assess profitability, growth potential, and risks before making investment decisions. Transparent financial reporting enhances investor confidence and facilitates access to capital markets.

**Creditworthiness and Financing:** Financial statements play a vital role in determining a company's creditworthiness and ability to obtain financing from banks, financial institutions, and other creditors. Lenders analyze financial statements to evaluate the company's ability to repay loans, manage debt, and generate cash flows. Positive financial performance enhances the company's borrowing capacity and access to favourable financing terms.

**Regulatory Compliance and Taxation:** Commercial

organizations are required to prepare financial statements in compliance with accounting standards and regulatory requirements, such as GAAP or IFRS. Accurate financial reporting ensures compliance with tax laws and facilitates tax planning strategies. Financial statements serve as the basis for tax assessment, auditing, and regulatory reporting.

**Performance Evaluation and Benchmarking:** Financial statements enable stakeholders to evaluate the company's financial performance, profitability, efficiency, and competitiveness over time. Comparative analysis with industry peers and benchmarks helps assess relative strengths and weaknesses and identify areas for improvement. Financial ratios and metrics derived from financial statements facilitate performance evaluation and benchmarking against industry standards.

**Transparency and Accountability:** Transparent financial reporting promotes accountability and integrity in commercial operations by providing stakeholders with clear, accurate, and timely information about the company's financial position and performance. Disclosure of significant accounting policies, assumptions, estimates, and risks enhances transparency and allows stakeholders to make informed decisions based on reliable financial information.



**Not-for-Profit Organizations:**

**Stakeholder Trust and Accountability:** Financial statements for NFP organizations are crucial for maintaining trust and accountability with donors, grantors, members, volunteers, and other stakeholders. Donors and grantors rely on financial statements to assess the organization's financial health, governance, and stewardship of resources before making contributions.

**Transparency and Donor Confidence:** Transparent financial reporting demonstrates the NFP organization's commitment to accountability, ethical stewardship, and mission fulfillment. Donors and grantors expect clear and detailed financial statements that provide insights into how their contributions are utilized and the impact achieved by the organization's programs and services.

**Regulatory Compliance and Funding:** NFP organizations are subject to regulatory requirements and reporting obligations imposed by governmental authorities, funding agencies, and oversight bodies. Compliance with accounting standards and regulatory requirements ensures transparency, credibility, and eligibility for funding, grants, and tax-exempt status.

**Performance Evaluation and Impact Assessment:** Financial statements enable stakeholders to evaluate the NFP organization's financial performance, efficiency, and effectiveness in delivering programs and services. Comparative analysis of financial data over time and benchmarking against industry standards help assess progress toward mission objectives and identify areas for improvement.

**Mission fulfilment and Sustainability:** Financial statements provide insights into the NFP organization's ability to achieve its mission, serve its beneficiaries, and sustain operations over the long term. Donors and stakeholders expect financial sustainability, prudent financial management, and accountability in the use of resources to ensure the organization's continued impact and relevance.

In summary, while the preparation of financial statements is essential for both commercial organizations and NFP organizations, the specific objectives, stakeholders, and regulatory environments may vary. Transparent financial reporting fosters trust, accountability, and informed decision-making in both sectors, contributing to organizational success and societal impact.

**Questions:**

- Which financial statement summarizes a company's revenues and expenses over a specific period?
  - Balance Sheet
  - Income Statement
  - Cash Flow Statement
  - Statement of Changes in Equity
- Which financial statement reports the cash inflows and outflows from operating, investing, and financing activities?
  - Balance Sheet
  - Income Statement
  - Cash Flow Statement
  - Statement of Changes in Equity
- What is the purpose of adjusting entries in the preparation of financial statements?
  - To correct errors in the trial balance
  - To record transactions that were missed initially
  - To ensure revenues and expenses are recognized in the correct accounting period
  - To adjust the cash balance
- Which financial statement reports changes in equity, including transactions with shareholders and changes in retained earnings?
  - Income Statement
  - Balance Sheet
  - Cash Flow Statement
  - Statement of Changes in Equity
- Which of the following is NOT a purpose of financial statements for commercial organizations?
  - Decision-making
  - Regulatory compliance
  - Stakeholder trust
  - Identifying donors



6. What does the balance sheet of a not-for-profit organization primarily represent?
  - a) Financial performance over a period
  - b) Cash inflows and outflows
  - c) Financial position at a specific point in time
  - d) Sources and uses of cash
7. What is the purpose of the statement of changes in net assets for a not-for-profit organization?
  - a) To disclose significant accounting policies
  - b) To summarize program expenses
  - c) To report changes in equity, including transactions with donors and changes in net assets
  - d) To present the organization's financial position at a specific point in time
8. Which financial statement reports the organization's financial position, including its assets, liabilities, and net assets at a specific point in time?
  - a) Income Statement
  - b) Balance Sheet
  - c) Cash Flow Statement
  - d) Statement of Functional Expenses
9. What is the primary purpose of financial statements for not-for-profit organizations?
  - a) Decision-making
  - b) Regulatory compliance
  - c) Stakeholder trust
  - d) Maximizing shareholder wealth
10. Which of the following is NOT a characteristic of financial statements for not-for-profit organizations?
  - a) Emphasis on transparency and accountability
  - b) Focus on profitability and return on investment
  - c) Presentation of financial position and performance
  - d) Disclosure of significant accounting policies and estimates

**Answer:**

1	2	3	4	5	6	7	8	9	10
b	c	c	d	d	c	c	b	c	b



## Topic

Module 2:  
Heads of Income

Module 3:  
Total Income and  
Tax Liability of  
Individuals & HUF

INTERMEDIATE

Group I - Paper-7A

Direct Taxation (DT)



## Income From Other Sources

1. A receipt shall be taxable under this head if such income does not specifically fall under any one of the other four heads of income.
  2. **Basis of chargeability:** Income under this head shall be chargeable on 'accrual' or 'cash' basis depending on the method of accounting regularly followed by the assessee.
  3. **Casual Income:** Winning from lotteries, crossword puzzles, etc. are taxable under this head. Tax is charged on such income at a flat rate of 30% plus surcharge (if any) plus cess.
  4. **Income from letting of machinery, plant or furniture is charged to tax under this head, if such income is not chargeable under the head "Profits and gains of business or profession".**
  5. **Composite rent:** If letting of building is inseparable from letting of machinery, furniture, etc. then income from such letting is charged to tax under the head "Income from other sources" otherwise Income from house property.
  6. **Family pension:** It is taxable under the head "Income from other sources" after allowing standard deduction to the minimum of a) 1/3rd of such pension; or b) ₹ 25,000 (however, if the assessee has opted for old tax regime then ₹ 15,000).
  7. **Gift: Following receipts by any person shall be considered as his income:**
    - a) If any sum is received without consideration in excess of ₹ 50,000 during the previous year;
    - b) If an immovable property is received without consideration and the stamp duty value exceeds ₹ 50,000, the stamp duty value of such property;
    - c) If an immovable property is received with consideration and the stamp duty value of such property exceeds such consideration by higher of the following:
      - (i) ₹ 50,000; or
      - (ii) An amount equal to 10% of the consideration - the difference between the stamp duty value and the consideration;
    - d) If movable properties are received without consideration and the aggregate fair market value of such properties exceeds ₹ 50,000, the whole of aggregate fair market value of such properties;
    - e) If movable properties are received for consideration which is less than the aggregate fair market value of properties by an amount exceeding ₹ 50,000, the difference between the aggregate fair market value and the consideration
- Exceptions:**
- (a) *Gift received from any relative.*
  - (b) *Gift received on the occasion of the marriage of the individual.*
  - (c) *Any sum of money which is received under a will or by way of inheritance.*
  - (d) *Any sum of money which is received in contemplation of death of the payer*
  - (e) *Any sum of money which is received from - local authority, any fund or foundation or university or other educational institutions or hospital or other medical institutions or any trust or institution referred u/s 10(23C) or a registered trust or institution;*
  - (f) *Receipts from an individual by a trust created or established solely for the benefit of relative of the individual.*
  - (g) *Receipts by way of distribution at the time of total or partial partition of HUF;*
  - (h) *Shares received in a consequence of demerger or amalgamation of a company or business reorganization of a co-operative society*
8. **Interest on securities** is charged to tax u/s 56. However, if such securities are held as stock, then taxed u/s 28.
  9. **Interest on delayed receipt of compensation or enhanced compensation** shall be taxable in the year of receipt after deducting standard deduction @ 50% of such income.
  10. **Bonus Stripping:** Where any person acquires any unit (original unit) within a period of 3 months prior to the record date and is allotted bonus unit on such date and such person transfers original unit within a period of 9 months after such date, then any loss arising to him shall be ignored and the amount of loss so ignored shall be deemed to be the cost of acquisition of such bonus unit held by him on the date of such sale or transfer.
  11. **Dividend:** As per sec. 2(22),
    - (a) Any distribution of accumulated profits, which results in the release of assets of the company.
    - (b) Any distribution of Debenture, debenture-stock, deposit certificates in any form whether with or without interest to its shareholders (equity as



well as preference); and Shares to preference shareholders by way of bonus, to the extent to which company possess accumulated profit.

- (c) Distribution made on liquidation to the extent to which company possess accumulated profit immediately before liquidation.
- (d) Distribution made on reduction of capital of the company to the extent it possess accumulated profit.
- (e) Any loan or advance by a company (in which public are not substantially interested) to the extent of accumulated profit (excluding capitalized profit) to its equity shareholder holding not less than 10% of voting power in the company or to a concern of which such shareholder is a member and has substantial interest in such concern or to any person on behalf of or for the benefit of such specified shareholder.
- (f) Any payment by a company on buy back of shares

**Tax treatment:** Dividend or income from units shall be taxable in the hands of shareholders or unit holders at the applicable rate. No deduction shall be allowed from dividend income, or income in respect of units of mutual fund or specified company, other than deduction on account of interest expense and in any previous year. Further, such deduction shall not exceed 20% of the dividend income or income from units included in the total income for that year without this deduction [however, no deduction shall be allowed in case of buy back of shares]

**12. Specific disallowance:** The following expenditures

shall not be deducted from any income under this head

- Any personal expenses of the assessee.
- Any interest which is payable outside India on which tax has not been deducted at source.
- Any salary payable outside India on which tax has not been deducted at source.
- 30% of any payment made to a resident on which TDS provision is applicable without deducting TDS as referred u/s 40(a)(ia)
- Any amount paid as Wealth tax or Income tax.
- Any amount specified u/s 40A e.g. payment to relative in excess of requirement; or cash payment in excess of ₹ 10,000.
- No deduction in respect of any expenditure shall be allowed in computing the income by way of any winnings from lotteries, etc.

**13. Deemed Profits:** Where an allowance or deduction has been allowed for any year in respect of loss, expenditure or trading liability incurred by the assessee; and subsequently, any amount is obtained, as revocation of such loss, expenditure or remission of liability, whether in cash or in any other manner, during any previous year, then such amount received or amount remitted shall be charged to tax.

The head 'Income from Other Sources' covers a wide range of incomes and frequently appears in exams due to its practical relevance. A clear understanding of what constitutes casual income, gift taxability, dividend income, and deemed incomes helps students master numerous problem-based questions.

## Advance Tax

Advance Tax, often referred to as 'pay as you earn' tax, is the income tax that is payable if your total tax liability is ₹10,000 or more in a financial year. It is paid in installments as per the due dates provided by the Income Tax Department. The primary purpose of Advance Tax is to ensure a continuous flow of revenue to the government and to reduce the burden of lump-sum tax payments on taxpayers at the end of the financial year.

### Who Needs to Pay Advance Tax?

Advance Tax is mandatory for:

- **Salaried individuals:** Salaried individuals who have income from sources other than salary such as rent, interest, capital gains, etc., need to pay advance tax.
- **Freelancers and self-employed individuals:**

Individuals earning income from business or profession.

- **Companies:** Corporate taxpayers and businesses.
- **Others:** Any individual earning from dividends, capital gains, lottery winnings, or similar incomes.

However, a senior citizen (aged 60 years or above) who does not have income from business or profession is exempted from paying advance tax.

### Due Dates and Installments

The Income Tax Department has prescribed specific due dates for the payment of advance tax. The payments can be made in four installments throughout the financial year:



1st Installment	By June 15	15% of the advance tax liability
2nd Installment	By September 15	45% of the advance tax liability (cumulative)
3rd Installment	By December 15	75% of the advance tax liability (cumulative)
4th Installment	By March 15	100% of the advance tax liability (cumulative)

For taxpayers who have opted for the presumptive taxation scheme u/s 44AD or 44ADA of the Income Tax Act, the entire advance tax liability has to be paid by March 15 in one installment.

### Calculation of Advance Tax

Advance tax can be calculated using the following steps:

- **Estimate your total income:** Calculate the total income from all sources (salary, rent, business, capital gains, etc.) for the financial year.
- **Calculate gross taxable income:** Adjust the total income by considering deductions available under various sections of the Income Tax Act (such as Section 80C, 80D, etc.).
- **Compute tax liability:** Apply the applicable income tax rates to the gross taxable income to compute the tax liability.
- **Deduct TDS and other credits:** Subtract the Tax Deducted at Source (TDS) and any other tax credits available.
- **Determine advance tax liability:** If the net tax liability is ₹10,000 or more, then advance tax has to be paid as per the specified due dates.

### Interest on Late Payment of Advance Tax

Under Sections 234B and 234C of the Income Tax Act, interest is charged for the late payment or short payment of advance tax:

- **Section 234B:** Interest is charged if the taxpayer has not paid 90% of the tax liability or has paid less than the prescribed percentage of advance tax within the previous year. The interest is charged at 1% per month from April 1 of the assessment year till the date of actual payment.
- **Section 234C:** Interest is charged for default in

payment of each installment. It is calculated at 1% per month for the period of delay on the amount of shortfall.

### Adjustment and Refund

Advance tax paid during the financial year is adjusted against the total tax liability at the time of filing the annual income tax return. If the advance tax paid is more than the actual tax liability, the excess amount is refunded to the taxpayer with interest under Section 244A of the Income Tax Act.

### Importance of Advance Tax

- **Regular Revenue Flow:** It ensures a regular inflow of revenue to the government, helping in better financial planning and implementation of developmental projects.
- **Reduced Year-End Burden:** For taxpayers, it spreads the tax payment over the year, reducing the financial burden at the end of the financial year.
- **Compliance:** Paying advance tax on time helps in avoiding interest for non-compliance.
- **Tax Planning:** It helps in better tax planning and managing cash flows effectively.

### Advance Tax for Specific Incomes

- **Capital Gains and Dividends:** Taxpayers with capital gains or dividends can pay advance tax in the remaining installments after the income arises.
- **Income from Lottery, Horse Races, etc.:** Advance tax (after considering TDS, if any) on such incomes should be paid immediately after earning the income.
- **Business Income:** Individuals with business income need to estimate their profits accurately to determine the advance tax liability.

### Conclusion

Advance tax is a crucial component of the income tax system in India, designed to ensure timely payment of taxes and efficient revenue collection for the government. It helps taxpayers by reducing the burden of lump-sum payments at the end of the financial year and avoiding interest and penalties for late payments. Proper calculation and timely payment of advance tax reflect good financial discipline and compliance with tax laws.



## Topic

Module 5:  
Goods and Services  
Tax (GST) Laws

INTERMEDIATE

Group I - Paper-7B

Indirect Taxation  
(IDT)



## Tax Invoice

A tax invoice is the most crucial document under GST, serving as both evidence of supply and the basis for availing input tax credit. It formalizes the transaction between supplier and recipient and ensures transparency, traceability, and accuracy in the GST compliance system. Understanding its format, components, and statutory timelines is essential for students and professionals dealing with indirect tax matters.

An invoice is a commercial instrument issued by a seller to a buyer. It identifies both the trading parties and lists, describes, and quantifies the items sold, shows the date of shipment and mode of transport, prices and discounts, if any, and delivery and payment terms. In certain cases, (especially when it is signed by the seller or seller's agent), an invoice serves as a demand for payment and becomes a document of title when paid in full. An invoice does not bring into existence an agreement but merely records the terms of a pre-existing agreement (oral or written). An invoice can be understood as a document that is meant to serve a particular purpose.

### Introduction to Tax Invoices under GST

Under GST a tax invoice is an important document.

- It not only evidences supply of goods or services, but is also an essential document for the recipient to avail Input Tax Credit (ITC). A registered person cannot avail input tax credit unless he is in possession of a tax invoice or a debit note.
- GST is chargeable at the time of supply. Invoice is an important indicator of the time of supply. Broadly speaking, the time of supply of goods or services is the date of issuance of invoice or receipt of payment whichever is earlier. However, a special procedure for payment of tax has been prescribed for registered persons (other than composition dealers) supplying goods. Such category of persons (suppliers of goods other than composition dealers) need to pay GST only at the time of issue of invoice irrespective of when they receive payment.

Suffice it to say, that the tax invoice is the primary document evidencing the supply and is vital for availing input tax credit.

The GST Law requires that an invoice – tax invoice or bill of supply – is issued on the occurrence of a certain event, being a supply, within the prescribed timelines. Therefore, an invoice, among other documents is required to be issued for every form of supply such as sale, transfer, barter, exchange, license, rental, lease or disposal. This chapter provides an understanding of the various documents required to be issued under the GST law, timelines to issue such document and the contents of every such document. It is to be noted that GST Law does

not prescribe any specific format of invoice but mandates that certain field or information should be incorporated in the invoice.

### Significance of Tax Invoices

Tax invoices serve several important purposes in the GST framework:

- **Legal Compliance:** Tax invoices are mandated by law under the GST regime, and failure to issue proper invoices can lead to penalties and legal consequences.
- **Input Tax Credit (ITC):** Tax invoices are necessary for claiming ITC, as they provide evidence of tax paid on inputs and input services used in the course of business.
- **Audit and Verification:** Tax authorities rely on tax invoices to audit and verify the accuracy of tax returns filed by taxpayers, ensuring compliance with GST laws and regulations.

### Key Components of a Tax Invoice

A tax invoice under GST must contain specific details to be considered valid. These include:

- **Supplier's Details:** Name, address, GSTIN (Goods and Services Tax Identification Number), and State code of the supplier.
- **Recipient's Details:** Name, address, GSTIN (if registered), and State code of the recipient.
- **Invoice Number and Date:** A consecutive serial number and date of issue of the invoice.
- **Description of Goods or Services:** Details such as quantity, unit price, total value, and applicable GST rate for each item supplied.
- **Taxable Value and Tax Amount:** Separate disclosure of the taxable value, CGST (Central Goods and Services Tax), SGST (State Goods and Services Tax), IGST (Integrated Goods and Services Tax), and cess, if applicable.
- **Place of Supply:** Indicates whether the supply is intra-state (within the same state) or inter-state (between different states).
- **Shipping and Billing Address:** If different from the supplier's and recipient's addresses.
- **Payment Terms:** Terms and conditions of payment, including payment due date and mode of payment.

### Types of Tax Invoices

Under GST, there are different types of tax invoices based on the nature of the transaction:

- **Tax Invoice:** Issued for taxable supplies of goods or services.



- **Bill of Supply:** Issued when GST is not applicable or when the supplier is registered under the composition scheme.
- **Credit Note:** Issued to reduce the taxable value or tax amount in case of goods returned or services cancelled.
- **Debit Note:** Issued to increase the taxable value or tax amount due to additional goods supplied or services provided.

#### Timeline for issuance of invoice

In general, time of issue of tax invoice for:

- **Supply of Goods:** A registered person supplying taxable goods shall issue a tax invoice, before or at the time of:

Where the supply involves the movement of goods	Removal of goods for supply to the recipient
Where the supply does not involve the movement of goods	Delivery of goods or making available thereof to the recipient

- **Supply of Services:** Invoice is required to be issued within 30 days from the date of the supply of service. However, in the case of an insurance/banking company or a financial institution, including NBFC, the invoice is required to be issued within 45 days

#### Implications for Businesses and Taxpayers

For businesses and taxpayers, compliance with tax invoice requirements under GST is crucial for several reasons:

- **Input Tax Credit (ITC) Claim:** Proper maintenance and issuance of tax invoices enable businesses to claim ITC, reducing the overall tax liability.
- **Audit and Assessment:** Tax authorities may conduct audits or assessments based on tax invoices to verify the accuracy of tax returns and ensure compliance with GST laws.
- **Legal Compliance:** Failure to issue valid tax invoices or maintain proper records can lead to penalties, interest, and other legal consequences.
- **Business Relationships:** Clear and accurate tax invoices enhance transparency and trust in business transactions, fostering better relationships with customers and suppliers.

#### Conclusion

Tax invoices form the backbone of GST compliance by documenting taxable transactions and enabling the efficient flow of Input Tax Credit. Proper issuance and maintenance of invoices not only support accurate return filing but also safeguard businesses against disputes, penalties, and audit issues. A sound understanding of invoice requirements ensures compliance discipline and builds a strong foundation in GST practice.



## Topic

Module 5:  
Methods of Costing

Module 6:  
Cost Accounting  
Techniques

INTERMEDIATE

Group I - Paper-8

Cost Accounting  
(CA)



## Process Costing

Process Costing is a separate method of costing that refers to costing of operations or process involved in converting raw materials into finished goods or products. It is suitable for those types of business where continuous and mass productions of homogeneous products are being produced.

At least one question either from Normal/Abnormal Loss/ Abnormal Gain or from Inter-Process-Profit or from Equivalent Production or from Joint Product / Byproduct are expected from this chapter for all examination. For solving a problem it is very important to learn various methods of valuation of work-in-progress, completed production, Abnormal Loss/ Gain etc. Abnormal Loss or Abnormal Gain should be treated as good units. Difference among Joint Product, By-product and Co-product should be clearly understood.

### Job Costing:

It is that specific method of costing where cost are determined by the Job itself and production is done by specific orders. Here cost is calculated after the completion of job. As production is not continuous, more meaningful attention is required for proper control. Normally there may or may not be any opening or closing WIP.

### Normal Loss:

It is that kind of losses which is inherent in the processing operations. It can be expected or anticipated in advance i.e. at the time of estimation. Cost of Normal Loss is considered as part of cost of production in which it occurs. If normal loss units have any realizable scrap value, the process account is credited by the amount.

### Abnormal Loss:

It is that loss which is caused by unexpected or abnormal conditions such as accident, machine breakdown, substandard materials etc. These losses are segregated from process costs and investigated to prevent their occurrence in future. The Process Account is to be credited by Abnormal Loss Account with cost of materials, labor

and overhead equivalent to good units and the loss due to abnormal reasons is to be transferred to Costing Profit and Loss Account.

### Abnormal Gain:

If the actual loss of a process is less than the expected loss then the difference between the two will be treated as abnormal gain. The value of abnormal gain is transferred to the debit side of the relevant process and ultimately closed by crediting it to the Costing Profit and Loss Account.

### Features of process costing

1. The products are produced in one or more process.
2. The products are of standardized and homogeneous nature
3. When a product is produced through more than one process, then the output of each process will be input of the next process.
4. The cost of one process is transferred to next process.
5. The total cost of each process after deducting scrap value is divided by the total production units to obtain cost per unit in the process.

### Application of Process Costing

Process costing can be used in a large variety of industries. It is very suitable for such industries where the product is manufactured through a continuous sequence of operations.

Generally, the processes costing are used in the following types of industries:

- (i) Textile and Chemical industries.
- (ii) Manufacturing Industries like iron and steel, cement, paper mill, soap-making etc.
- (iii) Mining Industries-coal, oil etc.
- (iv) Public utility services-such as gas, electricity, water supply etc.

A Problem based on Normal and Abnormal Loss is given below for your easy understanding:--

### Problem:

A product finally obtained after it passes through three distinct processes. The following information is available from the cost records:--

	Process—I	Process—II	Process—III	Total (₹)
Materials (₹)	2,600	2,000	1,025	5,625
Direct Wages (₹)	2,250	3,680	1,400	7,330
Production O/H	----	----	---	7,330



500 units @ ₹ 4 per unit were introduced in Process – I. Production Overheads are absorbed as a % of Direct Wages.

The actual output and Normal Loss of the respective Process are:

	Output (units)	Normal Loss % of Input	Value of Scrap (₹)
Process -I	450	10%	₹ 2
Process –II	340	20%	₹ 4
Process –III	270	25%	₹ 5

Prepare the Process Accounts and the Abnormal Gain and Loss Accounts.

