CMA E-Bulletin

VOL 10 | NO. 07 | JULY 2025

An Initiative of Directorate of Studies



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he 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, enrols 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, 117 Chapters in India and 11 Overseas Centres. The Institute is the largest Cost & Management Accounting body in the world with about 1,00,000 qualified CMAs and over 6,00,000 students pursuing the CMA Course. The Institute is a founder member of International Federation of Accountants (IFAC), Confederation of Asian and Pacific Accountants (CAPA) and South Asian Federation of Accountants (SAFA). The Institute is also an Associate Member of ASEAN Federation of Accountants (AFA) and member in the Council of International Integrated Reporting Council (IIRC), UK.

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"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 मृत्योर्मामृतं 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

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CMA FOUNDATION COURSE

Syllabus 2022

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

MULTIPLE CHOICE QUESTIONS (MCQ)

- 1. Which of the following best describes the doctrine of stare decisis in the Indian legal system?
 - a) Courts may refer to foreign judgments
 - b) Lower courts can choose to ignore higher court rulings
 - Judicial precedents are binding on subordinate courts
 - d) All court rulings have equal authority
- 2. A State Government passed a law contradicting a Central law on the same concurrent subject. The State law received Presidential assent. Which law applies in that State?
 - a) Central law
 - b) State law
 - c) Both
 - d) Neither
- 3. A Municipal Corporation issues a rule on sanitation not covered in the central law. This rule is challenged in court. What will be the likely judicial response?
 - a) Declared valid under subordinate legislation
 - b) Rule unconstitutional
 - c) Treated as custom
 - d) Treated as a primary law
- 4. Under Article 254, which law prevails in case of inconsistency between Union and State laws on a concurrent subject?
 - a) State law always prevails
 - b) The earlier law prevails
 - c) Union law prevails unless the State law has Presidential assent
 - d) Both laws become void
- 5. Which of the following is a limitation of subordinate legislation?
 - a) It can create new Acts
 - b) It can override constitutional provisions
 - c) It must conform to the parent Act
 - d) It is not subject to judicial review

- 6. A litigant wants to challenge a High Court order. Where should the appeal be made?
 - a) District Court
 - b) Lok Adalat
 - c) Supreme Court
 - d) Tribunal
- 7. During parliamentary recess, a national emergency arises requiring urgent legislation. What can be done?
 - a) President issues Ordinance under Article 123
 - b) Wait for Parliament to reconvene
 - c) Supreme Court takes suo moto action
 - d) State legislatures meet
- 8. A law made by a State was declared ultra vires as it exceeded the powers conferred in the Constitution. What does this mean?
 - a) It is valid forever
 - b) Law was beyond State's constitutional powers
 - c) Law is binding
 - d) Law was delegated
- 9. Which Article empowers the Supreme Court to review its own judgments?
 - a) Article 131
 - b) Article 137
 - c) Article 226
 - d) Article 129
- 10. Which of the following best exemplifies the quasifederal nature of the Indian Constitution?
 - a) The existence of uniform civil code
 - b) Power to legislate on State matters in national interest
 - c) The appointment of Chief Ministers by the President
 - d) Equal distribution of taxation powers
- 11. The creation of All India Services under Article 312 is an example of:
 - a) Executive law-making
 - b) Judicial review
 - c) Delegated legislation
 - d) Cooperative federalism

- 12. A writ petition is filed for violation of fundamental rights. The petitioner chooses High Court instead of Supreme Court. Is this valid?
 - a) No, only SC has writ powers
 - b) Yes, under Article 226
 - c) No, only Parliament can address this
 - d) Valid only in Delhi
- 13. A subordinate court passed a judgment in contradiction with a Supreme Court precedent. What is the implication?
 - a) Judgment is void
 - b) Judgment is binding
 - c) Can be ignored
 - d) Needs Governor's assent
- 14. Company X sues another company for a commercial dispute. The court suggests ADR. What method might apply?
 - a) Direct judgment
 - b) Lok Adalat
 - c) Mediation or Arbitration
 - d) Constitutional remedy
- 15. A citizen is denied a public benefit due to a newly framed rule by a ministry. Where can he challenge it?
 - a) Lok Sabha
 - b) Supreme Court under writ
 - c) Company Law Tribunal
 - d) RBI
- 16. A tribunal's decision is challenged by a party. Where should the appeal lie if no special law is provided?
 - a) High Court
 - b) Supreme Court
 - c) Subordinate Court
 - d) Parliament
- 17. Raj was arrested for a criminal offence and wants to appeal a judgment from a sessions court. Where should he appeal?
 - a) Supreme Court directly
 - b) High Court
 - c) Lok Adalat
 - d) Civil Court

- 18. A new environmental regulation was framed by a Ministry without Parliamentary debate. How is this allowed?
 - a) It is an ordinance
 - b) It is a judicial decision
 - c) It is delegated/subordinate legislation
 - d) It is a constitutional amendment
- 19. Which constitutional principle ensures that all laws must be applied equally and fairly, protecting citizens from arbitrary state action?
 - a) Rule of law
 - b) Judicial review
 - c) Basic structure doctrine
 - d) Doctrine of eclipse
- 20. A private citizen introduces a bill in the Lok Sabha seeking environmental reforms.

Question: What kind of bill has been introduced?

- a) Government Bill
- b) Private Member's Bill
- c) Constitutional Amendment Bill
- d) Money Bill
- 21. A High Court follows a legal precedent set by another High Court in a different state.

Question: What is the nature of this precedent?

- a) Binding
- b) Compulsory
- c) Persuasive
- d) Advisory
- 22. A petition is filed in the High Court regarding violation of legal rights, not fundamental rights. Question: Can the High Court entertain this?
 - a) No, only Supreme Court can
 - b) Yes, under Article 226
 - c) No, legal rights are not protected
 - d) Yes, under Article 131
- 23. Which of the following cannot be a source of law under the Indian legal system?
 - (a) Constitutional Articles
 - (b) Executive Orders issued under delegated authority
 - (c) Obiter dicta of court judgments
 - (d) Statutes passed by Parliament

24. A State Government fails to consult the High Court before appointing a District Judge.

Question: Is the appointment valid?

- (a) Yes, Governor has full power
- (b) No, it violates Article 233
- (c) Yes, but only with Cabinet approval
- (d) Yes, if President approves
- 25. A regional manager delivers a performance report to the zonal head through a detailed email with attachments. The zonal head later complains that some key figures were misinterpreted due to file formatting issues.

Question: What is the most likely barrier in this communication?

- (a) Physical barrier
- (b) Psychological barrier
- (c) Semantic barrier
- (d) Technological barrier
- 26. A supervisor gives verbal feedback to a team member in a noisy office. The employee misses key points of the conversation.

Question: What kind of communication barrier is this?

- a) Semantic barrier
- b) Psychological barrier
- c) Physical barrier
- d) Emotional barrier
- 27. An international manager uses complex idioms and region-specific slang in a business presentation to a diverse team from multiple countries. Some attendees appear confused and disengaged.

Question: What is the most likely barrier here?

(a) Psychological barrier

- (b) Semantic barrier
- (c) Physical barrier
- (d) Feedback barrier
- 28. In a boardroom meeting, one member gives continuous feedback through head nods, frowns, and eyebrow raises, even though they do not speak during the discussion.

Question: These gestures are best classified as:

- (a) Proxemics
- (b) Kinesics
- (c) Paralanguage
- (d) Silence cue
- 29. In an organization, rumours about layoffs spread quickly among employees despite no official communication. These messages often change as they move across departments.

Question: This is an example of which type of communication?

- (a) Downward formal
- (b) Upward formal
- (c) Grapevine
- (d) Horizontal formal
- 30. A CEO delivers a motivational speech to all employees, streamed live across branches. The employees cannot interact directly but are inspired and aligned with the company's goals.

Question: This is an example of which type of communication?

- (a) Formal upward communication
- (b) Interactive horizontal communication
- (c) One-way downward communication
- (d) Grapevine communication

Answer:

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

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)

In the following MCQs, only one answer is correct. Find out the same.

- 1. Nature of capital is
 - a. An Asset
 - b. A Liability
 - c. An Income
 - d. An expense
- 2. Rebate received at the time of payment liability is
 - a. Profit
 - b. Gain
 - c. Capital
 - d. Loss
- 3. What is termed as 'excess of assets over liabilities'
 - a. Capital
 - b. Drawings
 - c. Overdraft
 - d. Profit
- 4. On what basis or evidence business transactions are recorded in the books of accounts
 - a. Invoice
 - b. Bill
 - c. Source Document
 - d. Voucher
- 5. What do you mean by credit balance of Nominal Account?
 - a. Income
 - b. Expense
 - c. Profit
 - d. Loss
- 6. From where Voucher is prepared?
 - a. From Journal Entry
 - b. From Ledger Account
 - c. From Documentary evidence
 - d. From Cash Book
- 7. Debit Voucher is prepared for
 - a. Cash Receipt
 - b. Cash Payments
 - c. Credit Purchase
 - d. Credit Sale

- 8. From the balances of which accounts net profit or net loss can be ascertained?
 - a. Real Account
 - b. Nominal Account
 - c. Personal Account
 - d. Cash Account
- 9. Purchase Book is part of
 - a. Journal
 - b. Ledger
 - c. Trial Balance
 - d. Balance Sheet
- 10. A Trader can follow price discrimination policy through a type of discount called
 - a. Cash Discount
 - b. Trade discount
 - c. Special Discount
 - d. Transaction Discount
- 11. Withdrawal of cash from business by the proprietor should be credited to
 - a. Bank Account
 - b. Cash Account
 - c. Drawings Account
 - d. Capital Account
- 12. Ascertain Bank Balance as per Cash Book from the details given -

Overdraft balance as per Pass Book ₹6,800. Bank charged interest on overdraft ₹50. Dishonoured bill debited in Pass Book but not recorded in Cash Book ₹1,500.

