



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



CMA STUDENT **E-Bulletin**

VOL 11 | NO. 07 | JULY 2026

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, 113 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 professionals 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:

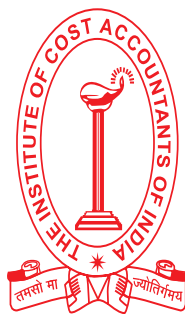
Copyright of this CMA Student E-Bulletin is reserved by the Institute of Cost Accountants of India and prior permission from the Institute is necessary for reproduction of the whole or any part thereof. The write ups published in good faith on the basis of declaration furnished by the authors.

Copyright © 2026 by The Institute of Cost Accountants of India

CMA STUDENT E-Bulletin

VOL 11 | NO. 07 | JULY 2026

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 11 | NO. 07 | July 2026

Chief Patron

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

Patron

CMA Neeraj Dhananjay Joshi, Vice President, ICMAI

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 - 24 - CMA Foundation Course

Syllabus 2022

(Paper 1 - 4)

25 - 72 - CMA Intermediate Course

Syllabus 2022

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

73 - 117 - 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,

It gives me immense pleasure to connect with you through the July 2026 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 1:
Introduction

Business
Communication -

Module 5:
Business
Communication

FOUNDATION

Paper-1

Fundamentals of
Business Laws and
Business
Communication
(FBLC)

SECTION – A: FUNDAMENTALS OF BUSINESS LAWS

1. Which of the following best defines “law” in a modern legal system?
 - a) A set of moral principles only
 - b) A system of enforceable rules governing conduct
 - c) Religious beliefs followed by society
 - d) Personal opinions of judges
2. Which source of law is considered the foundation of the Indian legal system?
 - a) Judicial decisions
 - b) Customs
 - c) Constitution
 - d) Ordinances
3. Which list in the Constitution contains subjects on which only Parliament can legislate?
 - a) State List
 - b) Concurrent List
 - c) Union List
 - d) Residuary List
4. Which type of law is created by judges through interpretation?
 - a) Statutory law
 - b) Customary law
 - c) Case law
 - d) Administrative law
5. Which of the following is an example of primary legislation?
 - a) Rules made by a ministry
 - b) Act passed by Parliament
 - c) Municipal bye-laws
 - d) Notifications
6. The authority of subordinate legislation depends on:
 - a) Public opinion
 - b) Judicial approval
 - c) Parent Act
 - d) International law
7. Which body is responsible for implementing laws?
 - a) Judiciary
 - b) Legislature
 - c) Executive
 - d) Tribunal
8. The power to make laws is divided between Centre and States under:
 - a) Article 14
 - b) Article 32
 - c) Article 246
 - d) Article 368
9. Which of the following best describes a bill?
 - a) A law already enforced
 - b) A draft proposal for a law
 - c) A court order
 - d) A constitutional amendment
10. What is the role of the President in the legislative process?
 - a) Drafting bills
 - b) Passing laws
 - c) Giving assent to bills
 - d) Interpreting laws
11. The National Company Law Tribunal (NCLT), the Income Tax Appellate Tribunal (ITAT), and the National Green Tribunal (NGT) are all examples of which of the following?
 - (a) Civil Courts exercising original jurisdiction under the Code of Civil Procedure
 - (b) Tribunals established under specific statutes to adjudicate specialised and technical disputes outside the ordinary court system
 - (c) Criminal Courts dealing with offences under the Indian Penal Code
 - (d) Constitutional Courts exercising writ jurisdiction under Articles 32 and 226
12. Which of the following is a feature of the Indian judicial system?
 - a) Dual court system
 - b) Integrated judiciary
 - c) Military judiciary only
 - d) No appellate system
13. Which court has the power of superintendence over subordinate courts?
 - a) Supreme Court
 - b) High Court
 - c) District Court
 - d) Tribunal

14. Which of the following ADR methods results in a binding decision?
 - a) Mediation
 - b) Conciliation
 - c) Arbitration
 - d) Negotiation
15. Lok Adalat decisions are:
 - a) Advisory
 - b) Appealable
 - c) Binding and final
 - d) Temporary
16. Which of the following best explains “delegation of power”?
 - a) Transfer of judicial authority
 - b) Transfer of legislative power to subordinate bodies
 - c) Transfer of executive authority
 - d) Transfer of constitutional rights
17. Which of the following is NOT a function of law?
 - a) Maintaining order
 - b) Resolving disputes
 - c) Creating uncertainty
 - d) Regulating conduct
18. The concept of separation of powers divides authority among:
 - a) Centre and States
 - b) Legislature, Executive, Judiciary
 - c) Courts and tribunals
 - d) Citizens and government
19. Which type of jurisdiction allows a court to hear a case for the first time?
 - a) Appellate
 - b) Advisory
 - c) Original
 - d) Review
20. Appeals from subordinate courts generally lie to:
 - a) Supreme Court
 - b) High Court
 - c) Tribunal
 - d) Parliament
21. Which of the following ensures flexibility in law-making?
 - a) Rigid constitution
 - b) Judicial review
 - c) Delegated legislation
 - d) Codification
22. Which body can create rules for local governance?
 - a) Parliament only
 - b) Judiciary
 - c) Municipalities and Panchayats
 - d) President only
23. Which of the following is an advantage of ADR?
 - a) Lengthy procedure
 - b) Expensive process
 - c) Quick resolution
 - d) Mandatory litigation
24. Which principle ensures that government actions must follow established laws?
 - a) Judicial activism
 - b) Rule of law
 - c) Separation of powers
 - d) Delegated legislation
25. Which of the following best describes ‘paralanguage’ as an element of communication?
 - (a) The written symbols and punctuation used in formal business letters
 - (b) The vocal qualities accompanying speech — such as pitch, tone, pace, volume, and pauses — that affect the meaning of the spoken message
 - (c) The physical gestures and facial expressions used during a conversation
 - (d) The use of diagrams and charts alongside a verbal presentation
26. A department head receives a complaint from a subordinate about a colleague’s behaviour. Instead of reading the full complaint, the department head dismisses it saying “I know exactly what happened.” This is an example of which listening barrier?
 - (a) Physical barrier due to environmental noise
 - (b) Premature evaluation or prejudging — the listener forms a conclusion before receiving the full message

- (c) Semantic barrier arising from use of technical language in the complaint
- (d) Channel barrier because the complaint was submitted verbally rather than in writing
27. A company sends the same promotional email to ten thousand customers using a mailing list. Three customers reply with queries. In communication process terms, these replies represent:
- Encoding by the original sender
 - Noise that disrupts the original message
 - Feedback from a portion of the receivers to the sender
 - Lateral communication between customers
28. Which of the following is the most appropriate format for communicating a sensitive disciplinary action, such as issuing a warning letter to an employee?
- An oral conversation in the cafeteria to maintain informality and reduce the employee's anxiety
 - A WhatsApp message to ensure immediate delivery and acknowledgement
 - A formal written letter delivered in person and placed on record, with a copy retained in the employee's file
 - A group email to the department to ensure transparency among all team members
29. The 'You-attitude' in business writing refers to:
- Writing in second person (using "you") in all business letters regardless of context
 - Framing communication from the receiver's perspective — focusing on their interests, benefits, and needs rather than the sender's own viewpoint
 - Addressing the reader by their first name to build personal rapport in formal correspondence
 - Using a polite tone exclusively in complaint and collection letters
30. An agenda of a meeting differs from the minutes of a meeting in that:
- An agenda is prepared after the meeting; minutes are prepared before the meeting
 - An agenda lists the items to be discussed at a forthcoming meeting, while minutes are the official record of what was actually discussed and decided at the meeting
 - An agenda is mandatory only for Board meetings, while minutes must be prepared for all meetings including informal ones
 - An agenda is signed by all participants, while minutes are signed only by the chairperson

Answer:

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

Topic

Fundamentals
of Financial
Accounting -

Module 1:
Accounting
Fundamentals

Fundamentals of
Cost Accounting -

Module 4:
Fundamentals of
Cost Accounting

FOUNDATION

Paper-2

Fundamentals of
Financial and Cost
Accounting (FFCA)

FUNDAMENTALS OF FINANCIAL ACCOUNTING

Sl. No.	MCQ	Sl. No.	Alternative Answers
1	What is the primary objective of accounting?	A	To maximize profit
		B	To record financial transactions and provide information
		C	To reduce taxes
		D	To increase sales
2	A Balance Sheet contains:	A	Revenue and Expenses
		B	Assets and Liabilities
		C	Balance of Nominal Accounts
		D	Income and Expenditure
3	Which is an example of capital expenditure?	A	Salaries paid
		B	Cartage on bringing material for Factory Shed
		C	Interest paid on Owner's capital
		D	Bad Debts
4	Which book records transactions in chronological order?	A	Journal
		B	Ledger
		C	Cash Book
		D	Journal Proper
5	Accounting Standards are issued in India by	A	Institute of Cost Accountants of India
		B	Institute of Chartered Accountants of India
		C	National Financial Reporting Authority
		D	Ministry of Corporate Affairs
6	Which account is affected when goods are purchased on credit?	A	Cash and Purchases
		B	Creditors and Purchases
		C	Debtors and Purchases
		D	Creditors and Cash
7	A Trial Balance is usually prepared:	A	Monthly
		B	Year End
		C	Periodically
		D	After Book Closing
8	Which document is evidence of a transaction?	A	Voucher
		B	Ledger
		C	Balance confirmation
		D	None of the above
9	Purchases Account is	A	Personal Account
		B	Real Account
		C	Nominal Account
		D	Any of the above depending the transaction
10	Drawings by owner reduce	A	Assets only
		B	Liabilities only
		C	Capital and Assets
		D	Capital only
11	The dual aspect concept states that	A	Every transaction has two effects
		B	Every transaction affects cash only
		C	Assets equal to Liabilities
		D	Debit and Credit mismatch equals to Suspense Account

Sl. No.	MCQ	Sl. No.	Alternative Answers
12	The balancing of ledger accounts is done to	A	Close the Business
		B	Ascertain Account Balances
		C	Prepare Trial Balance
		D	All of the above
13	Capital introduced by the owner increases	A	Assets & Capital
		B	Assets & Liabilities
		C	Reserves
		D	Capital
14	Which financial statement shows financial position?	A	Balance Sheet
		B	Trading Account
		C	Profit & Loss Account
		D	Cash Book
15	Depreciation is charged on	A	Current Assets
		B	Fixed Assets
		C	Liabilities
		D	Revenue
16	The rule for personal accounts is:	A	Debit what comes in, Credit what goes out
		B	Debit the receiver, Credit the giver
		C	Debit expenses, Credit income
		D	Debit assets, Credit liabilities
17	Which account is credited when goods are sold for cash?	A	Sales Account
		B	Cash Account
		C	Purchases Account
		D	Capital Account
18	A debit entry in an asset account	A	Decreases Asset Value
		B	Increases Asset Value
		C	Decreases Capital
		D	Increases Liability
19	Which book records transactions in chronological order?	A	Journal
		B	Ledger
		C	Trial Balance Sheet
		D	Cash Book
20	The accounting equation is	A	Assets = Liabilities – Capital
		B	Assets = Capital + Liabilities
		C	Capital = Assets + Liabilities
		D	Assets + Capital = Liabilities
21	Which accounting concept assumes that a business will continue to operate indefinitely?	A	Matching Concept
		B	Going Concern Concept
		C	Cost Concept
		D	Accrual Concept
22	When opening stock of work-in-progress exceeds closing stock, the difference is—	A	Added to Works Cost
		B	Deducted from Works Cost
		C	Ignored
		D	Added to selling cost

Sl. No.	MCQ	Sl. No.	Alternative Answers
23	Cost Data assist Management	A	Dividend distribution
		B	Make or Buy decision
		C	Tax Calculation
		D	Financial Results
24	Cost driver is	A	Any factor causing a change in the cost of an activity
		B	A person controlling cost
		C	A measure of Profit
		D	A Fixed Cost
25	Cost Accounting helps in Budgeting by	A	Providing historical cost data
		B	Hiding overheads
		C	Avoiding control systems
		D	Recording cash receipts
26	Who are the main users of Cost Accounting information ?	A	Shareholders
		B	Public
		C	GST Authority
		D	Management
27	Which of the following can be a Cost Unit?	A	Per Km. in Transport Company
		B	Per Meal in Restaurant
		C	Per Student in School
		D	All of the Above
28	Which is an example of a cost centre?	A	Maintenance department
		B	Factory as a whole
		C	Packing Section
		D	All of the above
29	Profit as per cost sheet is determined as -	A	Selling price – Cost of sales
		B	Selling price – Cost of goods sold
		C	Cost of production – Selling price
		D	Administrative overhead – Selling overhead
30	Opportunity cost is—	A	The cost that is unavoidable
		B	The benefit foregone by choosing one alternative over another
		C	The same as sunk cost
		D	Always included in financial accounts

Answer:

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

Topic

Fundamentals
of Business
Mathematics -

Module 1:
Arithmetic

Fundamentals of
Business Statistics -

Module 4:
Statistical
Representation of
Data

FOUNDATION

Paper-3

Fundamentals
of Business
Mathematics and
Statistics (FBMS)

FUNDAMENTALS OF BUSINESS MATHEMATICS AND STATISTICS

In this issue we will carry out MCQs on Arithmetic and Statistical Representation of Data--Refer Module 1 and Module 4 of Study guide

1. The next 6 terms for the series: 219, 204, 189, 174, 159, 144, 129 are
 - (a) 114, 99, 84, 69, 54, 39
 - (b) 114, 99, 85, 70, 55, 40
 - (c) 114, 100, 86, 72, 58, 44
 - (d) 114, 100, 87, 75, 64, 54
2. The next 5 terms for the series: $1/3, 2/3, 4/3, 8/3$
 - (a) $16/3, 18/3, 36/3, 38/3, 76/3$
 - (b) $9/3, 10/3, 20/3, 21/3, 42/3$
 - (c) $16/3, 32/3, 64/3, 128/3, 256/3$
 - (d) $9/3, 18/3, 20/3, 22/3, 44/3$
3. If $(1 + 1 + 3 + 5 + \text{upto } k \text{ terms}) - t_k = 0$, then t_k is equal to
 - (a) $k^2 - 2k + 2$
 - (b) k^2
 - (c) $2k^2 - 5k + 3$
 - (d) K
4. If a, b, c, d are in GP then
 - (a) $a^2 + b^2, b^2 + c^2, c^2 + d^2$ are in GP
 - (b) $a^2 - b^2, b^2 - c^2, c^2 - d^2$ are in GP
 - (c) $a^2 / b^2, b^2 / c^2, c^2 / d^2$ are in GP
 - (d) $a^2 / b^2, b^2 / c^2, c^2 / d^2$ are in GP
5. For any A.P. series which is starting with 799, each term decreased by 15, when the last term be 559, the value of 'n'?
 - (a) 17
 - (b) 16
 - (c) 20
 - (d) 19
6. Using the properties of proportion, solve the following equation y is, given $341 / 91 = (y^3 + 3y) / (3y^2 + 1)$
 - (a) 14
 - (b) 11
 - (c) 12
 - (d) 10
7. If $A \propto 1/B$ and $A = 7$ when $B = 3$, then when $B = 2 \frac{1}{3}$, A is
 - (a) $3/7$
 - (b) 3
 - (c) 9
 - (d) 1
8. If the yearly earnings of three persons A, B and C be R20000, R30000 and R40000 then
 - (a) Earnings of A, B, C are in the continued ratio of 6:12:8
 - (b) Earnings of A, B, C are in the continued ratio of 2:3:4
 - (c) Earnings of A, B, C are in the continued ratio of 6:4:3
 - (d) Earnings of A, B, C are in the continued ratio of 2:1.33:1
9. A ratio of greater inequality
 - (a) is increased by adding the same positive number to both its antecedent and consequent
 - (b) is increased by multiplying the same positive number to both its antecedent and consequent
 - (c) is diminished by adding the same positive number to both its antecedent and consequent
 - (d) is diminished by multiplying the same positive number to both its antecedent and consequent
10. Some money is distributed between A and B in the ratio 2:3. If A receives R72, then B receives
 - (a) R90
 - (b) R144
 - (c) R108
 - (d) None of these
11. In a fraction a / b
 - (a) The numerator is called the antecedent of the ratio and denominator is called the consequent of the ratio
 - (b) The numerator is called the consequent of the ratio and denominator is called the antecedent of the ratio
 - (c) The antecedent is called the numerator of the ratio and consequent is called the denominator of the ratio
 - (d) The consequent is called the numerator of the ratio and antecedent is called the denominator of the ratio

12. The ratio of 45 minutes to $5\frac{3}{4}$ minutes is

- (a) 5: 21
- (b) 3:23
- (c) 2: 19
- (d) 1: 27

13. Find relative frequency for the third class interval

- (a) $\frac{7}{16}$
- (b) $\frac{7}{4}$
- (c) $\frac{16}{7}$
- (d) None of the above

14. Find the number of observations between 250 and 300 from the following data

Value (greater than)	Frequency
200	56
250	38
300	15
350	0

- (a) 56
- (b) 23
- (c) 15
- (d) 8

15. Cost of sugar in a month under the heads Raw-materials, Labour, direct production and others were 12, 20, 35 and 23 units respectively. What is the difference between the central angles for the largest and smallest components of the cost of sugar?

- (a) 72°
- (b) 48°
- (c) 56°
- (d) 92°

16. Median of distribution can be obtained from

- (a) Less than type Ogives
- (b) Point of Intersection of Less than and greater than Ogives
- (c) Both a and b
- (d) None of these

17. Class frequency / Width of the class is defined as

- (a) Frequency density
- (b) Frequency distribution
- (c) Both
- (d) None

18. Mode of a distribution can be obtained from

- (a) Histogram
- (b) Less than type Ogives
- (c) More than types Ogives
- (d) Frequency polygon

19. The distribution of profits of a company follows

- (a) J-shaped
- (b) U-shaped
- (c) Bell-shaped frequency curve
- (d) Any of these

20. An area diagram is

- (a) Histogram
- (b) Frequency polygon
- (c) Ogive
- (d) None

21. A retail store records the number of customers visiting per day and groups the data into class intervals (0–100, 100–200, 200–300, etc.). Which diagram is most suitable for displaying the frequency distribution?

- (a) Pie Chart
- (b) Histogram
- (c) Line Graph
- (d) Pictogram

22. Which of the following is a characteristic feature of a histogram?

- (a) Bars are separated by gaps.
- (b) Bars are arranged alphabetically.
- (c) Adjacent bars touch each other.
- (d) It is used only for qualitative data.

23. Following is the class and frequency

Class	Frequency
0 -10	5
10 – 20	8
20 – 30	15
30 – 40	6
40 – 50	4

For the class 20-30, cumulative frequency is

- (a) 20
- (b) 13
- (c) 15
- (d) 28

24. Pie-diagram is used for
- Comparing different components and their relation to the table
 - Representing qualitative data in a circle
 - Representing quantitative data in circle
 - b or c
25. Sales manager prepares an Ogive (cumulative frequency curve) showing the cumulative number of customers whose monthly purchases are below different expenditure levels. The primary purpose of the Ogive is to:
- Compare frequencies of different categories
 - Find the median, quartiles, and percentiles of the distribution
 - Show the relationship between two variables
 - Display the composition of total sales
26. Weights are generally called –
- Range
 - Mean
 - Frequencies
 - Mode
27. A company classifies its customers according to their preferred mode of payment: Cash, Credit Card, Debit Card, and UPI. This type of data is an example of:
- Nominal level data
 - Ordinal level data
 - Interval level data
 - Ratio level data
28. The class interval of monthly sales (in units) is given as 20–29. What are the class boundaries of this interval?
- 20 and 29
 - 19.5 and 29.5
 - 20.5 and 28.5
 - 19 and 30
29. The following data relate to the marks of a group of students:
- | Marks | No of Students |
|----------|----------------|
| Below 10 | 15 |
| Below 20 | 38 |
| Below 30 | 65 |
| Below 40 | 84 |
| Below 50 | 100 |
- How many students got marks more than 30?
- 65
 - 50
 - 35
 - 43
30. Which of the following statements is false?
- Statistics is derived from Latin word ‘status’
 - Statistics is derived from Italian word “Statista”
 - Statistics is derived from French word “Statistik”
 - None of these

Answer:

1	a	Next 6 terms for the series : 219, 204, 189, 174, 159, 144, 129 117, 130, 143, 156, 169, 182 Since, type of Series – A.P. 'd' = 2nd term - 1st term = 204 - 219 = -15 Next 6 terms would be 129+(-15), 129+(-15-15), 129+(-15-15-15), 129+(-15-15-15-15), 129+(-15-15-15-15-15), 129+(-15-15-15-15-15-15) 114, 99, 84, 69, 54, 39
2	c	Next 5 terms for the series : 1/3, 2/3, 4/3, 8/3 Since, type of Series – G.P. 'r' = 2nd term/1st term = (2/3)/(1/3) = 2/3*3/1 = 2/3*3 = 2 Next 5 terms would be (8/3 * 2 ¹), (8/3 * 2 ²), (8/3 * 2 ³), (8/3 * 2 ⁴), (8/3 * 2 ⁵) 16/3, 32/3, 64/3, 128/3, 256/3
3	a	(1+1+3+5+upto k terms) - t _k = 0. So, t _k = (1+1+3+5+upto k terms) Or, t _k = 1+(1+3+5+upto k - 1 terms) and the bracketed portion is an AP

4	b	We have b = ak, c = bk, d=ck. i.e. b = ak, c = ak ² & d = ak ³ . Hence the result
5	a	First Term (a) = 799, Last Term(a _n) = 559 'd' = Difference between two consecutive terms = -15 A _n = a + (n-1)*d 559 = 799 + (n-1) * (-15) or, 559-799 = (n-1) * -15 or, -240 = (n-1) * -15 or, -240 / -15 = n-1 or, 16 = n-1 or, n = 16+1 = 17
6	b	341/91 = (y ³ +3y)/(3y ² +1) (341+91)/(341-91) = {(y ³ +3y)+(3y ² +1)} / {(y ³ +3y) - (3y ² +1)} 432/250 = (y ³ +3y+3y ² +1)/(y ³ +3y-3y ² +1) 216/125 = (y+1) ³ /(y-1) ³ (y+1) ³ /(y-1) ³ = 6 ³ /5 ³ (y+1)/(y-1) = 6/5 5*(y+1) = 6*(y-1) 5y+5 = 6y-6 6y-5y = 5+6 Y=11

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

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 developed after 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 3 :
Money and Banking

Fundamentals of
Management -

Module 5:
Fundamentals of
Management

FOUNDATION

Paper-4

Fundamentals of
Business Economics
and Management
(FBEM)

FUNDAMENTALS OF BUSINESS ECONOMICS AND MANAGEMENT

Let us now start our usual MockTest.

I. Choose the correct answer:

1. Who was the proponent of the welfare definition of economics?
 - A. Marshall
 - B. Pigou
 - C. Robbins
 - D. Samuelson
2. Main economic problems faced by any society include
 - A. What to produce
 - B. How to produce
 - C. For whom to produce
 - D. All of these
3. An improvement in production technology leads to a
 - A. Leftward shift in the PPC
 - B. Rightward shift in the PPC
 - C. No change in PPC
 - D. None of the above
4. In a free market economy the problem of allocation is solved by the
 - A. Profit mechanism
 - B. Consumption mechanism
 - C. Market mechanism
 - D. None of the above
5. Given that price elasticity of demand for x, is unity. When $p = ₹4$, $Q = 300$. What will be Q when $p = ₹3$?
 - A. 400
 - B. 500
 - C. 1000
 - D. None of the above
6. Suppose the demand curve is $X = 10 - 3P$
What will be the price elasticity of demand when $P = (5/3)$
 - A. Elasticity = 5
 - B. Elasticity = 1
 - C. Elasticity = 0.5
 - D. None of the above
7. The demand for a commodity which can be put to a variety of uses will be
 - A. Relatively elastic
 - B. Relatively inelastic
 - C. Unitary elastic
 - D. None of the above
8. The demand for durable goods usually remains
 - A. Relatively elastic
 - B. Relatively inelastic
 - C. Unitary elastic
 - D. None of the above
9. The mid-point of a linear demand curve shows a price elasticity of demand which is
 - A. Relatively elastic
 - B. Relatively inelastic
 - C. Unit elastic
 - D. Perfectly inelastic
10. Movement along any demand curve shows
 - A. Change in demand
 - B. Change in quantity demanded
 - C. Contraction in demand
 - D. None of the above
11. If the price of a complementary good rises, the demand curve shifts to the
 - A. Leftward direction
 - B. Rightward direction
 - C. Upward direction
 - D. None of the above
12. When there is decreasing returns to a variable factor, then
 - A. $AP = MP$
 - B. $AP < MP$
 - C. $AP > MP$
 - D. None of the above
13. The law of variable proportion explains the shape of
 - A. AFC curve
 - B. LAC curve
 - C. SAC curve
 - D. None of the above

14. The total cost function is given by $C = 100 + 15Q - 6Q^2 + Q^3$. What will be the total fixed cost?
- 100
 - 15
 - 6
 - None of the above
15. The short-run total cost
- Cannot be zero
 - Can be zero
 - Both A and B
 - None of the above
16. SMC is equal to the
- Change in LMC
 - Change in TFC
 - Change in TVC
 - None of the above
17. In the long run, the external economies of scale are enjoyed by
- An industry
 - A firm
 - Both of them
 - None of the above
18. Kinked demand curve is related to
- Monopoly market
 - Oligopoly market
 - Monopolistic competition
 - None of the above
19. The Fisher's equation in the Quantity theory of money is
- $MV = PT$
 - $MP = VT$
 - $MT = PV$
 - None of the above
20. The name of the Central Bank of India is
- CENTRAL BANK OF INDIA
 - BANK OF INDIA
 - RESERVE BANK OF INDIA
 - None of the above
21. In order to control inflation the central bank should
- Sell bonds in the open market
 - Lower the bank rate
 - Purchase bonds in the open market
 - None of the above
22. Which is embodied in all the functions of management?
- Planning
 - Control
 - Organizing
 - Co-ordination
23. A manager has to exhibit the style of leadership depending on the
- Situation
 - Performance
 - Time
 - Period
24. Operational planning is
- Long term planning
 - Short term planning
 - Medium term planning
 - Annual planning
25. Which of the following is not a part of staffing?
- Recruitment
 - Selection
 - Training
 - Publicity
26. Filtering means
- Hiding some meaning
 - Disclose the information
 - Sending the message
 - None of the above
27. Horizontal communication is also known as
- Written communication
 - Lateral communication
 - Verbal communication
 - None of the above

28. Which communication creates a record of evidence?

- A. Formal
- B. Verbal
- C. Written
- D. All of the above

29. Supervisory directly controls the activities in a

- A. Board
- B. Committee

C. Team

D. Group

30. Maslow's model is formulated in terms of

- A. Wants
- B. Rewards
- C. Human needs
- D. Goals

Answer:

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

So friends,

I hope you have enjoyed the Mock test. There are a couple of questions based on mathematics. Do not worry. They are very simple. Economics of today involves lots of higher mathematics. So you can not avoid mathematics totally. It will be helpful if you go through the "straight line" chapter of co-ordinate geometry. So long for today!!

Wish you all the best!

CMA INTERMEDIATE COURSE

Syllabus 2022

Topic

Module 2:
Indian Contracts
Act, 1872

INTERMEDIATE

Group I - Paper-5

Business Laws and
Ethics (BLE)

Termination of Agency under the Indian Contract Act, 1872

I. Why Termination Matters More Than Creation

Students and practitioners often emphasize how agency is created, but pay less attention to how it ends. Termination is usually treated as a simple list of events to remember, yet this is misleading. Most commercial disputes, unexpected liabilities for principals, and losses for agents arise from issues related to agency termination.

The reason is structural: an agent with authority binds the principal, but an agent whose authority has ended should not. Problems occur when authority has technically ended, but others do not know. The law, especially Sections 201–210 of the Indian Contract Act, 1872, addresses these situations in more depth than is often realized. This analysis reviews these sections as a unified framework and highlights unresolved questions in the Act.

II. The Anatomy of Section 201: Modes of Termination

Section 201 lists how the agency ends: revocation by the principal, renunciation by the agent, completion of business, death or insanity of either party, or the principal's insolvency. It is a brief list, not a detailed framework, and misses important nuances.

One key difference is between active termination (revocation or renunciation) and automatic termination (death, insanity, or insolvency), which requires no notice or action. This automatic end can cause problems if the agent or third parties do not know the agency has ended, creating risks of unauthorized actions.

Section 208 partly addresses this, but gaps remain that can have practical consequences.

Another important point is the difference between ending the whole agency and removing just some of the agent's authority. Principals may want to limit, not end, the relationship, for example, by restricting certain powers. The Act addresses the scope of authority elsewhere (Sections 186–189), but Section 201 mainly concerns total termination.

III. Revocation and the Requirement of Good Faith: Sections 203 to 205

Section 203 lets a principal revoke an agent's authority before it is exercised - but not without limits. Section 204 says revocation is barred for acts already done that bind the principal. Section 205 requires the principal to compensate the agent for loss if a fixed-term agency is revoked without sufficient cause.

These sections form a spectrum: if the agency hasn't been used, it's freely revocable. If it's been used to bind the principal, those acts cannot be undone. If partly used, the principal can revoke for future acts, but past acts remain

binding.

Sufficient cause' is not defined in the Act, but courts see it as serious agent misconduct - fraud, dishonesty, or willful disobedience. Revocation for reasons such as cost savings or market changes is not sufficient; the principal must compensate the agent.