#### Process – I Account

Particulars	Units	Rate	Amount (₹)	Particulars	Units	Rate	Amount (₹)
To Input	500	4	2,000	By Normal loss	50	2	100
To Materials			2,600	By Process II (transferred)	450	20	9,000
To Direct Wages			2,250				
To Production O/H			2,250				
	500		9,100		500		9,100

#### Process – II Account

Particulars	Units	Amount (₹)	Particulars	Units	Rate	Amount (₹)
To Process I A/c	450	9,000	By Normal loss	90	4	360
To Materials		2,000	By Abnormal Loss	40	50	2,000
To Direct Wages		3,680	By Process III (transferred)	320	50	16,000
To Production O/H		3,680				
	450	18,360		450		18,360

#### Process – III Account

Particulars	Units	Rate	Amount (₹)	Particulars	Units	Rate	Amount (₹)
To Process II A/c	320		16,000	By Normal loss	80	5	400
To Materials			1,025	By Finished Stock A/c	270	80.93	21853
To Direct Wages			1,400				
To Production O/H			1,400				
To Ab. Gain.	30	80.93	2,428				
	350		22,253		350		22,253

### Budget and Budgetary Control

#### Budget

It is a plan expressed in monetary terms, stop. It is prepared and approved prior to the budget period may show income, expenditure, and the capital to be employed. It may be drawn up showing incremental effects on formal budgeted or actual figures to be completed by zero based budgeting.

#### Budgetary Control

It is designed to assist management in carrying out its functions by allocating responsibility and authority, to

aid in making plans and estimates for the future and to assist in the analysis of variation between the actual and estimates in order to develop the bases for measurement with standard for the purpose of measuring efficiency of operations. Budgetary control is a system of planning and controlling cost through continuous comparison of actual with the budgeted results.

Steps required for an efficient budgetary control system:

1. Dividing the organization according to function, known as budget centre.



2. Preparation of separate budget for each centre.
3. Coordination between the centers for establishing the responsibilities.
4. Measurement of actual performances.
5. Composition of actual performance with the budget in order to develop the deviations. Six analyse the variance is into its possible causes for motivating the right people to take right decisions and action in proper time.
6. Taking remedial measures to readjust the budgeted estimates.

### **Budget Centre:-**

It is an area or section of an organization for which control may be exercised and budget is prepared. Budget, which refers to a budget Centre, is a departmental budget. A budget Centre may consist of number of cost centers.

### **Budget Committee:-**

A budget committee is a committee to formulate a general program for preparing budget and to exercise overall control. As budgeting aims at coordination of activities. The main functions of the budget committee is to reconcile divergent views, to coordinate and finally to submit proposals for approval by the top executives.

### **Budget Period:-**

The budget period may be defined as the period for which budget is prepared and used for controlling actual performances. In fact, there is no fixed period and the budget period varies according to requirements of the organization.

### **Budget Manual:-**

Budget manual is a schedule or document setting out the responsibilities of the person engaged in, the routine of, and the forms and records required for budgetary control. It serves as a guide for departmental heads.

### **Budget Factor:-**

Budget factor is the factor whose influence must fast be assisted in order to ensure that functional budgets are responsibly capable of fulfillment. Often sales is the budget factor, but the other factor, such as men, materials, machines, capital, etc. May also act as budget factor.

### **Functional Budget:-**

It is a budget of income and expenditures that relates to any of the functions of an organization. There are various types of functional budgets depending on the size and policy of the organization. The budgets which are prepared frequently are:

### **Sales Budget:-**

Sales budget is a quantitative statement of future sales of an organization expressed in monetary terms. It is the most important functional budget, as sales are the key factor of an organization.

### **Production Budget:-**

It is a forecast for the quantities to be produced in a period for achieving the sales target. It may be prepared in terms of units or standard hours.

### **Capital Expenditure Budget:-**

It is a plan for proposed outlay on fixed assets during the budget period. The Capital expenditure budget is fast prepared on long-term basis keeping in view the potential demand for product, existing capacity of production and long-term business policy.

### **Personal Budget:-**

This budget is prepared to show the planned outlay on direct and indirect labor cost during the budget period as well as to show the number of skilled, semiskilled and skin manpower required to fulfill the production.

### **Purchase Budget:-**

This budget is prepared to show the materials to be brought during the budget period. This budget helps the organization in setting out the money required to purchase direct and indirect materials required for production or to purchase finish goods for trading operations. It is prepared showing quantity to be bought and its value.

### **Selling and Distribution Cost Budget:-**

This is prepared to show the estimated overhead expenses in sales and distribution to the goods to be sold during the budget period. It is prepared on the basis of sales budget, as it shows the cost quantities on sales budget.

Distribution expenses include the cost for handling the order, after sales service, expenditures, storage, outward, freight, credit collection, expenses, packing, export duty, insurance, etc. After consolidation of all these estimates, the final selling and distribution cost budget is to be presented to the budget committee for its approval.

### **Production Cost Budget: -**

It is the forecast of the estimated cost of production based on product production budget. It is actually the summary of material budget, labor, budget, factory overhead budget, and may be expressed by analyzing into its departments and or products.

### **Plant Utilization Budget:-**

It is the budget closely connected with the production budget, which will show the estimated plant facilities required to meet the budgeted production. This enables



one to estimate the number of machines required to be installed for production and at what time and for which production. The budget can be expressed in terms of working hours or in any other suitable units.

#### **Administration Cost Budget:-**

Administration cost budget is the budget showing the estimated cost of formulating the policies, directing the organization and controlling the operation of an undertaking. Administrative costs are mainly fixed in nature for a given period of time.

#### **Research and Development Cost Budget:-**

The Research and development cost budget is planned outlay on research and development for a given period. It helps in coordination with other plans and programmers of an organization. The budget will show the permissible limit within which the activities are to be pursued.

#### **Cash Budget:-**

It is the budget that forecast the cash receipts and

payments for a given period. This budget is prepared after the preparation of all functional budgets. For efficient running of an organization, the anticipated cash requires should be known in advance.

#### **Master Budget:-**

It is a budget, which is the summary of all functional budgets of an organization. It includes:

Budgeted, profit and loss account, budgeted, profit and loss, appropriation account, budgeted balance sheet, and budgeted cash flow statement. Budgeted costs are classified and summarized by types of expenses as well as by departments.

#### **Flexible Budget:-**

A flexible budget has been defined as a budget which is designed to change in accordance with the activities attended. Particularly it is a series of budgets for different levels of activities. Here costs are analyzed, behaviourwise, Viz., Variable, Fixed and semi variable expenses.



## Topic

Module 7:  
Economics of  
Maintenance  
and Spares  
Management

INTERMEDIATE

Group II - Paper-9

Operations  
Management  
and Strategic  
Management  
(OMSM)



In this issue let us discuss economics of maintenance and spares management under operations management

Economics of Maintenance and Spares Management deals with how an organization can maintain equipment at minimum cost while ensuring high reliability, safety, and productivity.

### Definition and objectives of maintenance

Maintenance refers to the set of activities carried out to keep equipment, machines, and facilities in proper working condition so they can perform their intended functions with minimum downtime, maximum efficiency, and at the lowest possible cost.

In simple terms:

Maintenance means maintaining equipment in a condition that ensures reliability, safety, and continuous production.

### Objectives of Maintenance

1. Ensure maximum equipment availability  
Reduce breakdowns and unplanned stoppages.
2. Increase equipment reliability and performance  
Ensure machines operate at required standards.
3. Extend the useful life of equipment  
Minimize wear and delay the need for replacements.
4. Reduce maintenance and operating costs  
Optimize repair, labor, spare parts, and downtime costs.
5. Maintain product quality and process consistency  
Prevent defects caused by poorly maintained machines.
6. Ensure safety of workers and equipment  
Prevent accidents due to faulty equipment.
7. Support smooth production flow  
Align maintenance with production schedules.
8. Improve energy efficiency  
Well-maintained equipment consumes less energy.
9. Comply with legal, environmental, and industry standards  
Meet regulatory requirements for equipment safety.
10. Promote continuous improvement  
Enhance maintenance performance using tools like TPM, Kaizen, and predictive technologies.

### Role of maintenance in business performance

Maintenance plays a strategic role in improving overall business performance by ensuring that equipment, machines, and facilities operate reliably, safely, and efficiently. In modern industries where production is continuous and competition is high, maintenance is no longer a support function—it is a key business driver that directly influences cost, productivity, and customer satisfaction.

#### 1. Ensures High Equipment Availability

A major role of maintenance is to reduce machine downtime. Higher equipment availability means smoother production flow, fewer stoppages, and better capacity utilization. This directly supports on-time deliveries and higher production output.

#### 2. Improves Productivity and Operational Efficiency

Well-maintained equipment works at optimal speed and efficiency. This increases throughput, reduces cycle time, and prevents bottlenecks. Good maintenance also minimizes rework and scrap, improving overall productivity.

#### 3. Enhances Product Quality

Poorly maintained machines often cause defects, variability, and quality failures. Maintenance ensures proper alignment, calibration, and working condition of equipment, resulting in consistent product quality and reduced quality-related costs.

#### 4. Reduces Total Operating Costs

Maintenance helps businesses avoid expensive breakdowns, emergency purchases, overtime costs, and production losses. Preventive and predictive maintenance reduce long-term costs by minimizing failures and extending equipment life.

#### 5. Improves Safety and Reduces Risk

Well-maintained equipment reduces the chances of accidents, fires, leaks, or hazardous failures. This protects worker safety, avoids legal liabilities, and improves trust within the workplace.

#### 6. Supports Customer Satisfaction and Delivery Reliability

When machinery runs reliably, companies can meet customer delivery targets consistently. This strengthens customer trust, improves reputation, and helps secure long-term contracts—especially in sectors like automotive.

#### 7. Extends Equipment Life and Asset Value

Regular maintenance delays equipment deterioration and



maximizes its usable life. This reduces capital investment needs and improves return on assets (ROA).

### 8. Contributes to Energy Efficiency

Machines in good condition consume less energy. Maintenance eliminates inefficiencies such as friction, leakages, overheating, or vibration, contributing to lower energy costs and sustainability goals.

### 9. Enables Data-Driven Decision Making

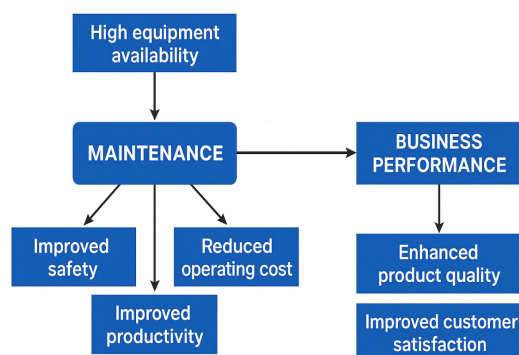
Modern maintenance systems (CMMS, IoT sensors, and predictive analytics) generate performance data that supports better budgeting, replacement decisions, and future planning.

### 10. Enhances Overall Business Competitiveness

By reducing downtime, improving quality, lowering costs, and ensuring reliability, maintenance strengthens the organization's competitive position in the market.

Maintenance is integral to business performance. It is not just about fixing machines; it is about ensuring reliability, supporting production, controlling costs, safeguarding quality, and enabling sustainable growth. Effective maintenance directly contributes to profitability and long-term business success.

**MAINTENANCE AND BUSINESS PERFORMANCE MODEL**



### Types of Maintenance

**Breakdown (Corrective) Maintenance:** Maintenance performed only after equipment has failed and needs repair to restore operation.

**Preventive Maintenance:** Maintenance carried out at regular, planned intervals to prevent equipment failure before it occurs.

**Predictive / Condition-Based Maintenance:** Maintenance based on real-time monitoring of equipment condition to predict and fix issues before failure happens.

**Corrective Maintenance:** Maintenance performed after a fault is detected to restore equipment to normal working condition.

**Autonomous Maintenance (AM):** Basic maintenance activities performed by machine operators such as cleaning, inspection, and minor adjustments.

**Total Productive Maintenance (TPM):** A company-wide maintenance approach that aims for zero breakdowns and maximum equipment effectiveness through operator involvement and continuous improvement.

**Reliability-Centered Maintenance (RCM):** A maintenance strategy focused on preserving system functions by prioritizing tasks based on failure risk and criticality.

**Planned Maintenance:** Maintenance that is pre-scheduled in advance, based on a structured plan to minimize downtime.

**Shutdown Maintenance:** Maintenance carried out when the plant or equipment is completely stopped, usually for major overhauls or inspections.

**Opportunity Maintenance:** Maintenance performed when an unexpected stoppage or idle time occurs, taking advantage of available downtime.

**Deferred Maintenance:** Maintenance that is postponed due to budget, time, or manpower constraints, increasing future risk and costs.

**Proactive Maintenance:** Maintenance focused on eliminating root causes of equipment failure rather than just fixing symptoms.

**Routine Maintenance:** Regular, repetitive maintenance tasks performed daily or weekly to keep equipment in good operating condition.

Maintenance Type	One-Line Definition	Real Business Example
Breakdown Maintenance	Repair after failure	A CNC machine in an auto plant stops due to spindle failure and is repaired immediately.
Preventive Maintenance	Scheduled maintenance at fixed intervals	Toyota schedules monthly lubrication and alignment checks for its robotic welding arms.
Predictive / Condition-Based Maintenance	Maintenance based on real-time condition monitoring	Tata Motors uses vibration sensors to predict bearing wear in engine assembly lines.
Corrective Maintenance	Fixing a detected fault to restore function	Maruti Suzuki fixes a detected hydraulic leak in a press machine before it fails completely.



Maintenance Type	One-Line Definition	Real Business Example
Autonomous Maintenance	Basic maintenance done by machine operators	Operators at Hyundai clean, inspect, and tighten bolts on machines at the start of each shift.
Total Productive Maintenance (TPM)	Company-wide effort to achieve zero breakdowns	Honda implements TPM to reduce downtime in paint shops and increase OEE.
Reliability-Centered Maintenance (RCM)	Maintenance based on criticality and failure risk	Ford prioritizes critical robots in assembly lines using RCM to avoid stoppages.
Planned Maintenance	Pre-scheduled maintenance work	A steel plant schedules an annual furnace shutdown for cleaning and inspection.
Shutdown Maintenance	Maintenance when the entire system is stopped	NHPC does shutdown maintenance during peak winter season when inflows to hilly rivers go to minimum forcing complete S/D of hydel power plant
Opportunity Maintenance	Maintenance done during unexpected idle time	A bottling plant performs pump inspection when a raw material delay halts production.
Deferred Maintenance	Required maintenance postponed intentionally	A warehouse delays repainting and minor electrical repairs due to budget constraints.
Proactive Maintenance	Eliminating root causes of failures	Bosch identifies cause of recurrent motor overheating and redesigns cooling system.
Routine Maintenance	Daily or weekly basic upkeep tasks	Daily cleaning and lubrication of conveyor belts in a food processing plant.

### Illustrations:

1. A machine suddenly stops working during production. The maintenance team is called immediately to repair it and restart operations.

What type of maintenance is this?

- (a) Preventive Maintenance
- (b) Breakdown Maintenance
- (c) Predictive Maintenance
- (d) Autonomous Maintenance

2. An automobile company schedules lubrication of all robotic arms every 15 days as per the manufacturer's manual, whether a fault is detected or not.

What type of maintenance is this?

- (a) Predictive
- (b) Preventive
- (c) Breakdown
- (d) Corrective

3. A vibration sensor on a CNC spindle shows abnormal vibration patterns. The team replaces the bearing before it fails.

Which type of maintenance is being applied?

- (a) Breakdown

- (b) Preventive

- (c) Predictive / Condition-Based

- (d) Deferred

4. An operator notices excessive noise during machine startup and tightens loose bolts as part of his daily checklist.

This is an example of:

- (a) Autonomous Maintenance
- (b) Breakdown Maintenance
- (c) Shutdown Maintenance
- (d) Corrective Maintenance

5. During an unexpected power cut, the maintenance team checks and cleans all cooling fans because the production line is idle.

Which maintenance approach is this?

- (a) Opportunity Maintenance
- (b) Planned Maintenance
- (c) Corrective Maintenance
- (d) Predictive Maintenance

6. A steel plant stops its blast furnace for 5 days every year to perform major internal inspection and refractory lining replacement.



What type of maintenance is performed?

- (a) Autonomous
- (b) Shutdown Maintenance
- (c) Breakdown
- (d) Routine

7. A technician identifies minor leakage in an oil seal and fixes it before the machine completely fails.

Which maintenance type does this represent?

- (a) Preventive
- (b) Corrective
- (c) Predictive
- (d) Breakdown

8. A company keeps postponing non-critical building repairs and equipment repainting because the yearly budget is fully utilized.

Which maintenance type is this?

- (a) Deferred Maintenance
- (b) Routine Maintenance
- (c) Preventive Maintenance
- (d) Corrective Maintenance

9. A food processing plant performs daily cleaning and lubrication of conveyors as part of a standard checklist.

What type of maintenance is this?

- (a) Predictive
- (b) Routine Maintenance
- (c) Breakdown
- (d) Proactive

10. A company studies recurring failures in its hydraulic press and modifies the design of its cooling system to fully eliminate the root cause.

Which maintenance philosophy is this?

- (a) Breakdown Maintenance
- (b) Routine Maintenance
- (c) Proactive Maintenance
- (d) Preventive Maintenance

11. A vehicle assembly plant notices that its automated painting booth frequently overheats during peak

production hours. Analysis shows temperature starts rising gradually 3–4 days before the system fails. The company installs LOT sensors that track temperature, humidity, and airflow in real time. Maintenance is performed only when sensor readings cross a threshold, even though the machine is still running.

What maintenance strategy is being implemented?

- (a) Preventive Maintenance
- (b) Breakdown Maintenance
- (c) Predictive / Condition-Based Maintenance
- (d) Corrective Maintenance

12. A forging plant experiences frequent die failures during production. To reduce downtime, the maintenance team studies past failure data and realizes that dies used in high-temperature forging fail after roughly 1,800 cycles. The team then schedules die replacement exactly at 1,700 cycles, even if the die still looks functional.

This approach is an example of:

- (a) Preventive Maintenance using age-based replacement
- (b) Predictive Maintenance using sensor data
- (c) Breakdown Maintenance
- (d) Proactive Maintenance

13. A truck manufacturing company finds that its air compressors fail due to moisture accumulation in filters. Instead of replacing the compressors repeatedly, the maintenance team redesigns the filtration system and installs an automatic moisture-purging mechanism. Since this change permanently removes a recurring failure cause, compressor breakdowns drop by 80%.

Which maintenance philosophy best describes this?

- (a) Preventive Maintenance
- (b) Proactive Maintenance (Root Cause Elimination)
- (c) Routine Maintenance
- (d) Shutdown Maintenance

14. During an annual shutdown, a heavy machinery plant inspects boilers, replaces worn tubes, recalibrates pressure gauges, cleans the entire furnace, and performs statutory safety checks. These tasks are legally required and can only be done when the plant is completely offline.



This type of maintenance is:

- (a) Corrective Maintenance
- (b) Preventive Maintenance (time-based)
- (c) Shutdown / Overhaul Maintenance
- (d) Predictive Maintenance

15. An automotive parts supplier keeps a large spare inventory of servo motors because they often fail suddenly. To reduce costs, the company decides to implement a system where operators perform daily checks for noise, heat, lubrication level, and

controller alarms. Over time, they learn to detect early signs of failure and replace motors before they fail, reducing spare inventory by 40%.

This is an example of:

- (a) Breakdown Maintenance
- (b) Autonomous Maintenance evolving into Predictive Maintenance
- (c) Preventive Maintenance
- (d) Deferred Maintenance

**Answer:**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
b	b	c	a	a	b	b	a	b	c	c	b	b	c	b

### ***Suggestions:***

*The study notes need to be read thoroughly. Supplementary readings could be made from other resources. The illustrations are just indicative type. Maximum benefits could be reaped once Guide book on the paper 9- Operations Management & Strategic Management written and issued by Institute on New Syllabus along with reference books are thoroughly consulted.*

***Best Wishes.***



## Topic

Module 5:  
Accounting  
Standards

Module 8:  
Auditing of  
Different Types of  
Undertakings

INTERMEDIATE

Group II - Paper-10

Corporate  
Accounting and  
Auditing (CAA)



## Section A: Corporate Accounting

## Topic: Accounting Standards

## • Multiple Choice Questions

1. What is the primary objective of general-purpose financial reporting as per the Conceptual Framework?
  - A. To determine taxable income
  - B. To provide information useful to existing and potential investors, lenders and other creditors
  - C. To measure entity performance for regulatory authorities
  - D. To prevent fraud

**Answer: B. To provide information useful to existing and potential investors, lenders and other creditors**

2. Which of the following is not one of the fundamental qualitative characteristics of useful financial information?
  - A. Faithful representation
  - B. Relevance
  - C. Comparability
  - D. Both A and B

**Answer: C. Comparability**

3. Faithful representation requires financial information to be:
  - A. Comparable, verifiable, timely
  - B. Complete, neutral, free from error
  - C. Accurate, audited, timely
  - D. Verified by external auditors

**Answer: B. Complete, neutral, free from error**

4. Enhancing qualitative characteristics include all of the following except:
  - A. Timeliness
  - B. Understandability
  - C. Verifiability
  - D. Neutrality

**Answer: D. Neutrality**

5. Which of the following is not an element of financial statements according to the Conceptual Framework?
  - A. Assets
  - B. Liabilities
  - C. Income

- D. Reserves

**Answer: D. Reserves**

6. An asset is defined as:
  - A. A resource owned by the entity
  - B. A resource controlled by the entity that has potential to produce economic benefits
  - C. A resource that must have a cost
  - D. A resource purchased in the past

**Answer: B. A resource controlled by the entity that has potential to produce economic benefits**

7. A present obligation arising from past events, the settlement of which is expected to result in an outflow of resources, is known as:
  - A. Expense
  - B. Liability
  - C. Contingent item
  - D. Provision

**Answer: B. Liability**

8. Income includes:
  - A. Only revenue
  - B. Gains and losses
  - C. Increases in assets or decreases in liabilities that increase equity
  - D. Only revenue from core operations

**Answer: C. Increases in assets or decreases in liabilities that increase equity**

9. Which of the following is a necessary criterion for recognition of an element (asset, liability, income, expense)?
  - A. It must be material
  - B. It must arise from a transaction
  - C. It must provide relevant information and faithful representation
  - D. It must be measurable in cash

**Answer: C. It must provide relevant information and faithful representation**

10. Which measurement basis is not discussed in the Conceptual Framework?
  - A. Historical cost



- B. Fair value
- C. Value in use
- D. Liquidation value

**Answer: D. Liquidation value**

11. “Substance over form” is an aspect of which qualitative characteristic?

- A. Relevance
- B. Verifiability
- C. Faithful representation
- D. Understandability

**Answer: C Faithful representation**

12. The reporting entity concept in the Framework refers to:

- A. Only companies registered under the Companies Act
- B. The boundary within which financial information is prepared
- C. A group of companies only
- D. Any legal entity with revenue greater than ₹1 crore

**Answer: B. The boundary within which financial information is prepared**

13. Information is material if:

- A. It changes the auditor’s opinion
- B. Its omission or misstatement could influence

users’ decisions

- C. It exceeds 5% of total assets
- D. It forms part of notes to accounts

**Answer: B. Its omission or misstatement could influence users’ decisions**

14. Which statement about the Conceptual Framework is correct?

- A. It overrides the requirements of specific Ind AS standards
- B. It applies only when preparing consolidated financial statements
- C. It helps ASB develop standards and assists preparers when a standard is silent
- D. It is legally enforceable in the same way as Ind AS

**Answer: C. It helps IASB/Ind AS Board develop standards and assists preparers when a standard is silent**

15. The going concern assumption means that:

- A. The entity will liquidate within 12 months
- B. The entity normally continues in operation for the foreseeable future
- C. Assets are measured at liquidation values
- D. Liabilities are not recognised

**Answer: B. The entity normally continues in operation for the foreseeable future**

## Section B: Auditing

### Topic: Auditing of Different Types of Undertakings

#### Question:

Prepare an audit programme for a nursing home.

#### Answer:

An audit programme for a nursing home should include the following points:

#### 1. Preliminary Planning

1. Obtain basic information about:
  - o Number of beds and wards
  - o Departments (OPD, IPD, Pharmacy, Pathology, Radiology, OT)
  - o Staff strength (doctors, nurses, paramedical staff, admin)
2. Review internal control systems and organisational chart.

3. Understand statutory compliance requirements:

- o Clinical Establishments Act / local laws
- o Labour laws
- o Fire safety, biomedical waste, pollution control
- o Drug licence & pharmacy regulations

4. Prepare audit plan and sampling methodology.

#### 2. Internal Controls & MIS

1. Review billing controls and prevention of revenue leakage.
2. Evaluate IT systems (HIS) and data security.
3. Examine MIS reports: bed occupancy, collection summaries, department-wise performance.