- a. ₹5,250
- b. ₹5,300
- c. ₹6,750
- d. ₹8.250
- 13. Book value of a Machine was ₹1,75,000. On 01.01.2025 depreciation for 9-months was ₹20,000. The Machine was sold at a loss of ₹20,000. Determine sale price of Machine.
 - a. ₹1,35,000
 - b. ₹1,50,000
 - c. ₹1,55,000
 - d. ₹1,75,000

- 14. Debtors as on 31.03.2025 is ₹20,000. Provision for Doubtful Debts to be created @5% and Discount on Debtors @4%. Amount of Provision for Discount on Debtors is
 - a. ₹760
 - b. ₹800
 - c. ₹840
 - d. ₹40
- 15. Which type of receipt creates assets and liabilities and helps in creating capital gains?
 - a. Capital receipt
 - b. Revenue receipt
 - c. Capital gain
 - d. Trading profit
- 16. To which account licence fee for importing a machine should be debited?
 - a. Licence fee account
 - b. Machinery Account
 - c. Import expense account
 - d. General expense account
- 17. Legal expense incurred for abuse of trademark is
 - a. Capital expenditure
 - b. Revenue expenditure
 - c. Capital loss
 - d. General expenditure
- 18. Drawings Account is a
 - a. Real Account
 - b. Personal Account
 - c. Nominal Account
 - d. None of these
- 19. Accounting Equation is a statement of equality between
 - a. Debit and Credit
 - b. Assets and Capital
 - c. Income and Expense
 - d. Liabilities and Capital
- 20. Accounting equation proves that total equities (internal and external) are always equal to
 - a. Total Assets

- b. Total Liabilities
- c. Total Income
- d. Total Expense
- 21. If total Assets equals to ₹1,50,000 and Capital is ₹90.000, the amount of Creditor will be
 - a. ₹1,00,000
 - b. ₹90,000
 - c. ₹60,000
 - d. ₹50,000
- 22. Which of these is not an objective of Cost Accounting?
 - a. Ascertainment of Cost
 - b. Determination of Selling Price
 - c. Cost Control and Cost reduction
 - d. Assisting Shareholders in decision making
- 23. A profit centre is a centre
 - a. Where the manager has the responsibility of generating and maximising profits
 - b. Which is concerned with earning an adequate Return on Investment
 - c. Both of the above
 - d. Which manages cost
- 24. Responsibility Centre can be categorised into:
 - a. Cost Centres only
 - b. Profit Centres only
 - c. Investment Centres only
 - d. Cost Centres, Profit Centres and Investment Centres
- 25. Cost Unit is defined as:
 - Unit of quantity of product, service or time in relation to which costs may be ascertained or expressed
 - A location, person or an item of equipment or a group of these for which costs are ascertained and used for cost control
 - c. Centres having the responsibility of generating and maximising profits
 - d. Centres concerned with earning an adequate return on investment
- 26. Abnormal cost is the cost:
 - a. Cost normally incurred at a given level of output

- b. Cost not normally incurred at a given level of output
- c. Cost which is charged to customer
- d. Cost which is included in the cost of the product
- 27. Conversion cost includes cost of converting....... into......
 - a. Raw material, WIP
 - b. Raw material, Finished goods
 - c. WIP, Finished goods
 - d. Finished goods, Saleable goods
- 28. Sunk costs are:
 - a. relevant for decision making
 - b. Not relevant for decision making
 - c. Cost to be incurred in future
 - d. Future costs

29. Calculate the prime cost from the following information:

Direct material purchased: ₹1,00,000; Direct material consumed: ₹90,000; Direct labour: ₹60,000 Direct expenses: ₹20,000 Manufacturing overheads: ₹30,000

- a. ₹ 1,80,000
- b. ₹ 2,00,000
- c. ₹ 1,70,000
- d. ₹ 2,10,000
- 30. Total cost of a product: ₹10,000 Profit: 25% on Selling Price Profit is:
 - a. ₹ 2,500
 - b. ₹ 3,000
 - c. ₹ 3,333
 - d. ₹ 2,000

Answer:

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

Fundamentals of Business Mathematics -

Module 1: Arithmetic

Module 2: Forms of Market

Module 3: Money and Banking

FOUNDATION

Paper-3

Fundamentals of Business Mathematics and Statistics (FBMS)

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. Find the value of 505th term for: 1001, -1001, 1001, -1001, and 1001
 - a) 1001
 - b) -1001
 - c) -1000
 - d) 1000
- **2.** For any A.P. series which is starting with 128, each term increased by 1.75, what would be value of 'd'?
 - a) 128.00
 - b) 1.75
 - c) 3.50
 - d) 129.75
- **3.** If the Last term is 292, First Term is 127, value between two consecutive terms is 11 added, find the number of terms in the series.
 - a) 16
 - b) 15
 - c) 17
 - d) 14
- **4.** Calculate 'd' for the series: $(\frac{1}{2})$ wy, $(-\frac{1}{2})$ wy, $(-\frac{3}{2})$ wy, $(-\frac{5}{2})$ wy
 - a) 1
 - b) 1/2
 - c) $-\frac{1}{2}$
 - d) -1

For the Series 25, 50, 100, 200, 400, 800, 1600, 3200, 6400, 12800, 25600 answer the following questions (Q5 to Q7)

- 5. Which term of the series would be 409600?
 - a) 12
 - b) 11
 - c) 10
 - d) 15

- **6.** What would be the sum of first 9 terms of the series?
 - a) 12775
 - b) 25575
 - c) 19175
 - d) 18800
- 7. Identify the type of given series.
 - a) T.P.
 - b) G.P.
 - c) H.P.
 - d) Neither of the Above

For the Series 177147, 59049, 19683, 6561, 2187, 729, 243, 81, 27, 9, 3, 1 answer the following questions (Q8 to Q12)

- **8.** Identify the type of given series.
 - a) A.P.
 - b. H.P.
 - c. G.P.
 - d. Neither of the Above
- **9.** Find the value of 7th term of the series.
 - a) 243
 - b) 81
 - c) 27
 - d) 6561
- 10. Which term of the series would be 81?
 - a) 9
 - b) 8
 - c) 10
 - d) 7
- 11. What would be the value of 11th term?
 - a) 1/3
 - b) 1/27
 - c) 3
 - d) 1

- 12. What would be the sum of first 12 terms of the series?
 - a) 265716
 - b) 265720
 - c) 265719
 - d) 272265
- **13.** The sum of all the relative frequencies equal to always
 - a) 1.000 or 100%
 - b) 0
 - c) 100
 - d) 50%
- 14. Find the odd man out from the following
 - (a) Regression
 - (b) Kurtosis
 - (c) Sampling
 - (d) Central Tendency
- **15.** Classes in any relative or simple frequency distributions are all
 - a) Exclusive type
 - b) Inclusive type
 - c) Exponential type
 - d) Polynomial type
- **16.** Mutually exclusive type means no data point falls into more than one category.
 - a) All data point falls into one category
 - b) Few data point falls into more than one category
 - c) No data point falls into more than one category
 - d) None of the above
- 17. Measurement of skewness is
 - (a) Analysis of data
 - (b) Presentation of data
 - (c) Organisation of data
 - (d) Interpretation of data
- **18.** If we show the frequency of each class as a percentage of total frequency then we get

- a) Relative Frequency Distribution
- b) Relative Mutually exclusive Distribution
- c) Relative Inclusive Distribution
- d) Relative polynomial Distribution
- 19. Which one of the following is synonymous words?
 - (a) Status, Staistik, Statista
 - (b) Staistik, Statista, Stats
 - (c) Statistic, Statistia, Stats
 - (d) Statistic, Statistia, Status
- **20.** The graphs of frequency distribution are designed to present
 - (a) The characteristic features of a frequency data
 - (b) The characteristic features of groups
 - (c) The characteristic features of the statistical world
 - (d) The characteristic features of individual data
- **21.** When the class-intervals are so fixed that the upper limit of the class is included in that class, it is known as
 - a) Exclusive method of classification
 - b) Inclusive method of classification
 - c) Exhaustive method of classification
 - d) None of the above
- 22. In a series the class limits are extended to class boundaries by adjusting adjustment factor, which is equal to half of the difference between the upper limit of the one class and lower limit of the next class. The series so obtained is
 - a) Discrete
 - b) Synchronous
 - c) Open ended
 - d) Continuous
- 23. Class magnitude is equal to
 - (a) Upper class boundary
 - (b) Upper class boundary Lower class boundary
 - (c) Lower class boundary
 - (d) Upper class boundary + Lower class boundary

- 24. Percentage frequency of a class interval is
 - a) Percentage frequency = (Total frequency-Class frequency)* 100
 - b) Percentage frequency = (Class frequency +Total frequency)* 100
 - c) Percentage frequency = (Class frequency *Total frequency)* 100
 - d) Percentage frequency = (Class frequency/ Total frequency)* 100
- **25.** When the basis of classification of data is according to differences in time, the classification is called
 - a) Quantitative Classification
 - b) Temporal Classification
 - c) Spatial Classification and
 - d) Qualitative Classification
- **26.** Which one of the following is not an advantage of classification of data?
 - a) It condenses the data and ignores unnecessary details
 - b) It facilitates comparison of data
 - c) It helps in studying the relationships between several characteristics
 - d) It facilitates further incorporation of external information
- **27.** Which one of the following is not a main characteristics of a good classification?