This duty to compensate is often missed. Businesses that end fixed-term agencies without valid cause may face unexpected liability under the Indian Contract Act, 1872.

IV. Agency Coupled with Interest: Section 202 and Its Conceptual Boundaries

Section 202 is one of the most intellectually interesting provisions in the law of agency. Where the agent has a real, direct interest in the property they are managing - not just the right to a fee or commission - the principal cannot end the agency if it would harm that interest, unless the contract specifically allows it. This is called an "agency coupled with an interest."

The concept has a precise meaning that students frequently get wrong. An agent who is owed commission - who has an interest in the proceeds of the agency - does not have an interest in the subject matter. An agent who is owed a fee for performing a service has no interest in the goods or property being dealt with. What Section 202 requires is an interest in the property itself, not merely an expectation of benefit from the transaction.

The classic illustration is the creditor who is authorised to sell the debtor's property and recover the debt from the sale proceeds. The creditor's interest is in the property itself - they need to sell it to realise their security. If the debtor could revoke this authority, they could effectively defeat the creditor's right of recovery. Section 202 prevents this by making the agency irrevocable.

But consider a less obvious situation: a partner in a firm who is given authority to manage assets in which the partnership has a shared interest. Is this an agency coupled with an interest? Indian courts have generally required a clear, legally recognised interest in the specific subject matter of the agency, not merely a commercial stake in the outcome. The interest must be one that would be prejudiced if the agency were terminated - not merely one that benefits from the agency continuing.

It is also worth noting what Section 202 does not say. It does not say the agency is irrevocable absolutely. It says it cannot be terminated 'to the prejudice' of the agent's interest. This suggests that a principal could, in theory, terminate the agency if they simultaneously protected or satisfied the agent's interest - for example, by paying off the debt that the agency was created to secure. The

termination would not prejudice the agent's interest because the interest would already be satisfied.

V. The Notice Problem: Section 208 and the Third Party's Dilemma

Section 202 states that if an agent has an interest in the property that is the subject of the agency, the agency cannot be terminated in a way that harms that interest, unless the contract says otherwise. This is known as an 'agency coupled with an interest.'

This concept is often misunderstood. Merely having the right to commission or a fee does not constitute an interest in the property itself. Section 202 requires a direct interest in the property, not just a potential benefit from the transaction.

A classic example is a creditor allowed to sell a debtor's property to recover a debt - the creditor's interest is in the property as security. Section 202 makes this agency irrevocable, so the debtor cannot revoke it and block repayment.

Courts require that the agent's interest be legally recognized in the specific property, not just a commercial interest. The interest must be harmed if the agency ends, not merely benefited by its continuation.

Section 202 does not make the agency absolutely irrevocable. It only prevents termination if it would harm the agent's interest. If the principal satisfies the agent's interest, such as by paying off the underlying debt, the agency can end without prejudice.

VI. The Agent's Position After Termination: Sections 209 and 210

Section 209 says that if the principal dies or becomes insane, the agent must take reasonable steps to protect the principal's interests for the legal representatives. The agent's duty is to preserve ongoing matters, not start new ones - this includes preventing contract defaults, securing assets, and quickly handing over authority and records.

Section 210 states that when an agent's authority ends, any sub-agent's authority ends too. Since a sub-agent's power comes from the agent, it cannot outlast it. Principals must ensure sub-agents stop acting once the main agency is terminated.

VII. A Gap in the Act: Agency Termination and Estoppel

The Act does not directly address apparent authority after termination, though this is a key practical issue. Apparent authority means what a third party reasonably believes an agent has. It can continue even after actual authority ends. If a principal's actions lead others to think an agent still has authority, the principal may be liable for the agent's acts, despite proper termination.

Courts have held that principals can still be bound if, for example, they allow an ex-agent to continue using company resources or to appear publicly as a representative. This is true even if notice of termination was given under Section 208.

The Act's rules set the minimum for ending an agency, but do not cover all risks. Principals must go beyond the statute to fully protect themselves from lingering apparent authority.

IX. Conclusion

The termination of agency, viewed from a legal perspective, is fundamentally a risk management issue. The principal bears the risk of the agent's acts until the agent knows the agency has ended. The principal also bears the risk of third-party reliance until those third parties know the agency has ended. And the principal bears the risk of continuing apparent authority even after actual authority has been properly terminated.

Managing these risks requires, at minimum, prompt and broad communication of termination, careful retrieval of authorisation documents and access, and vigilance about representations that might continue to hold out the former agent as still authorised. The ICA provides the legal framework; prudent commercial practice must fill the gaps.

For students preparing for the ICAI Inter examination and for professional practice, the key insight from this area of law is that agency is not just a relationship of authority - it is a relationship of accountability. When that relationship ends, the accountability does not immediately disappear. It lingers until the world has been told the relationship is over and has had a reasonable opportunity to act on that knowledge. Understanding this is what separates a working knowledge of Section 201 from a genuine grasp of what the law of agency is trying to achieve.

When You Find What Is Not Yours: The Finder of Lost Goods as a Bailee under the Indian Contract Act, 1872

I. The Problem Nobody Thinks About

Most students encounter Section 71 of the Indian Contract Act, 1872 as a one-line proposition: a finder of lost goods has the same responsibility as a bailee. They memorise it, reproduce it in examinations, and move on. But pause for a moment and think about what that provision is actually doing. It is imposing a legal relationship, with all its duties, liabilities, and rights, on a person who never agreed to anything. No offer was made. No acceptance was given. No consideration passed. And yet the law says: you are now a bailee. Why? And what does that really mean in practice?

The answer lies not just in the text of the Act but in a deeper principle about the relationship between possession, responsibility, and the protection of property rights. This write-up aims to go beyond the textbook summary of sections and explore what the finder's position really entails, where the law draws difficult lines, and what happens when the seemingly simple situation of finding something becomes legally complicated.

II. The Conceptual Foundation: Why No Contract Is Needed

The dominant view in contract law is that obligations arise from agreement. But even the classical contract theorists recognised that certain obligations arise from situations, not from consent. The Romans called this quasi ex contractu which means obligations that resemble contract obligations but arise by operation of law rather than by agreement. The finder of lost goods is precisely such a situation.

When a person picks up goods that belong to someone else, they create a factual situation that the law must regulate. Left unregulated, the finder could do anything with the goods: sell them, destroy them, keep them indefinitely, or simply deny having found them. The true owner, who may not even know the goods are lost, would have no recourse. Section 71 resolves this by imposing bailee-like responsibility the moment the finder voluntarily takes custody. The word 'voluntarily' is important: the provision does not punish a person for merely observing lost goods. It is the act of taking custody that triggers the legal relationship.

III. Standard of Care for Finders: Legal Expectations and Responsibilities

As per Section 151, a finder (bailee) must look after found goods as carefully as they would look after their own things of similar type and value. Section 152 adds that if the finder takes proper care, they are not responsible if the item is lost, damaged, or destroyed.

In the case of *Coggs v. Bernard* (1703), it was held that if you keep something for someone without being paid, you only need to be reasonably careful, not as careful as someone who is paid to look after things.

IV. The Duty to Find the Owner: Its Scope and Limits

No part of Section 71 or the Act directly states that 'the finder must search for the owner.' Still, this duty is clearly implied when you look at Sections 71, 168, and 169 together. Section 169 only allows the finder to sell the goods if 'the owner cannot with reasonable diligence be found.' Section 168 lets the finder keep the goods only while waiting to identify the owner. These rules all assume that the finder is trying to locate the owner, and they only make sense if that is the case.

What counts as 'reasonable diligence' when trying to find the owner? The law does not spell this out, so courts decide what is sufficient in each case. The actions a finder should take depend on the situation. For instance, if someone finds a wallet with a driving license, Aadhaar card, and business cards, they should try to contact the owner directly. If the finder comes across an unmarked bag with no clues, it might be enough to report it to the police and make an announcement.

Section 39 of the Code of Criminal Procedure, 1973 (now Section 56 of the Bharatiya Nagarik Suraksha Sanhita, 2023) states that anyone who finds property that may have been stolen or lost must report it to the nearest police officer. While this rule is part of criminal law, not civil law, it shows that the law expects finders to do more than just keep what they find. They should report the property they have found.

V. The Right to Sell: A Provision More Nuanced Than It Appears

Section 169 of the Act allows a finder to sell found goods in two cases: if the goods are perishable and could lose most of their value, or if the finder's legal charges reach two-thirds of the goods' value. Both parts of this rule are important to understand.

The first part, perishability, is clear for items like food, dairy products, plants, and similar goods. But what about items that do not spoil right away but lose value quickly, like seasonal decorations found after a festival or fashion items at the end of a season? In these cases, the court would need to decide if they fit the idea behind the perishability rule, even if the goods do not actually spoil. The safer legal view is to follow the exact wording of the law: Section 169(1) refers to physical perishability, not just a drop in commercial value.

The second part, where charges reach two-thirds of the value, is notable because it allows the finder to sell the goods based on the cost of keeping them, not just on what the goods are. If storing the goods costs more than they are worth, the law allows the finder to sell them. This rule makes economic sense and covers situations like paying for costly storage for items that are not very valuable.

One important issue that Section 169 does not clearly explain is how the sale should be carried out. Does the finder need to get the best price? Should the sale be public? The Act does not say. Still, the general rule of good faith in bailment means the finder should get a fair price, not just an easy one. If a finder sells goods to a friend for much less than their market value, even if they plan to give the rest to the owner, they may have failed in their duty.

VI. The Right to Retain and the Reward: Section 168

Section 168 includes a rule that is both economically important and often overlooked in legal discussions. If someone finds and returns goods after a public reward is offered, they can claim the reward and keep the goods until they are paid.

By making the reward legally enforceable, lawmakers created a real reason for people to act honestly. If a finder could not claim the reward, and the owner could just take back the offer once the goods were returned, people would be less likely to do the right thing. When finders know they can get back their costs and any promised reward, they are more likely to try to find the owner. So, Section 168 is not just about rewarding one honest person; it is about promoting honesty in all cases involving lost property.

This section also gives the finder a lien, which means they can keep the goods until they are paid. This lien applies only to the specific items found, not to any other property the finder may have for the owner. For example, a finder cannot hold onto a found phone until the owner pays a different debt. The lien only covers costs and rewards related to finding and caring for those particular goods.

VII. Criminal Consequences: Section 403 IPC / Section 314 BNS, 2023

Section 403 of the Indian Penal Code, 1860 (now Section 314 of the Bharatiya Nyaya Sanhita, 2023) makes criminal misappropriation of property a punishable offense. The provision explicitly extends to finders: a person who finds property and takes it for their own use without taking reasonable steps to locate the owner commits criminal misappropriation.

It is important to understand how the civil and criminal rules work together. Under the Indian Contract Act, 1872, if a finder keeps the goods and the owner later appears, the finder must return them and pay for any loss. Under the BNS, the finder could also be prosecuted. The key difference is intention: if the finder truly tries to find the owner and keeps the goods safe, they are protected. But if the finder takes the goods for their own benefit or ignores who owns them, they may be committing a crime.

VIII. Conclusion

The law about the finders acting as bailees under the Indian Contract Act, 1872, is concise yet full of meaning. Its main idea is that when someone voluntarily takes care of something, they become responsible for it. This shows that property rights should be protected even without a contract, and anyone who benefits from having someone else's property must also accept certain duties.

In real life, every business deals with goods belonging to others, whether as a custodian, agent, or service provider. The rules of bailment, especially the duties of finders under Section 71, help us understand how possession creates a legal responsibility, how that responsibility can lead to liability, and how the law seeks to balance the interests of owners, finders, and society as a whole.

When someone picks up a lost wallet, they are not only helping out. Without realizing it, they enter into a legal relationship with the owner, which entails specific duties and rights. This is what makes Section 71 both subtle and elegant.

Topic

Module 1:
Accounting
Fundamentals

INTERMEDIATE

Group I - Paper-6

Financial Accounting (FA)

Bank Reconciliation Statement / Depreciation and Amortisation

Bank Reconciliation Statement

A Bank Reconciliation Statement (BRS) is a document that matches the cash balance on a company's balance sheet to the corresponding amount on its bank statement. The purpose is to ensure the accuracy of financial records and to identify any discrepancies.

Steps to Prepare a Bank Reconciliation Statement

1. **Compare the opening balances:** Ensure the opening balance of the cash book matches the bank statement.
2. **Check deposits and withdrawals:** Verify that all deposits and withdrawals are recorded in both records.
3. **Identify outstanding checks:** List all checks issued but not yet cleared.
4. **Identify deposits in transit:** List all deposits recorded in the cash book but not yet credited by the bank.
5. **Adjust for bank errors:** Note any errors made by the bank and adjust accordingly.
6. **Adjust for company errors:** Correct any errors made in the company's records.
7. **Prepare the reconciliation statement:** Start with the bank statement balance, add deposits in transit, deduct outstanding checks, and adjust for any errors to arrive at the adjusted cash book balance.

Key Concepts

- **Cash Book:** Records all cash transactions.
- **Bank Statement:** Issued by the bank, showing all transactions in the bank account.
- **Outstanding Checks:** Checks that have been issued but not yet cleared by the bank.
- **Deposits in Transit:** Deposits recorded in the company's books but not yet credited by the bank.
- **Bank Errors:** Mistakes made by the bank in recording transactions.
- **Company Errors:** Mistakes made by the company in recording transactions.

Importance of Bank Reconciliation Statement

1. Ensures Accuracy of Financial Records

- o **Detection of Errors:** Identifies discrepancies between the company's records and the bank's records, such as incorrect entries or omissions.
- o **Prevents Mistakes:** Helps prevent errors in financial statements by ensuring that the cash book and bank statement balances match.

2. Fraud Prevention and Detection

- o **Identifies Unauthorized Transactions:** Helps spot unauthorized or fraudulent transactions by comparing the bank statement with the company's cash book.
- o **Mitigates Risk of Embezzlement:** Regular reconciliation reduces the risk of internal fraud or embezzlement.

3. Effective Cash Management

- o **Accurate Cash Position:** Provides an accurate picture of the company's cash position, helping in effective cash flow management.
- o **Informed Decision-Making:** Enables better decision-making regarding cash requirements and investments.

4. Improves Internal Control

- o **Accountability:** Enhances accountability by ensuring that all transactions are properly recorded and reconciled.
- o **Operational Efficiency:** Streamlines financial processes and improves operational efficiency by maintaining up-to-date records.

5. Compliance and Auditing

- o **Regulatory Compliance:** Helps comply with regulatory requirements by maintaining accurate financial records.
- o **Audit Trail:** Provides a clear audit trail for external auditors, simplifying the auditing process.

6. Prepares for Financial Reporting

- o **Accurate Financial Statements:** Ensures that financial statements accurately reflect the company's financial position.
- o **Transparency:** Enhances transparency and reliability of financial information provided to stakeholders.

A Bank Reconciliation Statement is crucial for maintaining the integrity and accuracy of a company's financial records. It plays a vital role in error detection, fraud prevention, effective cash management, improving internal controls, ensuring compliance, and preparing accurate financial statements. Regular reconciliation helps businesses maintain accurate records, make informed decisions, and provide transparent financial information to stakeholders.

Example

Suppose the bank statement shows a balance of ₹10,000, while the cash book shows ₹9,500. After comparing the two, you identify the following:

- Outstanding checks: ₹1,500
- Deposits in transit: ₹2,000
- Bank error (overcharge): ₹100
- Company error (under-recorded withdrawal): ₹400

Bank Reconciliation Statement

Particulars	Amount
Balance as per bank statement	₹10,000
Add: Deposits in transit	₹2,000
Less: Outstanding checks	₹1,500
Add: Bank error	₹100
Less: Company error	₹400
Adjusted cash book balance	₹10,200

Depreciation and Amortisation

Depreciation and amortization are accounting methods used to allocate the cost of tangible and intangible assets over their useful lives. These methods help in matching the cost of assets with the revenue they generate over time.

Depreciation

Depreciation is an accounting method used to allocate the cost of a tangible asset over its useful life. This systematic allocation helps reflect the usage, wear and tear, or obsolescence of the asset in the company's financial statements.

Objectives of Depreciation

- **Match Expenses with Revenue:** Ensures that the cost of an asset is matched with the revenue it generates over time.
- **Reflect True Asset Value:** Provides a more accurate representation of an asset's value on the balance sheet.
- **Financial Planning:** Helps in planning for the replacement of assets by spreading their cost over their useful life.

Factors Affecting Depreciation

- **Cost of the Asset:** The initial purchase price and any additional costs necessary to prepare the asset for use.
- **Useful Life:** The estimated period over which the asset will be productive.
- **Residual Value (Salvage Value):** The estimated value of the asset at the end of its useful life.
- **Depreciation Method:** The chosen method of calculating depreciation expense.

Methods:

- Straight-Line Method
- Declining Balance Method
- Units of Production Method
- Sum-of-the-Years-Digits Method

Example:

1. A company purchases a piece of machinery for \$15,000. The machinery has an estimated useful life of 5 years and a salvage value of \$3,000. Calculate the annual depreciation expense using the straight-line method.

$$\text{Depreciation Expense} = \frac{\text{Cost} - \text{Salvage Value}}{\text{Useful Life}}$$

$$\text{Depreciation Expense} = \frac{15,000 - 3,000}{5} = 12,000/5 = 2,400$$

2. An asset is purchased for ₹25,000 with no salvage value and a useful life of 4 years. Calculate the depreciation expense for the first two years using the double declining balance method.

$$\text{Depreciation Rate} = 100\% / \text{Useful Life} \times 2 = 100\% / 4 \times 2 = 50\%$$

First Year:

$$\text{Depreciation Expense} = \text{Book Value at Beginning of Year} \times \text{Depreciation Rate}$$

$$\text{Depreciation Expense} = 25,000 \times 50\% = 12,500$$

Second Year:

$$\text{Book Value at Beginning of Second Year} = \text{Cost} - \text{Accumulated Depreciation}$$

$$\text{Book Value} = 25,000 - 12,500 = 12,500$$

$$\text{Depreciation Expense} = 12,500 \times 50\% = 6,250$$

The depreciation expenses are ₹12,500 for the first year and ₹6,250 for the second year.

Amortisation

Amortization is the process of spreading the cost of an intangible asset over its useful life. This accounting method ensures that the expense related to the intangible asset is matched with the revenue it generates over time.

Objectives of Amortization

- **Expense Allocation:** Spreads the cost of intangible assets over their useful lives.
- **Financial Accuracy:** Reflects the decline in value of intangible assets over time.
- **Revenue Matching:** Matches the cost of intangible assets with the revenue they help generate.

Intangible Assets Subject to Amortization

- **Patents:** Exclusive rights to produce or sell an invention.
- **Copyrights:** Exclusive rights to reproduce and sell artistic or literary work.
- **Trademarks:** Rights to use a symbol, name, or logo.
- **Franchise Agreements:** Rights to operate a business using another company's name and systems.
- **Goodwill:** The value of a company's brand name, customer relationships, etc.

Amortization Methods

- Straight-Line Method:
- Units of Production Method

Impact of Amortization

- **Financial Statements:** Reduces net income on the income statement and the book value of intangible assets on the balance sheet.
- **Taxation:** Amortization expense is deductible for tax purposes, reducing taxable income.

Example:

A company acquires a copyright for ₹1,00,000 with a useful life of 20 years and no residual value.

Amortization Expense = $1,00,000/20 = ₹5,000$ per year

Questions:

- What is the main purpose of a Bank Reconciliation Statement?
 - To prepare financial statements
 - To match the company's cash book with the bank statement
 - To record all cash transactions
 - To reconcile outstanding invoices
- Which of the following is an example of a deposit in transit?
 - A check issued but not yet cleared
 - A bank charge not recorded in the cash book
 - A deposit made but not yet credited by the bank
 - A loan repayment
- What should be done if the bank statement shows an overcharge?
 - Record the overcharge in the cash book
 - Ignore the overcharge
 - Adjust the bank statement
 - Add the overcharge to the bank reconciliation statement
- An outstanding check is:
 - A check recorded in the cash book but not yet cleared by the bank

- A check that has been cleared by the bank but not recorded in the cash book
 - A check that has been issued and cleared
 - A check that has been cancelled
- If the bank reconciliation statement shows an adjusted cash book balance higher than the bank statement balance, which of the following might be true?
 - There are outstanding checks
 - There are deposits in transit
 - The bank has made an error
 - The company has made an error
 - What is the primary purpose of depreciation?
 - To allocate the cost of an asset over its useful life
 - To increase the value of an asset over time
 - To match the revenue with the expenses in the same period
 - Both a and c
 - Which depreciation method allocates an equal amount of expense each year?
 - Declining Balance Method
 - Straight-Line Method
 - Units of Production Method
 - Sum-of-the-Years-Digits Method
 - How is accumulated depreciation reported in the financial statements?
 - As an expense on the income statement
 - As a contra asset on the balance sheet
 - As a liability on the balance sheet
 - As a revenue on the income statement
 - What is the primary purpose of amortization?
 - To allocate the cost of an intangible asset over its useful life
 - To increase the value of an intangible asset over time
 - To match the revenue with the expenses in the same period
 - Both a and c
 - Which of the following is an example of an intangible asset that would be amortized?
 - Building
 - Equipment
 - Patent
 - Land

Question No	1	2	3	4	5	6	7	8	9	10
Answer	b	c	d	a	b	d	b	b	d	c

Topic

Module 1:
Basics of Income
Tax Act

INTERMEDIATE

Group I - Paper-7A

Direct Taxation (DT)

Residential Status

Under the architecture of the Income-tax Act, 1961, the sovereign right to tax a person's income is anchored not to their citizenship, but to their economic nexus with the territory of India. Before the mathematical computation of taxable income can even commence, an absolute threshold question must be resolved: What is the residential status of the Assessee?

While Section 6 establishes the statutory tests to classify persons as Residents (further bifurcated into Ordinarily and Not Ordinarily Residents for Individuals and HUFs) or Non-Residents, Section 5 operates as the charging compass that dictates the exact jurisdictional scope of their taxable global income. For a CMA, mastering this interplay is the foundational first step in international tax planning, cross-border structuring, and withholding tax compliance.

Determination of Residential status [Sec. 6]

Assessee	Condition to be a Resident	Condition to be an Ordinarily resident
Individual	An individual is said to be a resident in India, if he satisfies <i>any one</i> of the following conditions - - He is in India in the previous year for a period of <i>182 days or more</i> [Sec. 6(1)(a)]; or - He is in India for a period of 60 days or more during the previous year and for 365 or more days during 4 previous years immediately preceding the relevant previous year [Sec. 6(1)(c)] Exceptions A. In the following cases, <i>condition (ii) of sec. 6(1)</i> [i.e. sec. 6(1)(c)] is irrelevant: - An Indian citizen, who leaves India during the previous year for employment purpose. - An Indian citizen, who leaves India during the previous year as a member of crew of an Indian ship. B. In case of an Indian citizen or a person of Indian origin comes on a visit to India during the previous year, and his total income, other than the income from foreign sources, exceeds ₹15 lakhs during the previous year then modified <i>condition (ii) of sec. 6(1)</i> is applicable i.e., he is in India for a period of 120 days or more (but less than 182 days) during the previous year and for 365 or more days during 4 previous years immediately preceding the relevant previous year. If such income does not exceed ₹ 15 lakhs, then condition (ii) of sec. 6(1) is irrelevant. C. If assessee has satisfied all the conditions given u/s 6(1A), he is considered as deemed resident. The conditions are: - He is a citizen of India - His total income, other than the income from foreign sources, exceeds ₹ 15 lakhs during the previous year; - He is not satisfying any of the basic conditions given u/s 6(1) [i.e., 182 days or 60 days + 365 days]; and - He is not liable to tax in any other country or territory by reason of his domicile or residence or any other criteria of similar nature.	If a resident individual satisfies the following two additional conditions, he will be treated as resident & ordinarily resident in India - - He has been resident in India [as per sec. 6(1)] in <i>at least 2 out of 10</i> previous years immediately preceding the relevant previous year; and - He has resided in India for a period of 730 days or more during 7 previous years immediately preceding the relevant previous year. Note: If the assessee is considered as resident by virtue of 120 days + 365 days criteria or he is considered as deemed resident u/s 6(1A), then he is considered as not ordinarily resident in India.

Assessee	Condition to be a Resident	Condition to be an Ordinarily resident
HUF	Management is wholly or partly situated in India	<i>Karta</i> satisfies both the conditions of sec. 6(6)
Company		
a) Indian company	Always resident	Not applicable
b) Other company	Place of effective management is in India	
Any other person	Management is wholly or partly situated in India	

Example:

Determine the residential status in the following different cases:

Case	A	B	C	D	E	F	G	H
Citizenship	Foreign	India	India	India	Foreign	Foreign	India	Foreign
Is he person of Indian origin	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Total income (excluding income from foreign source) exceeds ₹ 15,00,000	Yes	No	Yes	Yes	Yes	Yes	No	No
Liable to pay tax in other country	No	No	No	Yes	No	No	No	No
Stay in India during the previous year	30	30	30	30	138	185	85	85
Stay in India during 4 years immediately preceding previous year	380	380	380	380	380	180	380	380
Are dual conditions given u/s 6(6) satisfied	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Residential Status	NR	NR	NOR	NR	NOR	ROR	NR	ROR
Note	1	2	3	4	5	6	7	8

1. He is not an Indian citizen, hence sec. 6(1A) is not applicable. Further his stay in India during the previous year does not exceed 120 days.
2. His total income does not exceed ₹ 15,00,000.
3. All conditions of sec. 6(1A) are satisfied.
4. He is liable to pay tax in other countries.
5. His stay in India exceeds 120 days (but does not exceed 182 days)
6. He has satisfied one condition of sec. 6(1) [i.e. 182 days criteria] and dual conditions of sec. 6(6)
7. He is not satisfying with any of the conditions provided in sec. 6(1)
8. He has satisfied one condition of sec. 6(1) [i.e. 60 + 365 days criteria] and dual conditions of sec. 6(6)

Incidence of Tax [Sec. 5]

The following chart highlights the provisions of tax incidence in brief:

Nature of Income	Tax incidence in the case of		
	Resident & ordinarily resident	Resident but not ordinarily resident	Non resident
Income accrued or deemed to be accrued and received or deemed to be received in India	Taxable	Taxable	Taxable
Income accrued outside India but received or deemed to be received in India.	Taxable	Taxable	Taxable
Income accrued or deemed to be accrued in India but received outside India	Taxable	Taxable	Taxable

Nature of Income	Tax incidence in the case of		
	Resident & ordinarily resident	Resident but not ordinarily resident	Non resident
Income accrued and received outside India from a business controlled in or profession set-up in India.	Taxable	Taxable	Not taxable
Income accrued and received outside India from a business controlled or profession set-up outside India.	Taxable	Not taxable	Not taxable
Income accrued and received outside India in the previous year (it makes no difference if the same is later remitted to India).	Taxable	Not taxable	Not taxable
Income accrued and received outside India in any year preceding the previous year and later on remitted to India in current financial year.	Not taxable	Not taxable	Not taxable
Note: In case of resident assessee like company, firm etc. (other than Individual and HUF) in which there is no classification as 'Resident but not ordinarily resident', income accrued and received outside India from a business controlled or profession setup outside India shall be taxable.			

Example

Ram provides following details of income, calculate the income which is liable to be taxed in India for the A.Y. 2026-27 assuming that –

a) He is an ordinarily resident	b) He is not an ordinarily resident	c) He is a non-resident.
Particulars		Amount
Salary received in India from a former employer of UK		1,40,000
Income from tea business in Nepal being controlled from India		10,000
Interest on company deposit in Canada (1/3 rd received in India)		30,000
Profit from a business in Mumbai controlled from UK		1,00,000
Profit for the year 2023-24 from a business in Tokyo remitted to India		2,00,000
Income from a property in India but received in USA		45,000
Income from a property in London but received in Delhi		1,50,000
Income from a property in London but received in Canada		2,50,000
Income from a business in Zambia but controlled from Turkey		10,000

Solution:

Calculation of income liable to be taxed in India of Ram for the A.Y. 2026-27

Particulars	Resident & ordinarily resident	Resident but not ordinarily resident	Non-resident
Salary received in India from a former employer of UK	1,40,000	1,40,000	1,40,000
Income from tea business in Nepal being controlled from India	10,000	10,000	Nil
<u>Interest on company deposit in Canada -</u>			
- 1/3 rd received in India	10,000	10,000	10,000
- 2/3 rd received outside India	20,000	Nil	Nil
Profit from a business in Mumbai controlled from UK	1,00,000	1,00,000	1,00,000
Past Profit from a business in Tokyo remitted to India	Nil	Nil	Nil
Income from a property in India but received in USA	45,000	45,000	45,000
Income from a property in London but received in Delhi	1,50,000	1,50,000	1,50,000
Income from a property in London but received in Canada	2,50,000	Nil	Nil

Particulars	Resident & ordinarily resident	Resident but not ordinarily resident	Non-resident
Income from a business in Zambia but controlled from Turkey	10,000	Nil	Nil
Income liable to tax in India	7,35,000	4,55,000	4,45,000

Ultimately, the classification of an assessee under Section 6 is the definitive starting line for every tax computation under the Income-tax Act, 1961. For an ICAI aspirant, mastering this chapter is an exercise in absolute statutory precision, a single day's miscalculation can misclassify an individual from a Resident to a Non-Resident, instantly altering the jurisdictional scope of their taxable total income u/s 5. Whether navigating the nuanced 120-day exception for visiting Indian citizens or applying the "control and management" test to non-corporate entities, a rock-solid conceptual command over these provisions is what bridges the gap between rote memorization and true exam readiness. As you approach practical problems, anchor yourself to the golden sequence of Direct Tax: first establish the residential status, and only then quantify the taxable scope.