### 3. Audit of Revenue

#### A. In-Patient (IPD) Revenue

1. Verify admission procedures and documentation.
2. Check rate charts for room rent, nursing charges, equipment and procedure charges.
3. Reconcile:
  - o Bed occupancy records
  - o Daily census report
  - o Bills raised
4. Verify discharge summary and final bill.
5. Check billing for procedures, surgeries, consultant charges, medicines, consumables.
6. Examine adjustments, concessions, write-offs, refunds.
7. Verify collection of payments and deposits.

#### B. Out-Patient (OPD) Revenue

1. Check registration of patients and daily receipts.
2. Verify consultation charges, lab tests, radiology tests.
3. Reconcile daily OPD register with cash/digital collections.

#### C. Pharmacy Revenue

1. Check billing system for pharmacy sales to IPD and OPD.
2. Ensure transfer of medicines/consumables to wards is billed properly.
3. Reconcile pharmacy stock records with financial accounts.

### 4. Audit of Purchases and Stores

1. Verify purchase procedures: requisition, order, GRN, invoice checking.
2. Review procurement of medicines, surgical items, consumables, linen, food supplies.
3. Test-check vendor rates, discounts, credit terms.
4. Examine inventory control in:
  - o Central stores
  - o Pharmacy
  - o Operation theatre (OT) stores
  - o CSSD (Sterile supply department)
5. Conduct physical verification of selected items.
6. Check for expiry, obsolescence, pilferage.

### 5. Audit of Fixed Assets & Equipment

1. Verify purchase and installation of medical equipment (X-ray, USG, ECG, monitors, etc.).

2. Check asset register, identification tags and depreciation.
3. Review AMC/ service contracts.
4. Verify usage logs for high-value equipment.

### 6. Payroll and HR Audit

1. Verify attendance, biometric records and duty rosters.
2. Check payroll computation for doctors, nurses, technicians, admin staff.
3. Verify statutory deductions: PF, ESI, TDS, Professional Tax.
4. Review consultant contracts and payments.

### 7. Audit of Expenses

1. Test-check purchases, consumables issued, housekeeping, laundry, pathology reagents, radiology films, ambulance expenses.
2. Verify utility payments (water, electricity, oxygen supply).
3. Review repairs and maintenance.
4. Check insurance and professional indemnity coverage.

### 8. Compliance & Regulatory Audit

1. Verify licences and registrations:
  - o Clinical Establishment licence
  - o Pollution control / Biomedical waste disposal
  - o Fire safety certificate
  - o Drug licence
  - o Blood bank licence (if applicable)
2. Review patient safety policies.
3. Check compliance with biomedical waste segregation and disposal norms.
4. Verify maintenance of mandatory registers (OT register, birth/death register, drug stock register, etc.).

### 9. Financial Statement Verification

1. Reconcile revenue with ledger accounts and bank statements.
2. Verify outstanding receivables (TPA/insurance claims).
3. Check cash handling, deposits, and bank reconciliation statements.
4. Review provisions, contingent liabilities, depreciation and closing stock.

### 10. Reporting

1. Prepare audit observations.
2. Provide recommendations for improved controls, efficiency, compliance and cost management.
3. Discuss draft report with management before issuing final audit report.



## Topic

Module 6:  
Working Capital  
Management

Module 9:  
Data Processing,  
Organisation,  
Cleaning and  
Validation

## INTERMEDIATE

### Group II - Paper-11

Financial  
Management and  
Business Data  
Analytics (FMDA)



## Financial Management

### Receivables Management

Receivable management is the process of monitoring, controlling, and collecting money owed to a company by its customers for goods or services purchased on credit. It involves managing the entire lifecycle of customer payments, from setting credit terms and invoicing to tracking payments and collecting overdue debts, all to ensure healthy cash flow and minimize the risk of non-payment.

#### Cost of Receivables Management

The major categories of costs associated with the extension of credit and accounts receivable are:

- (i) **Collection cost:** Collection cost is the administrative cost incurred in collecting receivables. Example: additional expenses on the creation and maintenance of a credit department with staff, accounting records, stationery, postage and other related items.
- (ii) **Capital cost:** Capital cost is the cost on the use of additional capital to support credit sales which alternatively could have been employed elsewhere. Example: Meanwhile, the firm has to pay employees and suppliers of raw materials, thereby implying that the firm should arrange for additional funds to meet its own obligations while waiting for payment from its customers
- (iii) **Delinquency cost:** Delinquency cost is cost arising out of failure of customers to pay on due date. Example: blocking-up of funds for an extended period.
- (iv) **Default cost:** Default costs are the over dues that cannot be recovered. These costs are associated with credit sales and accounts receivable.

#### Credit Policy

The credit policy of a firm provides the framework to determine:

- (a) whether or not to extend credit to a customer and
- (b) how much credit to extend.

The credit policy decision of a firm has two broad dimensions:

- (i) Credit standards and
- (ii) Credit analysis.

A firm has to establish and use standards in making credit decisions, develop appropriate sources of credit information and methods of credit analysis.

#### Credit Standards

The term 'credit standards' represents the basic criteria for the extension of credit to customers. The quantitative

basis of establishing credit standards are factors such as credit ratings, credit references, average payments period and certain financial ratios.

#### Credit Analysis

Besides establishing credit standards, a firm should develop procedures for evaluating credit applicants. The second aspect of credit policies of a firm is credit analysis and investigation. Two basic steps are involved in the credit investigation process:

- (a) obtaining credit information, and
- (b) analysis of credit information.

It is on the basis of credit analysis that the decisions to grant credit to a customer as well as the quantum of credit would be taken.

#### Example 1

Suria Ltd. is contemplating an increase in the credit period from 30 to 60 days. The average collection period which is at present 45 days is expected to increase to 75 days. It is also likely that the bad debt expenses will increase from the current level of 1 per cent to 3 per cent of sales. Total credit sales are expected to increase from the level of 30,000 units to 34,500 units. The present average cost per unit is ₹8, the variable cost and sales per unit is ₹6 and ₹10 per unit respectively. Assume the firm expects a rate of return of 15 per cent. Should the firm extend the credit period?

#### Answer:

- (i) Profit on additional sales =  $(₹4 \times 4,500) = ₹18,000$
- (ii) Cost of additional investments in receivables =

Average investments with the proposed credit period less average investments in receivables with the present credit period:

$$\text{Proposed plan} = \text{Cost of sales} / \text{Turnover of receivables} \\ = [(\₹8 \times 30,000) + (\₹6 \times 4,500)] \div (360 \div 75) = ₹55,625$$

$$\text{Present plan} = [(\₹8 \times 30,000)] / (360 \div 75) = ₹30,000$$

$$\text{Additional investment in accounts receivable} \\ = ₹55,625 - ₹30,000 = ₹25,625$$

$$\text{Cost of additional investment at 15 per cent} = 0.15 \times ₹25,625 = ₹3,843.75.$$

- (iii) Additional bad debt expenses: This is the difference between the bad debt expenses with the proposed and present credit periods.

$$\text{Bad debt with proposed credit period} = 0.03 \times ₹3,45,000 = ₹10,350$$



Bad debt with present credit period = ₹0.01 × 3,00,000 = ₹3,000

Additional bad debt expense = (₹10,350 - ₹3,000) = ₹7,350

Thus, the incremental cost associated with the extension of the credit period is ₹ 11,193.75 (₹ 3,843.75 + ₹7,350).

As against this, the benefits are ₹18,000. There is, therefore, a net gain of ₹ 6,806.25, that is, (₹18,000 – ₹11,193.75).

The firm would be well-advised to extend the credit period from 30 to 60 days.

### Effect of Relaxation of Credit Period to Two Months

Particulars	Amount (₹)
Incremental sales revenue (4,500 × ₹ 10)	45,000.00
Less: incremental variable costs (4,500 × ₹ 6)	<u>27,000.00</u>
Incremental contribution	18,000.00
Less: incremental cost of additional investment in debtors	3,843.75
Less: Increase in bad debts	<u>7,350.00</u>
Incremental profit	<u>6,806.25</u>

### Example 2

In order to increase sales from normal level of ₹2.4 lakhs per annum, the marketing manager submits a proposal for liberalizing credit policy as under:

Normal sales ₹2.4 lakhs

Normal credit period: 30 days

Proposed increase in credit period beyond normal 30 days	Relevant increase over normal sales
15 days	12,000
30 days	18,000
45 days	21,000
60 days	24,000

The P/V ratio of the company is 33.33%. The company expects a pretax return of 20% on investment. Evaluate four alternatives and advice the management. (Assume 36) days a year)

### Answer:

Statement showing evaluation of credit policies:

Particulars	Present	Option I	Option II	Option III	Option IV
Credit period	30 days	45 days	60 days	75 days	90 days
Annual sales (₹)	2,40,000	2,52,000	2,58,000	2,61,000	2,64,000
Less: Variable costs (66.67% of sales)	(1,60,000)	(1,68,000)	(1,72,000)	(1,74,000)	(1,76,000)
Less: Cost of investment in (debtors × required return)	(4,000)	(6,300)	(8,600)	(10,875)	(13,200)
Profit	76,000	77,700	77,400	76,125	74,800
Incremental profit	-	1,700	1,400	125	(1,200)
Debtors on sales	20,000	31,500	43,000	54,375	66,000

Comment: Option I having credit period of 45 days should be adopted as it yield maximum incremental income over present income.



## DATA ANALYTICS

### DATA VALIDATION

Data validation is the process of ensuring that data is accurate, consistent, and adheres to predefined rules and standards before it is used, stored, or processed. Data validation provides accuracy, cleanness, and completeness to the dataset by eliminating data errors from any project to ensure that the data is not corrupted. While data validation can be performed on any data, including data within a single application such as Excel creates better results. Inaccurate and incomplete data may lead the end-users to lose trust in data.

Common types include format validation, range checks, schema validation, and cross-field validation. These rules ensure data conforms to specified patterns, falls within acceptable ranges, and maintains consistency across related fields

#### How does data Validation work?

Data validation entails the establishment and enforcement of business rules and data validation checks.

While different organizations use different rules and data validation techniques, the most common types of data validation checks are:

- **Code checks**
- **Consistency checks**
- **Data type checks**
- **Format checks**
- **Range checks**
- **Uniqueness checks**

#### (i) Code checks

A code check determines whether a data value is valid by comparing it to a list of acceptable values. Some examples include country codes, International Standard Book Number (ISBN) codes and North American Industry Classification System (NAICS) codes for classifying businesses.

#### (ii) Consistency checks

Consistency checks confirm that input data is logical

and does not conflict with other values. An example is checking if the delivery date is after the shipping date for a parcel.

#### (iii) Data type checks

A data type defines the valid format for data in a particular column. Examples of data types might include text, numeric or date. This check identifies each value that does not match the selected data type in length, precision or scale—or that violates the specified data type.

#### (iv) Format checks

Format checks are implemented for columns that have specific data formatting requirements, such as columns for phone numbers, email addresses and dates. A common use case is date columns that are stored in a fixed format like “YYYY-MM-DD” or “DD-MM-YYYY.” A data validation procedure that ensures dates are in the proper format helps maintain consistency across data and through time.

#### (v) Range checks

Range checks determine whether numerical data falls within a predefined range of minimum and maximum values. For example, latitude and longitude are commonly used in geographic data. A latitude value should be between -90 and 90, while a longitude value must be between -180 and 180. Any values out of this range are invalid.

#### (vi) Uniqueness checks

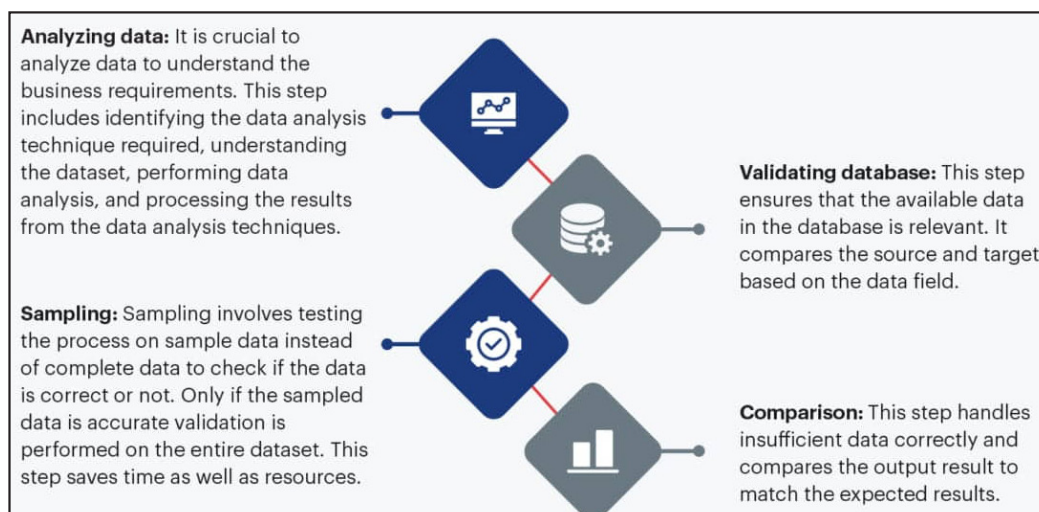
Uniqueness checks apply to columns where every data entry must be unique and there are no duplicate values. Some data like IDs or e-mail addresses are unique by nature. A database should likely have unique entries on these fields. A uniqueness check ensures that an item is not entered multiple times into a database.

Other checks used for data validation include length checks (ensuring the right number of characters in a field); presence checks (ensuring mandatory fields are not blank); and schema validation (ensuring that data conforms to a predefined structure).



## Data Validation Process

The data Validation process consists of the following steps:



Source: <https://www.sigmoid.com/blogs/data-validation/>



## Topic

Module 5:  
Transfer Pricing

Module 8:  
Divisional  
Performance  
Measurement

# INTERMEDIATE

## Group II - Paper-12

### Management Accounting (MA)



## Module 5: Transfer Pricing

### Concept of Transfer Pricing

Transfer pricing determines how revenue and cost are attributed to different divisions. When a selling division transfers goods or services to a buying division, the transfer price directly affects the profitability of both divisions. The objective is to set a price that motivates divisions to operate efficiently while maximizing overall organizational profit.

Key terms include:

- **Profit Centre:** A segment responsible for generating revenue and controlling costs.
- **Divisional Autonomy:** Freedom of divisional managers to make independent decisions.
- **Goal Congruence:** Alignment of divisional goals with overall organizational objectives.

A well-designed transfer pricing system encourages divisional autonomy while maintaining goal congruence.

### Methods and Techniques of Transfer Pricing

Cost and management accountants use various methods to determine transfer prices. Key methods include:

#### 1. Cost-Based Transfer Pricing

Transfer prices are based on cost, with several versions:

- **Marginal Cost**
- **Absorption Cost**
- **Standard Cost**
- **Marginal Cost plus a Fixed Mark-up**

This method is simple but may not motivate divisions to control costs efficiently.

#### 2. Market-Based Transfer Pricing

Here, the price of a comparable product in the external market is used as the transfer price. This promotes efficiency and ensures fairness, but it works only when an external market exists.

#### 3. Negotiated Transfer Pricing

The selling and buying divisions negotiate the price. This method supports divisional autonomy but may lead to conflicts and lengthy negotiations.

#### 4. Dual-Rate Transfer Pricing

Two prices are used for the same transaction—one for the selling division (often a full cost) and another for the buying division (frequently marginal cost). This method promotes goal congruence but complicates accounting records.

#### 5. Two-Part Transfer Pricing

The selling division charges:

- Marginal cost per unit, and
- A fixed annual fee to the buying division

This ensures efficient decision-making aligned with overall profit maximization.

#### 6. Opportunity Cost Approach

The transfer price considers the contribution the organization sacrifices by not selling externally. It is useful when external markets are imperfect or when capacity constraints exist.

### Divisional Performance and Goal Congruence

Transfer pricing directly influences divisional performance evaluation. When divisions are treated as profit centres, transfer prices affect their reported profitability.

Challenges may arise when:

- Divisional managers focus on maximizing their own profit rather than overall company profit.
- Transfer prices distort performance measurement.
- Conflicts occur between divisions over transfer pricing decisions.

Cost and management accountants must design systems that:

- Encourage cooperation,
- Prevent dysfunctional behaviour, and
- Align divisional decisions with overall organizational goals.

Methods like market-based transfer pricing and opportunity - cost approaches generally promote stronger goal congruence.



## Determination of Inter-departmental / Inter-company Transfer Prices

For internal transfers, cost and management accountants must ensure that the transfer price reflects:

- True production costs,
- Overheads,
- Market conditions, and
- Opportunity costs.

Transparent transfer pricing systems improve coordination, resource allocation, and efficiency across departments or units within the same company.

## International Transfer Pricing

Multinational corporations face additional complexities due to:

- Different tax laws,
- Exchange rate fluctuations, and
- Country-specific regulatory requirements.

International transfer pricing requires adherence to global tax rules to avoid penalties, double taxation, or accusations of profit shifting. Methods like CUP, Resale Price, Cost-Plus, Transactional Net Margin, and Profit Split Methods help determine arm's-length prices for cross-border transactions.

## Multiple Choice Questions (MCQs):

1. What is the primary objective of transfer pricing in cost and management accounting?
  - a) Maximizing shareholder wealth
  - b) Ensuring fairness and accuracy in cost allocation
  - c) Minimizing tax liabilities
  - d) Increasing market share
2. Which method uses cost plus a markup to determine transfer price?
  - a) Negotiated pricing
  - b) Market-based pricing
  - c) Opportunity cost method
  - d) Cost-plus method
3. What challenge does transfer pricing pose in relation to divisional performance evaluation?
  - a) Incentivizing collaboration
  - b) Ensuring compliance with tax regulations
  - c) Addressing goal congruence issues
  - d) Minimizing production costs
4. What issue arises when divisional managers prioritize their own performance objectives over the broader goals of the organization?
  - a) Goal congruence
  - b) Transfer pricing compliance
  - c) Tax optimization
  - d) Resource allocation
5. International transfer pricing becomes necessary due to:
  - a) Lack of skilled employees
  - b) Different tax laws and regulations across countries
  - c) Seasonal variations in demand
  - d) Lack of internal coordination
6. What is the primary challenge associated with international transfer pricing?
  - a) Allocating overhead costs
  - b) Navigating differences in tax regulations
  - c) Determining divisional performance metrics
  - d) Setting transfer prices based on market conditions
7. Opportunity cost in transfer pricing refers to:
  - a) Cost of machinery replacement
  - b) Additional training cost
  - c) Contribution foregone by not selling externally
  - d) Cost of hiring new employees
8. Orion Manufacturing Ltd. determines inter-divisional transfer prices on the basis of cost plus a return on investment. The budget for Division Z for the year 2022–23 is as follows: the division holds fixed assets worth ₹8,00,000, current assets worth ₹5,00,000, and debtors of ₹2,00,000. The annual fixed cost of



the division amounts to ₹8,00,000, and the variable cost per unit of the product is ₹10. The division's budgeted production volume is 4,00,000 units per year, and the desired return on investment (ROI) is 28%. Based on this information, what should be the transfer price for Division Z?

- a) ₹13.05
- b) ₹10.70
- c) ₹8.70
- d) ₹14.70

9. The Northern division of a XYZ company sells goods internally to the Southern division. The quoted external price in industry publications from a supplier near Eastern is 200 per ton plus transportation, which costs ₹20 per ton to transport the goods to Western. The actual market cost per ton for Eastern to buy the direct materials to make the transferred product is ₹100. The actual per ton direct labor cost is 50, and other actual costs of storage and handling amount to ₹40. The company president selects a ₹220-transfer price. This scenario illustrates:

- a) Market-based transfer pricing
- b) Negotiated transfer pricing.
- c) Cost plus 10% transfer pricing.
- d) Cost-based transfer pricing.

10. Sigma Industries has two divisions—Division A and Division B. Division A manufactures a component that is transferred internally to Division B. The component has no external market, and each year 6,000 units produced by Division A are transferred to Division B. The variable cost per unit in Division A is ₹100, while the variable cost per unit in Division B is ₹120. Division A incurs annual fixed costs of ₹1,20,000, and Division B incurs annual fixed costs of ₹90,000. The Head Office has decided that the transfer price must be set so that Division A earns a profit of ₹30,000. Based on this requirement, what should be the transfer price per unit?

- a) ₹145
- b) ₹135
- c) ₹120
- d) ₹125

**Answer:**

- 1. b
- 2. d
- 3. c
- 4. a
- 5. b
- 6. b
- 7. c
- 8. a
- 9. c
- 10. d

**True and False:**

- 1. Domestic Transfer pricing refers to the pricing strategy in play when there is transfer of goods/ services between associated enterprises, in International Transactions.
- 2. Transfer pricing is concerned with the price one profit centre charges another profit centre within the company for products or services provided.
- 3. A company with a decentralized organizational structure is one where mid- and lower-level managers make most of the decisions, rather than the senior management team.
- 4. The decision-making and the performance evaluation objectives for establishing a transfer pricing system does not conflict with each other.
- 5. Divisional Autonomy is the degree of freedom a division manager can exercise in decisions making.

**Answer:**

- 1. False
- 2. True
- 3. True
- 4. False
- 5. True



**Fill in the blanks:**

1. \_\_\_\_\_ Transfer Price could be set through a process of negotiation between the buying and selling divisions.
2. \_\_\_\_\_ is the most popular method of transfer pricing.
3. \_\_\_\_\_ transfer pricing uses two separate transfer prices to price each inter-divisional transaction.
4. Domestic transfer pricing is concerned with fairly compensating an \_\_\_\_\_ for products.

5. A \_\_\_\_\_ is a company's department that is responsible for the profits of the company.

**Answer:**

1. Negotiated
2. Market based pricing
3. Dual-rate
4. transfer price
5. Profit Centre



## Module 8 : Divisional Performance Measurement

### 1. Organisations with Multiple Divisions and Benefits of Decentralization

As organizations grow, operations become more complex in terms of products, customer base, technology, and geographic spread. To manage these complexities, companies often shift from a centralized structure—where top management makes most decisions—to a decentralized structure, where decision-making authority is delegated to sub-unit managers.

Decentralization allows local managers to use local information, react quickly to changes, and relieve top management from routine tasks so they can focus on long-term strategic planning. It also helps develop managerial talent, increases job satisfaction, and enables comparative evaluation across divisions. However, decentralization may result in lack of goal congruence, communication challenges, resistance from managers unwilling to delegate, and higher costs due to errors or training.

Decentralized firms create responsibility centers, mainly cost centers, revenue centers, profit centers, and investment centers. Divisional structures are especially useful in large and diversified companies, making it easier to measure divisional and managerial performance. However, decentralization must be balanced with central oversight on core functions such as cash management or treasury operations.

### 2. DuPont Analysis

The DuPont model, introduced by the DuPont Corporation, breaks down Return on Equity (ROE) into three drivers: net profit margin (operating performance), total asset turnover (asset usage), and financial leverage (use of debt). This decomposition helps managers and investors understand which aspect of the business is influencing ROE.

The DuPont formula is:

$$\text{ROE} = \text{Net Profit Margin} \times \text{Asset Turnover} \times \text{Financial Leverage}$$

Net profit margin measures operating efficiency. Asset turnover indicates whether assets are being used efficiently to generate sales. Financial leverage shows how much debt is used in the company's capital structure.

The DuPont method highlights strengths and weaknesses in the business. For example, a company with a high ROE due to high leverage may face increased financial risk. Managers use this analysis for performance evaluation, capital allocation, and comparison of divisions or companies. Investors also use it to gauge sustainability of ROE and identify whether improvements stem from genuine performance or increased leverage.

Extended DuPont analysis decomposes profit margin further into EBIT margin, interest burden, and tax burden, providing deeper insight into operations, financing, and tax efficiency. The five-step DuPont model links net income and shareholder equity through tax burden, interest burden, operating margin, asset turnover, and leverage.

### 3. Divisional Performance Measurement Tools: ROI and Residual Income

Organizations use divisional performance measures to align managerial decisions with company objectives. Two major tools are Return on Investment (ROI) and Residual Income (RI).

#### Return on Investment (ROI)

ROI expresses divisional profit as a percentage of assets employed and is similar to Return on Capital Employed (ROCE).

$$\text{ROI} = \text{Profit before interest and tax} \div \text{Capital employed}$$

ROI helps compare divisions of different sizes and is well understood by managers. It can be improved by increasing profit margin, increasing asset turnover, or both. However, ROI has problems:

- It ignores the cost of equity capital.
- It may encourage managers to focus on short-term gains.
- Divisions with old depreciated assets may appear more efficient.
- Managers may reject projects that yield returns below their current ROI even if the project benefits the company.