- a) It should be exhaustive
- b) It should be unambiguous
- c) It should be inclusive
- d) It should be stable
- **28.** Classification is the process of arranging the available data into various
 - a) Homogenous classes
 - b) Heterogeneous classes
 - c) Discrete classes
 - d) Exhaustive classes
- **29.** Information obtained from the research papers published by University departments is a method of collecting
 - a) Data
 - b) Secondary data
 - c) Primary data
 - d) None of the above
- **30.** The range of the marks from 1 to 100 is grouped into ten classes or groups viz: 1 10, 11-20 and so on. The class interval is
 - (a) 5
 - (b) 8
 - (c)9
 - (d) 10

Answer:

Allsv	, cı .	
1	a	Value of 505th term for:
		1001, -1001, 1001, -1001, 1001
		Type of Series – G.P.
		r' = 2nd term/1st term = $-1001/1001 = -1$
		$An = a*r^{(n-1)}$
		or, 1001 * (-1) ⁽⁵⁰⁵⁻¹⁾
		or, 1001 * (-1) ⁵⁰⁴
		or, 1001* 1
		or, 1001
2	b	When the Series is increased by 1.75 and being A.P.,
		'd' = Difference between two consecutive terms
		'd' = 1.75
3	a	If the Last term is 292, First Term is 127, value between two consecutive terms is 11 added, find the number of terms in the series
		$A_n = a + (n-1)*d$
		or, 292 = 127 + (n-1) * 11
		or, 292-127 = (n-1)*11
		or, 165 = (n-1) *11
		or, 165 / 11 = n-1
		or, $15 = n-1$
		or, $n = 15 + 1 = 16$
4	d	$(\frac{1}{2})$ wy, $(-\frac{1}{2})$ wy, $(-\frac{3}{2})$ wy, $(-\frac{5}{2})$ wy
		Value of 'd' = 2nd Term – 1st Term
		$d = (-\frac{1}{2}) - (\frac{1}{2}) = (-\frac{1}{2} - \frac{1}{2}) = -1$
5	d	Term of the series would be 409600
		Value = a * $r^{(n-1)}$ = 25 * (2) $^{(n-1)}$ = 409600
		$409600/25 = (2)^{n-1}$
		$16384 = (2)^{n-1}$
		$2^{14} = (2)^{n-1}$
		14 = n-1
		n=14+1=15

6	a	Sum of first 9 terms
		$a * \{r^n - 1 / r - 1\} = 25* \{(2^9 - 1)/2 - 1\}$
		= 25 * { (512 – 1) /1}
		= 25*511 = 12775
7	b	Type of Series – G.P.
8	С	Type of Series – G.P.
9	a	Value of 7 th term = $a * r^{(n-1)} = 177147 * (1/3)^{(7-1)}$
		$= 177147 * (1/3)^6 = 177147 * 1/729 = 243$
10	b	term of the series would be 81
		Value = a * $r^{(n-1)} = 177147 * (1/3)^{(n-1)} = 81$
		$81 / 177147 = (1/3)^{n-1}$
		$1/2187 = (1/3)^{n-1}$
		$1/(37) = (1/3)^{n-1}$
		$(1/3)7 = (1/3)^{n-1}$
		7= n-1
		n=7+1=8
11	С	Value of 11^{th} term = $a*r^{(n-1)} = 177147*(1/3)^{(11-1)}$
		$= 177147 * (1/3)^{10} = 177147 * 1/59049 = 3$
12	b	Sum of first 12 terms of the series
		$a * \{1-r^{n}/1-r\} = 177147*\{(1-(1/3)^{12})/1-(1/3)\}$
		= 177147 * {(1- 1/531441) / (2/3)}
		= 177147*531440/531441*3/2 = 265720

13	14	15	16	17	18	19	20	21
a	С	b	с	a	a	a	a	b
22	23	24	25	26	27	28	29	30
d	b	d	b	d	С	a	b	d

Suggestions:

The study guide is to be followed thoroughly. Supplementary readings could be made from other resources. In this issue MCQs are based on basic concepts developed in the respective modules/sub modules of the study guide. Students should try to solve individual questions with concepts developed from guide book to understand the correct answer of each question. Formula used here are all covered in study guide. Brief solutions on selected problems are given as keys.

Best Wishes.

Fundamentals of Business Economics -

Module 1: Basic Concepts

Module 2: Forms of Market

Module 3: Money and Banking

Module 5: Fundamentals of Management

FOUNDATION

Paper-4

Fundamentals of Business Economics and Management (FBEM)

TIPS ON

BUSINESS ECONOMICS AND MANAGEMENT FOR THE MONTH OF JULY 2025

Let us start our mock test.

- I. Choose the correct answer:
- 1. Who was the proponent of the scarcity definition of economics?
 - A. Samuelson
 - B. Robbins
 - C. Pigou
 - D. Marshall
- 2. Who invented "Multiplier theory"?
 - A. Schumpeter
 - B. Samuelson
 - C. Keynes
 - D. None of the above
- 3. If the level of expenditure on a commodity remains the same, even if the price of it falls, the price elasticity of demand will be
 - A. Greater than unity
 - B. Less than unity
 - C. Equal to unity
 - D. None of the above
- 4. A point to the left of the mid point of a linear demand curve will have price elasticity of demand which is
 - A. Relatively elastic
 - B. Relatively inelastic
 - C. Unit elastic
 - D. None of the above
- 5. Demand for durable goods usually remains
 - A. Relatively elastic
 - B. Relatively inelastic
 - C. Unitary elastic
 - D. None of the above
- 6. The price elasticity of demand for salt is
 - A. Elastic
 - B. Perfectly elastic
 - C. Inelastic
 - D. None of the above

- When price elasticity of demand is infinity, then MR will be
 - A. Greater than price
 - B. Equal to price
 - C. Less than price
 - D. None of the above
- 8. Law of increasing returns to scale is a
 - A. Long run phenomenon
 - B. Medium run phenomenon
 - C. Short run phenomenon
 - D. None of the above
- 9. As output rises, AFC
 - A. Also rises
 - B. First falls then rises
 - C. Falls but it cannot be zero
 - D. None of the above
- 10. When AVC is rising then
 - A. SMC>AVC
 - B. SMC<AVC
 - C. SMC=AVC
 - D. None of the above
- 11. When AVC curve is rising
 - A. SMC curve will also be rising
 - B. SMC curve will be falling
 - C. SMC curve will be parallel to x-axis
 - D. Nothing can be predicted
- 12. Profit will be maximum when
 - A. AR=MR
 - B. MR curve cuts the AR curve from below
 - C. Both A and B
 - D. None of the above
- 13. Internal economies of scale occurs when
 - A. LAC curve sloping downward
 - B. SAC curve sloping downward

- C. LAC curve sloping upward
- D. SAC curve sloping upward
- 14. External economies of scale occurs when
 - A. LAC curve shifts downward
 - B. SAC curve shifts downward
 - C. LAC curve shifts upward
 - D. SAC curve shifts upward
- 15. The principal goal of a monopoly firm is assumed to be
 - A. Sales maximization
 - B. Revenue maximization
 - C. Profit maximization
 - D. None of the above
- 16. Product differentiation is the other name of
 - A. Monopoly
 - B. Discriminating monopoly
 - C. Monopolistic competition
 - D. None of the above
- 17. Kinked demand curve is related to
 - A. Oligopoly
 - B. Monopoly
 - C. Monopolistic competition
 - D. None of the above
- 18. Under perfect competition, a firm faces a demand curve which is
 - A. Downward sloping
 - B. Parallel to the x- axis
 - C. Upward rising
 - D. None of the above
- 19. What is the name of the central bank of England?
 - A. Central bank of England
 - B. Bank of London
 - C. Bank of England
 - D. None of the above
- 20. Inflation can be controlled if
 - A. Bank rate is increased
 - B. Govt. bond is sold in the open market
 - C. CRR is increased
 - D. All the three above

- 21. The narrow money in an economy is denoted by
 - A. M4
 - B. M3
 - C. M1
 - D. None of the above
- 22. The final step in decision making process is
 - A. Selection of an alternative
 - B. Developing alternative
 - C. Evaluation of alternative
 - D. Implementation and follow up of decision
- 23. Free-rein Leadership is also known as
 - A. Laissez Faire leadership
 - B. Participative leadership
 - C. Authoritarian leadership
 - D. None of the above
- 24. Selection is a process of rejection hence it is a
 - A. Positive process
 - B. Negative process
 - C. either A or B
 - D. none of the above
- 25. T-group training is also called
 - A. Class room training
 - B. Apprenticeship training
 - C. Internship training
 - D. Sensitivity training
- 26. Introduction of a person to a job is called
 - A. Induction
 - B. Placement
 - C. Orientation
 - D. None of the above
- 27. Vestibule training is considered as a part of
 - A. Off-the-job training
 - B. On-the-job training
 - C. Both A and B
 - D. None of the above

- 28. Who takes the initiative in formulating major objectives, strategies, policies
 - A. Middle management
 - B. Top management
 - C. Lower management
 - D. All of the above
- 29. Which of the following are called standing plans?
 - A. Policies
 - B. Procedures

- C. Rules
- D. All of the above
- 30. Carrot and stick approach to motivation is adopted under which system?
 - A. Exploitative Autocratic
 - B. Benevolent Autocratic
 - C. Consultative
 - D. Democratic

Answer:

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

So friends!!