Topic

Module 4:
Concept of Indirect
Taxes

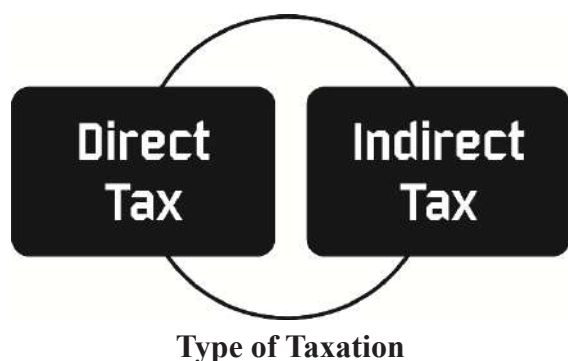
INTERMEDIATE

Group I - Paper-7B

Indirect Taxation
(IDT)

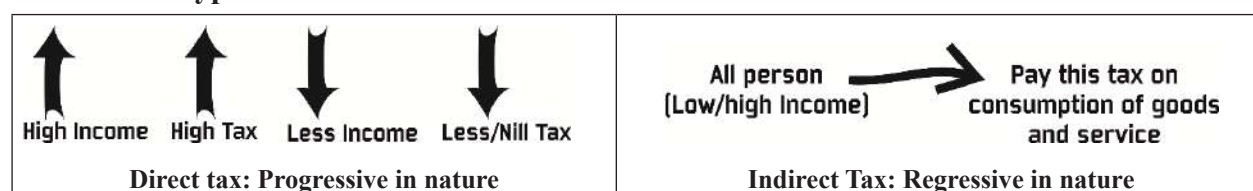
Concept of Indirect Tax

In the fiscal architecture of a sovereign state, taxation acts as the primary engine of public resource mobilization. While direct taxes attach to the income and wealth of specific person, **Indirect Taxes** are consumption-based levies anchored to economic transactions involving goods and services. Governed by the overriding constitutional mandate of Article 265 - which dictates that no tax shall be levied or collected except by authority of law - indirect taxation operates on the core principle of *shifted incidence*.



There are two types of taxes: Direct Tax and Indirect Tax

Tax, of which incidence and impact fall on the same person, is known as Direct Tax, such as Income Tax. On the other hand, tax, of which incidence and impact fall on two different persons, is known as Indirect Tax, such as GST, etc. It means, in the case of Direct Tax, tax is recovered directly from the assessee, who ultimately bears such taxes, whereas in the case of Indirect Tax, tax is recovered from the assessee, who passes such burden to another person & is ultimately borne by consumers of such goods or services.



Features of Indirect Taxes

Indirect taxes are taxes that are levied on goods and services rather than on income or profits. These taxes are collected by an intermediary (such as a retailer or manufacturer) from the person who ultimately bears the economic burden of the tax (such as the consumer). Here are some key points about indirect taxes:

- ✿ **Tax on goods and services:** Indirect tax is levied at the time of supply or manufacture or purchase or sale or import or export of goods or services.
- ✿ **Burden:** Tax, being indirect tax paid by the seller, shall be recovered by the seller from the buyer. Thus, one can say that burden of indirect tax is shifted from seller to buyer and ultimately borne by consumers of such goods or services.
- ✿ **Inflationary in nature:** Cost of goods and services increases due to levy of indirect tax thus indirect taxes promote inflation.
- ✿ **Social welfare:** It is useful tool to promote social welfare by checking the consumption of harmful goods or sin goods through higher rate of tax.
- ✿ **Wider Tax Base:** Majority of goods and services are liable to indirect tax with very low threshold limits, so tax base is much wider in case of indirect tax in compare to direct tax.
- ✿ **Regressive in Nature:** All persons (rich or poor) will bear equal wrath of tax on goods or service consumed by them irrespective of their ability. In other words, indirect tax does not create any difference between rich and poor. Poor people are also required to pay equal percentage of tax on certain goods and service of mass consumption. Thus, it may increase the disparities between rich and poor.
- ✿ **No pinch:** Seller (the person on which indirect tax is levied) does not perceive a direct pinch of tax as it is recovered by him from the buyer and then he is paying to the Government. On the other hand, since it is inbuilt in the price of the goods, the ultimate payer (i.e., buyer) pay it without knowing that he is paying any tax to the Government.
- ✿ **Examples of Indirect Taxes in India:**
 - **Goods and Services Tax (GST):** A comprehensive indirect tax on the manufacture, sale, and consumption of goods and services throughout India, replacing multiple indirect taxes like VAT, excise duty, and service tax.
 - **Customs Duty:** Levied on goods imported into India, aimed at protecting domestic industries and generating revenue.

- **Excise Duty:** Previously levied on the manufacture of goods within India, now subsumed under GST. However, Central Excise continues on Petroleum Crude, High-Speed Diesel, Petrol, Natural Gas, Aviation Turbine Fuel (ATF), and Tobacco (alongside GST on tobacco), while State Excise continues on Alcoholic Liquor for Human Consumption.

Comparison Chart

Basis	Direct Tax	Indirect Tax
Meaning	Direct tax is referred to as the tax, levied on person's income and wealth and is paid directly to the government.	Indirect Tax is referred to as the tax, levied on a person who consumes the goods and services and is paid indirectly to the government.
Nature	Progressive in nature, i.e., higher tax is levied on a person earning higher income and vice versa.	Regressive in nature, i.e., all persons will bear equal wrath of tax on goods or service consumed by them irrespective of their ability.
Incidence and Impact	Falls on the same person. Assessee, himself bears such taxes. Thus, it pinches the taxpayer.	Falls on different person. Tax is recovered from the assessee, who passes such burden to another person. Thus, it does not pinch the taxpayer.
Example	Income Tax	GST, Custom Duty
Evasion	Tax evasion is possible	Evasion is relatively difficult for the end-consumer at the retail point of sale, though systemic evasion through fraudulent Input Tax Credit (ITC) mechanisms remains a primary administrative challenge
Inflation	Direct tax helps in reducing the inflation.	Cost of goods and services increases due to levy of indirect tax thus indirect taxes promote inflation. However, sometimes it is useful tool to promote social welfare by checking the consumption of harmful goods or sin goods through higher rate of tax.
Imposition and collection	Imposed on and collected from the same person	Imposed on and collected from consumers of goods and services but paid and deposited by the assessee.
Burden	Cannot be shifted	Can be shifted
Event	Taxable income of the assessee	Supply of goods and services

Conclusion

Ultimately, Indirect Taxes form an integral part of the fiscal structure in India, actively influencing pricing and revenue collection. However, for a Cost and Management Accountant (CMA), mastering this framework—particularly under the Goods and Services Tax (GST) regime—is inseparable from the core discipline of cost ascertainment. Because the statutory availability or blockage of Input Tax Credit (ITC) directly dictates whether an indirect levy is absorbed into a product's landed cost or treated as a balance-sheet current asset, a single indirect tax misinterpretation can distort cost sheets, pricing models, and working capital.

Topic

Module 1:
Introduction to
Cost Accounting

Module 2:
Cost Ascertainment
– Elements of Cost

INTERMEDIATE

Group I - Paper-8

Cost Accounting
(CA)

Cost Accounting

Materials is the basic items which is required for the purpose of production. It is a major part of current assets as well as working capital of a business. In most of the developing countries, about 50% to 70% of total capital is generally invested in material items. The average investment in material varies from industry to industry. Hence control must be exercised during the time of purchase, storage and utilization of materials.

Almost in every examination one or more questions may be set from this chapter, especially in the area of Stores Pricing, EOQ Levels of stock and stock valuation. Students feel difficulty in the areas like treatment of Return and Shortage of Stores, determination of impact on profit under different methods of valuation, pricing issues etc. The students should be clear about the distinction between material control and inventory control.

Like all other functions purchasing is an important function of management. In big manufacturing organizations separate purchase departments are being set for conducting purchases. Top management lays down the purchase policy and accordingly, necessary purchases are made by the purchase department. It is the independent function of the purchase department to decide:- What to purchase?, When to purchase?, Where to purchase?, How to purchase?. when all purchases are made under the control of a purchaser or chief purchaser who ranks level with the top management, the buying is to Centralized. But if the buying function

is performed by other respective managers, including the chief purchaser, it is said to be decentralized. The decision for centralized or decentralized purchase will depend on, type and quality of material required, location of the production centers, policy of the firm and urgency of purchasing items. In order to make scientific control and optimum level of inventory, different levels of stocks are fixed, which are: - reorder level, Maximum Level, Minimum Level, Danger Level and average Level. There are various methods of pricing the materials issued in cost accounting. The choice mostly depends on the nature of materials used and the condition of the business itself. The principal methods used in costing for pricing stores issues are:- Cost price method, Average Cost Price Method, Market price Method, Notional price Method etc. the Cost price method includes: FIFO, LIFO, NIFO, HIFO, FILO and Base stock price.

Fixation of Stock Levels is very much important in case of purchasing function. In stores different level of stock may be maintained. The level of stock can be classified into four different levels: Maximum Level, Minimum Level, Reordering Level, Average Stock Level etc..

Cost Sheet is a statement of cost elementwise, showing total cost as well as cost per unit of the product produced during the given period. It helps the management in fixing prices of their product. A problem is given below, in order to clear the ideas of Cost Sheet.

Problem:

Following information has been obtained from the cost records of Aditya Bose Chemical Ltd. for 2025.

Particulars	₹
Finished goods on 1.1.2025	50,000
Raw materials on 1.1.2025	10,000
W. I. P. on 1.1.2025	14,000
Direct Labour.	1,60,000
Purchase of Raw Materials	98,000
Indirect Labour	40,000
Heat, Light and power	20,000
Factory Insurance and Taxes	5,000
Repairs to Plant	3,000
Factory Supplies	5,000
Depreciation --- Factory	5,000
---- Plant	10,000
Other related information are--	
Factory cost of goods produced	2,80,000
Raw materials consumed	95,000
Cost of goods sold during the year	1,60,000

No Office and Administrative expenses were incurred during the year.

Prepare a Statement of Cost Sheet for the year 2025, giving maximum possible information and its break-up.

Solution :

Aditya Bose Chemicals Ltd.
Cost Sheet for the year ended 31.12.2025.

Particulars	Amount (₹)	Amount (₹)
Opening Stock of Raw materials	10,000	
Add: Purchases	<u>98,000</u>	
	10,8000	
Less: Closing Stock of Raw materials (missing)	<u>13,000</u>	
COST OF MATERIALS CONSUMED	95,000	
Direct Labour	1,60,000	
PRIME COST		2,55,000
Factory Overhead:		
Indirect Labour	40,000	
Heat, Light and Power	20,000	
Insurance and Taxes.	6,000	
Repairs to Plants	3,000	
Factory Supplies	5,000	
Depreciation ---- Plant	10,000	
----- Building	5,000	
		<u>89,000</u>
		3,44,000
Add : Opening Work in -progress		<u>4,000</u>
		3,58,000
Less : Closing W.I.P. (missing.)		<u>78,000</u>
FACTORY COST		2,80,000
Add: Office and Administration Overhead		<u>NIL</u>
COST OF PRODUCTION		2,80,000
Add: Opening Finished Stock		<u>50,000</u>
		3,30,000
Less: Closing Finished Stock. (missing)		<u>1,70,000</u>
TOTAL COST/COST OF GOODS SOLD		<u>1,60,000</u>

Labour Cost represents the related cost of converting raw materials into finished products. It represents an important item of total cost. Labour cost relates to human behavior, hence most sensitive. So labour cost not only means wages but also includes cost of recruitment and training cost of idle time, cost of labour turnover, cost of overtime and shift work, cost of labour inefficiency, cost of wastage and spoilage etc. Controlling of labour cost is the most important function of administrative management. It is not like material which can be stored for future. If the day's labour is not utilized efficiently on the same day, idle time will occur with a loss to the department concerned. Again, if the management takes any action without recognizing the human element, it may result to strike or close down of the business. So it is a difficult task for the management to exercise control over labour cost. There are various techniques for effective control labour costs:

- 1) Planning of production
- 2) Budget of labour forces .
- 3) Standardization of labour cost and labour hours .
- 4) Labour performance reports.
- 5) Time booking through automatic time recorder.
- 6) Suitable system of wages payment coupled with various incentive schemes.

Direct Labour Cost And Indirect Labour Cost :

It is that cost which can be identified with and allocated to cost centres or cost units. Thus direct labour cost has a linear relationship with the volume of production. It forms part of prime cost. On the other hand labour cost which cannot be apportioned to or absorbed by cost centres or cost units is indirect labour cost. Thus those labours who are not directly engaged in altering the composition or condition of the product provide various types of services they are helpers, maintenance personnel etc. indirect labour is a part of overhead.

Labour Turnover:

Labour turnover may be defined as the rate of change in composition of the labour force of an organization during a specified period. labour turnover is a peculiar problem of industry and leads to high cost and low productivity. Thus,

$$\text{Labour Turnover} = \frac{\text{No of workers leaving in a particular period}}{\text{Avg no of workers employed during the period.}}$$

Cost of labour turnover is treated as an overhead expense and should be charged directly to production.

Job Evaluation and Merit Rating:

Job evaluation represents an effort to determine the relative value of every job. The evaluation may be achieved through the assignments of points or the use of some other systematic rating method for essential job requirements, such as skill, experience and responsibility .

Problem:

In a factory, bonus hours are calculated to its workers by the following formula:

$$\text{Time saved} \times \text{Time taken} / \text{Time Allowed}$$

The employees are carried forward from one period to another. There is no provision for overtimes. Employees are paid for all units produced included rejected units. From the following data you are requested to calculate for each employee:

- 1) The total earnings.
- 2) The cost of wages of each good unit produced.

Merit rating, on the other hand, refers to the evaluation of merit of an employee in terms of the requirements of the job. It is actually the evaluation of the performance of an employee. In merit rating, the personal qualities of an individual are taken into account.

Idle time:

Idle time refers to such a time for which wages are paid without any production. It is the difference between the time as per attendance records and the time booked for different jobs or workorders. The idle time may arise mainly due to two causes: i) Normal causes and ii) Abnormal causes. Cost of Normal Idle Time, which is uncontrollable should be charged to the job or workorder at an inflated rate. cost of Abnormal Idle Time should not be included in production cost but should be charged to Costing Profit and Loss A/c.

Overtime:

If a worker spends more time over and above the normal working hours, it is known as overtime. generally rate of overtime is higher than the normal rate. the extra payment required to be paid for Overtime work is known as overtime premium.

Idle Facilities:

It means the Plant and Machinery facilities available for utilization but which are not used fully due to normal or abnormal reasons. This generally arises due to market constraint or defective management policy.

Idle Capacity and Excess Capacity:

The term Idle capacity refers to temporary idleness because of shortage of production due to lack of orders or any other causes. Excess capacity represents the surplus capacity over what can be expected to be utilized at present due to unbalanced machines and equipments within the departments.

A Problem related to finding out the Earnings of some Employees are given below for your easy understanding.

Particulars	R-1	R-2	R-3
Hourly Rate	2.40	4.00	3.75
Units issued for production	2600	2250	3600
Time allowed for 100 hours	50	60	80
Time taken	48	38	42
Rejects	100	80	400

Solution :

Statement Showing Total Earnings of the Employees

Particulars	R-1 (₹)	R-2 (₹)	R-3 (₹)
Time wages	$48 \times 2.5 = 120.00$	$38 \times 4 = 152.00$	$42 \times 3.75 = 157.50$
Add: Bonus*	<u>9.23</u>	<u>----</u>	<u>10.50</u>
Total Earnings	<u>129.23</u>	<u>152.00</u>	<u>168.50</u>
Good units (Total units - Reject units)	$(600 - 100) = 2500$	$(2280 - 80) = 2200$	$(3600 - 400) = 3200$
Cost of wages per unit of good units	$129.23/2500 = 0.0517$	$152./2200 = 0.0691$	$168.50/3200 = 0.0525$

Workings: Calculation for Bonus

Particulars	R-1	R-2	R-3
Time Allowed (hours)	$2600 / 50 = 52$	$2280 / 60 = 38$	$3600 / 80 = 45$
Time Taken	<u>48</u>	<u>38</u>	<u>42</u>
Time Saved	<u>4</u>	<u>----</u>	<u>3</u>
Bonus:	$4/52 \times 48 \times 2.5 = ₹9.23$	$-----$	$3/45 \times 42 \times 3.75 = ₹10.50$

Topic

Module 3:
Designing of
Operational
Systems and
Control

INTERMEDIATE

Group II - Paper-9

Operations
Management
and Strategic
Management
(OMSM)

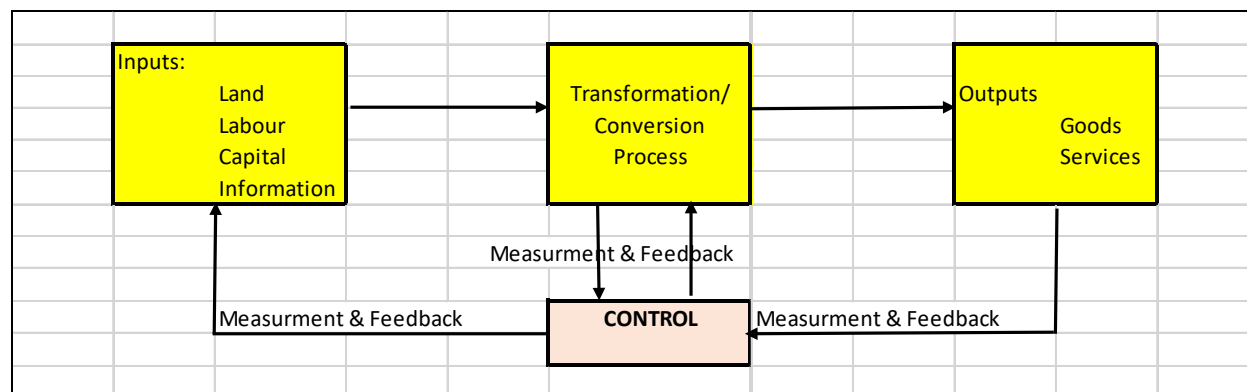
Operations Management

An operations system is the structured framework of resources, processes, and controls that transforms inputs (like raw materials, labor, capital, and information) into finished goods or services. It is the core engine of any organization—whether a manufacturing plant, a hospital, or a software company—responsible for executing the firm's operational strategy.

Every operations system can be understood through a classic input-transformation-output framework.

1. The Core Components: Input-Transformation-Output

At its heart, an operations system functions as a feedback-controlled loop:



Inputs: These are the resources combined to start the process. They include transformed resources (materials, information, or customers themselves) and transforming resources (facilities, machinery, and staff).

Transformation Process: The actual value-adding activity. Depending on the industry, this transformation can take several forms:

Physical (e.g., manufacturing raw steel into a car component)

Locational (e.g., logistics and warehousing moving goods to where they are needed)

Exchange (e.g., retail operations transferring ownership)

Informational (e.g., market research or financial analytics)

Physiological / Psychological (e.g., healthcare treating a patient or entertainment providing an experience)

Outputs: The final product or service delivered to the customer.

Feedback Loop: Mechanisms (like quality checks, inventory monitoring, or customer surveys) that capture performance data to adjust inputs or the transformation process dynamically.

From inputs Goods and services often occur jointly. Like painting of a house is a service but pain which is used is a good.

The essence of the operation function is to **add value** during the transformation process.

Value added is the term used to describe:

$$\text{Value or Price of output} - \text{Cost of Input}$$

In Non-Profit organisation:

- Output example – Highways, Police, Education, Fire service etc
- Value of such output – Value to Society
- The greater the value added the greater the effectiveness of these services to society

In for Profit organisation

- Output example – Tangible goods such as Car, FMCG products, Banking services etc
- Value of such output – Prices the consumers are willing to pay for those goods & services

2. Structural vs. Infrastructural Decisions

Designing and managing an operations system involves two main types of strategic decisions:

- **Structural Decisions (The Tangibles)** – These are long-term, capital-intensive choices that define the physical constraints of the system:
 - **Capacity:** Determining how much the system can produce (e.g., scale of facilities, peak vs. average load management).
 - **Facilities:** Deciding where to locate plants or service centers and how to lay them out (e.g., product layout vs. process layout).
 - **Technology:** Selecting the technology along with machinery, automation, and digital platforms that drive production.

- **Infrastructural Decisions (The Intangibles)** – These are the operational policies and systems that manage the day-to-day workflow within the structural footprint:
 - **Production Planning and Control:** Scheduling, sequencing tasks, and managing bottlenecks.
 - **Inventory Management:** Balancing the costs of holding stock against the risk of stockout (using frameworks like JIT, EOQ, or MRP).
 - **Quality Management:** Implementing control mechanisms like Six Sigma or Total Quality Management (TQM) to ensure output consistency.
 - **Workforce Design:** Job roles, skill requirements, and performance incentives.

3. Typology of Operations Systems (The 4 Vs)

Operations systems differ drastically based on the nature of what they produce. This variation is typically classified using the 4 Vs framework:

- **Volume:** High volume typically allows for standardization and automated, continuous flow processes (e.g., fast food, auto assembly), whereas low volume requires flexibility.
- **Variety:** High variety demands flexible, job-shop architectures capable of customization (e.g., bespoke consulting or custom manufacturing), whereas low variety simplifies the process route.
- **Variation in Demand:** Systems facing highly seasonal or unpredictable demand (e.g., emergency rooms, holiday resorts) must carry excess capacity or utilize flexible staffing, unlike stable demand systems.
- **Visibility:** The degree to which the customer experiences the process. High visibility (e.g., retail banking, hospitality) requires staff with strong interpersonal skills and clean front-office environments, whereas low visibility (e.g., digital clearinghouses, manufacturing) focuses heavily on back-office cost efficiency.

By aligning these components and structural choices with the overarching corporate strategy, an operations system ensures that a company can deliver its value proposition efficiently, reliably, and at scale.

Let us take an example major steps for designing operations systems adopted by a business unit dealing with rural products:

Designing an operations system for a business dealing with rural products (such as organic agro-produce, regional handicrafts, or processed rural crafts) requires adapting classic operations management principles

to unique constraints. Rural supply chains often face fragmented sourcing, seasonal demand or yield spikes, and infrastructure deficits.

The step-by-step process below outlines how to design a robust operations system for this sector, moving from strategic alignment to execution.

Step 1: Define the Operational Strategy & Product Typology

Before building physical infrastructure, you must align the operations system with the nature of the product and market demand using the 4 Vs Framework.

Determine Volume & Variety: A business handling artisanal handicrafts will design a Job-Shop / Flexible layout due to low volume and high variety. Conversely, a rural staple like processed spices or milled grains requires a Continuous / Line layout optimized for high volume and low variety.

Assess Demand Variation: Rural products are heavily tied to harvest cycles or festive seasons. The system must be designed to handle intense demand or supply spikes without maintaining prohibitive permanent overhead.

Evaluate Visibility: Decide if the transformation process involves the customer (e.g., rural tourism or experiential workshops) or if it is purely a back-office processing and logistics setup.

Step 2: Input Sourcing & Supply Chain Alignment

Rural operations are uniquely defined by their inputs. Designing this stage requires managing fragmented supply bases.

Aggregation Frameworks: Set up local collection centers or hub-and-spoke models to aggregate small batches of products from individual farmers or artisans.

Quality Standardization at Source: Because inputs vary naturally (e.g., varying crop sizes or handmade discrepancies), establish clear grading and sorting protocols at the point of collection to filter out substandard inputs early.

Information Inflow: Implement basic digital communication channels (like SMS or mobile apps) to track crop yields, weaving timelines, and raw material availability before collection vehicles are dispatched.

Step 3: Structural Decisions (The Physical Blueprint)

This step defines the capital-intensive, long-term elements of your operations system.

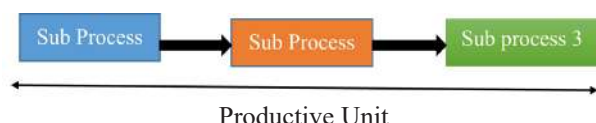
Facility Location: Balance the cost of transporting heavy raw materials against the cost of moving finished goods. For highly perishable rural products, primary processing facilities (washing, sorting, and cold storage) must be located near the cluster/source to prevent spoilage.

Capacity Planning: Design a flexible capacity model. Since rural supply fluctuates, build facilities that can scale up via temporary labor or modular processing lines during peak harvest seasons, rather than investing in massive, underutilized permanent machinery.

This is the most vital component of designing Operations systems.

Capacity is the maximum amount of output a productive unit could produce within a stated time. It is normally expressed in terms of output units per unit of time.

While producing output if the production process consists of many sub processes, then the capacity of the productive unit is governed by the capacity of the weakest link.



If sub process 2 is the weakest link then capacity of the productive unit is governed by the capacity of weakest link.

Capacity can be:

1. **Installed Capacity**--It represents capacity in terms of machines actually installed. Productive machines procured for installation have some defined capacity, as provided in their printed literatures. Summation of such capacity gives a total installed capacity.
2. **Rated Capacity**--This denotes the highest output established by the actual trial runs of the productive machines installed.

However, deciding the capacity rate based on the single one-time highest achievement may not be always correct. It is necessary to assume the average of performance rate of machines over a time period for more effective rating decision.

3. **Licensed Capacity**--This denotes the actual capacity licensed by the concerned government authorities.

Dimension	Effect on Capacity Management
Quantity	How much capacity is needed?
Timing	When should capacity be available?
Quality	What kind of capacity is needed?
Location	Where capacity should be installed?

Capacity planning is a long term strategic decision that establishes a firm's overall level of resources.

It is long term process over a time horizon long enough to obtain the requisite resources.

Long term capacity planning is central to the success of an organization.

Capacity decisions affect—

- Product lead times (Duration between receipt of order for the product and readiness of the product);
- Customer Responsiveness;
- Operating Costs;
- Firm's ability to compete;

Inadequate capacity –

- Loss of customers;
- Restricts growth;

Excess capacity –

- Drain company's resources;
- Prevent investments in more lucrative ventures;

Capacity Planning procedure –

- Assess company situation and environment to predict future demand;
- Determine the available capacity;
- Translate predictions into physical capacity requirements;
- Develop alternative capacity plans;
- Determine economic effects of alternative plans;
- Determine the risks of alternative plans;
- Recommend a course of action;
- Implement the course of action;

Capacity planning is mainly of two types:

- (i) **Long-term capacity plans** which are concerned with investments in new facilities and equipment. These plans cover a time horizon of more than two years.
- (ii) **Short-term capacity plans** which takes into account work-force size, overtime budgets, and inventories.

Operations managers must examine three dimensions of capacity strategy before making capacity decisions:

- Sizing capacity cushions;
- Timing and sizing expansion;
- Linking Capacity decisions with other operating decisions;

If the demand goes on increasing over time, then long term capacity must be increased accordingly to provide some buffer against uncertainties. When average utilization rates approach 100 percent, it is usually a signal to increase capacity. The capacity cushion is the amount of reserve capacity a process uses to handle sudden increase in demand. It measures the amount by which the average utilization in terms of total capacity falls below 100% i.e.

Capacity Cushion = 100% - Average utilisation rate(%)

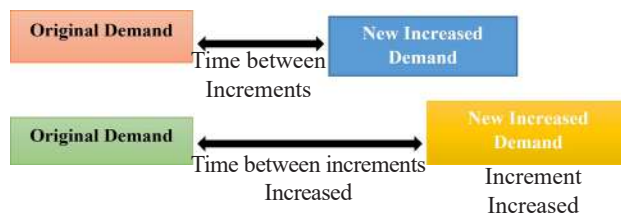
Average capacity utilization differs by industry. An industry with an 80% average utilization would have a 20% capacity cushion for unexpected surges in demand.

Large capacity cushions are common in industries in which demand is –

- Highly variable;
- Resource flexibility is low;
- Customer service is important;

Highly variable demand – In certain service industries (e.g. Grocery) demand on some days of the week is predictably higher than on other days. Long customer waiting times are not acceptable because customer goes impatient if they have to wait in a supermarket checkout line for more than a few minutes. Prompt customer service requires supermarkets to maintain a capacity cushion large enough to handle peak demand.

The timing and sizing of expansion are related. If demand is increasing and the time between increment increases, the size of the increments must also increase.



Two extreme strategies are followed for expanding capacity:

- **Expansionist Strategy** – which involves large infrequent jumps in capacity. It stays ahead of demand, minimizes the chance of sales lost to insufficient capacity. Suitable for second situation above;
- **Wait and see strategy** – which involves smaller more frequent jumps. It lags behind demand. Suitable for first condition above;

Factors favouring expansionist strategy:

- It results economies of scale;
- It results reducing cost of operation;
- It facilitates a firm to compete on price;
- It might increase the firm's market share;

Factors favouring wait and see strategy:

- It reduces the risks of overexpansion;
- It facilitates firms to avoid obsolete technology;
- It guards against inaccurate assumptions regarding competition;

Economies of scale – occur when it costs less per unit to produce or operate at high levels of output. This is true when:

- Fixed costs can be spread over a larger number of units;
- Production or operating costs do not increase linearly with output levels;
- Quantity discounts are available for material purchases;
- Operating efficiency increases as workers gain experience;

A higher capacity plant offers some economies of scale:

- Automation is possible in a high capacity plant;
- Labour economies – lower variable cost/unit – increase of skill of worker;
- Managerial economies, technical competence;
- Marketing economies – Purchase in bulk;
- Financial economies – better security, attract investment at lower cost;

Economies of scale do not continue indefinitely. Above a certain level of output diseconomies of scale can occur like:

- Overtaxed machines and material handling equipment break down;
- Slowing of service time;
- Quality suffers requiring more rework;
- Labour costs increase with more overtime;
- Increase in difficulties in coordination and management activities;

Technology Selection: Choose appropriate technology. In rural settings, operations systems often benefit from “appropriate automation”—semi-automated machinery that enhances human productivity (e.g., mechanized grinders, solar-powered dryers) rather than hyper-automated robotics that are difficult to maintain locally.