#### Residual Income (RI)

Residual Income overcomes some limitations of ROI by incorporating a capital charge for the investment used.

$$\text{RI} = \text{Divisional profit} - (\text{Required rate of return} \times \text{Divisional investment})$$

RI motivates managers to accept any project earning more than the required rate of return, ensuring better goal congruence. It accounts for opportunity cost and supports long-term decision making. However, RI is an absolute measure and cannot easily compare divisions of different sizes, so targeted levels of RI must be set.

Projects with positive RI are always beneficial for the company, even if they reduce divisional ROI.

### 4. Economic Value Added (EVA)

EVA is a value-based financial performance measure



developed by Stern Stewart & Co. It calculates the economic profit generated after covering the full cost of capital—both debt and equity.

$$\text{EVA} = \text{NOPAT} - (\text{WACC} \times \text{Capital Employed})$$

NOPAT is Net Operating Profit After Tax.

WACC (Weighted Average Cost of Capital) includes risk-free rate, beta, equity risk premium, and post-tax cost of debt.

EVA recognizes that capital is not free; investors expect a return reflecting risk. A positive EVA means the division or company is creating shareholder value; a zero EVA means shareholder expectations are met; a negative EVA means value is destroyed.

EVA adjusts for accounting distortions and is widely used for investment decisions, performance evaluation, and bonus plans. EVA centres focus on responsibility accounting, dividing the organization into cost, profit, and investment centres. Managers are held accountable not only for profits but also for the capital they use.

EVA helps managers balance short-term results with long-term value creation and discourages excessive investment in working capital or non-productive assets.

### 5. Learning Curve

The learning curve concept states that as workers perform tasks repeatedly, efficiency improves, and the time required per unit decreases at a declining rate. Though the chapter provides only an introduction, it emphasizes that learning effects must be considered in planning, costing, and performance evaluation.

### 6. Balanced Scorecard for Variable Pay Management

The Balanced Scorecard expands performance measurement beyond financial metrics by including customer, internal process, and learning and growth perspectives. In the context of variable pay, it ensures that managerial incentives align with strategic objectives rather than short-term profits alone. It balances quantitative and qualitative targets to encourage sustainable long-term performance.

### Conclusion

This chapter highlights the importance of choosing appropriate performance measurement tools in decentralized organizations. DuPont analysis, ROI, RI, and EVA each offer different insights into profitability, efficiency, risk, and value creation. While ROI is simple and widely used, RI and EVA provide better goal congruence and account for the cost of capital. Combined with concepts like the learning curve and the Balanced Scorecard, these tools help managers and organizations make informed, strategic decisions aimed at improving performance and creating long-term shareholder value.

### Multiple Choice Question (MCQs):

- Decentralization mainly means
  - Top management makes all decisions.
  - Decisions are delegated to lower levels.
  - No decisions are made.
  - Only financial decisions are delegated.
- A responsibility centre where only costs are aggregated is called a
  - Profit centre
  - Cost centre
  - Investment centre
  - Revenue centre
- ROI is calculated as
  - Profit after tax  $\div$  Sales
  - Operating income  $\div$  Operating assets
  - Sales  $\div$  Total assets
  - Net income  $\div$  Equity
- Which measure helps avoid sub-optimal decisions associated with ROI?
  - Net income
  - EPS
  - Residual Income
  - Gross margin
- DuPont ROE is computed as
  - Margin  $\times$  Asset Turnover  $\times$  Financial Leverage
  - Margin  $\times$  Total Assets
  - Operating profit  $\div$  Equity
  - Sales  $\div$  Assets
- Financial leverage refers to
  - Use of equity only
  - Use of debt to finance assets
  - Use of profit to buy assets
  - Use of cash reserves
- A pure centralized structure means
  - One person makes major decisions
  - All divisions act independently
  - Only decentralization exists
  - No authority is assigned



8. EVA is computed as
  - a) Net income – Cost of goods sold
  - b) Profit after tax – Depreciation
  - c) NOPAT – (WACC × Capital employed)
  - d) EBIT × Asset Turnover
9. Positive EVA indicates
  - a) Loss to shareholders
  - b) Value destroyed
  - c) Zero return
  - d) Value created for shareholders
10. The asset turnover ratio equals
  - a) Sales ÷ Total assets
  - b) Assets ÷ Sales
  - c) Profit ÷ Sales
  - d) Sales ÷ Equity
11. In ROI, profit is taken
  - a) After tax
  - b) Before tax and interest
  - c) After depreciation only
  - d) After dividends
12. Division managers judged on ROI may
  - a) Always accept new investments
  - b) Reject good long-term projects
  - c) Ignore short-term profit
  - d) Increase risk-taking

**Answers:**

1. B
2. B
3. B
4. C
5. A
6. B
7. A

8. C
9. D
10. A
11. B
12. B

**Fill in the Blanks:**

1. Total asset turnover indicates how efficiently a company uses its assets to generate \_\_\_\_\_.
2. Financial leverage is sometimes called trading on \_\_\_\_\_.
3. A responsibility centre assigned both costs and revenues is known as a \_\_\_\_\_ centre.
4. In EVA computation, NOPAT stands for Net Operating Profit \_\_\_\_\_ Tax.

**Answers**

1. Sales
2. equity
3. profit
4. after

**True/False Questions:**

1. Centralized organizations keep decision-making power concentrated at the top.
2. A decentralized structure always reduces the workload of lower-level managers.
3. According to DuPont analysis, ROE can increase due to either margin, turnover or leverage.
4. A firm with very high leverage automatically has a stronger financial position.
5. ROI may increase over time simply because asset values fall with depreciation.

**Answers**

1. True
2. False
3. True
4. False
5. True



# CMA FINAL COURSE

## Syllabus 2022



## Topic

Module 9 :  
Specific Legal  
Provisions related  
to MSME Sector

FINAL

Group III - Paper-13

Corporate and  
Economic Laws  
(CEL)



## MSME: An Overview

### Institutional Support to Micro, Small, and Medium Enterprises (MSMEs):

#### Executive Summary

The Micro, Small, and Medium Enterprises (MSME) sector is widely recognized as the **backbone of the Indian economy**, playing a pivotal role in employment generation, export promotion, and fostering inclusive growth. Despite their importance, MSMEs face significant structural challenges, including limited access to finance, technology gaps, skill shortages, and market access issues. This project report provides a comprehensive analysis of the institutional support mechanisms—comprising government bodies, financial institutions, and specific schemes—established to nurture and sustain this vital sector. It details the roles of apex institutions like the Ministry of MSME, SIDBI, and NSIC, categorizes the support provided, and examines the effectiveness of key initiatives. The report concludes with an assessment of the current landscape and proposes recommendations for enhancing the institutional framework to meet the sector's evolving needs for a 'Viksit Bharat' (Developed India).

### 1. Introduction: The MSME Sector in the Indian Economy

#### 1.1 Defining MSMEs

The Micro, Small, and Medium Enterprises (MSMEs) are defined under the **Micro, Small and Medium Enterprises Development (MSMED) Act, 2006**, with revised classification criteria based on investment in plant and machinery/equipment and annual turnover, effective from July 2020, both the criteria must comply. According to the notification issued under the MSMED Act:

#### “Plant and Machinery” means:

The original cost of the plant and machinery excluding:

1. Land and building
2. Furniture and fixtures
3. Tools, jigs, dies, moulds
4. Consumable stores
5. Installation charges
6. Research and development equipment
7. Pollution control equipment
8. Power generation set and extra transformer cost
9. Bank charges and service charges paid to NSIC/SIDC
10. Industrial safety devices
11. Other items as notified by the Government

According to the 2020 notification issued under the MSMED Act:

#### “Annual Turnover” means the turnover as reflected in the Income-Tax Act and the GST Act.

In practice:

1. Turnover is taken from the GST return filings (GSTR-3B / GSTR-1).
2. For enterprises not registered under GST (very small entities), turnover is taken from income-tax returns.
3. Exports of goods or services are excluded from turnover for the purpose of MSME classification.

Category	Investment in Plant & Machinery/Equipment	Annual Turnover
<b>Micro</b>	Does not exceed ₹1 Crore	Does not exceed ₹5 Crore
<b>Small</b>	Does not exceed ₹10 Crore	Does not exceed ₹50 Crore
<b>Medium</b>	Does not exceed ₹50 Crore	Does not exceed ₹250 Crore

#### 1.2 Significance of MSMEs

MSMEs are critical to India's socio-economic development, demonstrating high resilience and potential for innovation. Their contribution highlights their strategic importance:

- **Contribution to GDP:** MSMEs contribute approximately **30% of India's Gross Domestic Product (GDP)**, with a substantial share in both manufacturing and service activities.
- **Employment Generation:** They are the **second largest employer** in India after agriculture, providing livelihoods to over **110 million people**.
- **Exports:** The sector is a major player in international trade, contributing nearly **40% to India's total exports**.
- **Inclusive Growth:** MSMEs promote balanced regional development by setting up units in rural and underdeveloped areas, fostering entrepreneurship, and reducing regional economic disparities.

#### 2. Challenges Faced by MSMEs

Despite their robust contribution, MSMEs are inherently susceptible to various challenges that institutional support seeks to mitigate.

##### 2.1 Access to Finance and Credit Gap

This is perhaps the most pressing issue. Traditional financial institutions often perceive MSMEs as **high-risk**



**borrowers** due to a lack of formal records, insufficient collateral, and limited credit history. This results in a significant **credit gap** (the difference between the credit that MSMEs need and the credit that they actually receive from the formal financial system.), where a substantial portion of formal MSMEs is either fully or partially constrained from accessing the necessary capital for expansion and working capital.

## 2.2 Technology Adoption and Modernization

Many MSMEs operate with **obsolete plant and machinery** and lag in adopting modern production techniques, digital platforms, and automation tools. This deficiency hampers productivity, product quality, and their ability to compete effectively in global supply chains. The **cost and lack of awareness** are primary barriers to technological upgrade.

## 2.3 Skill Gaps and Labour Shortages

The sector often faces a shortage of **skilled labour and managerial expertise**. Larger enterprises attract top talent with better wages, leaving MSMEs struggling to recruit and retain a proficient workforce. This skill deficit impacts the quality of output and the efficient implementation of new technologies.

## 2.4 Market Access and Competition

MSMEs often face intense competition from large domestic and international players. They also struggle with **inadequate marketing strategies**, weak supply chain linkages, and limited access to both domestic and global markets.

## 2.5 Regulatory and Infrastructural Hurdles

Navigating the complex and often changing **regulatory framework** related to labour laws, taxation, and permits consumes valuable time and resources. Furthermore, deficient **infrastructure**, including unreliable power supply, poor logistics, and transportation, affects production schedules and operational efficiency.

## 3. Institutional Support Mechanism: The Multi-Pillar System

The Indian Government has established a multi-tiered institutional framework to address these challenges, operating at the central, state, and district levels.

### 3.1 Central Government Institutions

#### 3.1.1 Ministry of Micro, Small and Medium Enterprises (MoMSME)

The Ministry of Micro, Small and Medium Enterprises is a department of the Government of India responsible for promoting, developing and supporting micro, small and medium enterprises across the country. The Ministry plays

a vital role in encouraging entrepreneurship, generating employment, and strengthening small-scale industries that form the backbone of the national economy.

The Ministry designs and implements policies and programmes to improve access to finance, technology, infrastructure, training and markets for micro, small and medium enterprises. It works in coordination with the Office of the Development Commissioner for Micro, Small and Medium Enterprises, the Khadi and Village Industries Commission, the Coir Board and various state governments.

Important initiatives of the Ministry include schemes for credit support, entrepreneurship development, cluster development, skill training, rural industrialisation and resolving delayed payments. Through these efforts, the Ministry contributes significantly to industrial growth, balanced regional development and increased economic opportunities for small business owners in India.

#### 3.1.2 Small Industries Development Bank of India (SIDBI)

Established in 1990 as the principal financial institution for the promotion, financing, and development of the MSME sector.

- **Primary Role:** Providing indirect and direct financial assistance to MSMEs through various schemes, including refinancing term loans and extending working capital.
- **Key Initiatives:** It anchors programs like the **Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE)** and is instrumental in formalizing the sector through platforms like the **Udyam Registration Portal**.

#### 3.1.3 National Small Industries Corporation (NSIC)

An ISO 9000 certified Government of India Enterprise established in 1955.

- **Core Functions:** Facilitating technology transfer, providing market support, and offering raw material assistance.
- **Key Schemes:** **Single Point Registration Scheme (for Government Purchase)** to help MSMEs participate in government procurement, and **Raw Material Assistance** scheme.

#### 3.1.4 Khadi and Village Industries Commission (KVIC)

A statutory body tasked with planning, promoting, and organizing the development of Khadi and Village Industries (KVIs) in rural areas, strengthening the rural economy.

### 3.2 State-Level and Technical Institutions



### 3.2.1 State Small Industries Development Corporations (SSIDCs)

Set up by state governments to provide infrastructure, raw material assistance, and marketing support to MSMEs within their respective states.

### 3.2.2 District Industries Centres (DICs)

Established at the district level to act as a **single-window agency** for various services and facilities required by small-scale entrepreneurs, including registration, preparation of project reports, and provision of state-specific subsidies.

### 3.2.3 Small Industries Service Institutes (SISIs) / MSME-Development Institutes (MSME-DIs)

These institutes provide a wide range of consultancy, training, and testing services to existing and prospective MSME entrepreneurs. Their services include technical advice, preparation of project profiles, and conducting management training programs.

## 4. Key Institutional Support Schemes and Initiatives

Institutional support is channelled through targeted schemes designed to address specific sectoral constraints.

### 4.1 Financial Support and Credit Facilitation

Scheme	Nodal Institution	Objective
<b>MUDRA Yojana (PMMY)</b>	SIDBI/ Banks/ NBFCs	Provides collateral-free loans up to ₹10 Lakh to micro and small enterprises for income generation activities.
<b>Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE)</b>	CGTMSE (SIDBI & MoMSME)	Offers <b>collateral-free credit guarantee</b> cover up to ₹5 Crore for term loans and working capital to eligible MSMEs, easing the collateral burden.
<b>Interest Subvention Scheme for MSMEs</b>	Banks	Provides interest subvention (subsidy) on fresh/incremental term loans or working capital limits, reducing the cost of credit.
<b>Emergency Credit Line Guarantee Scheme (ECLGS)</b>	Banks	Launched during the COVID-19 pandemic to provide fully guaranteed and collateral-free additional credit to MSMEs to help them meet operational liabilities.

### 4.2 Technology Upgradation and Infrastructure

- **Technology Upgradation Scheme (CLCS-TUS):** The **Credit Linked Capital Subsidy for Technology Upgradation Scheme** offers a capital subsidy on institutional finance availed for the modernization and technology upgrade of existing MSMEs.
- **Scheme of Fund for Regeneration of Traditional Industries (SFURTI):** A cluster development scheme that organizes traditional industries and artisans into clusters to make them competitive by providing support for new machinery, better processes, and skill development.
- **MSME-Technology Centres (Tool Rooms and Technology Development Centres):** These institutions, set up across the country, provide precision tooling, skill development, and technology-related services to the sector.

### 4.3 Market Access and Procurement

- **Public Procurement Policy for MSMEs:** Mandates all Central Ministries/Departments and Public Sector Undertakings (PSUs) to procure a minimum of **25%** of their annual value of goods or services from MSMEs, with specific sub-targets for SC/ST and women entrepreneurs.
- **Government e-Marketplace (GeM):** An online national procurement portal that facilitates transparent and efficient public procurement from MSMEs, giving them a vast market platform.
- **International Cooperation Scheme:** Provides financial assistance to MSMEs for participating in international trade fairs, exhibitions, and buyer-seller meets to promote exports.

### 4.4 Skill Development and Training

- **Entrepreneurship Skill Development Programme (ESDP):** Implemented by the MSME-DIs, it aims to promote entrepreneurial culture among youth by offering various training courses, leading to self-employment and skill enhancement.
- **Incubation and Design Schemes:** Offer financial assistance for developing new products/prototypes and incorporating design into their production processes.

## 5. Impact and Effectiveness of Institutional Support

The extensive institutional framework has yielded notable successes:



- **Formalization:** The **Udyam Registration Portal** has significantly boosted the formalization of the sector, bringing millions of unregistered units into the formal economy, which in turn enhances their access to institutional credit and government benefits.
- **Ease of Doing Business:** Initiatives like the **Digital MSME Scheme** and the single-window clearance mechanisms, especially at the DIC level, have streamlined processes, although challenges remain.
- **Financial Inclusion:** Schemes like MUDRA and CGTMSE have expanded the reach of formal credit to enterprises previously dependent on the informal sector, boosting financial inclusion, particularly for micro-enterprises.
- **Post-Pandemic Resilience:** Timely government intervention through schemes like ECLGS prevented mass closures during the economic shocks caused by the COVID-19 pandemic, demonstrating the crisis response capability of the institutional system.

However, the effectiveness is not uniform. A significant portion of the credit gap persists, particularly for smaller enterprises in remote areas, and the awareness and utilization of non-financial schemes (like those for technology or design) remain suboptimal.

## 6. Conclusion and Recommendations

The institutional support system for MSMEs in India is vast and multifaceted, recognizing the sector's imperative role in the nation's economic progress. It has successfully created a foundational structure for financial, technical, and marketing assistance. The challenge now lies in ensuring deeper penetration and more efficient delivery of these services, especially to the *micro* segment and those in less-developed regions.

### 6.1 Recommendations for Enhancement

- **Deepening Digital and Financial Outreach:**
  - **Data-Driven Lending:** Encourage financial institutions to utilize **GST, Udyam, and digital payment data** for credit assessment, reducing reliance on traditional collateral for MSMEs with a good digital transaction history.
  - **Digital Platforms:** Further integrate institutional schemes into digital platforms like **GeM and JanSamarth** to provide a truly seamless, paperless application and delivery experience.

- **Bridging the Technology and Skill Gap:**

- **Cluster-Based Upgradation:** Intensify the **cluster development approach** to facilitate the collective adoption of advanced technologies, common testing facilities, and specialized machinery, making it cost-effective.
- **Industry-Academia Linkage:** Strengthen collaboration between MSME-DIs, technical institutions, and industry associations to make skill development programs more **industry-relevant** and focused on new-age skills (e.g., AI, IoT, digital marketing).

- **Streamlining Regulatory Compliance:**

- **Simplified Framework:** Move towards a unified and simplified **MSME-specific compliance portal** that minimizes the number of filings and inspections, thereby improving the **Ease of Doing Business**.

- **Focus on Export Competitiveness:**

- **Export Credit Guarantee:** Expand the coverage and reach of credit guarantee schemes specifically for exporters, like the proposed **Credit Guarantee Scheme for Exporters (CGSE)**, to enhance global competitiveness and diversification into new markets.

- **Credit Rating:**

Credit rating in the micro, small and medium enterprise sector refers to the formal assessment of the financial strength, business performance and repayment capacity of an enterprise by an approved credit rating agency. It helps lenders evaluate the level of risk involved in extending loans to such enterprises.

The purpose of credit rating is to make credit more accessible and affordable for small businesses. A good credit rating enables an enterprise to obtain loans at lower interest rates, receive quicker approvals and improve its credibility with banks, suppliers and investors. The Ministry of Micro, Small and Medium Enterprises promotes credit rating through specialised schemes that provide subsidies for getting the rating done.

Credit rating evaluates several aspects of an enterprise, such as financial statements, management quality, business stability, market conditions and



repayment history. It brings transparency into the lending process and encourages enterprises to maintain better financial discipline. Overall, credit rating plays an important role in bridging the credit gap and strengthening the financial ecosystem for micro, small and medium enterprises.

- **Financial liberalisation:**

Financial liberalisation in the micro, small and medium enterprise sector refers to the process of easing financial regulations, widening access to institutional credit and encouraging competition among financial institutions to support small businesses. It aims to remove restrictive policies that earlier limited the flow of funds to this sector.

Through financial liberalisation, banks, non-banking financial companies and other lenders were encouraged to provide more credit to small enterprises by adopting flexible lending norms, risk-based pricing and simplified procedures. Reforms

such as priority lending guidelines, collateral-free loans, credit guarantee schemes and the entry of private and foreign financial institutions expanded credit options for small businesses.

Financial liberalisation has helped improve credit availability, reduce dependence on informal moneylenders, promote entrepreneurship and support the growth of small industries. It has also increased transparency in lending practices and strengthened the overall financial ecosystem for micro, small and medium enterprises.

The future growth of the Indian economy to achieve the 'Viksit Bharat' goal is intrinsically linked to the sustained growth of the MSME sector. Continuous refinement and robust implementation of the institutional support mechanisms are essential to transform these enterprises from beneficiaries of assistance into independent, global engines of economic prosperity.



## Topic

Module 6:  
Equity and Bond  
Valuation and  
Evaluation of  
Performance

FINAL

Group III - Paper-14

Strategic Financial  
Management (SFM)



## Topic: Equity and Bond Valuation

### • Multiple Choice Questions

- In equity valuation using the Dividend Discount Model (DDM), the intrinsic value of a share increases when:
  - The required rate of return increases
  - The dividend growth rate increases
  - The next year's expected dividend decreases
  - The dividend payout ratio decreases

**Answer: B. The dividend growth rate increases**

- The Gordon Growth Model is most appropriate for valuing companies that:
  - Have irregular and unpredictable cash flows
  - Are in high-growth startup phase
  - Pay stable dividends that grow at a constant rate
  - Do not pay dividends

**Answer: C. Pay stable dividends that grow at a constant rate**

- In bond valuation, if the required yield is greater than the coupon rate, the bond will trade:
  - At par
  - At a premium
  - At a discount
  - At its face value

**Answer: C. At a discount**

- The present value of a bond equals:
  - Sum of future coupon payments discounted at coupon rate
  - Face value only
  - Sum of coupon payments and redemption value discounted at required yield
  - Future dividends discounted at growth rate

**Answer: C. Sum of coupon payments and redemption value discounted at required yield**

- The Price/Earnings (P/E) ratio for a firm increases when:
  - Expected growth rate increases
  - Required return increases
  - Risk decreases
  - Both A and C

**Answer: D. Both A and C**

- The value of a zero-coupon bond is equal to:
  - Its face value
  - Present value of a single lump-sum payment
  - Sum of all coupon payments
  - Coupon rate  $\times$  maturity

**Answer: B. Present value of a single lump-sum payment**

- According to the Dividend Discount Model, the required return equals:
  - (Expected Dividend / Price) + Growth
  - Dividend  $\times$  Growth
  - Price – Dividend
  - Growth – Price

**Answer: A. (Expected Dividend / Price) + Growth**

**Formula:  $k = D_0 (1 + g) / P_0 + g$**

- The yield to maturity (YTM) of a bond represents:
  - The coupon rate
  - The return earned if the bond is held until maturity
  - The return based only on coupon payments
  - The bond's par value

**Answer: B. The return earned if the bond is held until maturity**

- Which of the following factors does not directly influence equity valuation under the free cash flow model?
  - Weighted Average Cost of Capital (WACC)
  - Future free cash flows
  - Dividend payout ratio
  - Growth rate

**Answer: C. Dividend payout ratio**

(Dividend payout is irrelevant because valuation uses free cash flow, not dividends.)

- A stock with high beta and uncertain dividends will generally have:
  - Low required return
  - High required return
  - Constant dividend growth
  - Zero intrinsic value

**Answer: B. High required return**



11. When interest rates rise in the market, the value of an existing bond typically:

- A. Increases
- B. Decreases
- C. Remains constant
- D. Moves randomly

**Answer: B. Decreases**

12. The intrinsic value of a share under the two-stage DDM includes:

- A. Only stable-growth dividends
- B. Only high-growth period dividends
- C. Both high-growth period dividends and stable-growth period terminal value
- D. Only dividends paid this year

**Answer: C. Both high-growth period dividends and stable-growth period terminal value**

13. In equity valuation using Free Cash Flow to Equity (FCFE), the discount rate used is:

- A. Weighted Average Cost of Capital (WACC)
- B. Cost of Equity
- C. Cost of Debt

D. Internal Rate of Return (IRR)

**Answer: B. Cost of Equity**

14. Under the constant growth DDM, the stock price becomes undefined if:

- A. Growth rate is zero
- B. Growth rate is negative
- C. Growth rate equals required return
- D. Dividend payout is high

**Answer: C. Growth rate equals required return**

(Because denominator,  $k-g = 0$ , making value infinite or undefined.)