I asked you to go through the "straight line" chapter of co-ordinate geometry. I hope all of you have followed my instruction. So this mock test will be a cake-walk for you. Please maintain a record of your performance in all the mock tests. That will indicate your progress in this paper. Of course you should not consult the KEY before you finish off solving the test paper.

CMA INTERMEDIATE COURSE

Syllabus 2022

Module 2: **Indian Contracts** Act, 1872

INTERMEDIATE

Group I - Paper-5

Business Laws and Ethics (BLE)

Contract of Indemnity

Understanding Contract of Indemnity: A Contemporary Overview

The concept of indemnity, at its core, means providing security against loss. It belongs to a class of contingent contracts where one party (the indemnifier) commits to compensating another (the indemnity holder) for any loss that may occur due to the actions of the indemnifier or a third party. These contracts primarily serve to safeguard the promisee from anticipated harm.

Under Indian law, a contract of indemnity is defined in Section 124 of the Indian Contract Act, 1872, which describes it as an agreement where one party promises to protect the other from loss caused by their conduct or that of another person. These contracts typically involve two parties - the indemnifier, who takes on the liability, and the indemnity holder, who is protected against the risk.

Nature and Scope

Contracts of indemnity can be express or implied. Express indemnity typically arises from written agreements like insurance policies or construction contracts, where liabilities are explicitly laid out. In contrast, implied indemnity is not expressly written but inferred from the conduct or relationship between parties - such as that of an agent and principal.

One of the landmark cases highlighting implied indemnity is Secretary of State v. Bank of India, where the court ruled that if someone acts at another's request in good faith and suffers loss, they are entitled to be indemnified - even if the act turns out to be injurious. This case reinforced that implied indemnity is recognized under Indian law, even though Section 124 only refers to express contracts.

Further legal backing for implied indemnity is found under:

- Section 69: If someone interested in paying a debt legally owed by another makes that payment, they are entitled to reimbursement.
- Section 145: A surety in a contract of guarantee has the right to be indemnified by the principal debtor.
- Section 222: An employer must indemnify their agent for lawful acts performed in the course of business.

Indemnity vs Damages

It's essential to distinguish between indemnity and damages. Indemnity is a pre-agreed protection against loss, while damages arise from the breach of a contract. The right to indemnity stems from the original contract, whereas damages are a result of legal consequences following non-performance. Often these rights are confused because indemnity may overlap with the extent of damages in practice.

Indemnity in Tort

Indemnity clauses can also extend to tortious liabilities. These clauses are often categorized into:

- Agreements where one party indemnifies another against all liabilities in tort, as seen in "knock-forknock" agreements in industrial contracts.
- 2. Agreements where a party indemnifies the other against liability incurred by a third party's actions.

A significant English case, Yeoman Credit Ltd. v. Latter, clarified the distinction between indemnity and guarantee. The court held that indemnity is enforceable even when the underlying transaction (like one with a minor) is void, whereas a guarantee would fail under such circumstances.

Legal Implications and Purpose

Contracts of indemnity serve several legal and commercial functions:

- Risk Allocation: They help parties allocate commercial risks contractually in advance.
- Remoteness and Mitigation: While damages require the plaintiff to mitigate losses and prove foreseeability, indemnity operates more as a contractual debt claim rather than a claim in damages.
- Negligence: Courts are cautious about allowing indemnity clauses to cover a party's own negligence.
 In E.E. Caledonia Ltd. v. Orbit Valve Co., the court ruled that unless clearly stated, indemnity does not extend to cover negligent acts.

Landmark Indian Cases

Several Indian cases have shaped the understanding of indemnity contracts:

1. Gajan Moreshwar Parelkar v. Moreshwar Madan Mantri (1942)

The plaintiff executed a mortgage and later, at the defendant's request, transferred land rights. When the defendant failed to fulfill the payment, the plaintiff sued for indemnity. The Bombay High Court ruled in favor of the plaintiff, holding that even if no actual loss had occurred, incurring a potential liability justified indemnity.

2. Adamson v. Jarvis (1827)

An auctioneer sold cattle on the defendant's instructions. When it was discovered that the defendant was not the rightful owner, the auctioneer was held liable and sued for indemnity. The court ruled that since the auctioneer acted in good faith under the defendant's direction, he deserved indemnity.

3. Osman Jamal & Sons Ltd. v. Gopal Purshottam (1929)

Here, a company acting as a commission agent was indemnified by the principal against loss. When the principal failed to take delivery of goods, resulting in a resale at a lower price, the court held that the indemnity was enforceable even though the plaintiff hadn't yet paid the vendor. The court highlighted that indemnity protects not just against payments made but also against liabilities incurred.

Theoretical Insights and Analysis

Indemnity is best viewed as a subset of contractual compensation mechanisms. It is not only a legal duty but often a commercially motivated obligation, voluntarily assumed by the indemnifier. The Indian definition (Section

124) is somewhat restrictive because it focuses only on express indemnities for third-party acts, leaving implied indemnities unaddressed, despite being recognized in judicial practice.

One critical insight is that indemnity should not extend to acts of God or natural causes unless explicitly agreed upon. Holding indemnifiers liable for unforeseen, uncontrollable events would contradict the principles of fairness and voluntariness upon which indemnity contracts are based.

The scope of indemnity, especially in insurance contracts, is generally broader and often includes protection against accidental losses, unlike conventional indemnity clauses that require a direct relationship to the promisor's act.

Conclusion

Contracts of indemnity are indispensable in modern legal and commercial systems. They serve to balance risks, allocate liabilities, and ensure fairness between contracting parties. Though Indian law provides a basic framework under Section 124, much of its application is informed by judicial interpretations, case laws, and principles from English common law.

Recent case laws and jurisprudence suggest a shift towards pragmatic enforcement focusing more on commercial realities than rigid formalities. The line between indemnity and guarantee, while subtle, is crucial in contract enforcement. Going forward, businesses and legal professionals must pay close attention to how indemnity clauses are drafted and interpreted especially in areas involving third-party claims, negligence, and implied obligations.

Bailment and Pledge under the Indian Contract Act, 1872

The Indian Contract Act, 1872, provides the foundational framework for all types of contractual relationships, including agreements involving the transfer of possession of goods without the transfer of ownership. Two such arrangements are bailment and pledge, which are governed by Sections 148–171 and Sections 172–181 respectively. Though both involve the temporary transfer of goods, they differ significantly in their purpose, legal implications, and the rights and duties of the parties involved. This article explores these concepts in detail, highlighting the key features, relevant statutory provisions, and significant case laws that help in understanding their practical application.

I. Bailment (Sections 148–171)

Section 148 of the Indian Contract Act defines bailment as the process by which one person (the bailor) delivers goods to another (the bailee) for a specific objective, under the condition that the goods will be returned or dealt with as per the bailor's instructions once the objective is fulfilled. Bailment is based on trust, and the bailee holds the goods temporarily without any intention to own them.

Essential Features of Bailment

- Transfer of Possession: A core element of bailment is the delivery of possession, which can be either physical or constructive. It must be distinguished from mere custody, where control over the goods is not transferred. For instance, in Kavita Trehan v. Balsara Hygiene Products Ltd. (AIR 1992 Del 103), it was held that bailment requires actual or constructive delivery of goods to the bailee.
- Existence of Contract: Although bailment typically arises out of a contract (express or implied), the law also recognizes bailment in certain situations where a formal agreement is absent such as when someone finds lost property and assumes responsibility for it.
- 3. Specific Purpose: The goods are handed over for a definite reason—such as safekeeping, repair, or transportation. This purpose must be clear and agreed upon by both parties.
- 4. Return of Goods: The bailee is obligated to return the goods once the purpose is achieved or to dispose of them according to the instructions of the bailor.

Rights and Duties of the Parties

Duties of the Bailee:

- Must take reasonable care of the goods (Section 151).
- Cannot use the goods for unauthorized purposes (Section 154).
- Must not mix the bailor's goods with his own without consent (Sections 155–157).
- Must return the goods as agreed (Section 160).