Step 4: Infrastructural Decisions (Day-to-Day Controls)

Once the physical assets are in place, establish the operational policies to manage the workflow.

Inventory & Cold Chain Management: For perishable agro-products, inventory management relies heavily on First-Expired, First-Out (FEFO) protocols and cold-chain infrastructure. For non-perishable crafts, a Just-In-Time (JIT) pulling system can be coordinated with artisan groups based on urban retail orders to minimize warehousing costs.

Production Planning & Scheduling: Account for external constraints like erratic power supply or weather disruptions by building safety time buffers into the production schedule.

Quality Management (TQM): Implement simple visual management tools (like color-coded bins or physical templates) so that workforce teams can easily maintain quality standards without requiring overly complex training.

Step 5: Output Logistics & Distribution Network

Getting the product from a remote rural origin to urban or international markets requires a robust distribution design.

Logistics Optimization: Design multi-modal transport routes that protect product integrity (e.g., refrigerated trucks for dairy/produce, shock-absorbent packaging for fragile crafts).

Traceability Systems: Modern consumers of rural and

organic products value authenticity. Design the operations system to include batch-tracking or QR-code labeling that tells the story of the specific farm or artisan cooperative the product originated from.

Step 6: Feedback Loops & Continuous Improvement

The final step ensures the system adapts to changes in supply and market trends.

Yield & Waste Analytics: Track operational metrics such as processing yield percentages, post-harvest losses, and defect rates.

Continuous Improvement (Kaizen): Use feedback from urban buyers regarding product quality or packaging defects to retrain rural production clusters, creating a continuous loop that elevates the value of the rural output.

Suggestions:

This writing is an aid to the topic discussed in study guide on the paper 9- Operations Management & Strategic Management written and issued by Institute. Further knowledge could be developed from supplementary readings- Modern Production/Operations Management by Buffa and Sarin, Operations Management by R.S Russell & BW Taylor, Operations Management by Lee J Krajewski.

Best Wishes.

Topic

Module 1:
Accounting
for Shares and
Debentures

Module 6:
Basic Concepts of
Auditing

INTERMEDIATE

Group II - Paper-10

Corporate
Accounting and
Auditing (CAA)

Section A: Corporate Accounting

Topic: Redemption of Debenture Through Open Market Operation

• Purchase in the Open Market

..... Continued from Previous Issue

Situation 2: Purchase of Debentures for Immediate Cancellation - before the Date of Payment of Interest

If the date of purchase of debentures and the date for payment of interest on debentures are not the same, interest from the last payment date up to the date of purchase would accrue to the (old) debenture holder. Hence, the amount payable to the (old) debenture holder, i.e., seller, will be the sum of payment for the debentures and also payment for the accrued interest. Hence, an entry for the interest payment will be required separately. The entries for purchase and cancellation of debentures will be as follows:

(a) When debentures are purchased

Debentures Redemption AccountDr. [Cost]

Debenture Interest Account.....Dr. [Accrued interest]

To Bank Account [Total payment]

(b) When debentures are cancelled

(i) Debentures AccountDr. [Face value]

To Debentures Redemption Account [Cost]

To Profit on Cancellation of Debentures Account [Profit]

(ii) Loss on cancellation is transferred to Statement of Profit and Loss.

Profit and Loss A/c.....Dr.

To Debentures Redemption Account

(c) When profit on cancellation of debentures is transferred to Capital Reserve

Profit on Cancellation of Debentures AccountDr.

To Capital Reserve Account

(d) When face value of debentures is transferred to General Reserve

Profit and Loss A/cDr.

To General Reserve Account

Consider the following illustration.

Illustration 1

On 1.3.2026, A Ltd. purchases its own 7% debentures, of ₹10,000 @ ₹ 96 Cum-interest and cancels immediately, interest on debentures being payable on June 30 and December 31 each year. Pass journal entries.

Solution:

In the books of A Ltd Journal

Date	Particulars	Dr. (₹)	Cr. (₹)
2026 March 1	Debentures Redemption A/c (Note 1) Dr. Debenture Interest A/c...Dr. To Bank A/c (Being the purchase of 100 debentures @ 96 cum-interest for immediate cancellation)	9,500 100	9,600
March 1	6% Debentures A/cDr. To Debentures Redemption A/c To Profit & Loss on Cancellation of Debentures A/c* (Being the cancellation of 4,000 debentures as per Board's Resolution No.... dated...)	10,000	9,500 500

*At the year end, the profit on cancellation is transferred to Capital Reserve Account, being capital profit.

Working Note: (1)

When debentures are purchased "Cum-interest", accrued interest up to the date of purchase is calculated and deducted from the quoted price. The net amount is debited to the Debentures Redemption Account. Here, the total purchase price is ₹9,600 and interest up to the date of purchase is $(₹10,000 \times 6/100 \times 2/12) = ₹100$. Therefore, $(₹9,600 - ₹100) = ₹9,500$ is to be debited to Debentures Redemption Account.

Situation 3: Purchase of Debentures as Investment - on the Date of Interest

A company may purchase its own debentures as an investment. In the future, it may be sold on the market again or cancelled. When own debentures are purchased as an investment, an account called "Investment in Own Debentures Account" or "Own Debentures Account" is debited with the quotation price and the Bank Account is credited with the same amount. The "Account" is shown on the assets side of the Balance Sheet under the heading "Investment".

Interest on own debentures for the post-purchase period is credited to Statement of Profit and Loss similar any other income from other investments. Debenture Interest

Account is debited with the total interest (payable to outside debenture holders plus interest on own debentures held as investment).

The accounting entries will be as follows:

- (a) When debentures are purchased

Investment in Own Debentures AccountDr. [Quotation price $\times$ No. of debentures purchased]

To Bank Account

(Being the purchase of debentures @ ~ each as investment)

- (b) When interest on debentures is due and paid

Debenture Interest AccountDr. [Total interest]

To Bank Account [Interest paid to outside debenture holders]

To Interest on Own Debentures Account [Own Debentures]

(Being the interest on debenture paid and adjusted)

- (c) When debentures are cancelled

Debentures AccountDr. [Face value]

To Investment in Own Debentures Account [Purchase price]

To Profit on Cancellation of Debentures Account [Profit]

(Being the cancellation of debentures)

- (d) When profit on cancellation of debentures is transferred to Capital Reserve

Profit on Cancellation of Debentures AccountDr.

To Capital Reserve Account

(Being profit on cancellation is transferred to Capital Reserve Account)

- (e) When the face value of debentures is transferred to General Reserve

Profit & Loss AccountDr.

To General Reserve Account

(Being the amount equal to the face value of debentures redeemed is transferred to general reserve)

- (f) When interest on own debentures is transferred

Interest on Own Debentures AccountDr.

To Profit and Loss A/c

(Being the interest on own debentures is transferred to Statement of Profit and Loss)

- (g) When debentures interest (paid during the year) is transferred to the Statement of Profit and Loss

Profit and Loss A/c..... Dr.

To Debenture Interest Account

(Being interest charged to Statement of Profit and Loss)

Consider the following illustration.

Illustration 2

On 1st January 2026, X Ltd. had 5,000, 12% Debentures of ₹100 each. The company purchased 1,000 debentures in the open market at ₹96 each on 30th June 2026. Debenture interest is payable half-yearly, on 30th June and 31st December. The Company cancelled all the purchased debentures on 31st December 2016.

Pass the necessary Journal Entries.

Solution:

In the books of X Ltd
Journal

Date	Particulars	Dr. (₹)	Cr. (₹)
30.06.26	Debenture Interest A/cDr. To Bank A/c	30,000	30,000
30.06.26	Investment in Own Debentures A/cDr. To Bank A/c	96,000	96,000
31.12.26	Debenture Interest A/cDr. To Bank A/c To Interest on Own Debentures A/c	30,000	24,000 6,000
31.12.26	Profit and Loss A/c.....Dr. To Debenture Interest A/c	60,000	60,000
31.12.26	Interest on Own Debentures A/cDr. To Profit and Loss A/c	6,000	6,000
31.12.26	12% Debentures A/cDr. To Investment in Own Debentures A/c To Profit and Loss on Cancellation of Debentures A/c	1,00,000	96,000 4,000
31.12.26	Profit and Loss on Cancellation of Debentures A/c Dr. To Capital Reserve A/c	4,000	4,000
31.12.26	Profit and Loss A/c To General Reserve A/c	1,00,000	1,00,000

Section B: Auditing

Topic: Basic Concepts of Auditing

• **Multiple Choice Questions**

1. Audit documentation that records audit procedures performed, evidence obtained, and conclusions reached is known as:

- A. Audit Programme
- B. Audit File
- C. Internal Control System
- D. Management Representation

Answer: B. Audit File

2. According to auditing standards, audit documentation primarily serves to:

- A. Replace accounting records
- B. Support the auditor's opinion and demonstrate compliance with auditing standards

- C. Prepare financial statements

- D. Determine tax liability

Answer: B. Support the auditor's opinion and demonstrate compliance with auditing standards

3. Which of the following is generally included in a Permanent Audit File?

- A. Current year's bank reconciliation statement
- B. Current year's inventory count sheets
- C. Memorandum and Articles of Association
- D. Current year's adjusting journal entries

Answer: C. Memorandum and Articles of Association

4. Which of the following is generally maintained in the Current Audit File?

- A. Partnership deed applicable for several years

- B. Certificate of Incorporation
- C. Current year's audit programme and working papers
- D. Organization chart with no changes over many years

Answer: C. Current year's audit programme and working papers

5. Audit evidence refers to:

- A. Only written explanations given by management
- B. Information used by the auditor in arriving at audit conclusions
- C. Only vouchers and invoices
- D. Financial statements alone

Answer: B. Information used by the auditor in arriving at audit conclusions

6. Which of the following sources generally provides the most reliable audit evidence?

- A. Oral representation from management
- B. Internally generated document without controls
- C. Evidence obtained directly by the auditor through physical inspection
- D. Information provided by an employee verbally

Answer: C. Evidence obtained directly by the auditor through physical inspection

7. The appropriateness of audit evidence is primarily concerned with:

- A. Quantity of evidence obtained
- B. Cost of obtaining evidence
- C. Relevance and reliability of evidence
- D. Time taken to collect evidence

Answer: C. Relevance and reliability of evidence

8. Which of the following is an example of external audit evidence?

- A. Payroll register prepared by the entity
- B. Purchase requisition note
- C. Bank confirmation received directly from the bank
- D. Internal audit report

Answer: C. Bank confirmation received directly from the bank

9. The quantity of audit evidence required is referred to as:

- A. Reliability
- B. Materiality
- C. Sufficiency
- D. Relevance

Answer: C. Sufficiency

10. Which of the following statements regarding audit evidence is correct?

- A. More audit evidence always guarantees absolute assurance.
- B. Audit evidence must be both sufficient and appropriate.
- C. Only documentary evidence can be used in an audit.
- D. Audit evidence is collected only at the end of the audit.

Answer: B. Audit evidence must be both sufficient and appropriate.

Topic

Module 2:
Institutions and
Instruments in
Financial Markets

Module 8:
Introduction to
Data Science
for Business
Decision-making

INTERMEDIATE

Group II - Paper-11

Financial
Management and
Business Data
Analytics (FMDA)

Financial Management

Capital Market and Money Market

Capital Market: Capital market is a financial marketplace where buyers and sellers trade long-term assets such as stocks and bonds. It connects individuals and institutions with surplus money (investors) to companies and governments that need funding for long-term growth and operations.

Types of Capital Market

Capital Markets are categorized based on how securities are issued and types of financial instruments.

1. Based on Issuance

- (i) **Primary Market:** This is where new securities are issued and sold to investors for the first time. Companies raise fresh capital by launching Initial Public Offerings (IPO) or Further Public Offerings (FPO).

The **fund-raising in the primary market** can be classified as follows:

- (a) **Public issue by prospectus:** This is the most common method where securities are offered to the general public. Issuers must publish a detailed document disclosing financial health and risk factors.
- (b) **Private placement:** The company sells its securities directly to a select group of sophisticated investors rather than the open public. Issued exclusively to institutional investors like insurance companies, mutual funds, and high-net-worth individuals.
- (c) **Rights issues:** This method offers fresh shares exclusively to existing shareholders in proportion to their current holdings. Shares are typically offered at a price lower than the prevailing market value to incentivize purchase.
- (d) **Offer for Sale (OFS):** Instead of issuing fresh shares, existing shareholders (like promoters or venture capitalists) sell their holdings. The sale is usually conducted through stockbrokers or an institutional bidding process.

Book Building Method: The book building method is a capital-raising process where a company determines the price of its shares based on investor demand before the official issue. Instead of setting a fixed price, the company provides a price band.

Book building process works step-by-step:

- Step 1: Appointment of Lead Manager
- Step 2: Specifying the Price Band
- Step 3: Determine Bidding Period
- Step 4: Discovering the Cut-Off Price
- Step 5: Allocation and Allotment

- (ii) **Secondary Market:** Also known as the stock market, this is where existing, already-issued securities are traded between investors. It provides liquidity and is facilitated by major stock exchanges.

The National Stock Exchange of India Limited (NSE) is India's largest financial market and the world's largest derivatives exchange by trading volume. It provides a fully automated, electronic platform for trading equities, corporate bonds, and derivatives.

Core Financial Segments of NSE

1. **Equities:** Over 2,200 actively tradable companies are listed on the main board.
2. **Derivatives:** A global hub for trading equity futures, options, and currency derivatives.
3. **Debt Instruments:** Platform for government securities, corporate bonds, and commercial papers.
4. **Commodities & EGRs:** Includes Exchange-Traded Funds (ETFs) and newly added Electronic Gold Receipts (EGRs)

2. Based on Financial Instruments

- **Equity Market:** This market facilitates the trading of company stocks or shares. By purchasing equity, investors become partial owners of the company, gaining rights to dividends and voting power.
- **Debt Market:** This market allows companies and governments to borrow funds by issuing fixed-income instruments, such as bonds and debentures. Investors receive regular interest and the return of their principal amount at maturity.
- **Derivatives Market:** This segment trades contracts (like futures and options) whose value is derived from an underlying asset. It is primarily used by investors to hedge risks or for speculation.
- **Foreign Exchange Market:** A decentralized, global market where currencies are traded. It is used by multinational businesses to manage the risks associated with international trade.

Differences between Primary Market and Secondary Market

Points of Difference	Primary Market	Secondary Market
1. Definition	Marketplace for issuing new securities.	Marketplace for trading existing securities.
2. Interaction	Between issuer company and investor.	Between investor and investor.
3. Capital Flow	Money goes directly to the company	Money stays between investors
4. Pricing	Fixed by the management/underwriters.	Determined by market demand and supply.
5. Frequency	Securities are sold only once.	Securities can be sold infinitely.
6. Intermediaries	Underwriters, investment bankers.	Stockbrokers, authorized dealers.
7. Examples	Initial Public Offerings (IPOs), FPOs.	Trading on NSE, BSE.

Money Market Segments

1. Call/Notice Money Market

The call money market is a market for very short-term funds repayable on demand and with a maturity period varying between one day to a fortnight. When money is borrowed or lent for a day, it is known as call (overnight) money. Intervening holidays and/or Sundays are excluded for this purpose.

When money is borrowed or lent for more than a day and upto 14 days, it is known as notice money. No collateral security is required to cover these transactions. The call money market is a highly liquid market, with the liquidity being exceeded only by cash. It is highly risky as well as extremely volatile.

The participants in the call money market are: scheduled and non-scheduled commercial banks, foreign banks, state, district and urban cooperative banks, and DFHI. Other borrowing participants were the brokers and dealers in the securities/bullion/bills market, and sometimes individuals of high financial status.

2. Treasury Bills

Treasury bills are short-term instruments issued by the Reserve Bank on behalf of the government to tide over short-term liquidity shortfalls. This instrument is used by the government to raise short-term funds to bridge seasonal or temporary gaps between its receipts (revenue and capital) and expenditure.

T-bills are repaid at par on maturity. The difference between the amount paid by the tenderer at the time of purchase (which is less than the face value) and the amount received on maturity represents the interest amount on T-bills and is known as the discount. Tax deducted at source (TDS) is not applicable on T-bills.

If a T-bill with a face value of ₹100 is issued at ₹98, then the implicit yield is: $[(100 / 98 \times 100) - 100] \times 4 = 8.164\%$

3. Commercial paper

A commercial paper is an unsecured short-term promissory note, negotiable and transferable by endorsement and delivery with a fixed maturity period. It is generally issued at a discount by the leading creditworthy and highly rated corporates to meet their working capital requirements. A commercial paper can be issued to individuals, banks, companies, and other registered Indian corporate bodies and unincorporated bodies. Non-resident Indians can be issued a commercial paper only on a non-transferable and non-repatriable basis. Banks are not allowed to underwrite or co-accept the issue of a commercial paper. Foreign institutional investors (FIIs) are eligible to invest in commercial papers but within the limits set for their investments by the SEBI.

4. Certificates of Deposit

Certificates of deposit (CDs) are unsecured, negotiable, short-term instruments in bearer form, issued by commercial banks and development financial institutions. Certificates of deposit were introduced in June 1989. Only scheduled commercial banks excluding Regional Rural Banks and Local Area Banks were allowed to issue them initially. Financial institutions were permitted to issue certificates of deposit within the umbrella limit fixed by the Reserve Bank in 1992.

Like other time deposits, CDs are subject to SLR and CRR requirements. There is no ceiling on the amount to be raised by banks. The deposits attract stamp duty as applicable to negotiable instruments. They can be issued to individuals, corporations, companies, trusts, funds, associates, and others. NRIs can subscribe to the Deposits on a Non-repatriable Basis.

Data Analytics

(Introduction to Data Science for Business Decision-making)

Ethical Use of Data and Information

The ethical use of data and information refers to the principles, values, and legal frameworks that govern how data is collected, processed, shared, and stored. It ensures that technology and data practices respect human rights, privacy, and fairness.

The ethical use of data is critical because data directly impacts human lives, financial systems, and societal trust. In a highly digitized world, data is not just numbers—it represents individual identities, behaviors, and rights.

Importance of Ethical use of Data

1. **Protection of individual rights:** Big data often involves the collection and analysis of massive amounts of personal information. Without robust ethical guidelines, there is a risk of infringing upon individual rights to privacy, autonomy and dignity. Ethical data practices ensure that individuals have control over their data and are protected from potential misuse or abuse.
2. **Mitigation of bias and discrimination:** Data analytics can inadvertently perpetuate biases and reinforce existing inequalities in big data and general data collection. Unethical data practices, such as biased algorithms or discriminatory profiling, may result in unfair treatment or discrimination against certain groups.
3. **Enhancement of trust and transparency:** Trust is paramount in the use of all data, mainly when it involves sensitive information or significant decisions. Ethical data practices, such as transparency in data collection methods and clear communication of data use policies, foster trust between data providers, data users and the broader community.
4. **Safeguarding against harm:** Data has the potential to generate significant societal benefits, but it also carries inherent risks. Ethical data practices help mitigate the risks of harm, including privacy breaches, identity theft or unintended consequences of data analysis.
5. **Promoting social responsibility:** In an increasingly interconnected world, the ethical use of data extends beyond individual organisations to encompass broader societal impacts. Ethical data practices promote social responsibility by considering the broader implications of data-driven decisions on diverse stakeholders, communities and society.

Five principles of ethical data management

The following five principles are critical when considering data ethics:



Consent: Organisations should seek permission to collect an individual's personal data.



Fairness: Data shouldn't be used in ways that perpetuate biases or lead to harm or discrimination.



Intention: Data use should serve society and shouldn't disadvantage the individual.



Integrity: Data use should be accurate and high quality, and not misrepresent facts or lead to unethical decisions.



Stewardship: Data collection and management should be done in a protected and secure environment.

Source: Improvado

Topic

Module 1:
Introduction to
Management
Accounting

Module 2:
Activity Based
Costing

INTERMEDIATE

Group II - Paper-12

Management Accounting (MA)

Module 1: Introduction to Management Accounting

Accounting is fundamentally the process of keeping records of financial transactions, encompassing the systematic recording, reporting, and analysis of an organization's financial activities. In 2014, the renowned investor Warren Buffet offered valuable advice to an intern, referring to accounting as the “language of business”. Much like a language, it must be learned before true understanding can occur. Accounting serves as the primary medium through which a business communicates with its various stakeholders, allowing them to analyze financial performance and make informed decisions.

The users of this information ecosystem are broadly categorized into external and internal users. External users include shareholders seeking profitability metrics, creditors assessing short- and long-term financial strength, regulatory agencies evaluating compliance, and the government compiling national statistics. Conversely, internal users consist primarily of the organization's management. Because there is generally a separation between ownership and management, managers require a vastly different set of financial information tailored specifically for internal decision-making, operational planning, and strategic control.

Defining Management Accounting

To satisfy these internal needs, the discipline of Management Accounting emerged. At its core, management accounting involves the application of accounting and financial management principles to create, protect, preserve, and increase value for the stakeholders of an enterprise. The Chartered Institute of Management Accountants (CIMA) provides an extensive definition, noting that the discipline requires the identification, generation, presentation, interpretation, and use of relevant information to accomplish several critical tasks. These tasks include:

- Informing strategic decisions and formulating business strategy.
- Planning long, medium, and short-run operations.
- Determining capital structure.
- Designing reward strategies for executives and shareholders.
- Informing operational decisions and controlling operations to ensure the efficient use of resources.
- Measuring and reporting financial and non-financial performance.
- Safeguarding tangible and intangible assets.
- Implementing corporate governance procedures, risk management, and internal controls.

Prominent authors provide further clarity. Colin Drury states that management accounting combines accounting, finance, and management with leading-edge techniques to advise managers on project implications, conduct internal audits, and explain the competitive landscape. Garrison and Noreen emphasize that it provides the essential data with which organizations are actually run. Horngren, Datar, and Rajan summarize it as the process of measuring, analyzing, and reporting financial and non-financial information that helps managers coordinate product design, production, marketing, and performance evaluation.

The Scope of Management Accounting

Because it is not bound by rigid statutory frameworks, the scope of management accounting is vast and continually evolving. While traditional activities include calculating product profitability, allocating costs, and setting inter-divisional transfer prices, the modern scope encompasses much more. Management accountants advise on product mix, outsourcing decisions, capital investments, and market targeting. Furthermore, they employ specialized techniques like activity-based cost management and the theory of constraints to increase overall operational effectiveness.

The Four Stages of Evolution

The International Accounting Federation (IFAC, 1998) outlines the historical evolution of managerial accounting through four distinct stages, reflecting shifts in the global economic landscape:

Stage 1: Cost Determination and Financial Control (Prior to 1950) Also referred to as the “classical era,” this stage focused heavily on basic cost determination and financial control. Arising primarily from the needs of the Industrial Revolution, production technology was relatively simple, and societies produced homogeneous products. Cost tracking was straightforward, driven by the speed of manual operations, and management accounting was viewed as a highly technical activity.

Stage 2: Information for Management Planning and Control (1950–1965) As organizations grew more complex, the focus shifted toward providing actionable information for planning and control issues. This era saw the introduction of traditional management accounting techniques, such as standard costing, profitability analysis, and responsibility accounting. During this stage, management was highly focused on internal production processes and paid less attention to the external business environment.

Stage 3: Reduction of Waste in Business Processes (1965–1985) Often referred to by some authors as a

“period of lost relevance” because core accounting innovations had previously stalled, this stage was forcefully awakened by Japan’s rapid economic progress and technological development. Global competition surged, compelling companies to simultaneously seek cost reduction and quality improvement. Management accounting shifted to reducing waste by eliminating “no-value” activities, heavily influenced by the adoption of robotics, computer-controlled processes, and Just-In-Time (JIT) production systems.

Stage 4: Creation of Value Through Effective Resource Use (1985–Present) In the modern era, technological innovations are at the forefront, and business uncertainties have intensified. The priority shifted entirely to value creation, utilizing technology to drive customer value, shareholder value, and organizational innovation. Contemporary managerial techniques began to dominate, including Activity-Based Costing (ABC), Target Costing, the Balanced Scorecard, Value Chain Analysis, and Strategic Management Accounting. Information itself transitioned from being a mere reporting tool to acting as a vital organizational resource.

Demarcating the Branches of Accounting

To fully grasp management accounting, it must be contrasted with its sister disciplines: Financial Accounting and Cost Accounting.

Financial vs. Management Accounting: Financial accounting classifies, analyzes, and summarizes historical financial transactions to present a true and fair picture of a company’s affairs, primarily for external stakeholders like investors and regulators. It is legally mandatory, strictly regulated by statutory frameworks (like the Companies Act 2013), and utilizes standardized formats to produce highly verifiable, quantitative data. In stark contrast, management accounting is entirely optional and possesses no statutory requirements or fixed formats. It is tailored exclusively for internal management, utilizing both quantitative and qualitative data to generate predictive, forward-looking insights.

Cost vs. Management Accounting: While cost accounting and management accounting overlap closely, clear distinctions exist. Cost accounting deals narrowly with the accumulation of costs for inventory valuation, cost control, and setting sale prices. It provides a historical, quantitative measuring grid to ensure a business does not exceed its budget. Management accounting, however, is the broader “universal set” that encompasses cost accounting as a subset. It shifts the emphasis from mere cost ascertainment to holistic decision-making, utilizing both historical and predictive data to offer a “big picture” of how management should strategize.

Multiple Choice Questions (MCQs):

- According to the International Accounting Federation (IFAC, 1998) and the Gliubic (2012) study, the third stage of management accounting evolution (1965 – 1985) was primarily characterized by which of the following?
 - Cost determination and financial control through standard costing.
 - Information provision for management planning and control using responsibility accounting.
 - Reduction of waste of resources in business processes by eliminating no-value activities.
 - Creation of value through effective resource use driven by technological innovations.
- Which pair of authors argued that management accounting theory historically arose from the needs of manufacturing companies to measure and value work-in-progress and inventory, thereby raising issues for service sectors?
 - Garrison and Noreen (2000)
 - Johnson and Kaplan (1987)
 - Wilson and Way (1993)
 - Horngren, Datar, and Rajan (2015)
- Which of the following best categorizes “Theory of Constraints” and “Benchmarking” within management accounting methodologies?
 - Traditional techniques focused on historic financial analysis.
 - Contemporary techniques focused on strategic value creation.
 - Statutory cost accounting tools required under the Companies Act 2013.
 - External reporting mechanisms for regulatory agencies.
- A company adopts a strategy to offer unique, innovative products that appeal specifically to niche customers, allowing them to charge a premium price. In strategic cost management, this approach is formally known as:
 - Cost leadership strategy
 - Product differentiation strategy
 - Lean manufacturing strategy
 - Target costing strategy
- How has the era of globalization and the subsequent reduction in tariffs and duties impacted the operational focus of management accounting?

- A) It restricted management accounting strictly to standard costing and variance analysis.
 - B) It allowed organizations to return to a protected, monopolistic environment.
 - C) It increased the demand for information relating to quality, customer satisfaction, and customer profitability analysis.
 - D) It eliminated the need for capital investment appraisals.
6. Based on recent shifts in the business environment discussed in the text, what is the approximate reported change in the ratio of intangible resources compared to tangible assets?
 - A) Intangibles decreased from 67% to 34%.
 - B) Intangibles increased from 37% to 63%.
 - C) Intangibles remained static at 50% due to regulatory constraints.
 - D) Intangibles increased from 10% to 90%.
 7. Why is the third stage of management accounting's evolution (1965–1985) frequently referred to by some authors as the “period of lost relevance”?
 - A) Because companies entirely stopped using accounting software during this era.
 - B) Because management accounting practices used were mostly developed by 1925, resulting in a halt in innovation to support new competitive strategies.
 - C) Because the International Monetary Fund banned cross-border transactions.
 - D) Because environmental, social, and governance (ESG) factors completely replaced financial metrics.
 8. Which of the following accurately describes the overlapping scope of Capital Investment Appraisal as detailed in the module?
 - A) It is exclusively a financial accounting function due to statutory audit requirements.
 - B) It is solely a cost accounting function because it involves cost accumulation.
 - C) It falls under management accounting when considering strategic operational effects, and under financial management when considering strategic financing decisions.
 - D) It is only applicable to the first stage of management accounting evolution.
 9. According to the CIMA official terminology, management accounting requires the identification, generation, presentation, interpretation, and use of relevant information to accomplish several key objectives. Which of the following is NOT explicitly listed among those objectives?
 - A) Determine capital structure.
 - B) Safeguard tangible and intangible assets.
 - C) Formulate accounting standards (Ind AS) for external regulatory compliance.
 - D) Design reward strategies for executives and shareholders.
 10. In comparing Cost Accounting and Management Accounting, which of the following statements is true regarding their “Measuring grid”?
 - A) Both Cost Accounting and Management Accounting rely exclusively on qualitative metrics.
 - B) Cost Accounting is purely qualitative, while Management Accounting is purely quantitative.
 - C) Cost Accounting utilizes quantitative data, whereas Management Accounting utilizes both quantitative and qualitative data.
 - D) Both disciplines reject qualitative data to ensure strict verifiability.
 11. What external factor primarily forced previously government-owned monopolies to design elaborate management accounting systems that accurately measure product costs and profitability?
 - A) The introduction of the balanced scorecard.
 - B) The deregulation and privatization of industries.
 - C) The increase in the product life cycle duration.
 - D) The introduction of Just-In-Time (JIT) manufacturing.
 12. The International Monetary Fund (IMF) defines globalization based on three growing economic interdependencies. Which of the following is NOT one of those three pillars?
 - A) Increasing volume and variety of cross-border transactions in goods and services.
 - B) Standardization of global corporate tax rates.
 - C) Free international capital flows.
 - D) More rapid and widespread diffusion of technology.