15. When valuing a bond, the discount rate applied to future cash flows should reflect:

- A. The bond's coupon rate
- B. The face value of the bond
- C. The market's required yield for similar risk and maturity
- D. The issuer's dividend payout ratio

**Answer: C. The market's required yield for similar risk and maturity**

## • Comprehensive Problems

### Problem 1

Pine Laboratories Ltd. is planning to issue debentures with face value of ₹1,000 each for a total maturity of 10 years with the following coupon rates:

Years	Rates
1-4	8%
5-8	9%
9-10	13%

The current interest rate on similar debenture is 15% p.a. The required yield rate is 16% p.a. The redemption price of the debentures will be at 10% premium on maturity. Determine the issue price of the debentures?

PVIF @ 16% for 1 to 10 years are: 0.862, 0.743, 0.641, 0.552, 0.476, 0.410, 0.354, 0.305, 0.263, 0.227 respectively.

### Solution

The issue price of the debentures will be the sum of present value of interest payments during 10 years and present value of redemption of debenture.

Years	Cash outflow (₹)	PVF @ 16%	PV of CF
1	80 (1000 × 8%)	0.862	68.96
2	80	0.743	59.44
3	80	0.641	51.28
4	80	0.552	44.16
5	90 (1000 × 9%)	0.476	42.84



Years	Cash outflow (₹)	PVF @ 16%	PV of CF
6	90	0.410	36.90
7	90	0.354	31.86
8	90	0.305	27.45
9	130 (1000 × 13%)	0.263	34.19
10	130	0.227	29.51
11	1,100 (1000 × 110%)	0.227	249.70
			678.29

Thus, the issue price of the debentures should be fixed at ₹676.29.

### Problem 2

Calculate the value of share of M Ltd. from the following information:

Equity share capital	₹2,400 crores
Profit of the company	₹600 crores
Par value of share	₹40 each
Debt ratio	25%
Long run growth rate	8%
Beta value	0.1
Risk free interest rate	8.7%
Market returns	10.3%
Change in working capital per share	₹ 4
Depreciation per share	₹40
Capital expenditure per share	₹48

### Solution

(a) No. of Share =  $2,400/40 = 60$  crores

(b) EPS = Profit after tax/No. of shares =  $600/60 = ₹10$  per share

(c) FCFE per share = Net Income – [(1 – debt ratio) (Capex – Depreciation) + (1 – debt ratio) × Change in WC]  
 $= 10 - [(1 - 0.25) \times (48 - 40) + (1 - 0.25) \times 4] = 1.00$

(d) Cost of equity =  $R_f + \beta (R_m - R_f) = 8.7 + 0.1 (10.3 - 8.7) = 8.86\%$

(e)  $P_0 = \frac{FCFE (1+g)}{K_e - g} = \frac{1.00 (1.08)}{0.0886 - 0.08} = ₹125.058$

### Problem 3

Mr. P is holding 5,000 shares of Smart Group Ltd. Presently the rate of dividend being paid by the company is ₹10 per share and the share is being sold at ₹100 per share in the market. However, various factors are likely to change during the course of the year as indicated below:

	Existing	Revised
Risk free rate	12.5%	10%
Market risk premium	6%	4.8%
Expected growth rate	5%	8%
Beta value	1.5	1.25

In view of the above factors whether Mr. P should buy, hold or sell the shares? Give appropriate reason for your decision.



**Solution**

On the basis of existing and revised factors, Rate of Return and Price of the share is to be calculated as follows.

Existing Rate of Return:

$$\begin{aligned}\text{Return} &= R_f + \beta (R_m - R_f) \\ &= 12.5 + 1.5 (6) \\ &= 21.5\%\end{aligned}$$

Revised Rate of Return:

$$\begin{aligned}\text{Return} &= R_f + \beta (R_m - R_f) \\ &= 10 + 1.25(4.8) \\ &= 16\%\end{aligned}$$

Price of Share (Original):

$$P_0 = \frac{D_0 (1+g)}{K_e - g} = \frac{10.00 (1.05)}{0.215 - 0.05} = 10.50/0.165 = 63.63$$

Price of Share (Revised):

$$P_0 = \frac{D_0 (1+g)}{K_e - g} = \frac{10.00 (1.08)}{0.16 - 0.08} = 135.00$$

- Under current scenario, market Price is ₹100 per share and equilibrium price is ₹63.63 So, the shares are overpriced and hence the shares should be sold.
- Under revised scenario, market price is ₹100, though price is likely to increase due to reduction in return, so, investors should hold the share.



## Topic

Module 12:  
Double Taxation  
and Avoidance  
Agreements (DTAA)

## FINAL

### Group III - Paper-15

Direct Tax Laws  
and International  
Taxation (DIT)



## Double Taxation Avoidance Agreement

*In home country, tax is an obligation, while in the host country, tax is a cost.*

International taxation has gained significant importance in a globally integrated economy. When taxpayers derive income across borders, differences in domestic tax systems can result in double taxation of the same income. To avoid this hardship and promote cross-border trade and investment, countries enter into Double Taxation Avoidance Agreements (DTAAs). This article explains the concept, structure, and practical relevance of DTAA for global taxpayers.

### What is Double Taxation?

Double taxation occurs when an individual or a business is taxed twice on the same income in two or more countries. This can happen due to conflicting tax laws and regulations between nations. For instance, if a person earns income in one country but is also considered a tax resident in another, they may be subject to taxation on the same income by both countries. For instance, Mr. X, an ordinarily resident in India, earned bank interest of ₹ 1,00,000 on his money deposited into a bank located in US. In that case, such income is taxable in US on the Source of income basis and again in India as he is an ordinarily resident India.

In times when economies are going global and borders fading, double taxation is still one of the major obstacles to the development of inter-country economic relations. In order to prevent this hardship or to avoid double taxation, relief is provided to the tax-payer.

**Double taxation** can occur in two primary forms:

- **Juridical Double Taxation:** When the same person is taxed on the same income in more than one country.
- **Economic Double Taxation:** When the same income is taxed in the hands of more than one taxpayer (e.g., both the company and shareholders).

### Introduction to Double Taxation Avoidance Agreements (DTAA)

DTAA, also known as tax treaties, are bilateral agreements between two countries aimed at preventing double taxation and promoting cooperation in tax matters. These agreements delineate the taxing rights of each country concerning various types of income, such as dividends, interest, royalties, and capital gains.

### Significance of DTAA

DTAA serves several significant purposes:

- **Preventing Double Taxation:** The primary purpose of DTAA is to eliminate or mitigate double taxation, thereby promoting cross-border trade, investment, and economic activities.

- **Promoting Investment:** By providing certainty and clarity on tax matters, DTAA encourages foreign investment by reducing the tax burden on investors and businesses operating across borders.
- **Facilitating Exchange of Information:** DTAA facilitates the exchange of information between tax authorities of different countries, promoting transparency and combating tax evasion and avoidance.

### Key Components of DTAA

DTAA typically includes the following key components:

- **Residency Rules:** Defines the criteria for determining an individual's tax residency status, which is essential for determining the country's right to tax.
- **Permanent Establishment (PE):** Establishes the threshold for determining when a business activities in one country constitute a permanent establishment, subject to taxation in that country.
- **Taxation of Various Income Sources:** Specifies the rules for taxing different types of income, such as dividends, interest, royalties, and capital gains, ensuring that each country has the right to tax certain types of income.
- **Tax Rates and Tax Credits:** Prescribes the applicable tax rates for various types of income and provides mechanisms for granting tax credits or exemptions to prevent double taxation.
- **Mutual Agreement Procedure (MAP):** Sets out procedures for resolving disputes between tax authorities of the treaty countries and ensuring the consistent application of the treaty provisions.

### Mode of providing relief

As per Article 2 of the Vienna Convention on Laws of Treaties, 1969, "Treaty" means an international agreement concluded between States in written form and governed by international law, whether embodied in a single instrument or in two or more related instruments and whatever its particular designation. The two countries' government agrees to provide relief against double taxation of the same income. The relief is granted based on the terms of such agreement. Generally, such an agreement provides relief through the following methods:

### Exemption Method

In this method, one country provides an exemption to such type of income. Generally, the residence country gave up its right and the country of source is then given the exclusive right to tax such incomes.



- a. **Full Exemption Method:** Under this method, income earned in the State of Source is fully exempt in the State of Residence.
- b. **Exemption with Progression:** Under this method, income from the State of Source is considered by the State of Residence only for the rate purpose.

### Credit Method

<b>Full Exemption</b>	Full exemption of foreign income from <u>residence</u> country tax.
<b>Exemption with Progression</b>	Foreign income <u>exempt</u> but considered to determine slab rates.
<b>Full Credit</b>	Full tax paid in <u>source</u> country <u>credited</u> against <u>residence</u> tax.
<b>Ordinary Credit</b>	Credit limited to proportionate domestic tax payable.
<b>Tax Sparing</b>	Credit allowed for tax that would have been payable but was spared
<b>Underlying Tax Credit</b>	Credit for corporate taxes paid by a foreign subsidiary.

In this method, the resident remains liable in the country of residence on its global income, however as far as the quantum of tax liabilities is concerned credit or deduction for tax paid in the source country is given by the residence country against its domestic tax as if the foreign tax were paid to the country of the residence itself.

- a. **Full Credit:** Total tax paid in the State of Source is allowed as a credit against tax payable in the State of Residence.
- b. **Ordinary Credit:** The state of Residence allows credit of tax paid in the state of Source restricted to that part of income tax which is attributable to the income taxable in the state of Residence.
- c. **Tax Sparing:** The state of Residence allows credit for deemed tax paid on income which is otherwise exempt from tax in the State of Source.
- d. **Underlying Tax Credit:** In this method attempts to mitigate the economic double taxation. Economic double taxation occurs when the same income is taxed more than once in the hands of different persons in the same tax jurisdiction.

DTAA can be of two types, limited or comprehensive. Limited DTAA are those which are limited to certain types of incomes only e.g. DTAA between India and Pakistan is limited to shipping and aircraft profits only. Comprehensive DTAA are those which cover almost all types of incomes covered by any model convention.

### Mode of Providing Relief under Indian Law

- **Section 90:** Relief where India has a DTAA.
- **Section 90A:** Relief where agreement is with specified associations outside India.
- **Section 91:** Unilateral relief where no DTAA exists.

**Note:** As per Section 90(2), if DTAA provisions are more beneficial to the taxpayer compared to domestic law, DTAA provisions prevail.

### Impact on Taxpayers and Businesses

DTAA has a profound impact on taxpayers and businesses engaged in cross-border transactions:

Impact	Description
Lower Withholding Taxes	Reduced taxes on cross-border payments.
Greater Certainty	Assured taxation framework for foreign investments.
Enhanced Compliance	Promotes adherence to international and domestic laws.
Avoidance of Litigation	Provides alternate dispute resolution through MAP.



- **Reduced Tax Liability:** Taxpayers benefit from reduced tax liability on income derived from foreign sources, as DTAA often lowers the withholding tax rates on dividends, interest, royalties, and other income.
- **Certainty and Predictability:** Businesses enjoy greater certainty and predictability regarding their tax obligations in foreign jurisdictions, enabling better tax planning and investment decisions.
- **Enhanced Compliance:** DTAA promotes compliance with tax laws by providing clear rules and procedures for determining tax liability, reducing the risk of unintentional non-compliance.
- **Dispute Resolution:** The inclusion of a Mutual Agreement Procedure (MAP) in DTAA provides a mechanism for resolving disputes between taxpayers and tax authorities, ensuring fair and impartial resolution of tax disputes.

## Conclusion

The Double Taxation Avoidance Agreement plays a pivotal role in ensuring fairness and equity in international taxation. It protects taxpayers from dual tax burdens and provides a clear mechanism for taxing cross-border incomes. With the advent of evolving global tax practices, the Indian DTAA framework has incorporated anti-abuse rules, exchange of information, and multilateral agreements to strike a balance between tax collection and facilitation of international trade.

Effective understanding and strategic application of DTAA provisions are now integral to global business operations, international investments, and tax planning strategies.



## Topic

Module 13:  
Business  
Application of  
Maxima and Minima

FINAL

Group III - Paper-16

Strategic Cost  
Management (SCM)



## Business Application of Maxima and Minima

Business is defined as “Any activity or enterprise entered into for Profit”. So whenever we talk about business application of something, it boils down to profit making by an enterprise through its activities. Actually “Enterprise” is the term in the commercial world to describe a project or venture undertaken for gain. This is synonymous with the term Firm.

Thus business application of *Maxima and Minima* mainly refers to the process of finding the optimal strategies by a Firm to achieve its goal or objective. Economists believe that Business Firms always attempt to maximize their profit (or minimize their losses) They however do realise that businessmen have other goals like maximization of sales, maximization of firms’ growth rate etc. for their survival which subsequently provide a quiet life. Yet the traditional economic theory assumes profit maximization as the sole objective of the business firms. Such an assumption turns out to be very useful and convenient due to the following reasons –

- ④ In actual practice firms come fairly close to act like profit maximizers.
- ④ It is helpful in correctly predicting the behaviour of the business firms with regard to the quantity of output produced and prices charged in the real world.

No wonder therefore, the whole traditional economic theory is developed on the basis of profit maximization (or loss minimization) hypothesis. As a result mathematical techniques are observed to be used to a great extent. The first condition for such techniques to be useful is that economic relationships or functions are expressed in algebraic form which in turn demands the objectives are well defined and transformed into quantitative statements. There can be two different situations under which the optimization of objectives are carried out. These are given as – (1) Unconstrained Optimization and (2) Constrained Optimization

Unconstrained Optimization can further have sub divisions as given below -

- (A) Optimization of single variable objective function
- (B) Optimization of objective functions having multiple variables. Similarly Constrained Optimization has the following sub divisions.
- (A) Equality constrained Optimization
- (B) Inequality constrained Optimization
- (C) Static Optimization
- (D) Dynamic Optimization

Of all these types of optimization situations, concept of Maxima and Minima of differential calculus is used

for both types of Unconstrained Optimization. Use of differential calculus is observed for Constrained Optimization with Equality Constraint. Though the same technique can be used for Constrained Optimization with Inequality Constraints, but in practice that has not gained much popularity.

### 1.0. Unconstrained Optimization

A major part of economic analysis assumes not only maximizing behaviour on the part of the economic actors but also unconstrained optimization or mathematical optimization. Such type of optimization is also known as Unbounded Maxima technique. As mentioned above, there can be two different situations involving either single variable or multiple variables.

#### A. Optimization of Functions involving Single Independent Variable

When the objective function is given as an Algebraic Function and no constraints are imposed then Calculus approach of derivatives is used to optimize the function. The conditions of optimization are two fold and given as

1. **Necessary condition:** The 1st Order Derivative should be Zero, that is  $\frac{dy}{dx} = 0$

This is applicable for both the situations of Maximization as well as Minimization.

2. **Sufficient condition:**  $\frac{d^2y}{dx^2} < 0$  for **Maxima** and  $\frac{d^2y}{dx^2} > 0$  for **Minima** at the value of x obtained from (1)

The value/s of x obtained from the Necessary Condition (1) written above, is/are called Critical Value/s. The sign of 2nd Order Derivative is checked by putting the Critical value/s in it and subsequently decision regarding Maxima or Minima is taken as per Sufficient Condition (2) above.

Point of Inflexion exists when  $\frac{d^2y}{dx^2} = 0$

Such point is neither a Maxima nor a Minima.

#### B. Optimization of Functions involving Multiple Independent Variables

For the situations where the Objective Function involves more than one Independent variable (say two) and the change in the dependent variable is the joint impact of changes in both the variables then the approach towards optimization of the Objective Function, though takes help of differential calculus, but is not exactly same as that used for the case of single Independent variable.

In fact the measurement of the independent impact of one variable is not possible without assuming that the other variable remains unchanged. As example we consider the case of Sales of a commodity which is a multivariate function of Price and Advertising Expenditure. Now the impact of change in Price over Sales cannot be measured



if we do not assume the Advertising Expenditure to remain same. Partial Derivative of a function explains the same logic mathematically.

## 2.0 Constrained Optimization

The Optimization technique discussed earlier in this module is an example of Unbounded Maxima. It assumed that the Firm is capable of not only finding its Equilibrium Output but also producing it without any restrictions. All the resources required to produce the given level of output are at its command. It has no shortage of inputs, energy, labour, transport, liquidity etc. The economic actor under Neo Classical theory thus happened to be an unbounded maximizer.

In practical life the conditions are not exactly like the ones assumed in case of Unbounded Maxima. Firms need to compete for the procurement of inputs in the market. Scarcity of good quality energy is a very regular affair in our country. Availability of labours of desired skill is another questionable area. Transportation of goods from one place to the other, particularly from production centres to the warehouses, is troublesome. Credits of required amount may not be available at the time when it is actually required or the rate of interest may be exorbitantly high.

Thus working under restrictions is the most common phenomenon as far as operations of a Firm is concerned. A Firm has to work to its best possible ability even after facing various types of practical difficulties. Optimization with restrictions of different kind is known as *Constrained Optimization*.

Mathematically the constraints are expressed either in the form of Equations (which are also known as Equalities) or in the form of Inequalities. Problems of equality constraints are dealt with *Lagrangian Multipliers* and those involving inequality constraints are solved by Linear Programming techniques.

## 3.0. Equilibrium of a Firm

Equilibrium means a “State of Rest”. In this State the forces working in opposite directions are exactly in balance so that there is no tendency to move in any direction. A firm is said to be in equilibrium when it selects a particular level of output at which it would like to “Stay” or “Rest”. There is no incentive for the firm to increase or decrease output from that level. In other words, **A firm is in equilibrium when, given the demand and cost conditions, it produces that level of output at which the Profit is maximised.**

From some other point of view, a firm is supposed to be in equilibrium when its objective is optimised. The objective of a firm may be many, but the Neo Classical theory of Economics assumes maximization of Profit is the sole objective of it. The level of output and the price charged corresponding to the equilibrium are called the Equilibrium Output and the Equilibrium Price respectively.

Some important terminology related to the concept of Profit maximisation are as follows.

**i. Revenue:** is defined as the money earned by selling certain quantity of output. More precisely it should be called the “Sales Revenue” and it must not be mixed up with other similar concepts of earning money like income, profit etc.

Revenue involves three inter-related concepts – Total Revenue (TR), Average Revenue (AR) & Marginal Revenue (MR).

Total Revenue is the product of Price (P) and the Quantity Sold (x). Thus  $TR = P \cdot x$

Average Revenue is the Revenue earned per unit sale. So  $AR = TR / x$  Or,  $AR = Px / x$  Or,  $AR = P = \text{Price}$

Marginal Revenue is defined as the revenue earned by selling an additional unit of output.

**ii. Cost of Production:** Like Revenue Cost, too has three basic concepts – Total Cost (TC), Average Cost (AC) and Marginal Cost (MC)

**Total Cost** has two components: Fixed and Variable. So  $TC = TFC + TVC$

**Average Cost** is given as  $AC = TC / x$  Or,  $AC = TFC / x + TVC / x$  Or,  $AC = AFC + AVC$

**Marginal Cost** is the cost of producing an additional unit of output.

### iii. Profit

It is the residual after deducting Cost from the Revenue.

It is represented as  $\pi = f(x)$

**Total Profit** =  $T \pi = TR - TC$  Or,  $T \pi = TR - TC$  Or,  $T \pi = x (AR - AC)$

**Average Profit** =  $A \pi = T \pi / x$  Or,  $A \pi = (TR - TC) / x$  Or,  $A \pi = TR / x - TC / x$  Or,  $A \pi = AR - AC$



## Topic

Module 6:  
Cost Audit  
Programme

FINAL

Group IV - Paper-17

Cost and  
Management Audit  
(CMAD)



## Cost Audit Programme

A **Cost Audit Programme** is a structured plan that outlines the scope, methodology, and sequential steps to be followed by a cost auditor while conducting a Cost Audit. It acts as a roadmap ensuring that all relevant cost records, systems, processes, and statutory requirements are examined thoroughly and consistently. A well-designed cost audit programme enhances audit quality, reduces risks of oversight, and ensures compliance with the Companies Act, 2013, the Companies (Cost Records and Audit) Rules, 2014, and the Cost Accounting Standards (CAS). The programme also serves as documentary evidence demonstrating that the audit was conducted with due diligence and professional care, a requirement highlighted under the **Cost Audit and Assurance Standards (CAAS)** issued by the Institute of Cost Accountants of India.

### Objectives of a Cost Audit Programme

A sound programme ensures that the cost audit achieves the following objectives:

1. **Accuracy and adequacy of cost records** maintained under Rule 5 of the Cost Records and Audit Rules.
2. **Ensure compliance** with applicable Cost Accounting Standards and Generally Accepted Cost Accounting Principles.
3. **Evaluate internal controls** relating to cost accounting, inventory management, capacity utilisation, and production processes.
4. **Assess the reliability** of cost statements, product profitability statements, and reconciliation statements.
5. **Identify inefficiencies** and areas for cost control or saving.
6. **Provide assurance** to the Board and stakeholders on correctness of cost-related disclosures.

### Review of Cost Accounting System

The auditor should examine:

- The classification and codification system for materials, labour, and overheads.
- Method of valuation of inventory (CAS-6).
- Capacity determination (CAS-2).
- Costing system used: process costing, job costing, activity-based costing, etc.

### Verification of Cost Records

This forms the core of the audit, covering:

- **Material Cost (CAS-6):** GRNs, bin cards, stock registers, wastage records, FIFO/LIFO/weighted average.

- **Employee Cost (CAS-7):** time sheets, overtime, incentive schemes.
- **Overheads (CAS-3, CAS-4):** allocation, apportionment basis, absorption rates.
- **Utilities:** power, water, steam, gas consumption statements.
- **Repairs & Maintenance:** preventive maintenance schedules, breakdown logs.
- **Depreciation (CAS-16):** policies, asset register.

### Verification of Cost Statements

The programme includes checking:

- Product-wise cost sheet.
- Cost of production and cost of sales.
- Allocation of joint and by-product costs.
- Captive consumption valuation (CAS-4).
- Reconciliation of cost records with financial accounts.

### Evaluation of Internal Controls

A robust cost audit programme emphasizes testing controls:

- Inventory control systems.
- Production process controls.
- Budgetary control and variance analysis.
- Purchase controls and vendor management.
- Controls over by-products, scrap, and waste.

### Analytical Review

This includes:

- Trend analysis of cost behaviour.
- Ratio analysis (material consumption ratio, labour efficiency ratio, capacity utilisation).
- Comparison with industry standards or past periods.

### Compliance Check

Ensuring:

- MCA format CRA-1 cost records are properly maintained.
- CRA-2 and CRA-4 filings are timely.
- Compliance with Cost Audit and Assurance Standards (CAAS-101, 102, 103, etc.).

### Reporting

The audit programme should specify:

- Working paper documentation.
- Draft observations to be discussed with management.
- Final submission of **Cost Audit Report in CRA-3**.



## Conclusion

A well-designed cost audit programme strengthens the cost audit process by providing clarity, structure, and consistency. It ensures adherence to legal frameworks, improves organisational efficiency, and reinforces confidence among management, regulators, and stakeholders. In a competitive business environment, organisations benefit immensely from the insights generated through a disciplined and comprehensive cost audit backed by a robust audit programme.

1. Compliance with relevant CAS verified: CAS-1, 2, 3, 4, 6, 7, 8, 9, 10, 14, 15, 16, 23 depending on industry.
2. Inventory valuation method consistent and documented.

## Capacity & Technical Measures

1. Installed, licensed, and practical capacity determined (CAS-2).
2. Capacity utilisation report verified.
3. Reconciliation between production logs and ERP.
4. Standard yield norms checked.
5. Downtime records reviewed.

## Material Cost – CAS-6

1. GRNs, purchase orders, supplier invoices checked.
2. Issue and consumption records verified (FIFO/Weighted Average).
3. Excess, shortages, wastage reviewed.
4. Scrap and by-product accounting checked.
5. Stores ledger reconciled with stock statement.
6. Physical stock verification evidence examined.

## Utilities – Power, Fuel, Water, Steam

1. Separate utility cost centres maintained.
2. Meter readings and calibration records verified.
3. Heat rate, kWh/ton, GCV values validated.
4. Captive power valuation (CAS-4).
5. Cost allocation to production cost centres reviewed.

## Employee Cost – CAS-7

1. Attendance, overtime, incentive records matched.
2. Labour productivity ratio reviewed.
3. Direct vs indirect labour segregation validated.
4. Wage settlements reviewed for compliance.
5. Payroll control systems evaluated.

## Repair & Maintenance

1. Preventive maintenance plan obtained.
2. Major spares consumption verified.
3. Outsourced maintenance bills analysed.
4. Capital vs revenue expenditure distinction checked.
5. Break-down register reviewed.