Duties of the Bailor:

- Must disclose any known defects in the goods (Section 150).
- Should reimburse the bailee for any expenses incurred in connection with the bailment (Section 158).

Important Judicial Interpretations

- In State of Gujarat v. Memon Mahomed Haji Hasan (1967) 3 SCR 928, the court held that bailment could arise even without a formal contract, such as when government authorities seize goods and take responsibility for their safekeeping.
- In Dhian Singh Sobha Singh v. Union of India (AIR 1958 SC 274), the Supreme Court highlighted the liability of a bailee (in this case, the railways) for loss or damage due to negligence.

II. Pledge (Sections 172–181)

Section 172 defines a pledge as a specialized form of bailment in which goods are delivered as security for the payment of a debt or the fulfillment of a promise. The person delivering the goods is called the "pawnor," while the recipient is the "pawnee." Unlike general bailment, pledge serves a financial or contractual obligation, providing the pawnee with certain rights, especially in case of default by the pawnor.

Key Elements of a Pledge

- Bailment Relationship: Similar to bailment, pledge involves transferring possession of goods, not ownership. However, as held in Morvi Mercantile Bank Ltd. v. Union of India (AIR 1965 SC 1954), the delivery need not occur simultaneously with the creation of the debt.
- 2. Purpose of Security: What makes a pledge distinct is

- its specific purpose, the goods are handed over strictly as collateral to secure a debt or promise.
- 3. Right to Sell Goods: In case of default by the pawnor, the pawnee has the right to sell the goods after giving reasonable notice (Section 176).
- 4. Right of Redemption: Until the goods are actually sold, the pawnor retains the right to redeem them by fulfilling the underlying obligation (Section 177).

Rights and Obligations

Rights of the Pawnee:

- To retain the goods until the debt is paid (Section 173).
- To retain goods for subsequent advances as well (Section 174).
- To sue the pawnor or sell the goods upon default (Section 176).

Duties of the Pawnee:

- Must take reasonable care of the goods, similar to a bailee.
- Cannot misuse or mix the pledged goods.

Rights of the Pawnor:

- Has the right to redeem the goods before the actual sale.
- Is entitled to any surplus from the sale proceeds after the debt is recovered (Section 176).

Important Case Laws

- Lallan Prasad v. Rahmat Ali (AIR 1967 SC 1322) emphasized that while the pawnee has a special property in the goods, the general ownership remains with the pawnor. The pawnee can sell the goods upon default, but only after due notice.
- In Karnataka Pawnbrokers' Association v. State of Karnataka (1998) 3 SCC 423, the Supreme Court upheld the state's power to regulate pawnbroking practices and recognized laws that protect the interests of pawnors.
- Union Bank of India v. Official Liquidator, Goenka Alloys Steels Ltd. (2006) 9 SCC 1 clarified that a pawnee, being a secured creditor, enjoys priority over other creditors during insolvency proceedings.

III. Comparison between Bailment and Pledge

The following table outlines the primary distinctions between bailment and pledge:

Aspect	Bailment	Pledge							
Purpose	Broad purposes (safekeeping, repair, transport, etc.)	Specifically to secure a debt or the performance of a promise							
Right to Sell	Bailee has no right to sell the goods	Pawnee can sell the goods after default and due notice (Section 176)							
Consideration	May or may not involve consideration	Always involves a financial obligation or promise							
Interest in Goods	Bailee holds limited interest consistent with the purpose	Pawnee holds a special security interest							
Right to Use Goods	Bailee may use goods if permitted in contract	Pawnee usually has no right to use the goods							

Conclusion

In essence, pledge is a specialized form of bailment with a financial or contractual objective at its core. While bailment encompasses a wider range of purposes involving the temporary transfer of possession, pledge is strictly for securing performance or repayment, and grants the pawnee greater rights, including the ability to sell the goods upon default.

Both bailment and pledge are critical legal concepts that govern commercial and personal relationships involving movable property. The Indian Contract Act, 1872, clearly defines the roles, responsibilities, and rights of the involved parties, supported by a rich body of case law that clarifies and enforces these principles in real-world contexts. Understanding these legal distinctions helps in managing risk and ensuring proper compliance in business transactions.

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.
- 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

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

2. Fraud Prevention and Detection

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

3. Effective Cash Management

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

4. Improves Internal Control

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

5. Compliance and Auditing

- Regulatory Compliance: Helps comply with regulatory requirements by maintaining accurate financial records.
- 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.
- 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.

Depreciation Expense = Cost-Salvage Value / Useful Life

Depreciation Expense = 15,000 - 3,000 / 5 = 12,000 / 5 = 2,400

2. An asset is purchased for Rs.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.

Depreciation Rate = 100% / Useful Life×2 = 100%/4×2 = 50%

First Year:

Depreciation Expense = Book Value at Beginning of Year

× Depreciation Rate

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

Second Year:

Book Value at Beginning of Second Year = Cost – Accumulated Depreciation

Book Value =
$$25,000 - 12,500 = 12,500$$

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

The depreciation expenses are $\overline{12,500}$ for the first year and $\overline{6,250}$ 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:

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

- b) A check that has been cleared by the bank but not recorded in the cash book
- c) A check that has been issued and cleared
- d) A check that has been cancelled
- 5. If the bank reconciliation statement shows an adjusted cash book balance higher than the bank statement balance, which of the following might be true?
 - a) There are outstanding checks
 - b) There are deposits in transit
 - c) The bank has made an error
 - d) The company has made an error
- 6. What is the primary purpose of depreciation?
 - a) To allocate the cost of an asset over its useful life
 - b) To increase the value of an asset over time
 - c) To match the revenue with the expenses in the same period
 - d) Both a and c
- 7. Which depreciation method allocates an equal amount of expense each year?
 - a) Declining Balance Method
 - b) Straight-Line Method

- c) Units of Production Method
- d) Sum-of-the-Years-Digits Method
- 8. How is accumulated depreciation reported in the financial statements?
 - a) As an expense on the income statement
 - b) As a contra asset on the balance sheet
 - c) As a liability on the balance sheet
 - d) As a revenue on the income statement
- 9. What is the primary purpose of amortization?
 - a) To allocate the cost of an intangible asset over its useful life
 - b) To increase the value of an intangible asset over time
 - c) To match the revenue with the expenses in the same period
 - d) Both a and c
- 10. Which of the following is an example of an intangible asset that would be amortized?
 - a) Building
 - b) Equipment
 - c) Patent
 - d) Land

Answer:

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

Module 1: Basics of Income Tax Act

INTERMEDIATE

Group I - Paper-7A

Direct Taxation (DT)

Residential Status

The taxability of income under the Income-tax Act, 1961 depends significantly on the residential status of an assessee. Section 6 lays down clear parameters for classifying individuals and other entities as residents or non-residents, while Section 5 determines the *scope of total income* based on such classification. This chapter forms the conceptual backbone for understanding global income taxation and is highly relevant both for academic and practical applications.

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 any one of the following conditions - i) He is in India in the previous year for a period of 182 days or more [Sec. 6(1)(a)]; or ii) 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 year simmediately preceding the relevant previous year [Sec. 6(1)(c)] Exceptions A. In the following cases, condition (ii) of sec. 6(1) [i.e. sec. 6(1)(c)] is irrelevant: a) An Indian citizen, who leaves India during the previous year for employment purpose. b) An Indian citizen, who leaves India during the previous year as a member of crew of an 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 condition (ii) of sec. 6(1) 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 condition given u/s 6(1A), he is considered as deemed resident. The conditions are: a. He is a citizen of India b. His total income, other than the income from foreign sources, exceeds ₹ 15 lakhs during the previous year; c. He is not satisfying any of the basic conditions given u/s 6(1) [i.e., 182 days or 60 days + 365 days]; and d. 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 - a) He has been resident in India [as per sec. 6(1)] in at least 2 out of 10 previous years immediately preceding the relevant previous year; and b) 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 not ordinarily resident in India.