Answer

1	2	3	4	5	6	7	8	9	10	11	12
C	B	B	B	C	B	B	C	C	C	B	B

Fill in the blanks

1. A company following a _____ strategy offers differentiated or unique products that appeal to customers, often pricing them higher than competitors' products.
2. Activity Based Costing system was evolved during the period of _____.
3. The term 'globalization' was proposed for the first time in 1983 by _____ when discussing the convergence of markets around the world.
4. In the modern business world, _____ criteria consider how a company safeguards the environment, social behaviors, and internal governance.
5. _____ management describes cost management that specifically focuses on long-term issues like competitive advantage, productivity, and market opportunities.

Answer

1. product differentiation
2. 1965-1985
3. Theodore Levitt
4. ESG (Environmental, social, and governance)
5. Strategic cost

State True or False

1. The preparation and presentation of information in management accounting must strictly follow externally imposed reporting rules, such as the Companies Act 2013 and Ind AS.
2. According to Johnson and Kaplan (1987), the development of management accounting happened mainly because of the need to measure and value work-in-progress and inventory in manufacturing companies
3. In the evolution of management accounting, Stage 1 (Prior to 1950) was characterized by the use of Activity-Based Costing (ABC) and Target Costing to create shareholder value.
4. Deregulation and privatization actually reduced the need for elaborate management accounting systems because companies no longer had to deal with government pricing restrictions.
5. While cost accounting utilizes purely quantitative data as its measuring grid, management accounting integrates both quantitative and qualitative data for decision-making.

Answer

1	2	3	4	5
F	T	F	F	T

Activity Based Costing

Introduction

Activity-Based Costing (ABC) is a modern costing methodology developed to allocate indirect costs more accurately to products or services. Traditional costing systems generally allocate overheads using a single allocation base such as direct labour hours or machine hours. However, with the advancement of manufacturing technologies, increased automation, product customization, and diversified product lines, indirect costs have become a much larger proportion of total production costs. Consequently, allocating overhead based solely on production volume often results in inaccurate product costs.

Activity-Based Costing addresses this limitation by recognizing that activities consume resources, and products consume activities. Instead of allocating all overhead costs through one predetermined rate, ABC identifies the activities responsible for incurring costs, groups similar costs into activity cost pools, and assigns these costs to products based on their actual consumption of those activities. This approach produces more reliable product costs and provides managers with valuable information for pricing, budgeting, cost control, and strategic planning.

Initially developed for manufacturing organizations, ABC has now been widely adopted in service industries such as banking, healthcare, logistics, hospitality, education, and telecommunications, where indirect costs represent a substantial share of total operating expenses.

Objectives of Activity-Based Costing

The primary objectives of Activity-Based Costing are to improve the accuracy of product costing and enhance managerial decision-making. Specifically, ABC aims to:

- Allocate indirect costs according to the actual consumption of organizational activities.
- Identify the activities responsible for generating costs.
- Provide reliable product and service cost information.
- Improve pricing and profitability analysis.
- Distinguish between value-added and non-value-added activities.
- Support efficient utilization of organizational resources.
- Facilitate strategic decisions regarding product mix, outsourcing, budgeting, and process improvement.
- Strengthen cost control through activity-wise performance evaluation.

Key Elements of Activity-Based Costing

Activity-Based Costing is founded on the principle that organizational resources are consumed by activities, while activities are performed to produce goods or services. Therefore, costs should first be assigned to activities and then traced to products based on the extent to which each product uses those activities.

For example, two products may require the same number of machine hours but differ significantly in the number of inspections, machine setups, or purchase orders. Under conventional costing, both products may receive identical overhead allocations. Under ABC, however, the product requiring more inspections and setups will receive a greater share of overhead costs because it consumes more organizational resources. Thus, ABC establishes a direct cause-and-effect relationship between resource consumption and product cost.

1. Activities

Activities are specific tasks or operations performed within an organization that consume resources. Every stage of production involves numerous activities, each contributing to the creation of products or services.

Common manufacturing activities include:

- Purchasing raw materials
- Receiving and storing inventory
- Machine setup
- Production scheduling
- Material handling
- Quality inspection
- Equipment maintenance
- Packaging
- Dispatch and distribution

Similarly, service organizations perform activities such as customer support, transaction processing, record maintenance, billing, and complaint resolution.

Since activities consume resources, identifying these activities forms the foundation of the ABC system.

2. Cost Pools

A cost pool is the accumulation of all indirect costs associated with a particular activity. Rather than grouping all manufacturing overhead into one department-wide account, ABC creates separate cost pools for each significant activity.

Examples of activity cost pools include:

Activity	Cost Pool
Purchasing	Purchasing Cost Pool
Machine Setup	Setup Cost Pool
Inspection	Inspection Cost Pool
Material Handling	Material Handling Cost Pool
Maintenance	Maintenance Cost Pool
Packaging	Packaging Cost Pool

Grouping costs in this manner allows organizations to measure the cost of performing each activity independently.

3. Cost Drivers

A cost driver is any measurable factor that causes the cost of an activity to change. It provides the basis for assigning activity costs to products. An effective cost driver should have a clear cause-and-effect relationship with the activity being measured.

Examples include:

Activity	Cost Driver
Purchasing	Number of Purchase Orders
Machine Setup	Number of Setups
Inspection	Number of Inspections
Material Handling	Number of Material Movements
Maintenance	Machine Hours
Packaging	Number of Packages
Customer Service	Number of Customer Calls

Selecting appropriate cost drivers is critical because inaccurate drivers may distort product costs.

Steps in Implementing Activity-Based Costing

The implementation of an Activity-Based Costing system involves several systematic steps.

Step 1: Identify Organizational Activities

The first step is to identify all significant activities involved in manufacturing or service delivery. Activities should be grouped according to their purpose and resource consumption. Examples include procurement, production planning, machine setup, quality control, maintenance, packaging, warehousing, and customer service.

Step 2: Create Activity Cost Pools

After identifying activities, all indirect costs associated with each activity are accumulated into separate activity cost pools. This enables management to determine the total cost incurred for performing each activity during a specific accounting period.

Step 3: Identify Cost Drivers

Each activity is matched with an appropriate cost driver that best reflects the consumption of organizational resources. For example, setup costs are best allocated using the number of setups, whereas inspection costs are allocated based on the number of inspections performed.

Step 4: Calculate Activity Driver Rates

The activity driver rate represents the cost per unit of activity.

The formula is:

$$\text{Activity Driver Rate} = \frac{\text{Total Cost Driver Units}}{\text{Total Activity Cost}}$$

The calculated rate indicates the amount of overhead assigned for each unit of the selected cost driver.

Step 5: Allocate Costs to Products

The final step is to assign activity costs to products based on their actual consumption of cost driver units.

The cost assigned is calculated as:

$$\text{Cost Assigned} = \text{Activity Driver Rate} \times \text{Number of Driver Units Consumed}$$

The total manufacturing overhead of a product is obtained by summing the costs assigned from all activity cost pools.

Illustration

XYZ Manufacturing Ltd. manufactures two products—Product A and Product B. The company has identified three major activities responsible for manufacturing overheads. The details are as follows:

Step 1: Identify Activities and Activity Costs

Activity	Total Activity Cost (₹)	Cost Driver	Total Driver Units
Machine Setup	2,40,000	Number of Setups	60 Setups
Quality Inspection	1,80,000	Number of Inspections	360 Inspections
Material Handling	1,20,000	Number of Material Movements	240 Movements

Step 2: Calculate Activity Driver Rates

The activity driver rate is calculated using the formula:

$$\text{Activity Driver Rate} = \frac{\text{Total Activity Cost}}{\text{Total Driver Units}}$$

Accordingly,

Activity	Calculation	Activity Driver Rate
Machine Setup	₹2,40,000 ÷ 60	₹4,000 per setup
Quality Inspection	₹1,80,000 ÷ 360	₹500 per inspection
Material Handling	₹1,20,000 ÷ 240	₹500 per movement

Step 3: Determine Activity Consumption by Products

The production department reports the following activity usage:

Activity	Product A	Product B
Number of Setups	5	10
Number of Inspections	20	40
Material Movements	15	30

Step 4: Allocate Activity Costs to Products

The activity costs are allocated by multiplying the activity driver rate by the number of driver units consumed.

Product A

Activity	Driver Units Used	Driver Rate (₹)	Cost Allocated (₹)
Machine Setup	5	4,000	20,000
Quality Inspection	20	500	10,000
Material Handling	15	500	7,500
Total Overhead Allocated			37,500

Product B

Activity	Driver Units Used	Driver Rate (₹)	Cost Allocated (₹)
Machine Setup	10	4,000	40,000
Quality Inspection	40	500	20,000
Material Handling	30	500	15,000
Total Overhead Allocated			75,000

Step 5: Compute Total Product Cost

Assume the following direct costs:

Particulars	Product A (₹)	Product B (₹)
Direct Material	1,20,000	2,10,000
Direct Labour	60,000	1,10,000
Activity-Based Overhead	37,500	75,000
Total Cost	2,17,500	3,95,000

Under the Activity-Based Costing system, overhead costs are assigned based on the actual consumption of manufacturing activities rather than a single volume-based allocation base. Product B receives a higher share of overhead because it requires more machine setups, inspections, and material movements than Product A. This method provides a more accurate estimate of product cost and enables management to make better pricing, profitability, and production decisions.

Multiple Choice Questions (MCQs):

- 1) Activity-Based Costing (ABC) allocates manufacturing overheads primarily based on:
 - A. Direct labour hours
 - B. Machine hours
 - C. Activities that consume resources
 - D. Units produced
- 2) The fundamental principle of Activity-Based Costing is that:
 - A. Products consume costs directly
 - B. Resources consume products
 - C. Activities consume resources and products consume activities
 - D. Labour consumes overheads
- 3) Which of the following is an example of a cost driver for quality inspection?
 - A. Machine hours
 - B. Number of inspections
 - C. Units sold
 - D. Direct labour cost
- 4) A collection of overhead costs associated with a particular activity is known as:
 - A. Cost centre
 - B. Cost sheet
 - C. Cost pool
 - D. Cost unit
- 5) Which of the following is the correct formula for calculating the activity driver rate?
 - A. $\text{Total Driver Units} \div \text{Total Activity Cost}$
 - B. $\text{Total Activity Cost} \div \text{Total Driver Units}$
 - C. $\text{Total Overhead} \div \text{Units Produced}$
 - D. $\text{Direct Labour Cost} \div \text{Machine Hours}$
- 6) Which of the following is a batch-level activity in Activity-Based Costing?
 - A. Factory security
 - B. Product design
 - C. Machine setup
 - D. Building maintenance
- 7) Which of the following is classified as a product-level activity?
 - A. Factory rent
 - B. Machine setup
 - C. Product design and engineering
 - D. Material movement
- 8) Activity-Based Costing is most suitable for organizations that have:
 - A. Low indirect costs and a single product
 - B. High indirect costs and multiple product lines
 - C. Only service activities with no overheads
 - D. Only direct material costs
- 9) Which of the following is an advantage of Activity-Based Costing?
 - A. It ignores indirect costs.
 - B. It allocates overheads more accurately.
 - C. It eliminates all fixed costs.
 - D. It reduces direct material costs automatically.
- 10) Which of the following is a limitation of Activity-Based Costing?
 - A. It cannot allocate indirect costs.
 - B. It is simple and inexpensive to implement.
 - C. It requires extensive data collection and implementation cost.
 - D. It can only be used by manufacturing firms.
- 11) Activity-Based Costing helps management identify:
 - A. Tax liabilities only
 - B. Non-value-added activities
 - C. Government regulations
 - D. Exchange rate fluctuations
- 12) Activity-Based Costing is widely used to support decisions relating to:
 - A. Product pricing and process improvement
 - B. Income tax assessment
 - C. Company law compliance
 - D. Preparation of statutory financial statements

Answer Key

- 1–C
 2–C
 3–B
 4–C
 5–B
 6–C

7–C
8–B
9–B
10–C
11–B
12–A

Fill in the Blanks

1. In Activity-Based Costing, products consume _____, while activities consume resources.
2. A measurable factor that causes the cost of an activity to change is known as a _____.
3. A group of costs accumulated for a particular activity is called a _____.
4. The cost per unit of an activity is known as the activity driver _____.
5. Placing purchase orders is an example of a _____ - level activity.

Answer Key

1. Activities
2. Cost driver
3. Cost pool

4. Rate
5. Batch

State True or False

1. Activity-Based Costing allocates overhead costs based on the actual consumption of activities.
2. Quality inspections of products are generally classified as unit-level activities.
3. Activity-Based Costing can be applied in both manufacturing and service organizations.
4. One of the objectives of Activity-Based Costing is to identify non-value-added activities.
5. Activity-Based Costing is generally easier and less expensive to implement than conventional costing systems.

Answer Key

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

CMA FINAL COURSE

Syllabus 2022

Topic

Module 1 :
The Companies Act,
2013

FINAL

Group III - Paper-13

Corporate and
Economic Laws
(CEL)

FORMATION OF A COMPANY

Private Limited & Public Limited Companies

Companies are formed under the Companies Act, 2013 read with Companies (Incorporation) Rules, 2014. They prescribe the procedural steps, forms etc, like:

- Name reservation procedures (SPICe+ Part A)
- Drafting and filing of constitutional documents
- Digital Signature Certificate (DSC) requirements
- Director Identification Number (DIN) allotment
- Application for incorporation (SPICe+ Part B, AGILE-PRO-S)

Promoter

Promoter is as a person:

1. Who has been named as such in a prospectus or is identified by the company in the annual return; or
2. Who has control over the affairs of the company, directly or indirectly, whether as a shareholder, director, or otherwise; or
3. In accordance with whose advice, directions, or instructions, the Board of Directors is accustomed to act.

The promoter owes fiduciary duties to the company being promoted and to those who become shareholders. Key duties include:

- Duty not to make secret profits at the expense of the company
- Duty to disclose all material facts to the Board or an independent body of shareholders
- Duty to account for profits made through contracts with the company

Functions of a Promoter

- Conceiving the business idea and assessing its feasibility
- Conducting market research and preparing feasibility reports
- Deciding the form of the business organisation (private or public)
- Deciding the name of the company and verifying its availability
- Identifying and negotiating with persons to be first directors
- Arranging for the drafting of MoA and AoA
- Deciding the capital structure (authorised, subscribed, and paid-up capital)

- Entering into preliminary contracts on behalf of the proposed company
- Filing necessary documents with the Registrar of Companies (RoC)

5.4 Pre-incorporation Contracts

Pre-incorporation contracts are contracts entered into by promoters on behalf of a company that has not yet been incorporated.

Incorporation

Ministry of Corporate Affairs introduced the Simplified Proforma for Incorporating Company Electronically Plus (SPICe+), which consolidates multiple processes into a single integrated web-form.

Step 1: Obtain Digital Signature Certificate (DSC)

Every proposed director and subscriber must obtain a DSC.

Step 2: Director Identification Number (DIN)

Every individual intending to be appointed as a director must have a DIN, which is a unique 8-digit identification number allotted by the Central Government. Under the SPICe+ process, DIN is allotted simultaneously with incorporation (for up to 3 directors without a pre-existing DIN).

- Application: Through Form DIR-3 (for existing companies) or through SPICe+ Part B (for new companies)
- Documents: PAN, Aadhaar, photograph, proof of residence
- A person can hold only one DIN throughout their lifetime
- DIN must be quoted in all filings, returns, correspondence relating to directorship

Step 3: Name Reservation — SPICe+ Part A

The proposed name of the company must comply with the guidelines prescribed in Rule 8 of the Incorporation Rules, 2014 and the Companies (Incorporation) Rules as amended from time to time. The name must not:

- Be identical or too nearly resemble any existing registered company name
- Be a name that is prohibited under the Emblems and Names (Prevention of Improper Use) Act, 1950
- Include words like 'National', 'Reserve', 'Municipal', 'Government', 'Statute', etc., without prior approval
- Be offensive or contrary to national interest
- Use trade marks registered by another person without NOC

The applicant may propose up to two names in SPICe+ Part A in order of preference. The RoC examines the names and approves one, which is then reserved for 20 days (extendable). For a private limited company, the name must end with 'Private Limited'; for a public company, with 'Limited'. Names of Section 8 companies may include words like 'Foundation', 'Association', 'Forum', etc.

Step 4: Drafting the Memorandum of Association (MoA)

The MoA is the charter document or fundamental constitution of the company. It defines the scope of its activities, powers, and relationship with the outside world. Section 4 of the Act mandates that the MoA state the following clauses:

Clause	Content / Requirement
1. Name Clause	The exact name of the company with 'Private Limited' or 'Limited' at the end.
2. Registered Office Clause	The State in which the registered office is situated (not exact address).
3. Objects Clause	The objects for which the company is proposed to be incorporated (main objects and ancillary objects).
4. Liability Clause	States whether liability of members is limited (by shares or guarantee) or unlimited.
5. Capital Clause	The amount of authorised (nominal) share capital and its division into shares of fixed amount. (Not required for companies limited by guarantee or unlimited companies.)
6. Subscription Clause	Names, addresses, and occupations of subscribers with their signatures and the number of shares subscribed. Minimum 2 subscribers for Private Ltd.; 7 for Public Ltd.
7. Nominee Clause	Required only for One Person Company — name of nominee who shall become member in case of subscriber's death or incapacity.

The MoA must be in the respective Table form (Table A–E) as specified in Schedule I to the Act, depending on the nature of the company (limited by shares, limited by guarantee with or without share capital, unlimited). It must be signed by each subscriber in the presence of at least one witness who shall attest the signature.

Step 5: Drafting the Articles of Association (AoA)

The AoA is the internal rulebook of the company governing its day-to-day management and the rights and duties of its members inter se and in relation to the company. Section 5 provides that the AoA may contain provisions for:

A private company must include in its AoA: (a) restrictions on the right to transfer shares; (b) limitation on the number of its members to 200; and (c) a prohibition on any invitation to the public to subscribe to shares or debentures. The AoA of a public limited company may adopt Table F (Model Articles for companies limited by shares) as specified in Schedule I with or without modifications.

Step 6: Filing SPICe+ Form (Part B) — Application for Incorporation

SPICe+ (Simplified Proforma for Incorporating Company Electronically Plus) is a web-based form introduced by MCA and made mandatory from 15th February, 2020. It is a single integrated form that enables simultaneous: (a) Name reservation, (b) Company incorporation, (c) DIN allotment, (d) PAN and TAN allotment, (e) EPFO/ESIC registration, (f) Opening of bank account (through AGILE-PRO-S), and (g) GST registration (optional).

SPICe+ Part B contains the following information and declarations:

1. Details of the proposed company
2. Capital structure —
3. Registered office address
4. Subscriber and director details — DIN, name, nationality, occupation, residential address
5. Declaration by professionals — a practicing Chartered Accountant (CA), Company Secretary (CS), Cost Accountant, or Advocate must certify that all requirements have been complied with
6. Declaration by each director/subscriber of not having been convicted of any offence.

Attachments to SPICe+

- Electronically filed Memorandum of Association
- Electronically filed Articles of Association
- Declaration by first directors
- Proof of registered office address (utility bill + ownership document / rental agreement + NOC from owner)
- Proof of identity and address of each subscriber/director
- PAN and Aadhaar of subscribers (for Indian nationals)
- Passport (for foreign nationals)
- Consent to act as director
- Board Resolution and charter documents of the body corporate

AGILE-PRO-S Form

AGILE-PRO-S (Application for registration of Goods & Services Tax Identification Number, Employees' State Insurance Corporation Registration, Employees Provident Fund Organisation Registration, Profession Tax Registration, Opening of Bank Account and Shops and Establishment Registration) is a linked form to be filed simultaneously with SPICe+ Part B. It enables:

- GSTIN registration (optional at the time of incorporation)
- EPFO registration (mandatory for companies expecting to employ persons)
- ESIC registration (mandatory)
- Profession Tax registration (state-specific)
- Bank account opening with one of the designated banks
- Shops and Establishment Act registration (state-specific)

Certificate of Incorporation (CoI)

The Registrar of Companies issues a Certificate of Incorporation which is a conclusive evidence that all requirements of the Act have been complied with in respect of registration and matters precedent and incidental thereto.

Declaration of Commencement of Business

- Must be filed within 180 days from the date of incorporation to be filed by a director of the company.

Post-Incorporation Compliances

Compliance Requirement	Applicable To / Deadline
Affixing name and registered office address on company's premises	within 30 days of incorporation

Compliance Requirement	Applicable To / Deadline
Display of Corporate Identity Number, on letterheads, notices, and publications	immediately on incorporation
Appointment of First Auditor	within 30 days of incorporation by Board; ratified by members at first AGM
Opening of Bank Account and deposit of share subscription money	before filing INC-20A
Declaration of Commencement of Business	within 180 days of CoI
Filing of Form DIR-2 (Consent to act as director) and DIR-8	before appointment or within 30 days
Holding of First Board Meeting	within 30 days of incorporation
Statutory Registers — Register of Members, Register of Directors, Register of Charges, etc.	from date of incorporation
Annual General Meeting (AGM) — Section 96	within 9 months from close of first financial year
Annual Return	within 60 days of AGM
Financial Statements	within 30 days of AGM (60 days for OPC)
Commencement of Business with Employees — EPFO/ ESIC registration	at time of incorporation via AGILE-PRO-S

Topic

Module 1:
Investment
Decisions, Project
Planning and
Control

FINAL

Group III - Paper-14

Strategic Financial
Management (SFM)

Topic: Investment Decisions, Project Planning and Control

• Multiple Choice Questions

1. Which capital budgeting technique directly measures the increase in shareholders' wealth resulting from accepting a project?
 - a) Payback Period
 - b) Internal Rate of Return
 - c) Net Present Value
 - d) Profitability Index

Answer: c) Net Present Value

2. A project should be accepted under the NPV criterion when:
 - a) $NPV = 0$
 - b) $NPV < 0$
 - c) $NPV > 0$
 - d) Discount rate exceeds IRR

Answer: c) $NPV > 0$

3. Which of the following assumptions is associated with the Internal Rate of Return (IRR) method?
 - a) Cash inflows are reinvested at the cost of capital.
 - b) Cash inflows are reinvested at the IRR.
 - c) Cash inflows are reinvested at the inflation rate.
 - d) Cash inflows are not reinvested.

Answer: b) Cash inflows are reinvested at the IRR.

4. The Modified Internal Rate of Return (MIRR) overcomes the limitation of IRR by assuming reinvestment of positive cash flows at the:
 - a) Internal Rate of Return
 - b) Cost of capital
 - c) Inflation rate
 - d) Risk-free rate

Answer: b) Cost of capital

5. Which project is likely to produce multiple IRRs?
 - a) Project with conventional cash flows
 - b) Project having equal annual cash inflows
 - c) Project having non-conventional cash flow pattern
 - d) Project with no salvage value

Answer: c) Project having non-conventional cash flow pattern

6. Modified Net Present Value (MNPV) differs from NPV because:
 - a) Initial investment is ignored.
 - b) Positive cash flows are compounded to the end of the project's life.
 - c) Discount rate is not considered.
 - d) Terminal value is ignored.

Answer: b) Positive cash flows are compounded to the end of the project's life.

7. When comparing mutually exclusive projects of different sizes, which method is generally considered the most reliable?
 - a) Payback Period
 - b) Accounting Rate of Return
 - c) Net Present Value
 - d) Internal Rate of Return

Answer: c) Net Present Value

8. Which of the following statements regarding MIRR is correct?
 - a) MIRR may produce multiple rates of return.
 - b) MIRR always exceeds IRR.
 - c) MIRR produces only one rate of return for a project.
 - d) MIRR ignores financing costs.

Answer: c) MIRR produces only one rate of return for a project.

9. Under the NPV method, the discount rate normally represents the:
 - a) Dividend payout ratio
 - b) Required rate of return or cost of capital
 - c) Inflation rate only
 - d) Growth rate of sales

Answer: b) Required rate of return or cost of capital

10. If the discount rate increases while all other variables remain unchanged, the NPV of a project will generally:
 - a) Increase
 - b) Decrease
 - c) Remain unchanged
 - d) Become equal to IRR

Answer: b) Decrease

11. A project has an initial investment of ₹1,50,000 and generates a terminal value of positive cash inflows amounting to ₹2,40,000 at the end of 4 years. If the finance rate is 10%, the present value of the investment remains ₹1,50,000. The project is acceptable under MIRR if the computed MIRR is:

- a) 8%
- b) 10%
- c) 12%
- d) Greater than the cost of capital (10%)

Answer: d) Greater than the cost of capital (10%)

12. A project has an initial outlay of ₹5,00,000. The present value of future cash inflows at 12% is ₹4,80,000. The NPV is:

- a) ₹20,000

- b) ₹-20,000
- c) ₹5,00,000
- d) ₹9,80,000

Answer: b) ₹-20,000

14. A project has an initial investment of ₹1,00,000. The future value of all positive cash inflows at the end of the project life, compounded at the cost of capital, is ₹1,61,051 after 5 years. The MIRR is closest to:

- a) 8%
- b) 10%
- c) 12%
- d) 15%

Answer: b) 10%

• Comprehensive Problem

ATC Ltd is considering installation of a Cost Information System as part of its implementation of a JIT philosophy. Mr. X, the CEO, is convinced that the new system is necessary, but he needs a detail evaluation report to convince the board of directors. This is a major move for the company, and approval at board level is required.

Mr. Y has been assigned the task of justifying the investment. He is an MBA and understands the use of NPV for capital-budgeting decisions. To identify relevant costs, he developed the following information.

ATC produces a variety of small automobile components and sells them to auto manufacturers. It has a 40% market share, with the following summarised results expected for 2027:

Sales		₹1,20,00,000
Cost of goods sold		
Variable	₹40,00,000	
Fixed	<u>43,00,000</u>	₹83,00,000
Selling and administrative expenses		
Variable	₹20,00,000	
Fixed	<u>4,00,000</u>	<u>₹24,00,000</u>
Operating income		<u>₹13,00,000</u>

Installation of the information system will cost ₹60 lakh, and the company expects the system to have a useful life of 6 years with no salvage value. Installation will occur at the beginning of 2028. In 2028, the training costs for personnel will exceed any cost savings by ₹4,00,000. In years 2029 -2033, variable cost of goods sold will decrease by 35%, an annual savings of ₹14,00,000. There will be no savings in fixed cost of goods sold—it will increase by the amount of the straight-line depreciation on the new system. Selling and administrative expenses will not be affected. The required rate of return is 12%. Assume that all cash flows occur at the end of the year the revenue or expense is recognized, except the initial investment, which occurs at the beginning of 2028. Ignore income taxes.

- Suppose that Mr. Y assumes that production and sales would continue for the next 6 years as they are expected in 2027 in the absence of investment in the system. Compute the NPV of investing in the system.
- Now suppose Mr. Y predicts that it will be difficult to compete without installing the system. She has undertaken market research that estimates a drop in market share of three percentage points a year starting in 2028 in the absence of investment in the CIM (i.e., market share will be 37% in 2028, 34% in 2029, 31% in 2030, etc.). His study also showed that the total market sales level will stay the same, and he does not expect market prices to change. Compute the NPV of investing in the system.

Solution:

1. Calculation of NPV:

End of Year	Present Value @ 12%	Differential Net Cash Flow (₹)	Present Value of Differential Cash Flow (₹)
2027*	1.0000	(60,00,000)	(60,00,000)
2028	0.8929	(4,00,000)	(3,57,160)
2029	0.7972	14,00,000	11,16,080
2030	0.7118	14,00,000	9,96,520
2031	0.6355	14,00,000	8,89,700
2032	0.5674	14,00,000	7,94,360
2033	0.5066	14,00,000	7,09,240
Total			(18,51,260)

* Or beginning of 2028.

The investment in the system has a negative NPV of more than ₹18,50,000. Hence, no investment should be made in the system.

2. An additional advantage of the system must be recognized in this analysis. In the absence of investment in the system, some of the existing contribution margin will be lost each year. Investment avoids this loss, so the amount of the contribution margin that would have been lost is in essence a savings from investment in the system.

The current market share of 40% and sales of ₹1,20,00,000 implies that each 1% of the market is worth sales of ₹1,20,00,000 ÷ 40 = ₹3,00,000. Current sales are ₹1,20,00,000 and variable costs are ₹40,00,000 + ₹20,00,000 = ₹60,00,000, making the contribution margin percentage 50%. Therefore, for each ₹1 of lost sales, ATC loses ₹0.50 in contribution margin. The loss of ₹3,00,000 in sales results in a loss of ₹1,50,000 in contribution margin.