## Overheads – CAS-3 & CAS-8

1. Production overhead basis validated.
2. Administrative overhead allocation checked.
3. Selling & distribution overhead captured separately.
4. R&D cost (CAS-17, if applicable) reviewed.
5. Non-cost items excluded properly (e.g., donations).

## Production Records Verification

1. Bill of Materials aligned with actual consumption.
2. Batch sheets/process sheets examined.
3. By-products and waste captured appropriately.
4. Transit and pipeline losses reviewed.
5. Rejection and rework analysis reviewed.

## Finished Goods & WIP

1. Valuation as per CAS-4 & CAS-6 verified.
2. WIP determination methodology checked.
3. FIFO/Weighted Average methods tested.
4. GST impact on valuation reviewed.
5. Cut-off procedures validated.

## Cost Statements

1. Cost sheet verified for all products.
2. Conversion cost and prime cost accuracy checked.
3. Joint cost allocation method examined.
4. Captive consumption valuation certified.
5. Product-wise profitability statements reviewed.

## Reconciliation

1. Reconciliation of cost records with financial accounts completed.
2. Differences identified and justified.
3. Overheads and depreciation alignment checked.
4. Inventory valuation differences noted.



## Sector-Specific Cost Audit Programme – Cement Industry

Below is a tailored programme specifically designed for cost auditing **Cement Plants**, incorporating industry-specific cost drivers, utilities, Mining operations, kiln efficiency, and energy consumption norms.

### A. Industry-Specific Risk Areas

- High energy cost (up to 45% of total cost).
- Raw material extraction at captive mines.
- Kiln operation efficiency (heat rate, refractory life).
- High transportation and logistics expenses.
- Multiple products (OPC, PPC, PSC, clinker).
- High dependence on power & fuel mix.

### B. Compliance & Reporting Checklist

- CRA-1 Cost Records verified
- Auditor's observations documented
- Management representation letter signed
- Executive summary prepared
- Thermal & electrical energy consumption
- Clinker-cement ratio
- Capacity utilisation
- CAS compliance (CAS-3, 4, 6, 8, 21)

### C. Industry specific Cost Audit Programme-Cement

#### 1. Review of Mining & Raw Material Extraction

- Examine statutory approvals for mining.
- Verify limestone raising cost: drilling, blasting, loading, transportation.
- Verify stripping ratio and overburden removal cost.
- Check royalty, DMF, NMET, and other government levies.
- Validate captive mine-to-plant material transfer pricing.

#### 2. Raw Mill & Kiln Operations

- Review kiln run-hours, stoppages, and refractory life.
- Verify heat consumption norms (kcal/kg of clinker).
- Cross-check AFR (alternative fuel & raw material) usage.
- Validate kiln feed mix ratio (LSF, SM, AM).
- Examine preheater and cooler efficiency.

### 3. Power & Fuel

- Verify captive power plant operation logs.
- Validate SEC (Specific Energy Consumption) in kWh/ton cement.
- Review coal quality (GCV, moisture, ash).
- Check pet coke, AFR, lignite consumption.
- Metering accuracy and calibration.

### 4. Grinding Unit

- Check energy usage of ball mill/VRM.
- Verify grinding media consumption.
- Examine separator efficiency.
- Review product fineness norms.

### 5. Inventory Verification

- Raw materials: limestone, shale, gypsum.
- Clinker stockyard physical check.
- Bagged vs bulk cement reconciliation.
- Dead stock and slow-moving items analysis.

### 6. Transportation & Logistics Cost

- Outbound freight charges reconciled.
- Verification of rake freight, road transport bills.
- Freight equalisation policies checked.
- Primary vs secondary freight separation.

### 7. Environmental & Compliance Costs

- Pollution control cost (ESP, baghouse maintenance).
- Water usage cost.
- Environmental mitigation expenses.
- Compliance with CPCB/SPCB.

### 8. Product Cost Statements Verification

- OPC/PPC/PSC/clinker individual cost sheets reviewed.
- Expansion projects cost captured separately.
- Captive consumption valuation of clinker.
- Joint cost allocation between clinker and cement.

### 9. Reconciliation and Reporting

- Reconcile kiln logs, production statements, and ERP.
- Cross-check financial vs cost records.
- Evaluate variances: fuel, power, raw material.



## Topic

Module 6:  
Consolidated  
Financial  
Statements and  
Separate Financial  
Statements

Module 8:  
Government  
Accounting in India

FINAL

Group IV - Paper-18

Corporate Financial  
Reporting (CFR)



## Topic: Consolidated Financial Statements and Separate Financial Statements

### • Comprehensive Problems

#### Problem 1

Summarized balance sheets of a group of companies comprising P Ltd., Q Ltd. and R Ltd. as on 31st March, 2024 are as under.

(₹ in lakhs)

	P Ltd.	Q Ltd.	R Ltd.
<b>Assets</b>			
<u>Non-current Assets</u>			
Property, plant and equipment	1,120	1,260	1,050
Investment:			
112 lakh shares in Q Ltd.	1,190		
84 lakh shares in R Ltd.		980	
<u>Current assets</u>			
Inventories	770	245	175
Financial assets:			
Trade receivables	910	350	370
Bills receivables	252	-	105
Cash in hand and at bank	<u>798</u>	<u>140</u>	<u>140</u>
	<u>5,040</u>	<u>2,975</u>	<u>2,240</u>
<b>Equity and Liabilities</b>			
<u>Shareholder's equity</u>			
Share capital (Rs.10 per share)	2,100	1,400	1,120
Other equity:			
Reserves	630	350	280
Retained earnings	560	175	210
<u>Current liabilities</u>			
Financial liabilities:			
Trade payables	1,645	805	630
Bills payable			
P Ltd.	-	245	-
Q. Ltd.	<u>105</u>	<u>-</u>	<u>-</u>
	<u>5,040</u>	<u>2,975</u>	<u>2,240</u>

The following additional information is available:

- (i) P Ltd. holds 80% shares in Q Ltd. and Q Ltd. holds 75% shares in R Ltd. Their holdings were acquired on 30th September, 2022.
- (ii) The business activities of all the companies are not seasonal in nature and therefore, it can be assumed that profits are earned evenly throughout the year.



(iii) On 1st April 2023, the following balances stood in the books of Q Ltd. and R Ltd.

(₹ in lakhs)

	Q Ltd.	R Ltd.
Reserves	280	210
Retained earnings	70	105

- (iv) ₹35 lakhs included in the inventory figure of Q Ltd. is inventory which has been purchased from R Ltd. at cost plus 25%.
- (v) The parent company has adopted an accounting policy to measure non-controlling interest at fair value (quoted market price) applying Ind AS 103. Assume that market price of the shares of Q Ltd. and R Ltd. are the same as their respective face values.

#### Required:

- (a) Calculate Goodwill/Gain on bargain purchase and Non-controlling Interest for preparation of consolidated balance Sheet.
- (b) Prepare consolidated balance sheet, as at 31st March 2024, of the group of companies P Limited, Q Limited and R Limited.

#### Solution

- (a) A. Calculation of Goodwill / Capital Reserve on acquisition of subsidiaries

₹ in lakhs

	Q Ltd.	R Ltd.
Investment or consideration	1,190.00	(980×80%) 784.00
Add : NCI at Fair value		
(1,400 x 20%)	280.00	
(1,120 x 40%)	-	448.00
	1,470.00	1,232.00
Less: Identifiable net assets (Share Capital + Increase in the reserves and Surplus till acquisition date)	(1,400+437.50)	(1,120+402.50)
	(1,837.50)	(1,522.50)
Gain on Bargain Purchase (Capital Reserve)	367.50	290.00
Total capital reserve (367.50 + 290.50)	658.00	

- B. Calculation of Non-controlling Interest

(₹ in lakhs)

	Q Ltd.	R Ltd.
At Fair Value (See Answer A above)	280.00	448.00
Add : Post Acquisition Reserves (See Note 1)	(35x20%) 7.00	(35x40%) 14.00
Add : Post-acquisition retained earnings (See Note 1)	(52.50x20%) 10.560	(45.50x40%) 18.20
Less : NCI share of investment in R Ltd.	(980x20%) (196.00)*	-
	101.50	480.20
Total (101.50 + 480.20)	581.00	

\* Note: The non-controlling interest in Q Ltd. will take its proportion in R Ltd. So, they have to bear their proportion in the investment by Q Ltd. (in R Ltd.) also.



(b)

**Consolidated Balance Sheet of the Group as on 31st March, 2024**

Particulars	Note No.	₹ in lakh
<b>ASSETS</b>		
<u>Non-current Assets</u>		
(a) Property, Plant and Equipment	1	3,430.00
<u>Current Assets</u>		
(a) Inventories	2	1,183.00
(b) Financial Assets		
(i) Trade Receivables	3	2,142.00
(ii) Cash and cash equivalents	4	<u>1,078.00</u>
Total assets		<u>7,833.00</u>
<b>EQUITY AND LIABILITIES</b>		
Equity attributable to owners of parent		
(a) Share Capital		2,100.00
(b) Other Equity	5	1,966.30
Non-controlling interests [Answer 6 (a). B]		<u>581.70</u>
Total equity		<u>4,648.00</u>
<b>LIABILITIES</b>		
Non-current liabilities		Nil
Current liabilities		
(a) Financial Liabilities		
(i) Trade payables	6	<u>3,185.00</u>
Total liabilities		<u>3,185.00</u>
Total equity and liabilities		<u>7,833.00</u>

**Notes to Accounts**

Sl. No.	Particulars	₹ in lakh	₹ in lakh
1.	Property Plant & Equipment		
	P Ltd.	1,120.00	
	Q Ltd.	1,260.00	
	R Ltd.	<u>1,050.00</u>	3,430.00
2.	Inventories		
	P Ltd.	770.00	
	Q Ltd. (245 – 7)	238.00	
	R Ltd.	<u>175.00</u>	1,183.00
3.	Trade Receivables		
	P Ltd.	910.00	
	Q Ltd.	350.00	
	R Ltd.	<u>770.00</u>	
	(A)	<u>2,030.00</u>	
	Bills Receivables		
	P Ltd. (252 – 245)	7.00	
	R Ltd.	<u>105.00</u>	
		<u>112.00</u>	
	Total Trade Receivables (A+B)	(B)	2,142.00



Sl. No.	Particulars	₹ in lakh	₹ in lakh
4.	Cash & Cash equivalents		
	P Ltd.	798.00	
	Q Ltd.	140.00	
	R Ltd.	<u>140.00</u>	1,078.00
5.	Other Equity		
	Reserve (W.N.3)	679.00	
	Retained earnings (W.N.3)	629.00	
	Capital reserve [Answer 6(a). A]	<u>658.00</u>	1,966.30
6.	Trade payables		
	P Ltd.	1,645.00	
	Q Ltd.	805.00	
	R Ltd.	<u>30.00</u>	
	(A)	<u>3,080.00</u>	
	Bills payable		
	P Ltd.	105.00	
	Q Ltd. (245 – 245)	<u>-</u>	
	(B)	<u>105.00</u>	
	Total Trade Payables (A+B)		3,185.00

\* Note: Bills Payable of P Ltd. is not reflecting as Bills receivable of Q Ltd. This may happen since Q Ltd. may have discounted/endorsed the same to the bank/third party.

### Working Notes:

#### 1. Analysis of Reserves and Surplus

(₹ in lakh)

		Q Ltd.		R Ltd.
Reserves as on 31.3.2023		280.00		210.00
Increase during the year 2023-2024	70.00		70.00	
Increase for the half year till 30.9.2023		<u>35.00</u>		<u>35.00</u>
Balance as on 30.9.2023 (A)		315.00		245.00
Total balance as on 31.3.2024		<u>350.00</u>		<u>280.00</u>
Pot-acquisition balance of Reserves		<u>35.00</u>		<u>35.00</u>
Retained Earnings as on 31.3.2023		70.00		105.00
Increase during the year 2023-2024	105.00		98.00*	
Increase for the half year till 30.9.2023		<u>52.50</u>		<u>49.00</u>
Balance as on 30.9.2023 (B)		<u>122.50</u>		<u>154.00</u>
Total balance as on 31.3.2024		<u>(175.00)</u>		<u>(210.00)</u>
Post-acquisition balance		52.50		56.00
Less: Unrealised Gain on inventories [(35+125) x 25]		<u>-</u>		<u>(7.00)</u>
Post-acquisition balance for CFS		<u>52.50</u>		<u>49.00</u>
Total balance on the acquisition date i.e. 30.9.2023(A+B)		437.50		402.00

\* Net of unrealised gain ₹7 Lakh [(35/125) x 25]



## 2. Calculation of Effective Interest of P Ltd. in R Ltd.

Acquisition by P Ltd. in Q Ltd.	= 80%
Non-controlling Interest of Q Ltd.	= 20%
Acquisition by Q Ltd. in R Ltd.	= 75%
Acquisition by Group in R Ltd. (80% x 75)	= 60%
Non-controlling Interest of R Ltd.	= 40%

## 3. Calculation of Consolidated Other Equity

	Reserves (₹ in lakhs)	Retained Earnings (₹ in lakhs)
X Ltd.	630.00	560.00
Add: Share in Q Ltd.	(35 x 80%) 28.00	(52.50 x 80%) 42.00
Add: Share in R Ltd.	(35 x 60%) <u>21.00</u>	(45.50 x 60%) <u>27.30</u>
	<u>679.00</u>	<u>629.30</u>

## Topic: Government Accounting in India

**Question:**

**What is Public Accounts Committee? Describe its constitution.**

**Answer:****Meaning of Public Accounts Committee**

The Public Accounts Committee (PAC) is one of the most important financial committees of the Parliament of India, responsible for examining the accounts of the Government and ensuring financial accountability. It is a key instrument of legislative oversight over public expenditure and the functioning of the executive. The PAC examines reports of the Comptroller and Auditor General of India (CAG), especially those relating to the appropriation of funds, financial irregularities, wasteful expenditure, and violations of parliamentary financial procedures.

**Constitution of the Public Accounts Committee****1. Number of Members**

The committee consists of 22 members. 15 members are elected from the Lok Sabha. 7 members are elected from the Rajya Sabha.

**2. Method of Election**

Members are elected annually by the respective Houses of Parliament.

The election is conducted through the principle of proportional representation by means of the single transferable vote, ensuring representation of major political parties.

**3. Tenure**

The members are appointed for a one-year term. They can be re-elected in subsequent years.

**4. Chairperson**

The Chairperson of the PAC is appointed by the Speaker of the Lok Sabha.

Traditionally, the Chairperson is chosen from the opposition party, enhancing impartial oversight of government expenditure.

**5. Restrictions**

A minister cannot be a member of the PAC.

If an existing member is appointed as minister, he must step down from the committee.

The Public Accounts Committee is a powerful parliamentary body that scrutinizes public spending and ensures accountability by examining CAG reports. Its constitution reflects the principles of representative democracy, independence from executive influence, and bipartisan legislative oversight.



## Topic

Module 18:  
Valuation and  
Related Party  
Transactions

FINAL

Group IV - Paper-19

Indirect Tax Laws  
and Practice (ITLP)

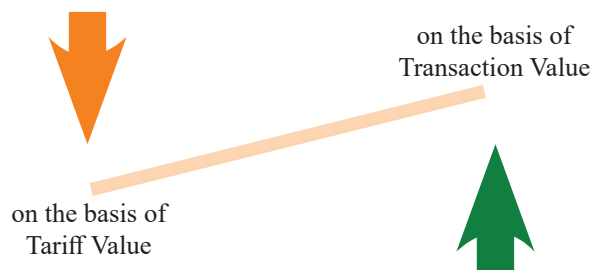


## Customs Valuation Rules

Customs administration has been an integral part of our economic framework since time immemorial, reflecting centuries-old practices of revenue collection that trace their origins as far back as Kautilya's *Arthashastra*. Today, the Customs Act, 1962, together with the Customs Valuation Rules, provides the modern machinery for determining the value of imported and exported goods. Entry No. 83 of the List I to the Schedule VII of the Constitution empowers the Union Government to legislate and collect duties on imports and exports. Accordingly, the Customs Act, 1962, effective from 1-2-1963 provides vide its section 12 for the levy of duties on goods imported into or exported from India. The items and the rates of duties leviable thereon are specified in two Schedules to the Customs Tariff Act, 1975. The First Schedule specifies the various import items in systematic and well considered categories, in accordance with an international scheme of classification of internationally traded goods known as 'Harmonized System of Commodity Classification' and specifies the rates of import duties thereon, as prescribed by the legislature. The duties on imported items are usually levied either on specific or ad-valorem basis, but in few cases specific-cum-ad valorem duties are also levied. The Second Schedule incorporates items that are subject to exports duties and the rates of duties thereof.

Customs valuation forms the foundation of duty assessment under the Customs Act, 1962. Since import duties are charged on the value of goods in most cases, determining the correct assessable value is essential for ensuring fairness, transparency, and revenue protection. This article explains the legal framework, valuation rules, and hierarchical methods used to determine the value of imported goods under Indian Customs law.

The rate of customs duty leviable on imported or exported goods are either specific or ad valorem basis (i.e., as a percentage of the value of goods) or at times on specific cum ad valorem. In case of ad valorem duty, the valuation of the goods may be determined in any of the following manner:



In an era of rapidly evolving global commerce, understanding the nuances of customs valuation is

paramount. This document delves into the multifaceted methods—ranging from transaction value to computed and residual methods—that underpin the current valuation framework. By systematically delineating each method and its corresponding conditions, the discussion illuminates how these rules help bridge historical customs practices with contemporary standards, thereby ensuring a consistent and just approach to duty assessment and revenue collection. These rules not only ensure equitable taxation but also uphold transparency and fairness in international trade by adhering to globally recognized principles.

### Valuation on the basis of Transaction Value [Sec. 14(1)]

1. **Valuation of Imported Goods:** The value of the imported goods shall be the transaction value of such goods, that is to say,
  - the price actually paid or payable for the goods;
  - when sold for export to India;
  - for delivery at the time and place of importation;
  - where the buyer and seller of the goods are not related; and
  - price is the sole consideration for the sale

subject to such other conditions as may be specified in the rules<sup>1</sup> made in this behalf.

#### Taxpoint

- Such transaction value in the case of imported goods shall include, in addition to the price as aforesaid, any amount paid or payable for costs and services, including
  - commissions and brokerage (excluding buying commission);
  - engineering, design work;
  - royalties and licence fees;
  - costs of transportation to the place of importation;
  - insurance;
  - loading, unloading and handling charges

to the extent and in the manner specified in the Customs Valuation (Determination of Value of Imported Goods) Rules, 2007

<sup>1</sup> The Customs Valuation (Determination of Value of Imported Goods) Rules, 2007 have been specified.



**Customs Valuation (Determination of price of imported goods) Rules, 1988**

Methods to be followed (in hierarchal order) for determination of the price of imported goods

SN	Valuation Method	Key Conditions/Notes
1	<b>Transaction Value (Rule 3)</b>	<ul style="list-style-type: none"> <li>- Sale in the ordinary course of trade under competitive conditions</li> <li>- Price is the sole consideration</li> <li>- Buyer and seller are not related</li> </ul>
2	<b>Transaction Value of Identical Goods (Rule 4)</b>	<ul style="list-style-type: none"> <li>- Based on sale of goods identical in characteristics, quality, and reputation</li> <li>- Adjustments if the sale differs in quantity or commercial level</li> </ul>
3	<b>Transaction Value of Similar Goods (Rule 5)</b>	<ul style="list-style-type: none"> <li>- Goods not identical but perform the same function</li> <li>- Similar in characteristics and component materials</li> </ul>
4	<b>Deductive Value (Rule 7)</b>	<ul style="list-style-type: none"> <li>- Based on unit price in India after deducting costs (commission, transport, insurance, taxes, etc.)</li> <li>- Applicable when preceding methods fail</li> </ul>
5	<b>Computed Value (Rule 8)</b>	<ul style="list-style-type: none"> <li>- Considers cost of materials, fabrication, processing, plus an amount for profit and general expenses</li> </ul>
6	<b>Residual Method (Rule 9)</b>	<ul style="list-style-type: none"> <li>- Applied using reasonable means with available data when none of the above methods yield a value</li> </ul>

**Note:** On request, the order of application of rules 7 (i.e. Deductive value) and 8 (i.e. Computed value) shall be reversed.

**Transaction Value [Rule 3]**

Transaction value shall be accepted as price, provided the following conditions are satisfied –

1. The sale is in the ordinary course of trade under fully competitive conditions;
2. There are no restriction as to the disposition or use of the goods by the buyer other than restrictions which –
  - a. are imposed or required by law or by public authorities in India; or
  - b. limit the geographical area in which the goods may be resold; or
  - c. do not substantially affect the value of the goods;
3. The sale or price is not subject to condition or consideration for which a value cannot be determined;
4. Any part of the proceeds of subsequent resale, disposal or use of the goods by the buyer will not be shared with the seller unless an appropriate adjustment is made;
5. The buyer and seller are not related.

**Transaction value of identical goods [Rule 4]**

The value of imported goods shall be the transaction value of identical goods sold for export to India and imported at or about the same time as the goods being valued.

**Taxpoint**

1. *Identical goods* means imported goods –
  - a) which are same in all respects, including physical characteristics, quality and reputation as the goods being valued except for minor differences in appearance that do not affect the value of goods;
  - b) produced in the country in which the goods being valued were produced; and
  - c) produced by the same person who produced the goods or where no such goods are available, then goods produced by a different manufacturer.

However, identical goods do not include goods where engineering, development, art work, design work, plan or sketch was done by the buyer in India free of charge or at a reduced cost.

2. Such identical goods shall be sold at the same commercial and quantity level. Where no such sale is found, the transaction value of identical goods sold at a different commercial level or in different quantity or both shall be used with certain adjustment.
3. Where more than one transaction value of identical goods is found, then the lowest of such value shall be used for determining the value of imported goods.



**Transaction value of similar goods [Rule 5]**

The value of imported goods shall be the transaction value of similar goods sold for export to India and imported at or about the same time as the goods being valued.

**Notes**

1. *Similar goods* means imported goods –
  - a) which although not alike in all respect, have like characteristics and like component materials which enable them to perform the same function. Such goods shall be commercially interchangeable with the goods being valued having regard to the quality, reputation and the existence of trade-mark.
  - b) produced in the country in which the goods being valued were produced; and
  - c) produced by the same person who produced the goods or where no such goods are available, then goods produced by a different manufacturer.

However, similar goods do not include goods where engineering, development, art work, design work, plan or sketch was done by the buyer in India free of charge or at a reduced cost.

2. Such similar goods shall be sold at the same commercial and quantity level. Where no such sale is found, the transaction value of similar goods sold at a different commercial level or in different quantity or both shall be used with certain adjustment.
3. Where more than one transaction value of similar goods is found, then the lowest of such value shall be used for determining the value of imported goods.

**Deductive Value [Rule 7]**

Where the goods being valued or identical or similar imported goods are sold in India at or about the time of determination of value, then the value of imported goods shall be based on the unit price at which such goods are sold in the *greatest aggregate quantity* to the *unrelated* person in India as reduced by -

- a) the commission usually paid or payable or the additions usually made for profits and general expenses for sales in India;
- b) the cost of transport and insurance and other cost incurred within India;
- c) the customs duty and other taxes payable in India by reason of importation or sale of the goods.

**Notes**

1. Where such goods are not sold at or about the same time of importation of the goods being valued, then the value of imported goods shall be based on the unit price at which the imported goods or identical

or similar imported goods are sold in India at the earliest date after importation but before the expiry of 90 days after such importation.

2. Where such goods are sold in India after further processing, then the value shall be based on the unit price at which the imported goods after processing are sold in the greatest aggregate quantity to an unrelated person in India as reduced by processing and other cost (as referred above) incurred in India.

**Computed value [Rule 8]**

The value of imported goods shall consist of –

- a) The cost or value of materials and fabrication or other processing employed in producing the imported goods;
- b) An amount for general expenses and profit made by producers in the country of exportation for export to India;
- c) The cost of transport, insurance, etc.

**Residual method [Rule 9]**

Where the value of imported goods shall not be determined as per any preceding rules, then the value shall be determined using -

- reasonable means consistent with the principles;
- general provisions of these rules; and
- data available in India.

In conclusion, the Customs Valuation Rules represent a vital framework designed to bring fairness, transparency, and consistency to the process of determining the value of imported goods. By employing a hierarchical approach—from the initial transaction value through to alternative methods such as identical or similar goods, and finally, the deductive, computed, or residual methods—these rules ensure that the assessed value accurately reflects the true economic conditions of international trade. This layered methodology not only helps safeguard government revenue but also promotes equitable treatment for businesses and importers by anchoring assessment practices in real-world commercial transactions.