HUF	Management is wholly or partly situated in India	Karta 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	В	С	D	Е	F	G	Н
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 country.
- 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 any of the condition provided in sec. 6(1)
- 8. He has satisfied one condition of sec. 6(1) [i.e. 182 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:

	Tax in	ncidence in the cas	e of
N. CI	Resident &	Resident but	Non
Nature of Income	ordinarily	not ordinarily	resident
	resident	resident	
Income accrued or deemed to be accrued and received or deemed to	Taxable	Taxable	Taxable
be received in India			
Income accrued outside India but received or deemed to be received	Taxable	Taxable	Taxable
in India.			
Income accrued or deemed to be accrued in India but received outside	Taxable	Taxable	Taxable
India			
Income accrued and received outside India from a business controlled	Taxable	Taxable	Not
in or profession set-up in India.			taxable
Income accrued and received outside India from a business controlled	Taxable	Not taxable	Not
or profession set-up outside India.			taxable
Income accrued and received outside India in the previous year (it	Taxable	Not taxable	Not
makes no difference if the same is later remitted to India).			taxable
Income accrued and received outside India in any year preceding the	Not taxable	Not taxable	Not
previous year and later on remitted to India in current financial year.			taxable
			taxable

<u>Note</u>: 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.2025-26 assuming that –

a) He is an ordinarily resident	b) He is not an ordinarily resident	c) He is a non-r	esident.			
	Particulars		Amount			
Salary received in India from a form	Salary received in India from a former employer of UK					
Income from tea business in Nepal b	Income from tea business in Nepal being controlled from India					
Interest on company deposit in Cana	30,000					
Profit from a business in Mumbai co		1,00,000				
Profit for the year 2022-23 from a b		2,00,000				
Income from a property in India but		45,000				
Income from a property in London b		1,50,000				
Income from a property in London b		2,50,000				
Income from a business in Zambia b	out controlled from Turkey		10,000			

Solution

Calculation of income liable to be taxed in India of Ram for the A.Y.2025-26

	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
Interest on company deposit in Canada -			
- 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
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

Understanding the concept of Residential Status under Section 6 and its impact on tax incidence under Section 5 is fundamental for determining taxability of global income. With increasing cross-border mobility and evolving tax laws, students must grasp not only statutory definitions but also their practical applications through illustrations and casebased reasoning. A strong command over these concepts ensures better compliance and exam readiness.

Topic

Module 4: Concept of Indirect Taxes

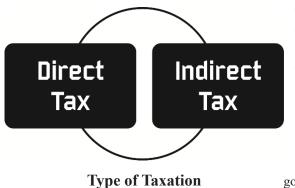
INTERMEDIATE

Group I - Paper-7B

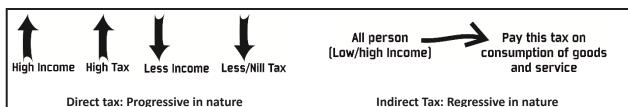
Indirect Taxation (IDT)

Concept of Indirect Tax

In a modern welfare state, taxation serves as the backbone of public finance. Among various types of taxes, *Indirect Taxes* play a significant role in augmenting government revenue without directly burdening the taxpayer. Unlike direct taxes, they are levied on goods and services and are ultimately borne by the consumer. Understanding their nature, structure, and impact is essential for future tax professionals, especially in the context of India's GST regime.



There are two types of taxes: Direct Tax and Indirect 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. Further, it is also levied on supply.
- **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 tax3.
- 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 largely subsumed under GST.

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	Tax evasion is hardly possible because it is included in the price of the goods and services.
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

Indirect taxes form an integral part of the fiscal structure in India. They influence consumer behaviour, pricing, and revenue collection. While they ensure wider tax coverage and ease of collection, their regressive nature also calls for careful policy design. A clear understanding of indirect tax principles, especially under the GST framework, is essential for aspiring professionals to interpret and apply tax laws effectively in real-life scenarios.

Topic

Module 2: Cost Ascertainment - Elements of Cost

INTERMEDIATE

Group I - Paper-8

Cost Accounting (CA)

Materials

The term "materials" refers to the basic items require for the purpose of production or rendering services. It is a major part of current assets as well as working capital. In all the developed and developing countries, about 50% to 80% of total capital is generally invested in material. 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.

Purchase Department and its Functions

Like all other functions purchasing is an important function of management. In big manufacturing organisations separate purchase departments are being set for conducting purchase 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

(i) What to purchase (ii) Where to purchase, (iii) When to purchase, (iv) How to purchase.

Centralised vs Decentralised 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 said to be 'centralised'. But, if the buying function is performed by other respective departmental managers, including the chief purchaser, it is said to be decentralized. The decision for centralized or decentralized purchase will depend on

(i) type and quality of material required, (ii) location of the production centers, (iii) policy of the firm and (iv) urgency of purchasing items.

Although centralized purchase is expensive due to increase in administrative cost, it has the advantage of low price and uniform quality, availability of efficient buying staff, economy in accounting and maintaining optimum stock.

Purchasing Procedure

The main functions of purchase department may include:

- (i) Receiving properly authorized purchase requisitions.
- (ii) Exploring the best sources of supply and selecting the supplier.

- (iii) Placement of purchase order and following up the delivery.
- (iv) Inspecting and receiving of materials, and
- (v) Checking inward invoices and passing the vouchers for payments.

Duties and Functions of the Storekeeper

The storekeeper is a person who should be the in charge of the stores department and also responsible for receipt, storage, and issue of materials. His main function may be summarized:

- (i) Receiving of materials after ensuring quantity and quality.
- (ii) Placing the materials in an 'organized' manner after entering into Bin Cards in order to reduce storage losses.
- (iii) Issuing of stores to production departments against properly authorized requisition.
- (iv) Issuing purchase requisition when re-ordering level is reached.
- (v) Maintaining proper records and checking the Bin Card balances with physical quantities in Bin.
- (vi) Receiving back the surplus material returned.
- (vii)Maintaining different levels of stocks, Max. level, Min. level etc.
- (viii) Preventing unauthorized persons to enter into store.
- (ix) Training and supervising the employees of stores.
- (x) Submitting reports regularly to the management about every item of stores.

Classification and Codification

In order to ensure greater control, materials should be classified on the basis of some similarity, usage etc. and also assigned some symbols or identification numbers or code numbers. Classification accompanied by a proper codification helps not only in proper maintenance of stores but it also facilitates in mechanized accounting and re-ordering.

Different Stock Levels

In order to ensure scientific control and optimum level of inventory, different levels of stocks ure fixed, which are:

- (i) Reorder level (ii) Maximum level (iii) Minimum level
- (iv) Danger level (v) Average level
- (i) Reorder Level:It is that level of stock at which new purchase order is placed for fresh supplies of the material. It is fixed somewhere between the maximum and minimum levels to avoid unnecessary storage or shortage.

Formula: Re-order Level = Maximum period required for delivery x Maximum usage or consumption per day/week/month

(ii) Maximum Level: The maximum level represents that level of stock above which the should not be allowed to rise. This level is to be fixed keeping in mind unnecessary block capital in stores.

Formula: Maximum Level =Re-order level +Reorder quantity - (Minimum consumption x Minimum period of delivery).

(iii) Minimum Level: It is that level below which the inventory of any item should not be allowed to fall. It is known as safety or buffer stock. The main object of fixing this level is to avoid unnecessary delay of production due to shortage of materials.

Formula: Minimum level = Re-order level - (Normal consumption per day/Week/month x

Average period required to obtain delivery).

(iv) Danger Level: Generally, this level is fixed below the minimum level and represents the stage where immediate steps are taken for getting stock replenished. In some cases, danger level of stock is fixed above the minimum level but below the reordering level.

(v) Average Level: It is the average level of stocks that should be maintained throughout year. The cost of storage depends on this average stock.

Formula: ½ (Max. level + Min. level)

Economic Ordering Quantity (EOQ)

It refers to that quantity where the total of inventory carrying cost and ordering cost is minimum. This represents the most favorable quantity to be ordered at the time of purchase. EOQ is also known as Re-order quantities.

Formula : √2AB/C

A = Annual Consumption /demand.

B = Buying cost Per order

C = Carrying cost per unit p.a.

Cost Sheet

The statement of cost element wise, is known as cost sheet. In a cost sheet, besides total expenditure, cost per unit of output, and the various stages of cost (from prime cost to total cost) are shown systematically.

Following are the advantages of a cost sheet:

- (a) It shows the total cost and cost per unit of the product produced during the given period.
- (b) It helps the producers to control over the cost of production.
- (c) It acts as a guide to the manufacturers and helps them in formulating a definite and profitable production policy.
- (d) It helps the management in fixing up the selling price of their products.
- (e) It helps management in comparative study of the various elements of cost with the past result and standard cost

A problem related to cost sheet is given below:

Problem:

From the following particulars regarding the single output of Anindita & Company for the Quarter ended 31st December 2024. Prepare a Statement of Cost of Production; and a Statement of Profit or Loss, assuming Weighted Average Method is followed by the Company for valuation of closing stock of finished goods:

Stock	1.10.2024.	31.12.2024.		
Raw materials	₹ 40000	₹ 50000		
Work in progress	₹ 50000	₹ 70000		
Finished Goods	₹ 72000 (4000 units)	₹ ? (5000 units)		
Purchase of Raw Materials		₹ 160000		
Direct Labour		₹ 110000		
Chargeable Expenses		₹ 40000		
Machine Hour Rate		₹ 16 per hour		
Machine Hours Worked		5000 hours.		
Office and Administration overhead	d	@ ₹ 4.80 per unit.		
Selling and Distribution overhead		@ ₹ 3.00 per unit.		
Sales of 24000 units.		@ ₹ 26 per unit .		

What would be the difference in stock value if the Company follows FIFO method for valuation of closing stock of finished goods?

Solution:

In the Books of Anindita & Company Ltd. Historical Cost Sheet for the year ended 31.12.2024.