Therefore, the potential lost contribution margin each year is:

Year	Lost Market Share	Lost Sales	Lost Contribution Margin
2028	3%	₹ 900,000	₹ 450,000
2029	6%	1,800,000	900,000
2030	9%	2,700,000	1,350,000
2031	12%	3,600,000	1,800,000
2032	15%	4,500,000	2,250,000
2033	18%	5,400,000	2,700,000

Combining the savings from variable costs with the savings in contribution margin, the NPV becomes a positive ₹40,17,325, computed as follows:

*These cost savings are the same as those in part 1 because even though the variable cost of goods sold declines with the decrease in sales, this only occurs if the CIM investment is not made. If the investment is made, market share remains constant at 40% (₹1,20,00,000 in revenues) every year, and thus the cost savings are also a constant ₹14,00,000 per year.

The picture has changed radically from that in requirement 1. Avoiding the lost contribution margin has made the system a very desirable investment.

Year	PV @ 12%	Invest. and Cost Savings*	Savings in Contribution Margin	Total Diff. Cash Flow	PV of Diff. Cash Flow
2027*	1.0000	(60,00,000)		(60,00,000)	(60,00,000)
2028	0.8929	(4,00,000)	4,50,000	50,000	44,645
2029	0.7972	14,00,000	9,00,000	23,00,000	18,33,560
2030	0.7118	14,00,000	13,50,000	27,50,000	19,57,450
2031	0.6355	14,00,000	18,00,000	32,00,000	20,33,600
2032	0.5674	14,00,000	22,50,000	36,50,000	20,71,010
2033	0.5066	14,00,000	27,00,000	41,00,000	20,77,060
Total					40,17,325

Topic

Module 1:
Assessment
of Income and
Computation of Tax
Liability of Various
Entities

FINAL

Group III - Paper-15

Direct Tax Laws
and International
Taxation (DIT)

Minimum Alternate Tax

In the architecture of corporate taxation, a perennial friction exists between “**Taxable Income**”—computed under the computation codes of the Income-tax Act, 1961—and “**Commercial Book Profits**”—derived from financial statements prepared under the governing Companies Act. Historically, it was common practice for highly profitable corporate entities to take advantage of various legitimate statutory incentives, accelerated depreciation, and profit-linked deductions to reduce their taxable income to Nil, even while reporting huge commercial profits and declaring handsome dividends to shareholders.

To counteract these prosperous “zero-tax companies” and restore fiscal equity, the legislature introduced the Minimum Alternate Tax (MAT). First inserted by the Finance Act, 1987 (with effect from Assessment Year 1988-89), briefly withdrawn by the Finance Act, 1990, and definitively resurrected by the Finance (No. 2) Act, 1996, MAT represents a profound philosophical shift: a pivot from pure *income-based* taxation to a *profit-based* floor. Governed today by the overriding provisions of **Section 115JB**, MAT enforces a simple mandate—if a company’s tax liability under the normal provisions of the Act falls below a prescribed percentage of its commercial book profit, that book profit itself is considered as the tax base.



Basic provisions of MAT

As per the concept of MAT, the tax liability of a company will be higher of the following:

- Tax liability of the company computed as per the normal provisions of the Income-tax Law, i.e., tax computed on the taxable income of the company by applying the tax rate applicable to the company. Tax computed in above manner can be termed as normal tax liability.
- Tax computed @ 15% on book profit (the mechanism for computing Book Profit is discussed in the subsequent section). The tax computed by applying 15% on book profit is called MAT.

Taxpoint: However, MAT is levied @ 9% (plus surcharge and cess as applicable) in case of a company, being a unit of an International Financial Services Centre and deriving its income solely in convertible foreign exchange.

Applicability and non-applicability of MAT

As per section 115JB, every taxpayer being a company is liable to pay MAT, if the income-tax payable on the total income, computed as per the provisions of the Income-tax Act in respect of any year is less than 15% of its book-profit.

However, the provisions of MAT are not applicable on:

- Domestic companies that have exercised an option u/s 115BAA or sec. 115BAB;
- Any income accruing or arising to a company from the life insurance business referred to in sec.115B
- Shipping company whose income is subject to tonnage taxation.

Further, as per Explanation 4 to section 115JB as amended by Finance Act, 2016 with retrospective effect from 1-4-2001, it is clarified that the MAT provisions shall not be applicable and shall be deemed never to have been applicable to an assessee, being a foreign company, if:

- the assessee is a resident of a country or a specified territory with which India has an agreement referred to in sec. 90(1) or the Central Government has adopted any agreement u/s 94A(1) and the assessee does not have a permanent establishment in India in accordance with the provisions of such agreement; or
- the assessee is a resident of a country with which India does not have an agreement of the nature referred above and the assessee is not required to seek registration under any law for the time being in force relating to companies.

Further, as per Explanation 4A to section 115JB as inserted by Finance Act, 2018, MAT provisions shall not be applicable to a foreign company, whose total income comprises of profits and gains arising from business referred to in section 44B, 44BB, 44BBA, or 44BBB and such income has been offered to tax at the rates specified in those sections.

Meaning of book profit

As per Explanation 1 to section 115JB(2) “book profit” for the purposes of sec. 115JB means net profit as shown in the statement of profit and loss prepared in accordance with Schedule III to the Companies Act, 2013 as increased and decreased by certain items prescribed in this regard. The items to be increased and decreased are as follows:

Particulars	Amount	Amount
Net profit as per statement of profit and loss prepared in accordance with Schedule III to the Companies Act, 2013		XXXX
Add: Following items (if they are debited to the statement of Profit and Loss)		
Income-tax paid/payable and the provision thereof ¹	XXX	
Amounts carried to any reserves by whatever name called (other than reserve specified u/s 33AC)	XXX	
Provisions for unascertained liabilities	XXX	
Provisions for losses of subsidiary companies	XXX	
Dividends paid/proposed	XXX	
Expenditure related to incomes which are exempt u/s 10, sec. 11 and sec. 12	XXX	
The amount or amounts of expenditure relatable to, income, being share of the taxpayer in the income of an association of persons or body of individuals, on which no income-tax is payable in accordance with the provision of sec. 86	XXX	
The amount or amounts of expenditure relatable to income accruing or arising to a taxpayer being a foreign company, from: - the capital gains arising on transactions in securities; or - the interest, dividend royalty or fees for technical services chargeable to tax at the rate or rates specified in Chapter XII if the income-tax payable on above income is less than the rate of MAT	XXX	
The amount representing notional loss on transfer of a capital asset, being share or a special purpose vehicle to a business trust in exchange of units allotted by that trust referred to in sec.47(xvii) or the amount representing notional loss resulting from any change in carrying amount of said units or the amount of loss on transfer of units referred to in sec. 47(xvii)	XXX	
Expenditure relatable to income by way of royalty in respect of patent chargeable to tax u/s 115BBF	XXX	
Amount of depreciation debited to P & L A/c	XXX	
Deferred tax and the provision thereof	XXX	
Provision for diminution in the value of any asset	XXX	
The amount standing in revaluation reserve relating to revalued asset on the retirement or disposal of such an asset if not credited to statement of profit and loss	XXX	
The amount of gain on transfer of units referred to in sec. 47(xvii) computed by taking into account the cost of the shares exchanged with units referred to in the said clause or the carrying amount of the shares at the time of exchange where such shares are carried at a value other than the cost through statement of profit and loss as the case may be;	XXX	XXXX
		XXXX

1 The amount of Income-tax shall:**➤ includes:**

- Any interest under Income Tax Act;
- Surcharge and cess on income-tax.

➤ does not include:

- Penalty paid or payable under this Act
- Any tax, interest or penalty paid or payable under Wealth Tax Act or other Act;
- Securities Transaction Tax;

Particulars	Amount	Amount
<i>Less: Following items (if they are credited to the statement of profit and loss)</i>		
Amount withdrawn from any reserve or provision if credited to P&L account ²	xxx	
Incomes which are exempt u/s 10, sec. 11 and sec. 12	xxx	
Amount of depreciation debited to statement of profit and loss (excluding the depreciation on revaluation of assets)	xxx	
Amount withdrawn from revaluation reserve and credited to statement of profit and loss to the extent it does not exceed the amount of depreciation on revaluation of assets	xxx	
The amount of income, being the share of the taxpayer in the income of an association of persons or body of individuals, on which no income-tax is payable in accordance with the provisions of sec. 86, if any such amount is credited to the statement of profit and loss	xxx	
The amount of income accruing or arising to a taxpayer being a foreign company, from: - the capital gains arising on transactions in securities; or - the interest, dividend royalty or fees for technical services chargeable to tax at the rate or rates specified in Chapter XII if such income is credited to the statement of profit and loss and the income-tax payable on above income is less than the rate of MAT	xxx	
The amount (if any, credited to the statement of profit and loss) representing - notional gain on transfer of a capital asset, being share of a special purpose vehicle to a business trust in exchange of units allotted by that trust referred to in sec. 47(xvii); or - notional gain resulting from any change in carrying amount of said units; or - gain on transfer of units referred to in sec. 47(xvii), The amount representing notional gain on transfer of units referred to in sec. 47(xvii) computed by taking into account the cost of the shares exchanged with units referred to in the said clause or the carrying amount of the shares at the time of exchange where such shares are carried at a value other than the cost through statement of profit and loss, as the case may be;	xxx	
Income by way of royalty in respect of patent chargeable to tax u/s 115BBF	xxx	
Aggregate amount of unabsorbed depreciation and loss brought forward in case of: - A company and its subsidiary and the subsidiary of such subsidiary, where, the Tribunal, on an application moved by the Central Government u/s 241 of the Companies Act, 2013 has suspended the Board of Directors of such company and has appointed new directors who are nominated by the Central Government u/s 242 of the said Act; - A company against whom an application for corporate insolvency resolution process has been admitted by the Adjudicating Authority u/s 7 or sec. 9 or sec. 10 of the Insolvency and Bankruptcy Code, 2016	xxx	
Amount of brought forward loss or unabsorbed depreciation, whichever is <i>less</i> as per books of account (applicable in case of a company other than the company undergoing insolvency proceedings)	xxx	
Profits of a sick industrial company till its net worth becomes zero/positive	xxx	
Deferred tax, if credited to statement of profit and loss	xxx	xxx
Book profit to be used to compute MAT		xxxx

² Withdrawals made from reserves created or provisions made on or after the 1-4-1997, shall be deducted only if the book profit of the year of creation of such reserve has been increased by the amount transferred to such reserve or provisions (out of which the said amount was withdrawn).

E.g. Governmental grants relating to depreciable assets are credited to special reserve (i.e., not to statement of profit and loss) in the year of receipt and a portion of such grant is transferred from that reserve to statement of profit and loss over the life of the asset in proportion to depreciation charged. In the year in which these grants were credited to special reserve, they had not been added to net profit for calculation of book profit subjected to MAT. Therefore, in the year of transfer to P&L the amounts so transferred shall not be reduced from net profit while calculating book profit for the purpose of MAT.

MAT credit

Where any amount of tax is paid by an assessee-company under the Minimum Alternate Tax provisions of sec. 115JB for any assessment year, the excess of the tax so paid over and above the tax payable under the normal provisions of the Income-tax Act is recognized as “**MAT Credit**” pursuant to **sec. 115JAA**. This accumulated credit can be carried forward and set off in subsequent assessment years, triggered in the year(s) where the company’s normal tax liability exceeds its MAT liability u/s 115JB.

However, the quantum of set-off allowable in such a subsequent year is capped to the extent of the difference between the normal tax liability and the MAT liability of that specific year. Consequently, the net tax payable by the company post-adjustment can never be reduced below that year’s MAT liability. Pursuant to sec. 115JAA(3A), an unabsorbed MAT credit can be carried forward for a maximum period of 15 assessment years immediately succeeding the assessment year in which such credit was originally generated, after which the unutilized balance permanently lapses. In accordance with sec. 115JAA(6), the statutory credit is purely compensatory in nature; hence, no interest is payable by the Revenue to the taxpayer on such accumulated MAT credit balances.

Report from chartered accountant

Every company to whom the provisions of sec. 115JB applies, shall upload a report in the prescribed form [Form No. 29B] from an accountant, certifying that the book profit has been computed in accordance with the provisions of this section one month prior to the due date of the filing of the return of income u/s 139.

Other provisions will apply

All other provisions of this Act like Advance Tax, interest, etc. shall apply to every company, mentioned in this section.

Conclusion

Ultimately, while Minimum Alternate Tax (MAT) was conceived as a statutory net to capture the classic “zero-tax company,” its role in modern corporate practice has transcended simple tax computation. For a Cost and Management Accountant, sec. 115JB represents the vital bridge reconciling Schedule III commercial accounting with the computation codes of the Income-tax Act, 1961. As corporate India migrates toward the lower tax regimes of sec. 115BAA and 115BAB, the professional focus surrounding MAT has fundamentally shifted from *routine compliance* to *sunk-cost analysis*—specifically, determining whether the net present value of exhausting a client’s 15-year MAT credit u/s 115JAA outweighs the immediate cash-flow benefits of a reduced, permanent base tax rate. Mastery of MAT, therefore, is no longer just an exercise in calculating a minimum tax base; it is a masterclass in optimizing the corporate balance sheet.

Topic

Module 1:
Introduction to
Strategic Cost
Management

FINAL

Group III - Paper-16

Strategic Cost
Management (SCM)

Introduction to Strategic Cost Management

1. Introduction: From Cost Accounting to Strategic Cost Management

Cost management has evolved significantly from its traditional role in early twentieth-century manufacturing. Initially, cost accounting focused primarily on measuring material, labour, and overhead costs for inventory valuation, financial reporting, and periodic profit determination. The emphasis was largely operational and confined within the organisation.

Traditional cost accounting techniques such as standard costing, absorption costing, and variance analysis continue to provide valuable tools for operational control. Nevertheless, these techniques are primarily historical and internally focused. They explain what costs have been incurred and how actual performance differs from predetermined standards, but they offer limited insight into why costs arise, how they compare with competitors, or how cost information can contribute to sustainable competitive advantage.

Strategic Cost Management (SCM) emerged to bridge this gap by integrating cost management with strategic planning and competitive positioning.

2. Meaning and Definition of Strategic Cost Management

Strategic Cost Management refers to the application of cost management techniques in a manner that simultaneously reduces costs and strengthens the strategic position of an organisation. Rather than treating cost information merely as an accounting output, SCM integrates cost analysis into every stage of strategic management.

According to **John K. Shank and Vijay Govindarajan**, Strategic Cost Management is:

“The managerial use of cost information explicitly directed at one or more of the four stages of the strategic management cycle.”

These four stages include:

- Strategy formulation
- Communication of strategy throughout the organisation
- Strategy implementation through tactical decisions
- Monitoring and control of strategic performance

Under this framework, cost information becomes an essential strategic resource rather than a routine accounting exercise.

3. Traditional Cost Management vs. Strategic Cost Management

Basis	Traditional Cost Management	Strategic Cost Management
Focus	Internal operations	Entire value chain including suppliers, customers and competitors
Time Orientation	Historical and short-term	Forward-looking and long-term
Objective	Cost control and periodic cost reduction	Sustainable competitive advantage through effective cost management
View of Cost Behaviour	Costs primarily driven by production volume	Costs driven by strategic and operational choices
Perspective	Production-centric	Value chain-wide, covering design, production, marketing, distribution and after-sales service
Data Used	Primarily financial data	Financial as well as non-financial and qualitative information
Decision Support	Operational decisions	Strategic decisions including pricing, product mix, outsourcing and capacity planning

Thus, while traditional cost management asks *“How much did it cost?”*, Strategic Cost Management asks *“Why did the cost arise, and how can it strengthen competitive advantage?”*

4. Objectives and Scope of Strategic Cost Management

Strategic Cost Management seeks to align cost management with the overall strategic direction of the organisation. Its major objectives include:

- aligning cost management with organisational strategy;
- supporting strategic positioning through cost leadership, product differentiation or focus strategies;
- analysing costs across the entire value chain rather than within organisational boundaries alone;
- identifying and managing structural and executional cost drivers;

- supporting long-term decisions such as pricing, product mix, outsourcing, capacity expansion and make-or-buy decisions; and
- integrating financial and non-financial performance measures to enhance shareholder value and long-term competitiveness.

5. The Shank and Govindarajan Framework

Shank and Govindarajan conceptualised Strategic Cost Management around three interrelated themes:

1. Value Chain Analysis

2. Strategic Positioning Analysis

3. Cost Driver Analysis

Together, these themes provide the conceptual foundation of modern Strategic Cost Management.

5.1 Value Chain Analysis

Traditional management accounting measures value added only within the organisation. In contrast, SCM adopts a broader perspective by examining the entire sequence of activities that create value—from raw material procurement to ultimate customer consumption.

Drawing upon **Michael Porter's Value Chain**, SCM analyses both:

Primary Activities

- Inbound logistics
- Operations
- Outbound logistics
- Marketing and sales
- After-sales service

Support Activities

- Firm infrastructure
- Human resource management
- Technology development
- Procurement

Shank and Govindarajan observed that traditional accounting “**begins too late and stops too soon.**”

It begins too late because it ignores supplier relationships, and it stops too soon because it overlooks customer linkages.

Strategic Cost Management therefore analyses costs, revenues and assets across the complete value chain to identify opportunities for competitive advantage.

5.2 Strategic Positioning Analysis

The usefulness of cost information depends upon the competitive strategy adopted by the organisation.

Building upon Porter's generic strategies, firms generally compete through either:

Cost Leadership

The organisation seeks to become the industry's lowest-cost producer while maintaining acceptable quality.

Under this strategy, management emphasises:

- tight cost control;
- predictable budgets;
- standardisation;
- efficiency improvements; and
- rigorous variance analysis.

Product differentiation

The organisation seeks to offer products or services perceived as unique by customers, allowing premium pricing.

Accordingly, management places greater emphasis on:

- innovation;
- flexibility;
- product quality;
- creativity; and
- customer value.

Thus, identical cost information may require entirely different managerial responses depending upon the firm's strategic positioning.

5.3 Cost Driver Analysis

Traditional costing assumes that production volume is the principal determinant of cost behaviour.

Strategic Cost Management rejects this narrow assumption and recognises multiple cost drivers arising from strategic choices and operational capabilities.

Structural Cost Drivers

Structural cost drivers originate from long-term strategic decisions made before operations commence.

Examples include:

- Scale of operations
- Scope and vertical integration
- Experience and learning effects
- Technology employed
- Product complexity

Executional Cost Drivers

Executional cost drivers arise from the firm's ability to utilise its chosen structure effectively.

Examples include:

- Workforce involvement
- Total Quality Management (TQM)
- Plant layout efficiency
- Capacity utilisation
- Product configuration
- Supplier and customer linkages

Accordingly, SCM views costs as the outcome of both strategic design and operational execution.

6. Role of Strategic Cost Management in Managerial Decision-Making

Strategic Cost Management supports a wide range of managerial decisions by integrating cost information with strategic objectives.

Pricing Decisions

SCM extends analysis beyond manufacturing costs to total value-chain costs, enabling more effective target pricing and target costing.

Product Mix and Capacity Decisions

Cost driver analysis identifies products that consume scarce strategic resources, thereby improving resource allocation.

Make-or-Buy and Outsourcing Decisions

Value chain analysis helps determine whether activities should be performed internally or outsourced to more efficient suppliers.

Performance Evaluation

SCM promotes balanced performance measurement by combining financial indicators with non-financial measures such as quality, customer satisfaction, innovation, delivery reliability and process improvement.

7. Contemporary Techniques Supporting Strategic Cost Management

Several modern management accounting techniques operationalise the philosophy of Strategic Cost Management.

Target Costing

Market price determines allowable cost, after which products are engineered to achieve that target cost.

Life Cycle Costing

Costs and revenues are evaluated over the product's entire life cycle—from research and development through withdrawal.

Activity-Based Costing (ABC)

Overhead costs are assigned based on activities that actually consume resources, resulting in more accurate product costing.

Total Quality Management (TQM) and Kaizen Costing

Continuous incremental improvements eliminate waste and reduce costs throughout production.

Just-in-Time (JIT)

Inventory investment and carrying costs are minimised by synchronising production with customer demand.

Business Process Re-engineering (BPR)

Business processes are fundamentally redesigned to achieve dramatic improvements in cost, quality, service and speed.

8. Digital Developments in Strategic Cost Management

Advances in digital technologies have significantly enhanced Strategic Cost Management without altering its fundamental principles.

Big Data, Artificial Intelligence (AI), Machine Learning (ML), cloud computing and enterprise analytics make SCM faster, more accurate and increasingly predictive.

8.1 Big Data and Cost Analytics

Big Data encompasses massive volumes of structured and unstructured information generated through business operations.

Its applications include:

- identifying cost drivers with greater accuracy;
- analysing value-chain performance in real time;
- monitoring supplier and logistics costs;
- improving customer profitability analysis; and
- supporting dynamic target costing.

8.2 Artificial Intelligence and Machine Learning

AI and Machine Learning enhance strategic cost management through predictive analytics and automation.

Major applications include:

- predictive cost estimation;
- automated variance and anomaly detection;
- dynamic pricing optimisation;
- product mix optimisation;
- procurement intelligence;
- supplier performance evaluation; and

- Robotic Process Automation (RPA) for repetitive accounting tasks.

These technologies improve both strategic planning and operational execution.

8.3 Cloud Computing and Enterprise Integration

Cloud-based Enterprise Resource Planning (ERP) systems integrate cost information across organisational functions and supply chain partners.

This enables real-time visibility of costs, revenues and assets throughout the value chain while reducing reporting delays and improving decision quality.

8.4 Strategic Implications

Digital technologies do not replace the three themes of Strategic Cost Management.

Instead, they strengthen them by making:

- Value Chain Analysis more comprehensive;
- Strategic Positioning Analysis more data-driven; and
- Cost Driver Analysis more accurate and predictive.

Furthermore, digital capability itself is increasingly viewed as both a structural cost driver and an executional capability because competitive advantage now depends

upon technological infrastructure, data quality and organisational readiness to exploit analytical insights.

9. Conclusion

Strategic Cost Management represents a fundamental transformation in the philosophy of cost accounting. Rather than viewing cost accounting solely as a mechanism for recording and controlling costs, SCM positions cost information as a strategic resource capable of creating sustainable competitive advantage.

By extending analysis across the entire value chain, aligning cost management with competitive strategy, and recognising both structural and executional cost drivers, SCM enables organisations to make informed long-term decisions that enhance profitability and market position.

The three pillars proposed by Shank and Govindarajan—Value Chain Analysis, Strategic Positioning Analysis and Cost Driver Analysis—remain the conceptual foundation of Strategic Cost Management. Contemporary techniques such as Target Costing, Life Cycle Costing, Activity-Based Costing, Balanced Scorecard, and emerging digital technologies further strengthen this framework, making SCM an indispensable component of modern strategic management.

Topic

Module 9:
Basics of
Management Audit

Module 14:
Internal Control and
Internal Audit

FINAL

Group IV - Paper-17

Cost and
Management Audit
(CMAD)

Basics of Management Audit / Internal Control and Internal Audit

Basics of Management Audit

Management Audit is a comprehensive and systematic examination of an organization's management processes, policies, objectives, and performance. Unlike a financial audit, which focuses primarily on the accuracy of financial statements and accounting records, a management audit evaluates the efficiency, effectiveness, and economy of managerial activities. It seeks to determine whether management is utilizing organizational resources optimally and achieving predetermined objectives in accordance with established policies and strategic goals.

Today organizations operate in a highly competitive and dynamic setting characterized by technological advancements, globalization, regulatory requirements, and stakeholder expectations. Consequently, management audit has emerged as an important tool for assessing organizational performance and improving managerial effectiveness. It provides constructive recommendations that assist management in enhancing decision-making, operational efficiency, and corporate governance.

Meaning of Management Audit

Management audit may be defined as an independent and systematic review of the quality of management's performance in carrying out organizational responsibilities. It involves an objective evaluation of managerial functions such as planning, organizing, staffing, directing, coordinating, and controlling.

The primary focus of a management audit is not merely to identify deficiencies but also to suggest improvements that can contribute to organizational success. It examines whether management practices are aligned with organizational goals and whether resources are being used efficiently and effectively.

Objectives of Management Audit

The major objectives of management audit are as follows:

- 1. Evaluating Managerial Performance:** To assess how effectively management performs its functions and responsibilities.
- 2. Improving Organizational Efficiency:** To identify operational inefficiencies and recommend corrective measures.
- 3. Assessing Achievement of Objectives:** To determine whether organizational goals and strategic plans are being achieved.
- 4. Reviewing Policies and Procedures:** To examine the adequacy and effectiveness of organizational policies and procedures.
- 5. Enhancing Decision-Making:** To evaluate the

quality of managerial decisions and their impact on organizational performance.

- 6. Strengthening Internal Controls:** To assess the effectiveness of control systems and governance mechanisms.
- 7. Promoting Accountability:** To ensure that managers are accountable for their actions and performance.
- 8. Facilitating Continuous Improvement:** To encourage innovation, efficiency, and best management practices.

Scope of Management Audit

The scope of management audit is broad and extends beyond financial matters. It covers virtually every aspect of management and organizational operations. The scope generally includes:

1. Organizational Structure

Management audit examines whether the organizational structure is appropriate for achieving business objectives. It evaluates authority relationships, delegation of responsibilities, communication channels, and coordination mechanisms.

2. Planning Function

Management audit assesses the effectiveness of strategic, tactical, and operational planning processes. It reviews the adequacy of objectives, policies, budgets, and forecasting methods.

3. Human Resource Management

The audit evaluates recruitment, training, performance appraisal, compensation, employee relations, and workforce utilization practices.

4. Production and Operations

It examines operational efficiency, productivity levels, quality management systems, inventory control, and resource utilization.

5. Financial Management

The audit reviews budgeting systems, capital allocation, financial planning, cash management, and financial controls.

6. Marketing Management

It evaluates marketing strategies, customer satisfaction, product development, pricing policies, and market competitiveness.

7. Risk Management and Governance

Management audit assesses risk identification, mitigation measures, compliance practices, and governance frameworks.

Advantages of Management Audit

Management audit offers several benefits to organizations:

- Improves managerial effectiveness and efficiency.
- Facilitates better strategic planning and decision-making.
- Enhances organizational productivity.
- Strengthens internal control and governance systems.
- Identifies operational bottlenecks and inefficiencies.
- Encourages accountability and transparency.
- Assists in achieving organizational objectives.
- Promotes continuous improvement and innovation.

These benefits contribute significantly to long-term organizational growth and competitiveness.

Limitations of Management Audit

Despite its advantages, management audit has certain limitations:

- Lack of universally accepted standards for evaluating management performance.
- Possibility of resistance from managers being evaluated.
- Difficulty in measuring qualitative aspects of management.
- Time-consuming and resource-intensive process.
- Recommendations may not always be implemented effectively.
- Results may sometimes be influenced by subjective judgment.

Therefore, successful management auditing requires cooperation from management and a commitment to organizational improvement.

Internal control

Internal control and internal audit are two fundamental pillars of an organization's governance, risk management, and accountability framework. In today's VUCA (Volatile, Uncertain, Complex, Ambiguous) world with dynamic business environment; organizations face increasing risks arising from technological advancements, regulatory requirements, financial complexities, cyber threats, and global competition. To address these challenges effectively, organizations establish robust internal control systems and independent internal audit functions. While internal controls are designed and implemented by management to ensure efficient operations and safeguard assets, internal audit provides independent assurance regarding the effectiveness of those controls. Together, they contribute significantly to organizational success, sustainability, and stakeholder confidence.

Internal control refers to the policies, procedures, practices, and organizational structures established by management to provide reasonable assurance that organizational objectives will be achieved. The concept was comprehensively defined by the Committee of Sponsoring Organizations (COSO) as a process effected by an entity's board of directors, management, and other personnel designed to provide reasonable assurance regarding the achievement of objectives in operations, reporting, and compliance.

The primary objectives of internal control include:

1. **Safeguarding Assets:** Protecting physical and intangible assets from theft, fraud, misuse, or unauthorized access.
2. **Ensuring Accuracy and Reliability of Information:** Maintaining the integrity of financial and operational records.
3. **Promoting Operational Efficiency:** Encouraging effective utilization of resources and minimizing wastage.
4. **Ensuring Compliance:** Adhering to laws, regulations, policies, and contractual obligations.
5. **Supporting Risk Management:** Identifying, assessing, and mitigating risks that may hinder organizational objectives.

An effective internal control system generally comprises five interrelated components:

- Control Environment
- Risk Assessment
- Control Activities
- Information and Communication
- Monitoring Activities

These components collectively establish a framework for managing risks and achieving organizational goals.

Internal Audit

Internal audit is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It assists management and the board in accomplishing organizational objectives by evaluating and improving the effectiveness of risk management, control, and governance processes.

Unlike external auditors who primarily focus on expressing an opinion on financial statements, internal auditors examine a broad range of organizational activities, including operational efficiency, compliance, information technology controls, risk management practices, and governance mechanisms.

The scope of internal audit includes:

- Financial and Cost Records Review
- Operational audits
- Compliance audits
- Information systems audits
- Fraud investigations
- Risk-based audits
- Performance audits
- Governance Review

Modern internal auditing has evolved from a traditional compliance-oriented function to a strategic partner that provides insights and recommendations for organizational improvement.

Relationship between Internal Control and Internal Audit

- o Internal control and internal audit are closely related but distinct concepts. Internal controls are established and operated by management as part of day-to-day activities. Internal audit, on the other hand, independently evaluates whether these controls are properly designed, effectively implemented, and operating as intended.
- o Internal audit assesses adequacy and effectiveness of Internal Control. Through periodic reviews and testing, internal auditors identify weaknesses, deficiencies, or control gaps and recommend corrective actions. Management is responsible for implementing these recommendations and strengthening the control environment.