Moreover, as global trade continues to evolve, a thorough understanding and diligent application of these valuation protocols remain imperative for customs officials, importers, and policy makers alike. Through clear documentation and adherence to these established norms, stakeholders can navigate regulatory complexities more effectively, thus minimizing disputes and enhancing compliance. Ultimately, these rules — rooted in both historical context and modern practice — reinforce the integrity of the customs system and serve as a robust guide for ensuring just duty assessments in an increasingly interconnected economic landscape.



## Topic

Module 4:  
Enterprise Risk  
Management

Module 9:  
Valuation in  
Mergers and  
Acquisitions

## ELECTIVES

### Paper-20A

Strategic  
Performance  
Management and  
Business  
Valuation (SPMBV)



## Enterprise Risk Management (ERM)

An ERM framework is a systematic approach organization adopt to identify, assess and manage risks across the entire company to achieve its goals & objectives. Thus, it is a set of principles and procedures for effectively managing & monitoring various functional risks to achieve long term organizational objectives by continuously focusing on risk avoidance, risk reduction, risk distribution and risk acceptance.

Key components of an ERM includes identifying potential risks, risk assessment & analysis , risk governance, risk monitoring and risk reporting.

Popular frameworks that provide an ERM structure are COSO and ISO 31000

Let us briefly discuss the key focus of an ERM –

- a. It identifies risks across internal & external environments, circumstances, stakeholders and systems.
- b. Drives risk management processes throughout the organization.
- c. Gives division level managers the flexibility to implement the applicable processes while ensuring that they align with the overall risk management strategy of the enterprise.
- d. Integrates risk prevention and mitigation activities to address all areas of organisational exposure to risk (e.g., compliance, financial, governance, operational, reputational, and strategic). In essence, it takes a comprehensive, integrated and holistic view of all pertinent risks that are identified.
- e. Seek risk management as a competitive advantage

In the aforesaid context, organisation with effective ERM, pay attention to the following important areas & tasks –

1. Organisation structure.
2. Procedures, Processes and Protocols
3. Employee education & Training
4. Monitoring, Measuring and Reporting performances.
5. Setting criteria for acceptance or tolerance of specific risks
6. Setting criteria for avoidance or termination of specific risks
7. Setting criteria for reduction or mitigation of specific risks
8. Setting policies for transferor and sharing of specific risks

The major elements constituting an ERM are-

### 1. Internal Environment:

Establishing the tone for risk management by including governance, ethical values and a risk- conscious culture in the organization.

Following questions are asked –

- (a) What are the main components or drivers of the organization's strategy?
- (b) What internal or external factors or events could obstruct or disrupt steps for executing this strategy?
- (c) Do existing systems and processes support achieving the stated goals and managing the consequent internal and external risks?

### 2. Objective Setting:

Linking risk management initiatives to overall organizational strategy by defining specific goals. The organisational objectives are aligned with the organization's risk threshold.

### 3. Risk identification and Risk Assessment:

It is the process of identifying potential events that could affect the organization and further assessing their potential impact and likelihood on the organisation's performance. Risk assessment is usually done through a process of Risk Mapping where all the relevant risk elements are listed and each single risk element is examined as to their probability or likelihood of occurrence and possible consequence or impact.

### 4. Risk Analysis:

After identifying and assessing all possible risks, it is important to analyse the level of each category of risk which involves the examination of the likelihood and consequence of each risk factor in a given situation. The analysis may be carried out by suitable qualitative, quantitative, or semi quantitative methods, depending upon the type of risk element in a given situation.

### 5. Risk categorization and strategy:

Establishing the amount of risk an organization is willing to accept to achieve its goals & objectives depends on its risk bearing capacity. Efforts are made to categorize potential events & circumstances signifying high risk, medium risk and low risk so that proper attention towards reduction, mitigation, avoidance or sharing of the risks in each category can be given depending upon the risk bearing capacity of the organization.

### 6. Risk response:

Developing and implementing strategies to manage identified risks, which include risk avoidance, risk acceptance, risk mitigation and risk sharing.



**7. Control activities:**

Implements policies and procedures to help ensure the risk responses are carried out effectively. To establish suitable detective and preventive control process to identify and prevent situations that requires control.

**8. Information & Communication:**

Ensures relevant risk information is captured and communicated to the stakeholders and for this purpose, meaningful reports are generated.

**9. Governance & Oversight:**

Provides a structure for governance and board level oversight of risk management activities in the organization.

**10. Monitoring & Review:**

Continuously evaluates the effectiveness of the risk management process and to make necessary adjustments, as needed.

**Common frameworks –**

1. COSO – The committee of Sponsoring Organizations Treadway Commission is a widely used ERM framework with eight components.
2. Other Models – Other models exist, sometimes with different number of components or steps but they generally cover the same core principles.
3. Industry specific Frameworks – Many highly regulated industries, such as financial services, healthcare and energy related entities have specific ERM frameworks or guidelines which they need to follow.

**Implementing ERM – The steps:**

1. To define the enterprise risk philosophy (ERP)
2. To establish a risk strategy & action plans that align with the enterprise risk philosophy.
3. To be clear and transparent about risk related priorities and proper communication of the same amongst the employees at various levels
4. To assign specific responsibilities for executing ERM plans – establishing Responsibility Accounting in respect of key responsibility areas.
5. To maintain flexibility & agility to respond quickly to new evolving risks
6. To continually monitor identified risks and their possible impact
7. To carefully review all perceived indicators related to future potential risks after establishing KRIs (Key Risk Indicators). The KRIs provide useful insights

about potential risks and act as a catalyst for timely decision making.

8. To measure ERM program results against relevant KPIs (Key Performance Indicators) and CSFs (Critical Success Factors) at stated intervals to ensure the ERM process is delivering results in a satisfactory manner.

**Types of Risks addressed by ERM –**

1. Compliance Risks, both general compliance and specific compliance.
2. Financial Risks
3. Health & Safety Risks
4. Legal Risks
5. Operational Risks
6. Reputational Risks
7. Security Risks
8. Strategic Risks
9. Market risks

**Potential ERM challenges –**

1. As a process, ERM lacks connection between risk and return as rigorous risk mitigation efforts across key functions in an organisation may sometime impact profitability or ROI.
2. Enterprise risk management programs are guided by familiar risks. Future and unfamiliar risks are not considered seriously in the regular Risk Mitigation strategy rendering ERM process weak.
3. Enterprise risk management programs are resource-intensive. Lack of proper management time, attention, focus and understanding undermines the effectiveness of Risk Management process.
4. Enterprise risk management program depends on management forecast. Incorrect forecast based on unreliable data & information undermines the effectiveness of an ERM.
5. Enterprise risk management system often lacks visibility as certain risks are hard to detect as they overlap.
6. ERM tends to focus more on internal risks. Important external risks like market trends, competition, possible change in certain Govt. regulations, etc. are not always focused deeply rendering ERM loose its effectiveness from a long-term standpoint.
7. Risks impact various segments of an enterprise not in the same manner. Hence, their evaluation, mitigation or monitoring using some common yardstick or



similar parameters or criteria becomes difficult. This again undermines the long-term effectiveness of an ERM.

### Benefits of ERM-

1. Ability to respond quickly and effectively to any adverse business situation
2. Awareness of important risks that the entity may face
3. Efficient allocation of resources on a continuous basis
4. Enhanced overall protection of enterprise resources including human resources
5. Improved compliance environment
6. Increased efficiency and effectiveness of operations & activities.

## Valuation in Merger & Acquisitions (MA)

M&A valuation is the process of determining a company's worth for a merger or acquisition and it is crucial for setting fair prices, negotiating deals and making informed decisions. It involves using a combination of methods, namely, market-based, income-based and asset-based approaches to analyse a target company's financial performance, assets & liabilities and future potential & prospects.

A valuation process in M&A indicates a fair purchase price, helps identify potential synergies, ensures regulatory compliance and protects shareholders' interest. M & A activities are normally financed through a combination of debt, cash and stock.

A merger takes place when two or more companies come together and form a new company, whilst when one company takes over another company and declares itself as the new owner, it is known as acquisition. An acquisition can be friendly or hostile.

An acquisition is usually carried out to increase the growth of an entity at a much faster rate and to take advantage of the existing internal and external economies of the acquired business entity. Mergers are carried out to increase market share, strengthen R&D and innovation initiatives, facilitate diversification & expansion, acquire assets, enhance financial capabilities & operating efficiencies and take major tax benefits.

### Importance of Valuation in M&A:

#### Negotiation & Pricing -

For providing a basis for negotiation by establishing a fair price for the target company, thus, preventing overpayment by the buyer and ensuring a fair return for the seller. This helps to determine the share exchange ratio between the transferor and the transferee companies on a reasonably correct basis.

### Concluding Remarks-

An ERM framework is a structured approach to identify, assess, manage, monitor and control risks across the entire enterprise to enable it achieve its strategic goals. It provides the principles and process for managing risks in a consistent and integrated manner, rather than having each department or responsibility centre manage them separately. This helps in making informed decisions, mitigating potential loss and taking advantage of opportunities.

Following such steps as risk identification, risk analysis, risk prioritisation, developing risk response & risk sharing strategies, implementation of suitable control and mitigation measures, monitoring and detecting emerging risks, and finally reviewing the entire process at regular intervals for necessary modifications or improvement, a successful and sustainable ERM process may be adopted by an organisation.

### Informed Decision making –

It gives the acquirer a clear understanding of the target company's financial health, market position and potential synergies to help make an informed decision about the deal.

### Regulatory compliance –

Regulatory bodies often require detailed valuation report before approving schemes of M&A.

### Strategic Alignment –

It helps to ensure that the deal aligns with the strategic goals of both the companies (transferor & transferee) and provides a basis for fairness and acceptability to protect the shareholders' interest.

### Synergy Assessment –

It helps to evaluate how two companies can be worth more together by analysing cost savings, revenue opportunities and operational efficiencies.

### Need for Valuation -

- Corporate restructuring
- Calculation of the consideration for the sale of a business or acquisition
- Liquidation of a Company
- Calculating the consideration for sale or purchase of equity stake
- The portfolio value of investments is calculated by proper valuation by Private Equity Funds or Venture Funds
- Purchase and sale of intangible assets
- For the purpose of getting listed in Stock Exchanges, determination of fair value of shares is required



- Calculating the fair value of shares for providing ESOP following Employee Stock Ownership guidelines.

Laws in India impacting M&A Valuation –

- Companies Act, 2013
- FEMA, 1999
- SEBI Guidelines and Stock Exchanges Rules
- Provisions of The Competition Act
- Stamp Act / Stamp Duty provisions
- Income Tax provisions
- Provisions relating to certain Indirect Taxes
- Accounting Standards.

### Valuation Approaches in M&A –

Major Approaches are -

#### 1. Market Approach-

It compares the company to similar publicly traded companies or recent comparable transactions to establish a relative value. A minority interest market value is provided in the market approach

#### 2. Income Approach-

This approach values the company based on its ability to generate future income under DCF method. The method analyses future cash flows and discounts them back to their present value.

#### 3. Asset- based Approach–

This approach focuses on the net value of the Company's underlying assets which can be the sum of its tangible and intangible assets. The net asset value is determined by subtracting total liabilities from total assets. The approach is employed for valuations in going concern entities as well as for companies in liquidation.

#### Methods of Valuation –

Based on the above-mentioned approaches, following valuation methods may be stated -

##### 1. Net Asset Method –

This method comes under the asset-based approach.

It determines the fair market value of every asset and liability on the date of valuation. In this method, the equity value is estimated based on adjusted assets minus the adjusted liabilities. Usually, the underperforming assets are considered by the acquiring company thru this method.

##### 2. Excess Earnings Treasury Method-

This method considers the concept of both asset-based

and income-based approaches.

It differentiates among intangible assets and adjusted net tangible assets. The estimation of intangible value is done by capitalizing those earnings of the company that are more than the earnings related to a reasonable return on the fair market value of its net assets. The total value of the Company is calculated by combining the tangible net adjusted assets at fair market value with the intangible value as estimated. This method makes use of the average return on equity from similar companies or industry averages to estimate a reasonable return while determining the right capitalization rate.

#### 3. Excess Earnings Reasonable Rate Method-

This method considers both asset -based and income -based approaches.

In this method, a reasonable rate of return is applied to the adjusted net assets. The estimation of intangible value is done by capitalising those earnings of the company that are more than the earnings relating to a reasonable return on the fair market value of its net assets. To estimate the total value of the company, the intangible value is combined with the fair market value of the adjusted net assets.

#### 4. Capitalization of Earnings Method –

This method comes under income-based approach.

This method is used to determine the value of a profitable company when the investor aims to facilitate an annual rate of return on investment over reasonable compensation of the owner. The future estimated earnings are determined and divided by a capitalization rate to obtain a value. In this method no separation is made between the tangible and intangible assets. This method is not appropriate for capital intensive companies.

#### 5. Discounted Cash Flow Method ( DCF ) –

This method comes under income-based approach.

This method is also known as Discounted Earning Method (DEM) . In this method, to determine the value of a company, its earnings are defined which may be post tax cash flow and cash flow from operations. The assumption in this method is that the total value of the company is estimated by determining the current value of the projected future earnings and the current value of the terminal value by using a suitable capitalisation rate. The valuer in this method must be satisfied that the projected earnings are backed by the assumptions of the management and constitute reasonable future earnings.

#### 6. Price Earnings Ratio Method –

This method is a combination of both income-based and market-based approaches.



In this method, market comparison is used to estimate the multiple to be applied against post tax earnings. A weighted average price earning ratio of similar publicly traded companies help in capitalizing the future estimated net income (post tax). The main problem in making market comparisons is finding publicly traded companies that are similar to the target company. This method is generally used to determine the value of large and diversified companies.

### 7. Dividend -Paying capacity Method-

This method is a combination of both income-based and market approaches.

This method is usually employed to determine the value of large companies that pay dividends. A weighted average of dividend yields for a given number of years of similar companies help in capitalizing the future estimated dividend to be paid. When the valuation of larger and diversified company is required, this method may be used.

### 8. Guideline Method-

This method is based on market-based approach.

It draws a qualitative and quantitate comparison between the target company and the public companies (guideline companies) that are similar to it. The valuer must be satisfied that the public companies and the target company carry out similar functions, have similar products & services and are based in the same geographical locations. The required adjustment to the financial statements of the public companies held for comparison must be made by the valuer.

### 9. Direct Market Data Method

This method is based on market-based approach.

It uses the sales transaction of an entity to compare with the acquisition candidate. However, it is not an easy task to compare the sales transaction as they often get consummated due to favourable purchase terms, acquired synergies, etc. Thus, the valuer is required to adjust the direct market data, if used for a premium or discount market pricing.

### 10. Rule of Thumb Method –

This method is based on market-based approach.

It is derived from the direct market data method. A formula is determined based on industry wide experience. This formula is used to ascertain the relations between the sales price and the operational unit of measurement regarding a particular industry. This method provides an effective test to check whether the value estimates determined from other methods are reasonably correct or not.

### Factors affecting M&A Valuation:

Major factors are -

- Collaboration & Strategic Fit – consideration of long-term strategic benefits.
- Regulatory and Legal Issues - possible impact on future profitability and business operations.
- Market and Economic conditions – competition, impact on future pricing policy.
- Tax considerations – possible tax advantages.
- Technology and Intellectual Property – consideration as to technology upgradation and protection of intellectual property rights.
- Debt and Financing Structures – debt levels and their sustainability
- Buyer Type – strategic or otherwise

Challenges in M&A Valuation: Major challenges are -

- a) Relevance & reliability of data quality
- b) Synergy evaluation
- c) Reliability of financial forecasts
- d) Reliability of valuation process
- e) Relevance of valuation approaches & method chosen in a given case so as to determine the correct share exchange ratio between the entities
- f) Market sensitivity to the entity's business with reference to any key or limiting factor(s)
- g) Quality & coverage of due diligence
- h) Behavioural dimension of the M&A, beyond the financial and legal framework, that impacts post merger continuity of the merged entity.

### Concluding Observations:

M&A forms a major part of activities in the corporate sector. Due to significant level of competition in the market, many companies opt for mergers and acquisitions to take advantage of various operational synergies. The value of the target company is determined based on the purpose for which it is getting merged or acquired. The valuation is done based on income, market or asset-based approaches. These approaches further lead to selection of suitable methods of valuation which are carried out in a given context that justifies the purpose of the merger or acquisitions and protects the interest of all stakeholders under a given set of conditions & circumstances.



## Topic

Module 5:  
Operational Risk  
and Off-Balance  
Sheet Risk

Module 8:  
Managing Risk in  
Insurance Business

## ELECTIVES

### Paper-20B

Risk Management  
In Banking and  
Insurance (RMBI)



## Operational Risk and Off-Balance Sheet Risk

Risk Management in Banking involves identifying, assessing, and mitigating risks, with operational risk and off-balance sheet risk being two critical areas. Operational Risk is the risk of loss from failed internal processes, people, and systems, or from external events, and requires robust monitoring of internal processes, people, and systems. Off-balance Sheet (OBS) risk is the risk of loss from activities not listed on a bank's balance sheet, such as loan commitments and guarantees, which can still impact profits and losses and increase a bank's overall risk profile. In Banking, risk management is crucial, with operational and off-balance sheet risks being key areas. Off-balance sheet (OBS) risk arises from contingent assets or liabilities not listed on the main balance sheet, such as loan commitments, letters of credit, and derivatives, which can still create credit or liquidity risk.

### Operational Risk:

- *Definition:* The risk of loss resulting from inadequate or failed internal processes, people, and systems, or from external events. This includes legal risk but excludes strategic and reputational risk.
- *Sources:* Failures in people (e.g., fraud, errors), processes (e.g., incorrect transaction processing), systems (e.g., IT failures), and external events (e.g., natural disasters).
- *Management:*
  - *Identification and Assessment:* Proactively identify, assess, and quantify potential operational risks.
  - *Monitoring:* Track internal loss events, including actual losses, near misses, and attempted fraud, to understand vulnerabilities.
  - *Mitigation:* Implement robust internal controls, align policies, and invest in people, processes, and technology to prevent failures.
  - *Measurement:* Estimate the probability of a loss event occurring and the potential size of the loss.

### Types of Operational Risk in Banking:

- *Internal Fraud:* Losses from theft, bribery, or circumvention of internal policies by employees.
- *External Fraud:* Losses from outside parties, including theft, forgery, and cyberattacks.
- *Technology Failures:* Losses from system crashes, software issues, or inadequate IT infrastructure. Cybersecurity threats are a growing concern.
- *Execution and Process Management:* Losses from failed transaction processing, data entry errors, or incorrect record-keeping.

- *Clients, Products, and Business Practices:* Losses from issues such as failed disclosures, the sale of unsuitable products, or poor advice.

### Managing Operational Risk:

- *Establish a strong risk culture:* Define clear risk appetite and tolerance levels to set boundaries for risk-taking.
- *Assess and measure risk:* Systematically identify potential operational failures and evaluate their likelihood and impact.
- *Mitigation strategies:* Implement controls to reduce the likelihood or impact of risks. This includes avoidance, reduction, transfer (e.g., insurance), or acceptance of risks within the bank's tolerance.
- *Monitoring and reporting:* Regularly track and report on operational risks and incidents to ensure that risk management strategies remain effective.
- *Develop operational resilience:* Build the capacity to prevent, adapt to, and recover from operational disruptions.

**Off-Balance Sheet Risk (OBS):** The risk of financial loss from activities not reflected on a bank's balance sheet, such as loan commitments, guarantees, and derivatives.

- OBS items are financial activities or instruments that do not appear on a bank's primary balance sheet but can still represent a significant financial exposure.
- The risk is that these items can become liabilities that affect the bank's profits and capital, or trigger a demand for additional funding.
- They are typically disclosed in the notes accompanying a bank's financial statements.

### Off-balance Sheet Items:

- *Sources:*
  - *Contingent Liabilities:* Potential obligations that may arise, like a guarantee on a loan that could go bad.
  - *Credit-Related Activities:* Transactions that generate fees but can turn into losses if the counterparty defaults.
  - *Interest Rate Risk:* Mismatches in maturity or repricing dates between on- and off-balance sheet assets and liabilities can create risk from interest rate changes.
- *Management:*
  - *Risk Assessment:* Assess the potential impact of OBS activities on the bank's overall risk profile.



- *Monitoring*: Monitor the volume and nature of OBS commitments and potential liabilities.
- *Disclosure*: Ensure adequate disclosure of OBS items to provide a more complete picture of the bank's risk exposure.
- *Capital and Provisions*: Ensure sufficient capital and provisions are set aside to cover potential losses from OBS activities.

#### Other Sources of OBS Risk:

- *Undrawn lending facilities*: Lines of credit or loan commitments that a bank has promised to provide to a borrower upon request.
- *Derivatives*: Financial contracts whose value is derived from an underlying asset, creating potential counterparty and market risk.
- *Securitization vehicles*: Entities created to hold and manage assets, which can expose the bank to risks that were not transferred in the securitization process.
- *Leases*: Certain operating leases, where the bank is the lessee, have historically been kept off the balance sheet, though accounting rules have evolved to increase transparency.

#### Mitigating OBS risk:

- *Robust risk assessment*: Thoroughly analyse the potential for off-balance sheet items to create liquidity, credit, and counterparty risk.
- *Improved disclosure*: Rely on disclosures in financial statement notes to fully understand the extent of OBS

exposures. Regulatory changes have also pushed for greater transparency.

#### Risk Management in Banking:

- *Risk Appetite*: A core component is defining a clear risk appetite and tolerance level to identify acceptable levels of risk and establish appropriate mitigation strategies.
- *Policy*: A comprehensive risk management policy is essential for ensuring all current and future risk exposures are identified, assessed, and managed.
- *Alignment*: All relevant policies, such as those for loans, investments, and IT, should be aligned with the overarching risk management policy.

**To Conclude**, Operational risk is the potential for loss resulting from inadequate or failed internal processes, people, systems, or from external events, including legal risk. Off-balance sheet activities are those that do not involve booking assets and taking deposits but can impact a bank's financial statement if they become actual assets or liabilities. These include guarantees, endorsements, derivatives, and foreign exchange transactions.

Indian banks address operational and off-balance sheet risks by implementing robust frameworks based on regulations from the Reserve Bank of India (RBI), which focus on strong internal governance, risk assessment, and operational resilience. Off-balance sheet activities, which include derivatives and guarantees, are converted to "on-balance sheet" equivalents using credit conversion factors and are regulated through exposure norms and capital adequacy requirements.



## Risk Management in Insurance

### Managing Risk in Insurance Business

Risk Management in the insurance business involves identifying, assessing, mitigating, and monitoring risks to protect the company's financial health and ensure its ability to fulfil obligations. The process includes managing underwriting, investment, and operational risks by developing strategies like risk control, proper underwriting, and robust monitoring to minimize adverse financial impacts from unexpected events. It is a core strategic function, not just a compliance issue, and involves managing risks inherent in both underwriting policies and overall business operations.

**Risk Management Framework in Insurance:** A robust Enterprise Risk Management (ERM) framework in insurance is crucial for sound governance and typically involves the following systematic steps:

- *Risk Identification:* Pinpointing potential internal and external threats. This includes obvious risks like natural disasters and less apparent ones such as supply chain disruptions, regulatory changes, or data breaches.
- *Risk Assessment and Analysis:* Evaluating the likelihood and potential financial, operational, and reputational impact of identified risks. This often uses quantitative data, statistical models, and actuarial science to forecast future claims and potential losses.
- *Risk Mitigation and Control:* Developing strategies to minimize or eliminate the impact of risks. This includes implementing safety protocols, diversifying investments, purchasing reinsurance, or restructuring operations.
- *Monitoring and Reviewing:* Continuously tracking the risk profile and the effectiveness of implemented controls. Regular audits and performance reviews ensure that strategies remain relevant as business conditions evolve.
- *Communication and Reporting:* Ensuring transparent communication about risks and mitigation efforts to all stakeholders, including management, employees, regulators, and policyholders.
- *Governance:* Establishing a clear structure with defined roles (e.g., Chief Risk Officer, risk committees) to oversee the risk management process and align it with overall business strategy and regulatory requirements.

#### Risk Identification:

- *Initial step:* This involves examining all potential exposures the insurer faces, from client operations to internal processes.