Sale = 24000 units.		Output = 25000 units.
	Total ₹	Per unit. ₹
Opening Raw materials	40000	
Add: Purchase of Raw materials	160000	
	200000	
Less: Closing Raw Materials	50000	
Raw Materials Consumed	150000	6.00
Add: Direct Labour Cost	110000	4.40
Chargeable Expenses	40000	1.60
Prime Cost	300000	12.00
Add; Adjustment for Work in progress	- 20000	- 0.80
Add: Works Overhead (₹ 16 x 5000)	80000	3.20
Works Cost	360000	14.40

Add: Office and Administration Overhead (₹ 4.80x 25000)	120000	4.80
Cost of Production	480000	19.20
Add: Opening Finished Goods	72000	
	552000	19.03448
Less: Closing Finished Goods under Weighted Avg.	95172	
(5000 x 19.03448276)		
Cost of Goods sold	456828	19.03448
Add : Selling and Distribution O/H (₹ 3 x 24000)	72000	3.0000
Cost of Sales	528828	22.03488
Add: Profit (balancing figure)	95172	3.96 552
Sales	624000	26.00000

Closing Stock under FIFO Method = $480000/25000 \times 5000 = ₹96000$.

Profit would be ₹ 96000, i.e. ₹ 624000 - [480000 + 72000 - 96000 + 72000] = ₹ 624000 - 528000 = ₹ 96000.

Overhead

Overheads comprise those costs which the cost accountant is either unable or unwilling to allocate to a particular product, job or process. The C.I.M.A., London, terminology defines the term as "the aggregate of indirect material, indirect wages and indirect expenses." Broadly speaking, any expenditure over and above the prime cost is known as overhead.

According to the terminology mentioned above, overheads consist of the cost of indirect material, indirect labour and indirect expenses. But, overheads sometimes include even the direct material cost, direct labour cost and chargeable expenses, when they cannot be identified with a particular job. Nails, glue, thread etc. are examples of such cases. Various terms that are generally used to denote overhead are: overhead charges, on cost, overhead expenses, nonproductive costs, loading, burden, supplementary costs etc.

Chargeable Expenses and Overhead

Expenses which are neither direct material cost nor direct labour cost, but which are chargeable or related to a specific job or work order are called Chargeable Expenses. These expenses can also be called Direct Expenses. On the other hand, expenses which cannot be allocated but can only be apportioned to or absorbed by, cost centres or cost units are known as Indirect Expenses and these are called Overheads. These two terms may be distinguished on the basis of their being capable of getting identified with the specific job or work order.

Overheads can be classified in the following ways

According to CIMA London, Terminology, cost classification means "(i) the process of grouping costs according to their common characteristics, and (ii) establishing a series of special groups according to which costs are classified." Thus, on the one hand, it is the determination of definite groups in which the expenses should be classified and the placing of various items into one or the other of these groups according to their common characteristics.

Overheads may be classified according to their functions, elements, behaviors, normality and controllability.

(A) Functional Classification

(i) Manufacturing or Production Overhead

It is the indirect cost incurred for maintaining and operating the manufacturing division of an organization. It includes all such expenses incurred by the factory from the receipt of raw material until production is completed. It is also known as works overhead, factory overhead etc. Some common examples are: Depreciation of plant and factory premises, cotton waste, oil, grease, electricity, fuel, salaries and wages of supervisors etc.

(ii) Administrative Overhead

The term includes all expenses incurred in the direction, control and administration, including secretarial, accounting and financial control, of an undertaking. These are also known as general or office overheads. Some common examples are: Salaries of office staffs, Directors etc, office rent, depreciation of office plant and buildings, telephone expense etc.

(iii) Selling Overhead

This is the expenditure incurred in promoting sales and retaining customers. The examples are : Advertising, salaries and commission of selling agents, salesmen, bad debts etc.

(iv) Distribution Overhead

This expenditure is incurred in the process which begins with making the product produced available for despatch and ends with making the reconditioned empty package available for reissue. Some of the examples are: transport expenses, packing, warehousing ,staff salaries, normal loss of finished goods etc.

(B) Element wise Classification

(i) Indirect Material

This is a part of material cost which cannot be allocated to a particular job or production but is absorbed by cost centre or cost units indirectly. Some examples are: fuel, consumable stores, small tools, cotton waste etc.

(ii) Indirect Labour

This includes such wages which cannot be allocated, but can only be apportioned to cost centres or cost units. Some examples are: wages for maintenance staff, salary of storekeeper and foreman, idle time cost etc.

(iii) Indirect Expenses

The expenses which cannot be allocated directly but can only be apportioned to or absorbed by cost centres or cost units. The common examples are : salary to factory staff, training expenses, taxes, insurance, rents and rates of factory, hospital and dispensary, canteen etc.

(C) Behavioural Classification

(i) Fixed Overhead

Fixed overhead cost represents those costs which tend to remain fixed by variation in volume of output. In fact this is a period cost and remains unaffected for a given period. The examples of such costs are rent and taxes, salaries of staff etc.

(ii) Variable Overhead

This is a cost which tends to vary directly with the change in output. Thus the cost changes in direct proportion to output. The examples of such costs are power, selling commission, repair, fuel etc.

(iii) Semi-variable Overhead

These costs are partly fixed and partly variable. Those expenses which neither remain fixed nor they vary directly with the output are called semi-variable overhead. They do not vary in the same ratio in which the output changes. The main examples of such costs are depreciation, repairs and maintenance etc.

D) Classification according to Normality

(i) Normal Overhead

These represent such overheads which are expected to be incurred in attaining a given output. These overheads are essential and unavoidable. Thus, these costs should be included in product costs.

(ii) Abnormal Overhead

These represent such overheads which are not expected to incurred in attaining a given output, e.g. cost of abnormal idle time. Hence these costs should excluded from total cost and to be charged to Costing Profit and Loss Account.

E) Classification according to Controllability

(i) Controllable Overhead

These overhead costs are those costs which can be controlled by executive action at the point of their incurrence. Generally speaking, all direct costs including direct material, direct labour, direct expenses and some of the overheads are controllable cost.

(ii) Uncontrollable Overhead

These are overhead costs which are not controllable by management. They are incurred on time basis. All fixed costs are uncontrollable.

Topic

Module 2: Operations Planning

INTERMEDIATE

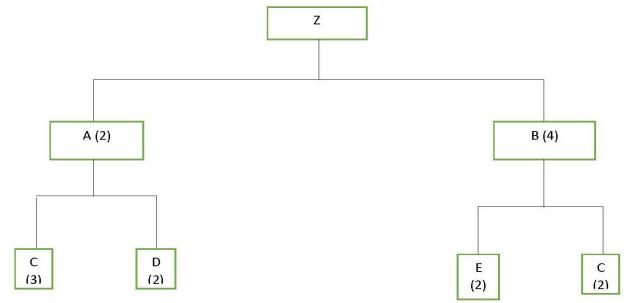
Group II - Paper-9

Operations Management and Strategic Management (OMSM)

Operations Management

In this issue we will discuss on Material Requirement Planning (MRP) with some complex problem. Please refer Sub Module 2.5 of Guide book

Illustration: One hundred twenty units of end item Z are needed at the beginning of week 7. Prepare a Material Requirement Plan for component C. Take into account that on hand there are 40 units of Z, 70 units of A, 100 units of B and 30 units of C. Also there is a scheduled receipt of 20 units of component C in week 4. Lead times are two weeks for Z and B and one week for other components. Lot for Lot ordering will be used for all items. Use the following information also:



Answer:

MRP for aforementioned type combines a sequence of spreadsheet sections, where each section has the following format:

Week Number	Beg. Inventory	1	2	3	4	5	6	7
Item:								
Gross Requirements								
Scheduled Receipts								
Projected on hand								
Net Requirements								
Planned order Receipts								
Planned order Releases								

Steps to be followed:

Step 1: Label the spreadsheet sections, top to bottom, following the order shown in the tree diagram:

> Top section : End Item

Next section : ANext section: BNext section: C

We don't need one for D and one for E as D&E are not components of C

Step 2: Add the lead Time for the end item and each component next to the section labels

Step 3: Add any beginning inventory (on hand) & scheduled receipts quantities for the end item and each component to their spread sheet sections

Outcome of Step 1, 2 & 3 is:

Outcome of Step 1, 2 & 3	is:							
Week Number	Beg. Inventory	1	2	3	4	5	6	7
Item: End Z LT = 2								
Gross Requirements								
Scheduled Receipts								
Projected on hand	40							
Net Requirements								
Planned order Receipts								
Planned order Releases								
Week Number	Beg. Inventory	1	2	3	4	5	6	7
Week Namber	beg. inventory			3	7	<u> </u>		,
Item: A (2) LT =1								
()								
Gross Requirements								
Scheduled Receipts								
Projected on hand	70							
Net Requirements								
Planned order Receipts								
Planned order Releases								
Week Number	Beg. Inventory	1	2	3	4	5	6	7
Week Number	beg. Inventory	тт		3	4	3	U	,
Item: B (4) LT = 2								
(1) = 1								
Gross Requirements								
Scheduled Receipts								
Projected on hand	100							
Net Requirements								
Planned order Receipts								
Planned order Releases								
	-							
Week Number	Beg. Inventory	1	2	3	4	5	6	7
Item: C (3) C(2) LT =1								
Gross Requirements								
Scheduled Receipts					20			
Projected on hand	30							
Net Requirements								
Planned order Receipts								
Planned order Releases								