Importance of Internal Control and Internal Audit

The significance of internal control and internal audit has increased considerably due to heightened regulatory expectations and corporate governance requirements. The benefits include:

1. Prevention and Detection of Fraud

Strong internal controls reduce opportunities for fraud, while internal audits help detect irregularities and investigate suspicious activities. Organizations with robust control systems are less vulnerable to financial misconduct.

2. Improved Risk Management

Internal auditors evaluate risk management processes and provide recommendations to address emerging risks. This enables organizations to respond proactively to changing business conditions.

3. Enhanced Governance

The board of directors and audit committee rely on internal audit reports to oversee organizational performance and accountability. Effective governance

structures are strengthened through transparent reporting and independent assurance.

4. Better Decision-Making

Reliable information generated through effective internal controls enables management to make informed strategic and operational decisions.

5. Regulatory Compliance

Organizations operate within complex legal and regulatory environments. Internal controls and audits help ensure compliance with applicable laws, regulations, standards, and ethical requirements.

6. Operational Efficiency

Internal audit reviews operational processes and identifies opportunities for cost reduction, process improvement, and resource optimization, thereby enhancing organizational efficiency.

Challenges in Internal Control and Internal Audit

Despite their importance, organizations face several challenges in maintaining effective internal control and audit systems:

- Rapid technological changes and cybersecurity threats.
- Increasing regulatory complexity.
- Limited audit resources and budget constraints.
- Resistance to change within organizations.
- Difficulty in monitoring remote and hybrid work environments.
- Managing risks associated with artificial intelligence and digital transformation.

To overcome these challenges, organizations must continuously update their control frameworks, invest in technology-enabled auditing tools, and strengthen risk management practices.

Conclusion

Internal control and internal audit are indispensable components of modern organizational governance. Internal controls establish the foundation for safeguarding assets, ensuring reliable information, managing risks, and achieving operational objectives. Internal audit complements this framework by providing independent assurance and recommendations for continuous improvement. Together, they enhance accountability, transparency, compliance, and organizational resilience. As business risks continue to evolve, organizations must strengthen both internal control systems and internal audit functions to maintain stakeholder confidence and achieve sustainable long-term success.

Topic

Module 1:
Specific Accounting
Standards

FINAL

Group IV - Paper-18

Corporate Financial
Reporting (CFR)

Topic: Specific Accounting Standards

• Multiple Choice Questions

1. Which of the following best defines an intangible asset under Ind AS 38?
 - A. Physical asset with no monetary value
 - B. Identifiable non-monetary asset without physical substance
 - C. Asset held for sale in the ordinary course of business
 - D. Tangible asset used in production

Answer: (B) Identifiable non-monetary asset without physical substance

2. An intangible asset is recognized only when:
 - A. It is probable that future economic benefits will flow to the entity and cost can be measured reliably
 - B. It is internally generated
 - C. It has a physical form
 - D. It is purchased from a third party

Answer: (A) Probable future benefits and reliable measurement

3. According to Ind AS 38, internally generated goodwill:
 - A. Must be recognized as an asset
 - B. May be recognized if reliably measurable
 - C. Cannot be recognized as an asset
 - D. Is amortized over 10 years

Answer: (C) Cannot be recognized as an asset

4. Expenditure on research phase is:
 - A. Always capitalized
 - B. Expensed as incurred
 - C. Deferred until development phase
 - D. Amortized over 5 years

Answer: (A) Expensed as incurred

5. Development expenditure can be capitalized if:
 - A. Technical feasibility is established
 - B. Intention to complete and use/sell exists
 - C. Adequate resources are available
 - D. All of the above

Answer: (D) All of the above

6. If an intangible asset has an indefinite useful life:
 - A. It must be amortized over 20 years
 - B. It is not amortized but tested annually for impairment
 - C. It is expensed immediately
 - D. It is amortized over 10 years

Answer: (B) Not amortized, tested annually for impairment

7. After recognition, intangible assets can be measured using:
 - A. Cost model only
 - B. Revaluation model only
 - C. Either cost model or revaluation model
 - D. Fair value model only

Answer: (C) Either cost model or revaluation model

8. Intangible assets with indefinite useful life must be:
 - A. Amortized annually
 - B. Tested for impairment annually
 - C. Expensed immediately
 - D. Revalued every 3 years

Answer: (B) Tested for impairment annually

9. Which of the following is NOT an intangible asset under Ind AS 38?
 - A. Patents
 - B. Trademarks
 - C. Inventory
 - D. Copyrights

Answer: (C) Inventory

10. Entities must disclose for intangible assets:
 - A. Useful life or amortization rates
 - B. Amortization methods
 - C. Gross carrying amount and accumulated amortization
 - D. All of the above

Answer: (D) All of the above

11. What is the primary objective of Ind AS 36?

- A. To prescribe accounting for intangible assets
- B. To ensure assets are carried at no more than their recoverable amount
- C. To measure fair value of financial instruments
- D. To regulate depreciation methods

Answer: (B) Ensure assets are carried at no more than their recoverable amount

12. Recoverable amount of an asset is defined as:

- A. Higher of fair value less costs of disposal and value in use
- B. Lower of fair value and carrying amount
- C. Net realizable value
- D. Historical cost less depreciation

Answer: (A) Higher of fair value less costs of disposal and value in use

13. Which of the following is NOT an indicator of impairment?

- A. Significant decline in market value
- B. Obsolescence or physical damage
- C. Increase in market interest rates
- D. Increase in asset's market demand

Answer: (D) Increase in asset's market demand

14. A CGU is defined as:

- A. The smallest group of assets that generates cash inflows largely independent of other assets
- B. A single asset only
- C. A reporting segment under Ind AS 108
- D. A group of liabilities and assets together

Answer: (A) Smallest group of assets generating independent cash inflows

15. Goodwill acquired in a business combination must be:

- A. Amortized over 10 years
- B. Tested annually for impairment
- C. Expensed immediately
- D. Revalued every 3 years

Answer: (B) Tested annually for impairment

16. Value in use is determined by:

- A. Discounting estimated future cash flows from the asset
- B. Historical cost of the asset
- C. Current replacement cost
- D. Net realizable value

Answer: (A) Discounting estimated future cash flows from the asset

17. Impairment losses can be reversed when:

- A. There is an increase in recoverable amount due to change in estimates
- B. Market value continues to decline
- C. Goodwill is impaired
- D. Carrying amount exceeds recoverable amount

Answer: (A) Increase in recoverable amount due to change in estimates

18. Can impairment losses on goodwill be reversed?

- A. Yes, always
- B. Yes, if market value increases
- C. No, never
- D. Only if approved by auditors

Answer: (C) No, never

19. Corporate assets that do not generate independent cash inflows are:

- A. Allocated to CGUs for impairment testing
- B. Tested individually for impairment
- C. Not subject to impairment testing
- D. Always expensed immediately

Answer: (A) Allocated to CGUs for impairment testing

20. Entities must disclose:

- A. Amount of impairment losses recognized and reversed
- B. Events leading to impairment
- C. Methods and assumptions used in recoverable amount calculation
- D. All of the above

Answer: (D) All of the above

• Comprehensive Problems

1. A major depreciable asset of S Ltd. was purchased at a cost of ₹90,000 million on 1st July, 2020. The asset has useful life till 31st March, 2028 (i.e., for 7.75 years). The estimated residual value is ₹1,300 million. The selling price of the asset on 31st March, 2023 is expected to be ₹50,000 million and the cost of disposal as on this date is expected to be ₹1,000 million. The expected cash flows from the asset are as under:

Financial year	Cash Flow (₹ in million)
2023-2024	15,000
2024-2025	14,000
2025-2026	13,000
2026-2027	12,000
2027-2028	10,000

The company expects the discount rate of 9% the company provides depreciation on straight line basis. You are required to determine the following as at 31st March, 2023.

- Carrying amount of asset
- The value in use of the asset
- The impairment loss, if any
- The revised carrying amount for the financial year ending 31st March, 2022.

(Discount factor @ 9% for 1, 2, 3, 4 and 5 years are 0.917, 0.842, 0.772, 0.708 and 0.650 respectively).

Solution:

- Calculation of carrying amount
Original cost = ₹90,000 million

Depreciation for 2.75 years = $[(₹90,000 \text{ million} - ₹1300 \text{ million}) \times 2.75/7.75] = ₹31,474 \text{ million}$

Carrying amount on 31.3.2023 = $[₹90,000 \text{ million} - ₹31,474 \text{ million}] = ₹58,526 \text{ million (approx.)}$

- Calculation of value in use

Year	Cash Flow (in million)	Discount @ 9%	Discounted cash flow
2023-2024	15,000	0.917	13755
2024-2025	14,000	0.842	11788
2025-2026	13,000	0.772	10036
2026-2027	12,000	0.708	8496
2027-2028	10,000	0.650	6500
2027-2028	(residual)1,300	0.650	845
			<u>51,420</u>

- Calculation of impairment loss

When recoverable amount is less than carrying value
Impairment loss = Carrying amount – Recoverable amount

Value in use = ₹51,420 million

Selling Price = ₹50,000 million

Cost of disposal = ₹1000 million

Net selling price = ₹49,000 million

Recoverable amount = Higher of value in use and net selling price i.e., ₹51,420 million.

Impairment loss = ₹58,526 million – ₹51,420 million = ₹7,106 million

- Revised carrying amount = Recoverable amount = ₹51,420 million

Topic

Module 1:
Supply under GST -
A Refresh

FINAL

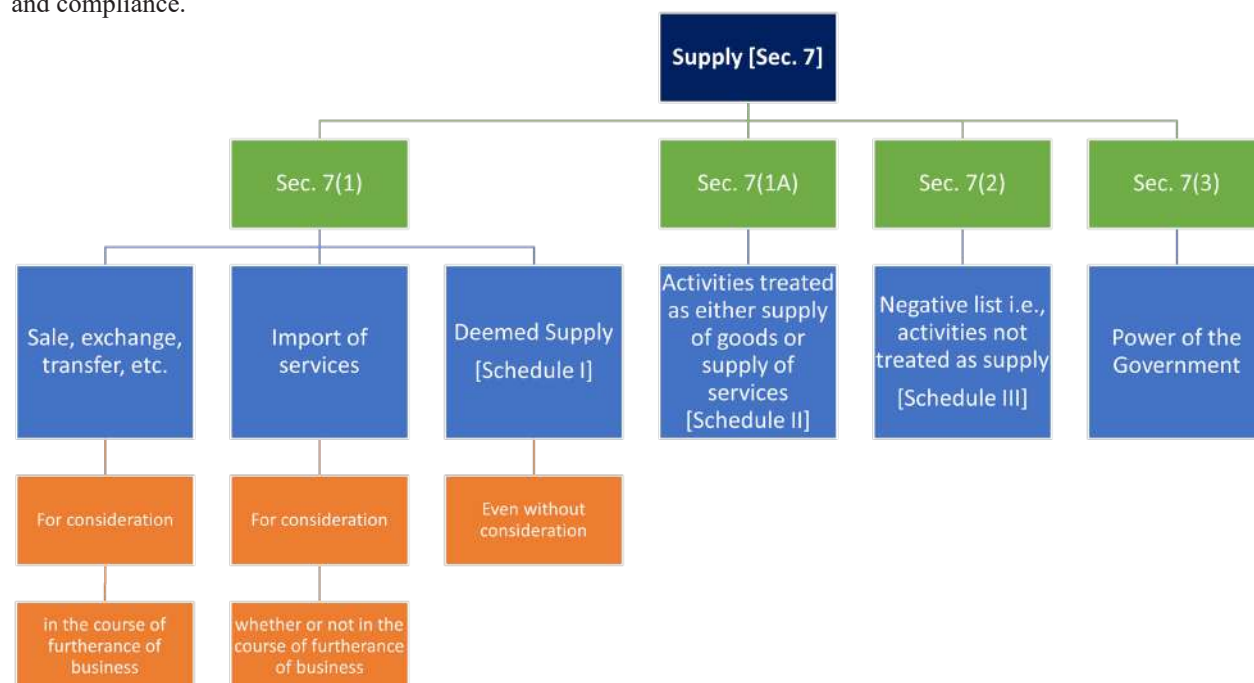
Group IV - Paper-19

Indirect Tax Laws
and Practice (ITLP)

Supply Under GST

In the pre-GST era, Indian indirect tax jurisprudence was fragmented across a mosaic of distinct statutory taxable events—such as the *manufacture* of goods for Excise, the *sale* of commodities for VAT, and the *rendering* of services for Service Tax. The Goods and Services Tax (GST) regime fundamentally dismantled this multiplicity by consolidating the entire fiscal net under one singular, master taxable event: **Supply**

Section 7 of the CGST Act, 2017 defines supply inclusively, encompassing both commercial transactions and certain deemed supplies. A proper understanding of the scope and exceptions of supply is essential for correct tax treatment and compliance.



The meaning and scope of supply under GST can be understood in terms of the following six parameters, which can be adopted to characterize a transaction as supply:

1. Supply of goods or services. Supply of anything other than goods or services does not attract GST
2. Supply should be made for a consideration
3. Supply should be made in the course or furtherance of business
4. Supply should be made by a taxable person
5. Supply should be a taxable supply
6. Supply should be made within the taxable territory

While these six parameters describe the concept of supply, there are a few exceptions to the requirement of supply being made for a consideration and in the course or furtherance of business. Any transaction involving the supply of goods or services without consideration is not a supply, barring a few exceptions, in which a transaction is deemed to be a supply even without consideration. Further, the import of services for a consideration, whether or not in the course or furtherance of business is treated as supply.

Supply of Goods or Services or Both

Goods as well as services have been defined in the GST Law. The securities are excluded from the definition of goods as well as of services. Money is also excluded from the definition of goods as well as services, however, activities relating to the use of money or its conversion by cash or by any other mode, from one form, currency or denomination, to another form, currency or denomination for which a separate consideration is charged are included in services.

Schedule II to the CGST Act, 2017 lists a few activities which are to be treated as supply of goods or supply of services. For instance, any transfer of title in goods would be a supply of goods, whereas any transfer of right in goods without transfer of title would be considered as services.

Further Schedule III to the CGST Act, 2017 spells out activities which shall be treated as neither supply of goods nor supply of services or outside the scope of GST. This includes:

- a. Services by an employee to the employer in the course of or in relation to his employment.
- b. Services of funeral, burial, crematorium or mortuary including transportation of the deceased.
- c. Sale of land and sale of building where the entire consideration has been received after the completion certificate is issued or after its first occupation.
- d. Actionable claims, other than specified actionable claims

Supply for Consideration

Consideration has specifically been defined in the CGST Act, 2017. It can be in money or in kind. Any subsidy given by the Central Government or a State Government is not considered as consideration. It is immaterial whether the payment is made by the recipient or by any other person.

A deposit given in respect of the supply of goods or services or both shall not be considered as payment made for such supply unless the supplier applies such deposit as consideration for the said supply.

Further, when there is barter of goods or services, the same activity constitutes supply as well as a consideration. When a barber cuts hair in exchange for a painting, hair cut is a supply of services by the barber. It is a consideration for the painting received.

However, there are exceptions to the requirement of 'Consideration' as a pre-condition for a supply to be called a supply as per GST. As per Schedule I to the CGST Act, 2017, activities as mentioned below shall be treated as supply even if made without consideration:

1. Permanent transfer or disposal of business assets where input tax credit has been availed on such assets.
2. Supply of goods or services or both between related persons or between distinct persons as specified in section 25, when made in the course or furtherance of business. However, gifts not exceeding ₹50,000 in value in a financial year by an employer to an employee shall not be treated as supply of goods or services or both.
3. Supply of goods— (a) by a principal to his agent where the agent undertakes to supply such goods on behalf of the principal; or (b) by an agent to his principal where the agent undertakes to receive such goods on behalf of the principal.
4. Import of services by a taxable person from a related person or from any of his other establishments outside India, in the course or furtherance of business.

Supply in the Course or Furtherance of Business

GST is essentially a tax only on commercial transactions. Hence, only those supplies that are in the course or furtherance of business qualify as supply under GST. Hence, any supplies made by an individual in his personal capacity do not come under the ambit of GST unless they fall within the definition of business as defined in the Act. Sale of goods or service even as a vocation is a supply under GST.

However, there is one exception to this 'Course or Furtherance of Business' rule i.e., import of services for a consideration.

Supply by a Taxable Person

A supply to attract GST should be made by a taxable person. Hence, a supply between two non-taxable persons does not constitute supply under GST. A "taxable person" is a person who is registered or liable to be registered under section 22 or section 24. Hence, even an unregistered person who is liable to be registered is a taxable person. Similarly, a person not liable to be registered but has taken voluntary registration and got himself registered is also a taxable person.

It should be noted that GST in India is State-centric. Hence, a person making supplies from different States needs to take separate registration in each State. A person who has obtained or is required to obtain more than one registration, whether in one State or Union territory or more than one State or Union territory shall, in respect of each such registration, be treated as distinct persons for the purposes of GST. Hence, a supply between these entities constitutes supply under GST.

Taxable Supply

For a supply to attract GST, the supply must be taxable. Taxable supply has been broadly defined and means any supply of goods or services or both which, is leviable to tax under the Act. Exemptions may be provided to the specified goods or services or to a specified category of persons/entities making supply.

Supply in the Taxable Territory

For a supply to attract GST, the place of supply should be in India. The place of supply of any goods or services is determined based on Sections 10, 11, 12 and 13 of the IGST Act 2017.

In summary, the concept of "supply" u/s 7 operates as the filter governing tax liability. For a modern Cost and Management Accountant (CMA), correctly diagnosing a transaction as a taxable supply is ground zero: it is the prerequisite trigger that activates the subsequent statutory mechanics of Time of Supply (determining *when* to pay), Place of Supply (determining *whether* to remit CGST/SGST or IGST), and Valuation. A CMA's ability to interpret these boundaries protects the enterprise from miscalculated output tax liabilities and trapped working capital.

Topic

Module 1:
Introduction to
Performance
Management

Module 5:
Fundamentals of
Business Valuation

ELECTIVES

Paper-20A

Strategic
Performance
Management and
Business
Valuation (SPMBV)

Introduction to Performance Management

Performance management is a continuous process of identifying, measuring and developing the performance of individuals and teams and aligning their performances with the strategic goals of an organization.

Let's consider the definition's *two main components*: -

1. **Continuous process.** Performance management is ongoing. It involves a process of setting goals and objectives, observing performance, and providing guidance & direction and receiving feedback.
2. **Alignment with strategic goals.** Performance management requires that managers ensure that employees' activities and outputs are congruent with the organization's goals and, consequently, help the organization gain a competitive advantage.

Performance management therefore creates *a direct link* between employee performance and organizational goals and makes the employees' contribution to the organization explicit.

However, we must distinguish between *performance management and performance appraisal*. A system that involves employee evaluations once a year without an ongoing effort to provide feedback and coaching so that performance can be improved is not a true performance management system. Instead, this is only a performance appraisal system. Performance appraisal is the systematic description of an employee's strengths and weaknesses. *Thus, performance appraisal is an important component of performance management whilst performance management is much wider in scope.*

Following *essential elements* of Performance management, thus, crystal out and may be summarized as:

- *setting clear and measurable goals,*
- *implementing meaningful actions, and*
- *imposing rigorous consequences & expectations.*

A performance management system should *help change people's mind-set*, and the organization should also become truly performance oriented. Every manager should understand *that performance as per pre-set standards* is a critical aspect of working and this guiding philosophy is to be communicated in many ways throughout the organization. Performance management systems that do not make explicit the employee contribution to the organizational goals are not true performance management systems. Making an explicit link between employees' performance objectives and the organizational goals also serves the purpose of establishing a *shared understanding* about what is to be achieved and how it is to be achieved.

In essence, well-designed and well-implemented performance management systems make substantial contributions to the organization.

From a *Functional Perspective*, a comprehensive performance management system will cover the following key domains –

1. Financial Performance Analysis
2. Vendor Relationship Management
3. Supply Chain Management covering such aspects as: production, inventory, location, transportation, distribution and information.
4. Customer Relationship Management
5. Customer Profitability Analysis
6. Overall Strategy Mapping with a *mix of Forward and Reverse Mapping*, preferably using Data Analytics in the areas of:
 - budgeting & forecasting,
 - product development,
 - comprehensive marketing research,
 - risk management, and
 - aligning objectives, strategies and available resources

PERFORMANCE MANAGEMENT CONTRIBUTIONS =

Following are the major contributions-

1. **Motivation to perform is increased.** Receiving feedback about one's performance increases the motivation for future performance. Knowledge about how one is doing and recognition about one's past successes provide the fuel for future accomplishments. This improves team performance and group synergy.
2. **Self-esteem is enhanced.** Receiving feedback about one's performance fulfils a basic human need to be recognized and valued at work. This, in turn, is likely to increase employees' self-esteem and their attachment to the organization.
3. **Managers gain insight about subordinates.** Direct supervisors and other managers gain new insights about the person being appraised. Gaining new insights into a person's performance and personality will help the manager build a better relationship with that person. Also, supervisors gain a better understanding of each individual's contribution to the organization.
4. **The understandings of a job criteria are better clarified.** The job of the person being appraised may be clarified and defined more clearly so that employees gain a better understanding of their

performance and results expected of a specific position. Employees also gain a better insight of what it takes to be a successful performer (i.e., what are the specific criteria that define a job success).

5. **Administrative actions can be fairer and more appropriate.** Performance management systems provide valid information about performance that can be used for administrative actions such as merit rating, promotions, and transfers as well as terminations. Thus, a performance management system helps ensure that rewards are distributed on a fair and credible basis as such decisions are based on a sound performance management system that further lead to improved interpersonal relationships and enhanced supervisor-subordinate understandings.
6. **Organizational goals are made clear.** Since a good performance management system helps to focus on clarity of organizational goals, the employees understand what they can do about the organizational success. This ensures organizational goals cascade down to individual employees. This further help improve employees' acceptance of the organizational wider goals when an organization expands & diversifies.
7. **Employees become more competent over time.** An obvious contribution is that employee performance is improved. In addition, there is a solid foundation for helping employees become more successful by establishing suitable training & mentoring plans for employees.
8. **Employee misconduct is minimized.** Employee misconduct is an increasingly pervasive phenomenon that has received widespread media coverage. Such misconduct includes accounting irregularities, churning customer accounts, abusing overtime policies, giving inappropriate gifts to clients / potential clients and using company resources for personal use. Although some individuals are more likely to engage in misconduct compared to others based on individual differences in personality and other attributes, having a good performance management system in place provides an early check on these issues.
9. **There is better and more timely differentiation between good and poor performers.** Performance management systems allow for a quicker identification of good and poor performers. Also, it helps supervisors to address performance problems on a timely basis to initiate possible correctional steps.
10. **Supervisors' views of performance are communicated more clearly.** Performance

management systems allow managers to clearly communicate their opinions to the subordinates regarding their performance. Thus, there is greater transparency as to how managers discuss performance expectations and provide necessary feedback.

11. **Organizational change is facilitated.** Performance management systems can be a useful tool to drive organizational change. For example, when an organization decides to change its culture to give top priority to product quality and customer service. This is precisely what IBM did in the 1980s when it wanted to switch focus to customer satisfaction and brought significant changes in the employee mindset,
12. **There is better protection from lawsuits.** Data collected through proper performance management systems help various legal compliance with applicable Rules & Regulations; thus, legal accountability is enhanced.
13. **Employee engagement is enhanced.** A good performance management system leads to enhanced employee engagement. Employees who are engaged feel involved, committed, passionate, and empowered. Employee engagement is an important predictor of organizational performance and this is an important contribution of a good performance management system.
14. **Significant improvement in Functional & Group productivity, efficiency and effectiveness is achieved.** Another important contribution of a good performance management system is to *enhance productivity, efficiency and effectiveness of a team / group vis a vis the functions / processes / activities that are linked to their responsibilities*. The sum total of the efficiency and effectiveness of the group and the team across an organization significantly brings the overall efficiency and functional effectiveness in an organisation *by removing functional bottlenecks, duplication and deficiencies*.

DISADVANTAGES/DANGERS OF POORLY IMPLEMENTED PERFORMANCE MANAGEMENT SYSTEMS

Following instances may be stated: -

1. **Increased employee turnover.** If the process is not seen as fair, employees may become upset and leave the organization. They can leave physically (i.e., quit) or withdraw psychologically (i.e., minimize their effort until they are able to find a job elsewhere).
2. **Use of misleading information.** If a standardized system is not in place, there are multiple opportunities for fabricating information about an employee's performance.

3. **Lowered self-esteem.** Self-esteem may be lowered if feedback is provided in an inappropriate and inaccurate way. This, in turn, can create employee resentment and destroy team work and group synergies.
4. **Wasted time and money.** Performance management systems cost money and time. These resources are wasted when systems are poorly designed and implemented.
5. **Damaged relationships.** As a consequence of a deficient system, the relationship among the individuals involved may be damaged, often permanently.
6. **Decreased motivation to perform.** Motivation may be lowered for many reasons, including the feeling that superior performance is not translated into meaningful & tangible (e.g., pay increase) or intangible (e.g., personal recognition) rewards.
7. **Employee burnout and job dissatisfaction.** When the performance assessment instrument is not seen as valid and the system is not perceived as fair, employees are likely to feel increased levels of job burnout and job dissatisfaction. As a consequence, employees are likely to become increasingly irritated destroying discipline and organisational culture.
8. **Increased risk of litigation.** Expensive lawsuits may be filed by individuals who feel they have been appraised unfairly.
9. **Varying and unfair standards and ratings.** Both standards and individual ratings may vary across the various units of an organization and be unfair.
10. **Unclear ratings system.** Poor communication is an inevitable outcome of a poorly designed performance system and employees may not know how their ratings are generated and how the ratings are translated into rewards or reprisals.

FUNDAMENTALS OF BUSINESS VALUATION

PURPOSE:

Valuation is an essential prerequisite in choosing investments for a portfolio, in deciding on the appropriate price to pay or receive in a takeover, and in making investment, financing and dividend choices while running a business. Valuation is required throughout the life cycle of a company from the time a company is incorporated and needs infusion of funds to its liquidation.

Valuation is a critical requirement at various stages of a company.

Some of the common purposes of valuation are:

Issue of shares or other securities by the company (e.g. private investors, employee stock options, rights issue, and sweat equity shares)

- Initial public offering and listing of equity shares in stock exchanges
- Mergers and acquisitions including Leveraged Buyouts (LBO)
- Buyback of shares
- Business restructuring such as slump sale
- Shareholders' disputes settlement
- Purchase / sale of a business interest and takeovers & acquisitions
- Non-arm's length transactions
- Disgruntled minority shareholders' actions
- Damage claims
- Estate planning
- Insolvency proceedings and company liquidation

Some of the regulations that commonly require business valuation to be mandatorily made are:

- The Companies Act, 2013 (including Insolvency and Bankruptcy Code, 2016)
- Securities and Exchange Board of India (SEBI) Regulations
- Foreign Exchange Management Act (FEMA)
- Income Tax Act & Rules, etc., etc.

VALUATION PREMISE

The valuation approach, inputs and assumptions applied are highly dependent on the selected premise of value. *The premise of value is driven by the purpose of the valuation and basis of value used. A premise of value describes the circumstances of how an asset or liability is applied in a given case. Different bases of value may require a particular premise of value or require the consideration of multiple value premises.*

Some common premises of value are:

- (a) **Highest and best use:** Highest and best use (HABU) is the use, that would produce the highest value for an asset. The highest and best use must be physically possible (where applicable), financially feasible, legally allowed and should result in the highest value.
- (b) **Current use/existing use:** Current use/existing use, also known as "as-is-where-is" is the current way an asset, liability, or group of assets and/or liabilities is used. The current use may be, but not necessarily, the highest and best use.
- (c) **Orderly liquidation:** An orderly liquidation describes the value of a group of assets that could be realised in a liquidation sale, given a reasonable period of time to find a purchaser (or purchasers), with the seller being compelled to sell on an as-is-where-is basis. The reasonable period of time to find a purchaser (or purchasers) may vary by asset type and market conditions.
- (d) **Forced sale:** The term "forced sale" is often used in circumstances where a seller is under compulsion to sell and when a proper marketing period is not possible and buyers may not be able to undertake adequate due diligence.
- (e) **Going concern:** Going concern value is the value of a business that is expected to continue to operate in the future. The intangible elements of Going Concern Value result from factors such as having trained work force, an operational plant, the necessary licenses, marketing systems and procedures in place, etc. Usually, businesses are valued using Going Concern premise. In cases where businesses are under stress, they may be valued on Liquidation or Forced Sale premise. Tangible assets are usually valued using any of the premises except for Going concern. Further, the bases and premises of value do not consider the transaction cost to either the buyer or the seller.

VALUATION APPROACHES

Valuers may apply one or more valuation approaches to valuation to arrive at the value in accordance with the basis of value. The principal valuation approaches are:

- (a) Market Approach
- (b) Income Approach
- (c) Cost Approach

Each of these valuation approaches includes different methods of valuation. It should be remembered that ascertaining the appropriate value is the primary goal of the valuation exercise. A valuer should select the appropriate valuation approach or a set of approaches and methods as there may not be a single approach or method that is best suited for valuation in every situation.

Market Approach

The market approach provides an indication of value by comparing the assets with identical or comparable (or similar) assets for which price information is available. This approach is also known as Relative Valuation approach.

When should Market approach be applied?

The market approach should be applied under the following circumstances: -

- (a) the subject asset has recently been sold in a transaction appropriate for consideration under the basis of value,
- (b) the subject asset or substantially similar assets are actively publicly traded,
- (c) there are frequent and/or recent observable transactions in substantially similar assets.