- *Types of risks:* Insurers identify and categorize various risks, such as:

- *Underwriting risk:* Premiums may be insufficient to cover claims.
- *Market risk:* Changes in financial markets affect investments.
- *Operational risk:* Risks from day-to-day business operations, including internal failures or fraud.
- *Strategic risk:* Risks from poor business decisions or failure to adapt to market changes.
- *Regulatory risk:* Risks associated with changes in laws and regulations.
- *Cybersecurity risk:* Threats to data and systems.
- *Emerging risks:* New and unforeseen threats like geopolitical volatility.

#### Risk Assessment and Analysis:

- *Analyse impact and likelihood:* After identification, each risk is assessed to understand its potential financial impact and the probability of it occurring.
- *Data-driven analysis:* Qualitative or quantitative analysis of data helps isolate and prioritize risks.
- *Risk quantification:* Quantifying risk exposures is crucial for assessing solvency under different scenarios, a requirement under frameworks like Own Risk and Solvency Assessment (ORSA).

#### Risk Mitigation:

- *Loss control:* Implementing measures to reduce the likelihood or severity of losses, such as implementing safety protocols.
- *Risk transfer:* In some cases, this can involve purchasing insurance for risks the company itself faces or restructuring operations.
- *Strategic development:* Creating risk management programs that include specific control and mitigation measures.
- *Best practices:* Implementing strong internal controls and a “tone from the top” to ensure risk assessments are conducted at all levels of the organization.

#### Risk Monitoring and Control:

- *Continuous monitoring:* The process requires ongoing monitoring to ensure the effectiveness of mitigation strategies as business conditions and risks change.



- *Key risk indicators (KRIs)*: Using KRIs to monitor exposure levels and trigger actions when thresholds are breached.
- *Regular reviews*: Regularly reviewing and updating crisis management and business continuity plans.
- *ORSA reporting*: Regularly documenting the risk management approach, quantifying risk exposures, and assessing solvency is often a regulatory requirement.

#### **Governance and structure:**

- *Board oversight*: The Board of Directors sets the strategy and oversees management's risk management efforts.
- *Risk management committee*: A committee is often established to oversee risks across the organization and challenge management's assessments.
- *Independence*: Key roles in risk-taking and risk monitoring should be independent of each other.

**Key Types of Risks Faced by Insurers:** Insurance companies encounter a range of risks, including:

- Underwriting Risk.
- Market Risk from fluctuating factors like interest rates and equity prices.
- Operational Risk from internal process failures or external events.
- Liquidity Risk from insufficient cash to meet liabilities.
- Strategic Risk from an inability to adapt to environmental changes.
- Regulatory and compliance risk from new laws and regulations.

**Core Risk Management Strategies:** Insurers Employ Strategies such as:

- Avoiding high-risk Activities / Business.
- Reducing the frequency or severity of potential losses.

- Transferring risk, often through reinsurance.
- Retaining certain risks internally, using reserves.
- Diversifying across assets, geographies, or products.
- Using Asset and Liability Management (ALM) to match assets and liabilities.

ERM is the cornerstone of risk management, involving a holistic, company-wide process of identifying, assessing, and mitigating potential threats. This integrated approach ensures that risks are managed across all departments (underwriting, claims, investments, etc.) rather than in isolated silos.

The Insurance Regulatory and Development Authority of India (IRDAI) mandates a robust governance framework and strict adherence to regulations to safeguard financial stability and protect policyholders' interests.

Effective risk management is vital for insurers to maintain stability, profitability, and customer confidence, helping them navigate uncertainty and meet regulatory requirements.

Indian Insurance Companies manage risk through a combination of structured processes and technological adoption, including risk assessment and analysis, implementing risk management frameworks, leveraging data analytics for underwriting and pricing, and adhering to regulatory capital requirements. They also use risk transference through reinsurance and manage operational risks like fraud through monitoring and internal controls.

Indian Insurance Companies manage risk through a comprehensive, multi-faceted approach involving Enterprise Risk Management (ERM) frameworks, stringent regulatory compliance mandated by the IRDAI, and advanced technology like AI and data analytics.

By integrating these strategies, Indian Insurance Companies aim to build resilience against a constantly evolving risk landscape, from natural catastrophes and cyber threats to economic volatility and regulatory changes.



## Topic

Module 6:  
Risk Management  
Strategies

## ELECTIVES

### Paper-20C

Entrepreneurship  
and Start Up (ENTS)



## Risk Management Strategies and Startup Audit

Startup risk refers to the potential for a new business to fail, resulting in a loss of investment and other resources.

Following are the startup risks:

### Market and business risks

- (i) **Market need:** The product or service does not solve a problem that customers are willing to pay for.
- (ii) **Competition:** The market is too saturated or a better-funded competitor emerges.
- (iii) **Lack of product-market fit:** The startup struggles to find the right balance between its product and the needs of the market.

### Financial and operational risks

- (i) **Running out of cash:** Insufficient funding to sustain operations until the business becomes profitable.
- (ii) **Cash flow problems:** Inability to manage the timing of incoming and outgoing money.
- (iii) **Poor financial management:** Inadequate planning, accounting, or a lack of financial controls.
- (iv) **Execution risk:** Failure to effectively execute the business plan due to operational or technical shortcomings.

### Team and leadership risks

- (i) **Inexperienced or unskilled team:** The founders or early employees may lack the necessary skills, experience, or vision.
- (ii) **Founder disputes:** Disagreements among co-founders about the business direction or finances can be destructive.
- (iii) **Poor leadership:** Ineffective management can hinder growth and lead to failure.

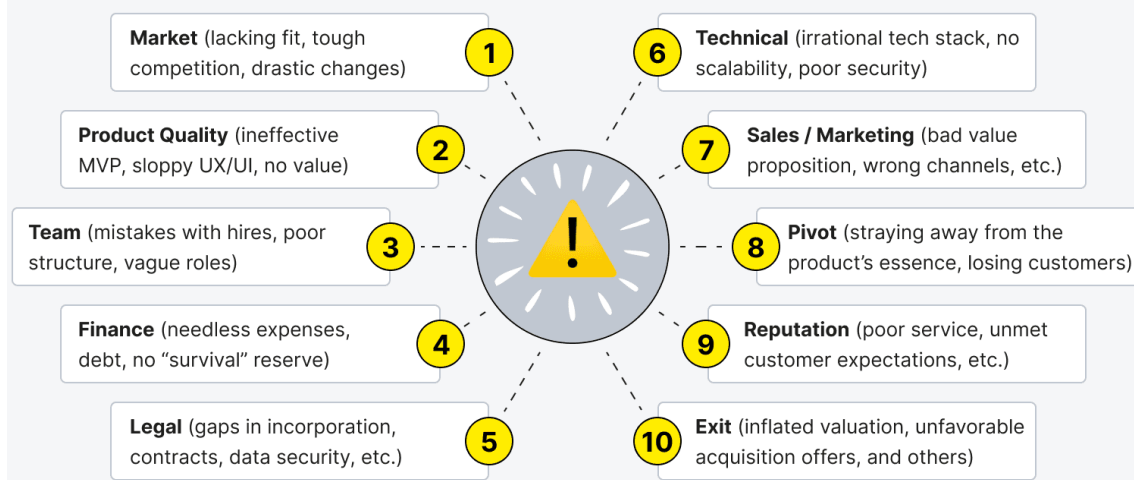
### Investment and liquidity risks

- A. **Illiquidity:** Startup investments are often difficult to sell quickly, as there is no public market for the shares.
- B. **Dilution:** As a startup raises more funding, the ownership percentage of early investors decreases.
- C. **Risk of complete loss:** A significant portion of startups fail, and investors risk losing their entire investment.

### Other risks

- (i) **Technology risk:** Failure of the core technology or the inability to develop it.
- (ii) **Regulatory and legal risk:** Startups may face legal challenges or be impacted by changing regulations.
- (iii) **Cybersecurity risk:** A data breach can cause catastrophic damage to a startup's reputation and finance.

## 10 Most Common Startup Risks

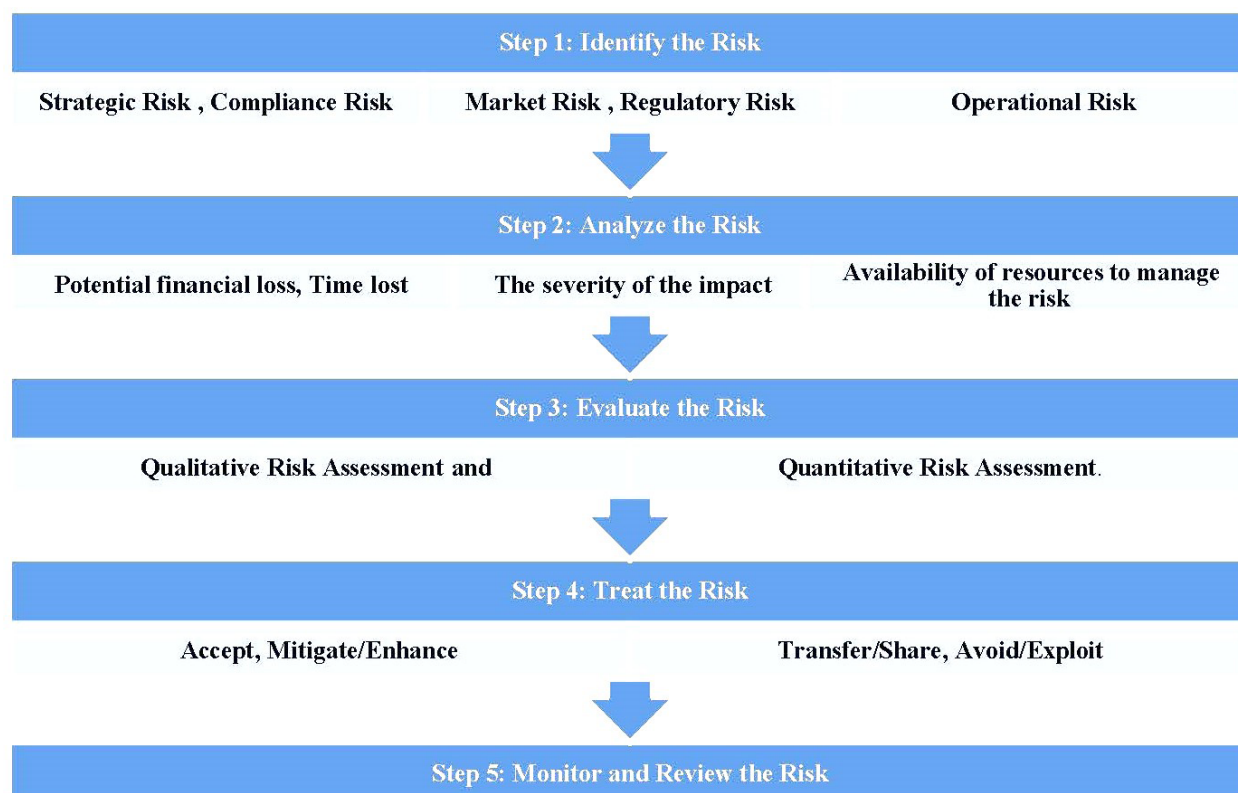


Source: <https://www.upsilonit.com/blog/most-common-startup-risks-how-to-manage-them>

### Risk management for startups

Risk management for startups involves a systematic process of identifying, evaluating, and mitigating potential threats to the business. Risk management is crucial for startups because it helps them anticipate and mitigate potential challenges, which minimizes losses, improves decision-making, and increases operational efficiency and investor confidence. A proactive approach to risk allows startups to safeguard their assets, maintain compliance, and build resilience, ultimately positioning them for long-term success.





**Organizations will notice over time that there will be some risks that cannot be eliminated and will be omnipresent**

These are discussed below:

### Step 1. Identifying Risks:

Identify unique roadblocks — like relying on few clients or navigating industry shifts. By diversifying customer base, building a strong startup community around products, staying informed, and strengthening the support system.

### Step 2. Assessing the Likelihood and Impact of Risks

After determining the risks, one should assess the likelihood and impact of the scenarios on your company. Carefully contemplate the potential consequences, aiming for a balanced and informed assessment. Devising strategies to minimize the risk's impact.

### Step 3. Prioritizing Risks

Sorting the startup risks by severity will help you allocate resources wisely and build resilience for whatever your venture throws your way. Accordingly, prioritize risks that threaten imminent tempests, not distant wisps of uncertainty. Focus your precious resources on the most realistic scenarios, not on chasing hypothetical butterflies. Estimating risks in their monetary equivalent can provide a stark, eye-opening comparison. Remember, the bigger the potential loss, the higher the risk climbs on your priority list. Assess your control over each risk. Prioritize risks where you have little to no control, as these demand proactive preparation for inevitable bumps in the road.

### Step 4. Developing a Startup Risk Management Plan

There are several common strategies to deal with risks of your organisation like avoidance, reduction, transfer and acceptance of risks.

### Step 5. Implementing the Risk Management Plan

Spread out responsibilities across the team and **set up a clear emergency chain of command**. The key to solid risk management in business is not just talking about it but making sure everyone knows exactly what to do when a crisis hits. That means assigning responsibilities and holding people accountable for managing the risks.

When emergencies pop up, having a clear plan with defined responsibilities will help you bounce back quickly. **Train the team to spot warning signs**, know when to sound the alarm, and kick in containment or contingency plans. This way, you'll be ready to respond swiftly and effectively when the unexpected happens.

### Step 6. Monitoring and Reviewing Risks

Risk management is an ongoing task. So, **the plans should be reviewed regularly**. You must make sure:

- the previously identified risks are relevant;
- all newly appeared risks are considered and evaluated;
- the team is up to date about risk management and their responsibilities.



Set up some half-year or quarterly sessions to keep your backup plans and the overall business risk management framework up to date. Some market shifts (like the release of Apple Vision Pro for the Meta Quest department) may require some emergency sessions.

### Startup Audit

A start-up audit is a review of a company's financial records and internal controls, often requested by investors, to ensure accuracy, compliance, and identify areas for improvement. Key steps to prepare include maintaining organized and accurate financial documents, following GAAP accounting standards, implementing internal controls, and ensuring transparency. Benefits include building investor trust, improving operations, and meeting regulatory requirements.

### Who are interested in Startup Audit?

Several groups are interested in startup audits for reasons including financial transparency, compliance, and risk management.

#### A. External Stakeholders

- (i) **Investors (Venture Capital firms, Angel Investors, etc.):** Investors require assurance that the startup's financial statements are accurate, reliable, and prepared in accordance with established accounting principles as part of their due diligence process before investing or for ongoing monitoring. A clean audit report builds confidence and can be a condition for securing funding in Series A and later rounds.
- (ii) **Lenders (Banks, Financial Institutions):** To secure a bank loan or line of credit, startups often need to provide audited financial statements. The audit enhances the startup's credibility and can lead to more favorable loan terms.
- (iii) **Regulatory Authorities/Government Bodies:** In certain jurisdictions or industries (e.g., fintech, healthcare), startups may be required by law to undergo a statutory audit to ensure compliance with specific regulations and legal requirements. Public companies are required to run annual audits, and startups planning for an Initial Public Offering (IPO) must prepare audited statements in advance.
- (iv) **Potential Acquirers/Merger Partners:** If a startup is planning a merger or acquisition (M&A), potential buyers will conduct thorough due diligence, which includes reviewing audited financial statements to confirm the company's financial position and fair value.
- (v) **Business Partners/Suppliers:** In some cases, major potential partners or clients may require audited financial statements to ensure the startup is a stable and reliable business partner, especially when bidding for contracts in a request for proposal (RFP) process.

#### B. Internal Stakeholders

- (i) **Founders and Management:** While audits can be an extensive process, the results provide valuable insights into the company's financial health, internal controls, and potential areas for improvement. This information supports informed decision-making and helps prevent financial losses due to error or fraud.
- (ii) **Board of Directors/Audit Committees:** The board, or a dedicated audit committee, often formally engages an audit firm and receives its report to ensure proper financial governance and accountability, especially in the absence of robust internal controls in early-stage companies.

### Types of Startup Audit

The main types of startup audits include:

1. **Financial Audit:** This type of audit examines the accuracy and fairness of a startup's financial statements and records.
2. **Internal Audit:** An independent review conducted from within the company to assess internal controls, risk management, and compliance with internal policies.
3. **Compliance Audit:** Compliance audit checks if the company is following external laws and regulations, as well as internal policies.
4. **Operational Audit:** It evaluates the efficiency and effectiveness of the company's operations and processes.
5. **Information System Audit:** It focuses on the security, integrity, and reliability of the company's information technology systems.
6. **Tax Audit:** It verifies that the company's tax returns are accurate and compliant with tax laws, according to the Income Tax Act.

### Audits by party

Audits for a startup, based on who conducts them, are generally categorized into three "parties": first-party (internal), second-party (customer/supplier), and third-party (independent external) audits.

1. **First-Party Audit:** An internal audit where the company audits itself to ensure it meets its own standards and goals. Employees within the startup or a contracted consultant acting on the startup's behalf.
2. **Second-Party Audit:** Involves a startup auditing a third-party supplier to ensure contractual and quality requirements are met. A larger company or potential partner might audit a startup as part of their vendor management or due diligence process.
3. **Third-Party Audit:** An independent, external auditing firm or certification body free of any conflict of interest with the startup can conduct this audit. The primary driver for startups to get an audit, especially during fundraising rounds (Series A/B and later) or before an acquisition.





**THE INSTITUTE OF  
COST ACCOUNTANTS OF INDIA**  
(STATUTORY BODY UNDER AN ACT OF PARLIAMENT)  
**CMA BHAWAN**  
12, SUDDER STREET, KOLKATA – 700 016.

Telephones: +91-33- 4036-4748/4721/4726

Website: [www.icmai.in](http://www.icmai.in)

Ref. No.: DOS/SKILLS TRAINING/11/2025


Date: November 19<sup>th</sup>, 2025

### **CIRCULAR**

**Sub: Skills Training Program for Intermediate & Final Level Students appearing in  
December 2025 Term Examinations**

It is hereby clarified that students appearing for the Intermediate & Final Examinations in December 2025 term shall complete all Skills Training activities including successful completion of assignments, as applicable, by 28<sup>th</sup> February, 2026.

This is for information of all concerned.

  
**Dr. Madhumita Sen Gupta**  
Joint Director & HoD - Studies  
(Training & Central Stores)

**e-Distribution:**

- 1) President's Office
- 2) Secretary, T&EF Committee
- 3) All HODs at Headquarters, Delhi Office and Hyderabad Centre of Excellence
- 4) All Regional Councils of the Institute
- 5) All Chapters of the Institute
- 6) All Overseas Centres of the Institute
- 7) IT Department- for uploading on the website of the Institute
- 8) Secretariat
- 9) Notice Board

**Copy to:**

- 1) President, The Institute of Cost Accountants of India
- 2) Vice President, The Institute of Cost Accountants of India
- 3) All Council Members



## NOTES:

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



## Invitation to Contribute Articles for CMA Student E-Bulletin - Showcasing Your Expertise!

Dear CMA Student,

**W**e are excited to extend an invitation to you to contribute an article for the **CMA Student E-Bulletin**, our esteemed monthly e-journal exclusively crafted for CMA students. This platform, managed by the Directorate of Studies at ICAI, aims to provide a space for your insights, experiences and knowledge-sharing within the CMA community.

### Submission Guidelines:

- ⦿ **Article Length:** Please prepare articles ranging between 1200 to 1500 words.
- ⦿ **Topic:** The articles can cover a wide spectrum of subjects, including but not limited to advancements in finance, industry insights, case studies, personal experiences and emerging trends in the field.
- ⦿ **Originality:** We encourage you to share your unique perspectives and experiences. Ensure that your submission has not been published elsewhere.

**Submission Deadline:** We kindly request you to submit your article by **20<sup>th</sup> of the previous month of publication**. This will allow us ample time to review and prepare the upcoming issues of the CMA Student E-Bulletin.

**Submission Process:** Please send your article to [studies.ebulletin@icmai.in](mailto:studies.ebulletin@icmai.in) with the subject line **"CMA Student E-Bulletin Submission - [Your Name, Registration No.]"**. Include a brief author bio and a high-resolution photograph to be featured alongside your article.

**Recognition and Rewards:** Selected articles will be featured prominently in the CMA Student E-Bulletin, providing you with a valuable platform to showcase your expertise. Additionally, authors of published articles will be acknowledged and the top contributors may be eligible for special recognition and rewards.

We believe that your unique insights and experiences will contribute significantly to the enrichment of the CMA Student E-Bulletin. Your participation will not only enhance your visibility within the CMA community but also foster a culture of knowledge-sharing and collaboration.

Best Regards,

**Team DoS**

**The Institute of Cost Accountants of India**

**E-mail – [studies.ebulletin@icmai.in](mailto:studies.ebulletin@icmai.in)**





# THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

Statutory Body under an Act of Parliament  
[www.icmai.in](http://www.icmai.in)



## NEW IT INITIATIVE TO PROVIDE ENHANCED FACILITIES TO CMA STUDENTS



A login feature has been integrated into the **ONLINE REGISTRATION APPLICATION SYSTEM** enabling students to access various services through their accounts.

To utilize this feature, students need to create a login account by verifying their email address through an OTP sent to their registered email ID. Once the email ID is verified, it becomes the user ID and students can set their password during the account creation process.

The introduced system enables students to:

Register online  
for Foundation,  
Intermediate &  
Final Courses

Check the status  
of their online  
applications

Request  
Conversion from  
Old Syllabus to  
New Syllabus

Request changes  
in Oral / Postal  
Coaching and opt  
for Chapter-to-  
Chapter  
Conversion

Convert from  
Provisional to  
Regular status

Additional services for students will be seamlessly incorporated in the near future.

Behind every successful business decision, there is always a **CMA**



Since 1944

## CMA Leads

4 Regional Councils

11 Overseas Centers

117 Chapters across India

61 CMA SC & 401 ROCC

1,00,000+ Alumni

5,00,000+ Students

## Value Added Services for the CMA Students

- Study Materials
- Students E-Bulletin
- Knowledge Web Series
- E-Library
- Webinars
- Model Question Papers
- MCQ Portal
- Tutorial Workshops
- Coaching - Oral/Postal (E-learning)
- Skills Training
- Practical Oriented Training Programme

### Admission Deadlines

- For June Exam - 31<sup>st</sup> January of same Calendar Year
- For December Exam - 31<sup>st</sup> July of same Calendar Year

✉ [studies@icmai.in](mailto:studies@icmai.in)

# LARGEST CMA BODY IN THE WORLD

Under the administrative control of Ministry of Corporate Affairs (MCA), Government of India

## CMA COURSE GOING GLOBAL

Mentoring Future-Ready Professionals

### Eligibility

#### Admission in Foundation Course

- Passed Class 10 (Require to pass 10+2 before appearing in CMA Examination)
- 10+2 Pass or its equivalent (Students appearing for 10+2 also apply on provisional basis)

#### Registration to Intermediate Course

- Passed CMA Foundation Examination
- Graduates of any discipline (Students awaiting final result also apply on provisional basis)
- Qualified CAT Level - I of The Institute of Cost Accountants of India
- Qualified CA Intermediate
- Qualified Engineers

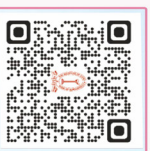
### Course Fees

Foundation - ₹6,000/-

Intermediate - ₹23,100/-\*

Final - ₹25,000/-\*

\*Installation facility available



To know more,  
Scan the QR Code



Skills Training Partner



**NPTEL**

### Online Admission

<https://eicmai.in/studentportal/Home>

## Prominent Recruiters in CMA Campus Placement Drives


And many more...

### Headquarters

CMA Bhawan, 12, Sudder Street, Kolkata - 700016  
☎ 033-40364777/40364722/40364726

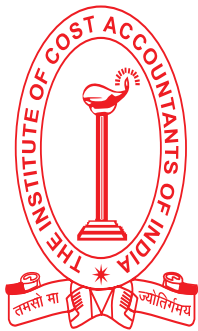
### Delhi Office

CMA Bhawan, 3, Institutional Area, Lodhi Road  
New Delhi - 110003  
☎ 011-24622156/24622157/24622158

✉ [placement@icmai.in](mailto:placement@icmai.in)

Behind every successful business decision, there is always a CMA





# ICMAI

## THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

### भारतीय लागत लेखाकार संस्थान

Statutory Body under an Act of Parliament  
(Under the jurisdiction of Ministry of Corporate Affairs)

[www.icmai.in](http://www.icmai.in)

#### Headquarters

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi - 110003

Ph: 011-24622156

#### Kolkata Office

CMA Bhawan, 12, Sudder Street, Kolkata - 700016

Ph: 033-40364743/40364735

[studies@icmai.in](mailto:studies@icmai.in)



Behind every successful business decision, there is always a CMA