In some instances, a valuer may consider using other valuation approaches instead of Market Approach or in combination with Market Approach, such as:

- (a) the business to be valued and its market comparables are not traded in the active market;
- (b) where the business has fewer identical or comparable assets (market comparable);
- (c) sufficient information on the comparable transaction is not available;
- (d) there is no recent transaction either in the business or in the market comparables; or
- (e) there are material differences between the business to be valued and the market comparables, which require significant adjustments.

METHODS OF VALUATION UNDER MARKET APPROACH :

(a) Market price method

Market price is the best judge of value. For assets that are frequently traded in an active market, the market prices may be considered as representative of value.

(b) Comparable Companies Multiple Method

Comparables Companies Multiple Method involves valuation of an asset based on valuation multiples of comparable assets that are traded in active market.

(c) Comparable Transactions Method

Comparable Transactions Method, also known as 'Guideline Transaction Method', involves valuing an asset based on transaction multiples derived from prices paid in transactions of asset to be valued / market comparables (comparable transactions).

Usually, companies in specialised business where there may not be exchange-traded comparables, but comparable

assets are having transactions in over-the-counter (private transactions), the valuation multiples may be taken from such transactions. It is important to consider recent and orderly transactions to avoid significant biases in valuation.

Income Approach

Income approach provides an indication of value by converting future cash flow to a single current value. Under this approach, the value of an asset is determined by reference to the value of income, cash flow or cost savings generated by the asset.

When to apply Income approach?

The income approach should be applied under the following circumstances:

- (1) where the asset does not have any market comparable or comparable transaction;
- (2) where the asset has fewer relevant market comparables, or
- (3) where the asset is an income producing asset for which the future cash flows are available and can reasonably be projected.

Income approach should be used when the income producing ability of the asset is the critical element affecting value from participant's perspective.

Also, a valuer considers Income approach along with other approaches, when:

- the timing and amount of future income is uncertain
- there is lack of access to information
- the asset has not yet begun generating income but is projected to do so

METHODS OF VALUATION UNDER INCOME APPROACH:

(a) Discounted Cash Flow Method (DCF)

The Discounted Cash Flow (DCF) Method is arguably the most preferred method of valuation among all stakeholders. Fundamentally, the DCF method attempts to prove that the value of an asset is the present value of its future cash flows. Accordingly, this method involves discounting of future cash flows expected to be generated by an asset over its life using an appropriate discount rate to arrive at the present value.

DCF method applies the concept of Net Present Value (NPV). It requires three key inputs viz, Cash Flows, Discount Rate and Terminal Value, and each of these inputs are very critical in the valuation process.

Cash Flows

Free cash flow is the actual cash that would be available to the company's investors after making all investments necessary to maintain the company as an ongoing enterprise. These are internally generated funds that

can be distributed to the company's investors (e.g., shareholders and bondholders) without impairing the value of the company. The cash flow can be pre-tax or post-tax.

Free Cash Flows generally represent the after-tax cash generated by the business, available for all the investors (stockholders and banks), excluding any impact of the financial structure. In case of Discounted Cash Flow based valuation, we assess the Free Cash Flow for an explicit forecast period (usually 5 years and in some cases, up to 10 years).

Discount Rate (Cost of Capital)

The Free Cash flows should be discounted to its present value using a Discount Rate that is usually the Cost of Capital. Cost of Capital represents the cost of funds used for financing the business. It is the rate of return that the suppliers of capital, bondholders and owners require as compensation for their contributions to capital.

If business is financed solely through Equity, cost of capital is the same as Cost of Equity

If business is financed solely through Debt, cost of capital is the same as Cost of Debt

Usually, companies use a mix of Debt and Equity while financing their business, thus, the overall cost of capital is derived from a weighted average of cost of all capital sources, known as the Weighted Average Cost of Capital (WACC). Cost of capital represents a minimum benchmark rate that a company must overcome before it can generate value for its financiers.

Terminal Value

Terminal value is the value of an asset, business, or project beyond the explicit forecast period when future cash flows can be estimated. Terminal value may assume that a business will grow at a set growth rate forever after the forecast period. In case the business is expected to mature at the end of the explicit forecast period, the terminal value may assume that the Free Cash Flows will continue for an infinite period thereafter. Terminal value often comprises a large percentage of the total assessed value. Terminal Value calculation uses the concept of Perpetuity calculation (with or without a constant growth rate).

(b) Profit Earning Capitalised Value (PECV) or Capitalisation of Earnings Method

PECV or Capitalisation of Earnings Method is a simplified application of Income Approach. In case where the Free Cash Flows cannot be calculated and the valuer does not have access to future projections, PECV serves as a proxy for DCF method. However, this assumes that Profits are like Free Cash Flows and the company is in a stable stage.

Valuers often use the past years' profits (adjusted for extraordinary or exceptional items) and assign them

weights based on current scenario. This weighted profit is assumed to accrue over an infinite period and is then discounted using a suitable capitalisation rate.

Cost Approach

Cost approach is a valuation approach that reflects the amount that would be required currently to replace the service capacity of an asset (often referred to as current replacement cost). This approach provides an indication of value using the economic principle that a buyer will pay no more for an asset than the cost to obtain an asset of equal utility.

When to apply Cost Approach?

- (i) Where income or market approach cannot be used
- (ii) An asset can be quickly recreated with substantially the same utility as the asset to be valued;
- (ii) An asset can be quickly recreated with substantially the same utility as the asset to be valued;
- (iv) When liquidation value is to be determined

Also, Cost Approach can be used along with other approaches when:

- (i) The asset hasn't started generating income.
- (ii) An asset of substantially the same utility as the asset to be valued can be created but there are regulatory or legal hurdles.
- (iii) The asset was recently created.

METHODS OF VALUATION UNDER COST APPROACH:

(a) Replacement Cost Method

Replacement cost is relevant to determining the price that a participant would pay as it is based on replicating the utility of the asset, not the exact physical properties of the asset.

(b) Reproduction Cost Method

Reproduction cost indicates value by calculating the cost of recreating a replica of an asset.

Reproduction cost is appropriate in circumstances such as:

- (i) The cost of a modern equivalent asset is greater than the cost of recreating a replica of the subject asset, or
- (ii) The utility offered by the subject asset could only be provided by a replica rather than a modern equivalent.

(c) Net Asset Value or Book Value method

While not specifically mentioned in the Valuation Standards, Net Asset Value or the Book Value method serves as a common method of valuation of private companies where the detailed information is not available. This method relies on the financial statements (Balance Sheet) and assumes that the values reflected in the Balance Sheet are reflective of true and fair value of the business.

Where the financial statements are prepared using historical cost convention (e.g. Land, Building and investments are recorded at cost but their values may have increased over time), valuers may identify the fair values of these assets and adjust them to arrive at their fair values. Valuers must keep in mind that under Ind AS (applicable to all listed companies and some large privately held companies), various assets and liabilities are to be recorded at Fair Values.

FUNDAMENTAL ELEMENTS IN VALUATION - RISK & RETURN

Harry Markowitz, the father of modern finance was first to quantify risk and used the same in portfolio decision making. Based on risk-return criteria, he suggested ways to identify optimal portfolio. Markowitz has made two important assumptions. First, an investor is risk averse. Second, an investor would prefer higher amount of wealth than the lower one. The reason is higher wealth leads to the possibility of higher consumption. Given two possible portfolios with similar risk profile, the one with higher expected return will be preferred. These two assumptions are most integral part of a valuation exercise. The Primary objective of any investor is to maximise return from a given investment, subject to various constraints, primarily the associated risks in a given context.

RETURN-

Return may be realised or expected. The rate of return is total return the investor receives during the holding period stated as a percentage of the purchase price of the investment at the beginning of the holding period.

RISK-

Risk can be defined as the chance that the actual outcome from an investment will differ from the expected outcome. Risk and return go hand in hand considering investments and market dynamics. Risk and returns are directly related to each other: higher the risk, higher is the expected return.

A commonly accepted measure of risk is volatility and is usually measured in terms of Standard Deviation

Risk can be reasonably diversified in respect of any class of assets by prudent investment strategies, thereby, increasing the value of the assets or group of assets. Hence, in valuation identifying the potential risks and future or probable risks are highly significant and the how prudently such perceived risks are diversified to minimise its impact in a given situation, assumes considerable importance.

TYPES OF RISK affecting a business valuation-

- **Interest Rate Risk-** variability in security's return due to adverse changes in the interest rates.
- **Market Risk-** variations in return due to fluctuations in the securities market.

- **Inflation Risk-** risk due to adverse changes in prices of all commodities.
- **Business Risk-** risk associated with the different activities undertaken by the enterprise.
- **Financial Risk-** risk resulting from the existence of debt in the capital structure of the company.
- **Liquidity Risk-** risk associated with the secondary market in which the security is traded

The above risks can be summarized under the following two categories:

- (a) **Systematic Risk-** Systematic risk is the risk that affects the entire market and hence, the firm too. It is also called non-diversifiable risk.
- (b) **Unsystematic Risk-** Unsystematic Risk is the variability in the security's return on account of the firm specific risk factors. It is also called diversifiable or avoidable risk.

In the process of Business Valuation, apart from many business documents, records, information and data the importance of maintaining accurate and properly structured Financial Statements (FS) is utmost. Proper analysis & interpretation of the FS by a valuer indeed results into a reasonably acceptable valuation number in most cases.

Market value and Enterprise Value in Business Valuation –

Market value (MV) – It is the estimated value for which an asset or a liability should exchange on the valuation date between a willing buyer and a willing seller in an arm's length transaction after undertaking adequate marketing diligence where the parties have acted prudently and without compulsion. The market value represents transaction between unrelated parties, each acting independently with proper marketing prudence.

Enterprise value (EV) – It covers value of all asset claims and ownership interests arising from debt and equity. EV is considered to be the actual cost of purchasing a company before a takeover is considered. In fact, it is the minimum value that an entity would pay to acquire a company. However, in M & A, the acquirer generally pays the enterprise value but would have access to cash of the target company, thus, we often subtract cash and cash equivalents in the calculation of EV.

Thus :

$$EV = (\text{Common shares} + \text{Preferred shares} + \text{Minority interest}) + \text{Market value of Debts} - \text{Cash}$$

EV enables business entities to find the worth (economic value) of a target company or a business entity.

The above narrative covers the entire spectrum of Business Valuation from its fundamental perspective.

Topic

Module 1:
Introduction to Risk
Management

Module 6:
Introduction to
Insurance Business

ELECTIVES

Paper-20B

Risk Management
In Banking and
Insurance (RMBI)

Risk Management in Banking

Introduction to Risk Management

Risk management is one of the most important functions in modern banking. Banks operate by accepting deposits, extending loans, investing in securities, facilitating payments, and providing various financial services. These activities expose banks to numerous uncertainties that can affect profitability, liquidity, reputation, and even survival. Therefore, risk management refers to the systematic process of identifying, measuring, monitoring, controlling, and mitigating various risks faced by banks to ensure financial stability, protect depositors' interests, and maximize shareholder value. In the post-globalization era, increasing competition, technological advancements, regulatory changes, cyber threats, and economic uncertainties have made risk management an indispensable component of banking operations.

Meaning and Concept of Risk Management: Risk is the possibility that actual outcomes may differ from expected outcomes, resulting in financial losses or adverse consequences. In banking, risk management involves establishing policies, procedures, systems, and controls to minimize the likelihood and impact of such losses. It is not aimed at eliminating risks completely, as risk-taking is an inherent part of banking business; rather, it seeks to maintain risks within acceptable levels consistent with the bank's risk appetite. Effective risk management enables banks to achieve sustainable growth while maintaining adequate capital and liquidity buffers.

Need for Risk Management in Banking: The banking industry is highly leveraged and interconnected with various sectors of the economy. A small disturbance can have significant repercussions on the financial system. Risk management is essential because:

- ✓ Banks deal with public money and must safeguard depositors' interests.
- ✓ Financial markets are highly volatile and susceptible to economic shocks.
- ✓ Technological developments expose banks to cyber and operational risks.
- ✓ Increasing competition demands efficient management of resources.
- ✓ Regulatory authorities require banks to maintain adequate capital and liquidity.
- ✓ Globalization and cross-border operations increase exposure to foreign exchange and market risks.
- ✓ Historical banking crises have demonstrated the consequences of inadequate risk management.

Risk Management Process: Risk management in banks generally follows a structured process comprising the following stages:

1. Risk Identification: This involves recognizing various sources of risk arising from lending, investment, treasury operations, foreign exchange transactions, information technology systems, and external factors.

2. Risk Measurement and Assessment: Banks quantify risk using statistical and analytical techniques. Parameters such as Probability of Default (PD), Loss Given Default (LGD), Exposure at Default (EAD), Value-at-Risk (VaR), stress testing, and sensitivity analysis are employed to estimate potential losses.

3. Risk Monitoring: Continuous monitoring helps detect deviations from prescribed risk limits. Management Information Systems (MIS), Key Risk Indicators (KRIs), and periodic reports facilitate effective surveillance.

4. Risk Control and Mitigation: Banks adopt various measures such as diversification, collateral requirements, hedging, insurance, limits on exposure, and provisioning to minimize risks.

5. Risk Reporting and Review: Regular reporting to senior management, the Board of Directors, and regulatory authorities ensures transparency and enables timely corrective actions.

Major Types of Risks in Banking:

1. Credit Risk: Credit risk is the possibility that borrowers or counterparties may fail to meet their contractual obligations. It is the most significant risk faced by banks. Non-performing assets (NPAs), defaults, and deterioration in credit quality are manifestations of credit risk.

2. Market Risk: Market risk arises due to adverse movements in interest rates, exchange rates, equity prices, and commodity prices. Treasury operations and investment portfolios are particularly vulnerable to market fluctuations.

3. Liquidity Risk: Liquidity risk refers to the inability of a bank to meet its financial obligations when they become due without incurring unacceptable losses. Effective liquidity management is essential for maintaining confidence among depositors and creditors.

4. Operational Risk: Operational risk results from inadequate or failed internal processes, human errors, system failures, fraud, and external events. Cybersecurity breaches and technological disruptions have increased the significance of operational risk.

5. Interest Rate Risk: Changes in market interest rates can affect a bank's earnings and economic value. Asset-Liability Management (ALM) techniques are used to manage interest rate risk.

6. Foreign Exchange Risk: Banks engaged in international transactions face exchange rate fluctuations, which may adversely impact profitability and capital.

Risk management forms the foundation of a sound and resilient banking system. Since banking inherently involves accepting and managing risks, the objective is not to avoid risk altogether but to identify, measure, monitor, and control risks within acceptable limits. An

effective risk management framework, supported by strong governance, regulatory compliance, advanced analytical tools, and emerging technologies, enables banks to withstand uncertainties and maintain stability. In an increasingly complex and digital financial environment, robust risk management has become essential for ensuring the long-term sustainability, profitability, and credibility of banking institutions.

Risk Management in Insurance

Introduction to Insurance Business

Insurance is a financial mechanism designed to provide protection against uncertainties and unforeseen losses arising from various risks. It is based on the principle of risk sharing, whereby a large number of individuals or entities contribute premiums to a common fund, and compensation is provided to those who suffer losses due to specified events. The insurance industry plays a vital role in promoting economic stability, encouraging investment, supporting business activities, and providing financial security to individuals and organizations. Since the business of insurance itself revolves around the assumption and management of risks, effective risk management becomes the foundation of the insurance sector. A sound understanding of the insurance business is essential for comprehending the importance of risk management in insurance companies.

Meaning and Concept of Insurance Business:

Insurance business refers to the activity of accepting risks from policyholders in exchange for premiums and undertaking to compensate them against financial losses arising from uncertain events. It involves pooling of risks and transferring individual losses to a collective mechanism. Insurance companies collect premiums from a large number of policyholders and use actuarial techniques and statistical principles to estimate probable losses and maintain adequate reserves for meeting future claims.

The insurance business is fundamentally different from other businesses because insurers promise compensation for uncertain future events. Therefore, risk assessment, pricing, underwriting, claim management, and investment management are critical functions in insurance operations.

Types of Insurance Business

Life Insurance: Life insurance provides protection against the financial consequences arising from death, disability, or survival. It also acts as a long-term savings and investment instrument.

Products include:

- ✓ Term Insurance
- ✓ Whole Life Insurance

- ✓ Endowment Policies
- ✓ Unit Linked Insurance Plans (ULIPs)
- ✓ Pension and Annuity Plans

General Insurance: General insurance provides protection against losses arising from non-life risks.

Fire Insurance: Covers losses due to fire and related perils.

Marine Insurance: Provides protection against risks associated with sea, air, and inland transit.

Motor Insurance: Covers damages to vehicles and third-party liabilities.

Health Insurance: Provides coverage for hospitalization and medical expenses.

Liability Insurance: Protects businesses and individuals against legal liabilities.

Reinsurance: Reinsurance refers to insurance obtained by insurance companies themselves to spread and manage large risks by transferring part of their liabilities to other insurers.

Relationship Between Insurance Business and Risk Management: Risk management is the core function of insurance business. Insurance companies themselves face various risks such as:

- ✓ Underwriting risk.
- ✓ Market risk.
- ✓ Credit risk.
- ✓ Liquidity risk.
- ✓ Operational risk.
- ✓ Catastrophe risk.
- ✓ Reinsurance risk.
- ✓ Cyber risk.
- ✓ Regulatory and compliance risk.
- ✓ Strategic and reputational risk.

Therefore, insurers employ advanced actuarial models, solvency frameworks, enterprise risk management systems, stress testing, and capital adequacy standards to ensure long-term sustainability.

Conclusion: Insurance business is fundamentally a risk-bearing and risk-sharing mechanism that provides financial security against uncertain future events. It serves as an important pillar of economic development by mobilizing savings, facilitating investments, promoting

entrepreneurship, and enhancing financial stability. Since insurers themselves are exposed to numerous financial and operational risks, effective risk management forms the backbone of insurance operations. In an increasingly complex and technology-driven environment, robust risk management practices, sound underwriting principles, adequate reserves, and strong regulatory oversight are essential for ensuring the stability, solvency, and sustainable growth of the insurance industry.

Topic

Module 1:
Entrepreneurial Skill
Sets

ELECTIVES

Paper-20C

Entrepreneurship
and Start Up (ENTS)

Capital Structuring, Resource Mobilization and Management

Startups have to finance their operations in order to attain growth, which can be done by structuring the combination of debt and equity in a way that suits the business. This structure of finance is called the capital structure. They have to choose their approach from all the different available options.

Startups need different types of capital depending on their growth stage, industry, and risk profile. This capital is generally divided into equity, debt, and non-dilutive funding.

1. Equity Capital (Ownership for Cash)

Investors provide funding in exchange for ownership shares in the company.

- (i) **Founders' Capital:** Personal savings used to launch the business.
- (ii) **Angel Investment:** High-net-worth individuals providing early-stage check sizes.
- (iii) **Venture Capital (VC):** Institutional funds for high-growth startups scaling rapidly.
- (iv) **Crowdfunding:** Small amounts of equity sold to a large public crowd online.

2. Debt Capital (Borrowed Money)

Startups borrow money that must be paid back with interest, usually requiring revenue or collateral.

- (i) **Venture Debt:** Specialized loans for VC-backed startups to extend operational runway.
- (ii) **Equipment Financing:** Loans secured by the physical assets or machinery being bought.
- (iii) **Lines of Credit:** Flexible, short-term loans used to manage day-to-day cash flow gaps.

3. Hybrid Capital (Future Equity)

Instruments that start as debt or contracts but convert into equity at a later date.

- (i) **SAFEs (Simple Agreement for Future Equity):** Cash today for a promise of future shares.
- (ii) **Convertible Notes:** Short-term debt that converts into equity during the next funding round.

4. Non-Dilutive Capital (Free or Earned Money)

Capital that does not require giving up equity or paying back a loan.

- (i) **Government Grants:** Subsidies for research, development, and deep-tech innovation.
- (ii) **Customer Revenue:** Cash generated directly from selling products or services.
- (iii) **Startup Competitions:** Cash prizes from pitch events and accelerator programs.

There are trade-offs when the business uses **debt or equity to finance** the operations. Depending on the industry, the management will have to decide the **amount**

to use and balance both to find a point of equilibrium suitable for their company.

Importance of Capital Structure for a Startup

Capital structure is an essential factor that contributes to the stability of the company. Startups need to have a good capital structure as this will determine if they will **survive the initial stages**. Other factors that also show this importance are:

1. A startup with a good capital structure will draw investors.
2. The business will be efficient as all the funds and resources will be effectively used, preventing under or overcapitalization.
3. As per the startup's situation, the company will have the flexibility of changing its debt capital.
4. Having a proper capital structure minimizes the overall cost of capital while maximizing the shareholder's capital.
5. In the form of higher returns to the shareholders, an effective capital structure will increase their profit.
6. If your startup has a sound capital structure, the chances of share prices increasing are high, leading to an overall higher business valuation.

Factors determining Capital Structure

There are many factors that affect and influence the capital structure of a startup. These are as follows: necessary to focus on the important factors, including:

1. **Control:** The shareholders type will determine the degree of control. If the startup has more equity shareholders than preference shareholders, they will have control and higher voting rights.
2. **Government Policies:** It is important as a startup to stay informed on all the policies that the government has set, as it influences your capital structure choice. If there are significant changes in the fiscal and monetary policies, you may have to change your capital structure choice.
3. **Cost of Capital:** Startups raise capital for its operations, and there are costs to do so. These costs that they incur is called the cost of capital. A company should generate enough revenue to negate this cost, and the growth can be sufficiently funded. One way of reducing the cost of capital is by balancing the debt and equity to get an optimal capital structure.
4. **Trading on Equity:** To increase returns, startups borrow new funds using more equity as the source. When the rate of interest the startup pays on debt is less than the rate of return on the total capital or when the rate of interest is higher than the return, they choose to trade on equity.

Optimal capital structure for a startup

The ideal balance between debt and equity that results in a **low WACC (weighted average cost of capital)** is known as the optimal capital structure. The definition does not reflect the same in practice as companies have their own aspect of what they think represents the optimal capital structure. The reason every company has a different perspective also comes down to the industry they are in. An entrepreneur can decide over capital structure instead of size, operations, and maturity.

Resource Mobilisation

Resource mobilization in startups is the process of identifying, acquiring, and allocating the critical assets (financial, human, intellectual, and physical) needed to launch and scale a business. Because early-stage startups operate with severe resource constraints, mobilization is less about buying resources and more about creatively attracting them.

Startups require five core types of resources to move from an initial idea to a scalable business: **financial, human, intellectual, physical, and social resources**.

1. **Financial Resources:** Financial resources provide the cash runway needed to build products and acquire customers before the company reaches profitability.
 - (i) **Founder Capital:** Personal savings or “sweat equity” used to fund initial operations.
 - (ii) **External Equity:** Cash from angel investors or venture capitalists in exchange for company shares.
 - (iii) **Convertible Instruments:** SAFEs or convertible notes used to secure quick seed funding.
 - (iv) **Non-Dilutive Cash:** Government grants, prize money from pitch competitions, or early customer revenue.
2. **Human Resources:** A startup’s execution capability depends entirely on the skills, drive, and alignment of its people.
 - (i) **Co-Founding Team:** A balanced mix of technical talent (builders) and business acumen (sellers).
 - (ii) **Core Employees:** Early engineers, product managers, or growth marketers willing to work in high-risk environments.
 - (iii) **Fractional Talent:** Part-time contractors, freelancers, or outsourced agencies used to fill temporary skill gaps without full-time payroll costs.
3. **Intellectual Resources:** Intellectual resources represent the proprietary knowledge and brand assets that protect a startup from competitors.
 - (i) **Proprietary Technology:** Unique software code,

algorithms, or specialized hardware designs.

- (ii) **Intellectual Property (IP) Protection:** Patents, trademarks, copyrights, and trade secrets.
 - (iii) **Market Insights:** Proprietary data, user research, and deep domain expertise that give the startup a unique advantage.
4. **Physical & Operational Resources:** The tangible assets and digital tools required to build, host, and deliver the product or service.
 - (i) **Tech Stack & Cloud Infrastructure:** Servers, hosting services (like AWS, Azure, or Google Cloud), and SaaS tools for project management, CRM, and communication.
 - (ii) **Workspace:** Flexible options like coworking spaces, home offices, or fully remote infrastructure.
 - (iii) **Equipment & Supply Chain:** Laptops, prototyping tools, lab space, raw materials, or manufacturing facilities (essential for hardware, biotech, or e-commerce startups).
 5. **Social & Network Resources:** Relational assets that grant the startup credibility, advice, and market access that money cannot easily buy.
 - (i) **Advisors & Mentors:** Industry veterans who guide strategy and introduce the founders to key players.
 - (ii) **Strategic Partnerships:** Alliances with larger corporations to access their distribution channels or customer bases.
 - (iii) **Early Adopter Community:** A passionate group of initial users who provide critical feedback and organic word-of-mouth marketing.

Startup Management

Startup management is the practice of directing a highly uncertain, fast-growing venture under extreme resource constraints. These are as follows:

- (i) **Strategic Management:** Startup managers do not rely on rigid 5-year business plans. Instead, they use agile methodologies to adapt quickly to market feedback.
- (ii) **Financial Management:** Managing a startup’s finances requires an intense focus on cash preservation rather than short-term profitability.
- (iii) **People Management:** In a startup, managers cannot offer corporate-level salaries, so they must use alternative mechanisms to motivate and align their team.
- (iv) **Product & Market Management:** Managing the relationship between what the engineering team builds and what the market actually wants.



Ref. No.: G/128/07/2026(01)

Date: July 01, 2026

CIRCULAR

Sub.: Revision of Cut-off dates for submission of Application Forms under the Scholarship Scheme for Economically Challenged-cum-Meritorious Students for CMA Intermediate Course

The Training & Educational Facilities Committee of the Institute, in its 221st Meeting, held on June 20, 2026, has approved the revision of the cut-off dates for submission of Application Forms under the Scholarship Scheme for Economically Challenged-cum-Meritorious Students for the CMA Intermediate Course.

The revised cut-off dates for the June and December Terms of Examination are as follows:

Cut-off Dates	June Term	December Term
Start date of Form Submission	15 th November (Last calendar year)	15 th May (Same calendar year)
Last date of form Submission	15 th January (Same calendar year)	15 th July (Same calendar year)

The revised Scholarship Scheme for Economically Challenged-cum-Meritorious Students – 2024 for the CMA Intermediate Course is available at the following link:

[https://dwpivt501gtb6.cloudfront.net/upload/students/Rev Scholarship Scheme Inter 01 07 26.pdf](https://dwpivt501gtb6.cloudfront.net/upload/students/Rev_Scholarship_Scheme_Inter_01_07_26.pdf)

Eligible candidates may apply for this Fee Waiver Scholarship through offline mode by submitting the prescribed application form along with all the requisite supporting documents.

This Circular is issued for the information of all concerned.

CMA Avijit Mondal
Joint Director and H.O.D Studies
(Academics and Administration)

e-Distribution:

- 1) President's Office
- 2) Secretary, T&EF Committee
- 3) All HODs at Headquarters, Kolkata Office and Hyderabad Centre of Excellence
- 4) All Regional Councils of the Institute
- 5) All Chapters of the Institute
- 6) All Accredited Institutions
- 7) All Overseas Centres
- 8) IT Department- for uploading on the website of the Institute
- 9) Secretariat
- 10) 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

- **Kolkata Office:** CMA Bhawan, 12, Sudder Street, Kolkata – 700 016, Phone: +91-33-2252 1602/1031/1619/1034
- **Noida Office:** CMA Bhawan, C-42, Sector-62, Noida (Uttar Pradesh) -201309, Phone: +91-0120-299 0004/6/7/8

Invitation to Contribute Articles for CMA Student E-Bulletin - Showcasing Your Expertise!

Dear CMA Student,

We 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 20th 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 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

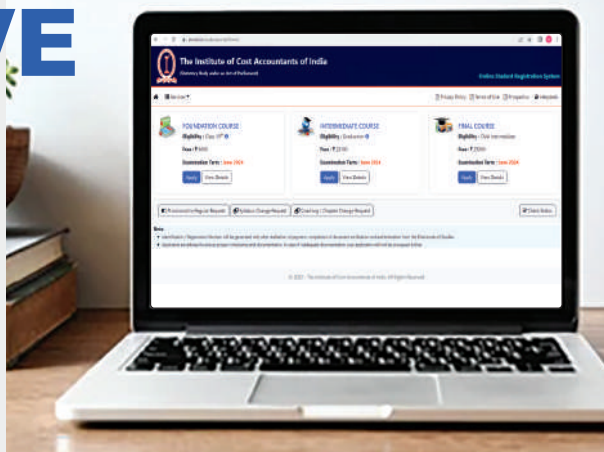


THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

Statutory Body under an Act of Parliament
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

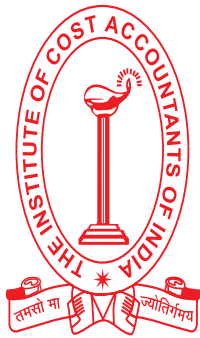
Request
Conversion from
Old Syllabus to
New Syllabus

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**



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

Headquarters

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi - 110003
Ph: 011-24622156

Noida Office

CMA Bhawan, C-42, Sector- 62, Noida (Uttar Pradesh) - 201309

Kolkata Office

CMA Bhawan, 12, Sudder Street, Kolkata - 700016
Ph: 033-40364743/40364735

studies@icmai.in



Behind every successful business decision, there is always a CMA