Step 4: Place the desired end item quantity in the master schedule in the week it is needed and in the gross requirements of the end item in that same week

Outcome of step 5 is as follows:

Master	Week	1	2	3	4	5	6	7
Schedule	Quantity							120
Week Number	Beg. Inventory	1	2	3	4	5	6	7
Item: End Z LT = 2								
Gross Requirements								120
Scheduled Receipts								
Projected on hand	40							
Net Requirements								
Planned order Receipts								
Planned order Releases								

Step 5: Complete the remainder of the plan

Outcome of the step 6 is as follows:

Master	Week	1	2	3	4	5	6	7
Schedule	Quantity							120
Week Number	Beg. Inventory	1	2	3	4	5	6	7
Item: End Z LT = 2								
Gross Requirements								120
Scheduled Receipts								
Projected on hand	40	40	40	40	40	40	40	40
Net Requirements								80
Planned order Receipts								80
Planned order Releases						80		

Planned order receipts = Net requirements, and all are in the same week

Planned order releases are always the same as planned order receipts, but earlier by lead time (two week in this case)

Week Number	Beg. Inventory	1	2	3	4	5	6	7
Itam: A (2) IT-1								
Item: A (2) LT =1								
Gross Requirements						160		
Scheduled Receipts								
Projected on hand	70	70	70	70	70	70		
Net Requirements						90		
Planned order Receipts						90		
Planned order Releases					90			

Week Number	Beg. Inventory	1	2	3	4	5	6	7
Item: B (4) LT = 2								
Gross Requirements						320		
Scheduled Receipts								
Projected on hand	100	100	100	100	100	100		
Net Requirements						220		
Planned order Receipts						220		
Planned order Releases				220				

Week Number	Beg. Inventory	1	2	3	4	5	6	7
Item: C(3)C(2) LT=1								
Gross Requirements				440	270			
Scheduled Receipts					20			
Projected on hand	30	30	30	30	0			
Net Requirements				410	250			
Planned order Receipts				410	250			
Planned order Releases			410	250				

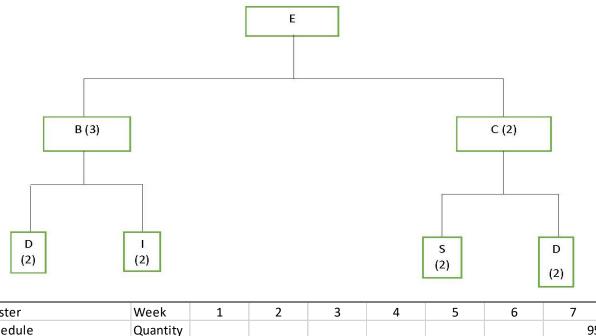
Gross requirement of A = planned order release of Z in 5th Week * 2 (No of components A in each Z)

Gross requirement of B = planned order release of Z in 5th Week * 3 (No of components B in each Z)

Gross requirement of C = planned order release of A in 4th Week * 3 (No of components C in each A)

Gross requirement of C = planned order release of B in 3rd Week * 2 (No of components C in each B)

Illustration: Ninety five units of end item E are needed at the beginning of week 7. Prepare a material requirements plan for component D. Take into account that 5 units of E are currently on hand as well as 50 units of B, 100 units of C and 80 units of D. Also 30 units of C have been outsourced and are expected to arrive in week 4. Lead times are two weeks for E and C and one week for the other components. Assume lot for lot ordering except for D, where multiples of 40 must be used.



Week Number	Beg. Inver	1	2	3	4	5	6	7
Item: End E LT = 2								
item. Liid L Li – Z								
Gross Requirements								95
Scheduled Receipts								
Projected on hand	5	5	5	5	5	5	5	5
Net Requirements								90
Planned order Receipts								90
Planned order Releases						90		
Week Number	Beg. Inver	1	2	3	4	5	6	7
Item: B (3) LT =1								
10011112 (0) 21 1								
Gross Requirements						270		
Scheduled Receipts								
Projected on hand	50	50	50	50	50	50		
Net Requirements						220		
Planned order Receipts						220		
Planned order Releases					220			
Week Number	Beg. Inver	1	2	3	4	5	6	7
Item: C (2) LT = 2								
Gross Requirements						180		
Scheduled Receipts					30			
Projected on hand	100	100	100	100	130	130		
Net Requirements						50		
Planned order Receipts						50		
Planned order Releases				50				
Week Number	Beg. Inver	1	2	3	4	5	6	7
H D (2) D(2) IT 1						-		
Item: D (2) D(2) LT =1								
Gross Requirements				100	440			
Scheduled Receipts								
Projected on hand	80	80	80	80	20	20	20	20
Net Requirements				20	420			
Planned order Receipts				40	440			
Planned order Releases			40	440				

Since D is to be ordered in multiples of 40, so in week 3 although requirement is 20, we have to order 40. So in next week 20 units will be in hand. Therefore actual requirement is 420. But we have to order 440 as multiples of 40. So 20 units will be in hand in next remaining weeks.

Suggestions:

This lesson is an extension of idea developed from teachings imparted by the Guide book issued by Institute. The study guide on Operations Management issued by Institute is to be studied thoroughly. In this issue illustrations are taken for better understanding of MRP. Interested students could refer Operations Management by R.S. Russell & B.W. Taylor, Operations Management by J Stevenson.

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: Accounting of Shares and Debentures Topic: Forfeiture and Reissue of Shares

Where shares of an entity are issued in instalments, there may arises situations where one or more shareholders fail to pay instalments so called up. In such situations, if the Articles of Association of the company so permit, the company may confiscate/seize the shares from such defaulting shareholders on the ground of their non-payment of instalments. This process is known as *Forfeiture of Shares*. On forfeiture –

- The corresponding shareholder is ceased to be a member of share of the company.
- The shares so forfeited are known as *Forfeited Shares*.
- The amount received on shares till such date becomes a capital receipt for the company and transferred to Forfeited Shares A/c.

If the Articles so permit, the shares so forfeited may again

be re-issued by the company to new shareholders. This process is known as Re-issue of Forfeited Shares. These shares are generally re-issued at a price lower than the face value of shares. For Reissue -

- The minimum re-issue price must be equal to called up value less amount collected (capital portion) on each share before forfeiture.
- The resulting loss is adjusted against the balance of the Forfeited Shares A/c,
- The net profit on forfeiture and re-issue of shares, is transferred to Capital Reserve A/c.
- In case the shares are re-issued at a price higher than the face value, the excess amount is not payable to the original shareholders. It is to be transferred to 'Securities Premium A/c'.

Accounting for Forfeiture and Reissue of Shares

The accounting entries for forfeiture and re-issue are as follows:

(i) On forfeiture of shares

Share Capital A/cDr. (Called-up value)

Securities Premium A/cDr. (Premium due but not collected)

To Calls-in-Arrear A/c (Amount unpaid)

To Forfeited Shares A/c (Capital portion received on shares forfeited)

(ii) On re-issue of shares

Bank A/c Dr. (Proceeds from re-issue)

Forfeited Shares A/c Dr. (Discount on re-issue)

To Share Capital A/c (Paid-up value of shares re-issued)

To Securities Premium A/c (Premium on shares re-issued, if any)

(iii) On transfer of profit

Forfeited Shares A/c (Net profit on forfeiture and re-issue)

To Capital Reserve A/c

Illustration 1 (Forfeiture of Shares)

Pass journal entries for share forfeiture in the following independent cases (ignore narration).

- (a) 2,000 equity shares of ₹5 each issued at ₹7 is forfeited for non-payment of call money of ₹1 per share.
- (b) 4,000 equity shares of ₹10 each is forfeited for non-payment of allotment money ₹5 (including premium ₹1) per share and call ₹ 2 per share.
- (c) 8,000 equity shares of ₹10 each (₹7 called up) forfeited for non-payment of first call of ₹3 per share.
- (d) A company invited application for equity shares of ₹4 each payable as follows:

On application ₹3 (including premium)

On allotment ₹2

On first and final call ₹1

Mr. X, holding 10,000 equity shares, failed to pay allotment money and his shares were forfeited before the call was made.

Solution:

In the books of.....

Dr.

Cr.

Journal

Date	Particulars	Amount (₹)	Amount (₹)
(a)	Equity Share Capital A/cDr. (2000 x 5)	10,000	
	To Calls in Arrear A/c (2000 x 1)		2,000
	To Forfeited Shares A/c (2000 x 4)		8,000
(b)	Equity Share Capital A/c(4000 x10)Dr.	40,000	
	Securities Premium A/c(4000 x 1)Dr.	4,000	
	To Calls in Arrear A/c (4000 x 5 + 4000 x 2)		28,000
	To Forfeited Shares A/c (4000 x 4)		16,000
(c)	Equity Share Capital A/cDr. (8000 x 7)	56,000	
	To Calls in Arrear A/c (8000 x 3)		24,000
	To Forfeited Shares A/c (8000 x 4)		32,000
(d)	Equity Share Capital A/cDr. (10000 x 3)	30,000	
	To Calls in Arrear A/c (10000 x 2)		20,000
	To Forfeited Shares A/c (10000 x (3-2)*)		10,000

^{*}Rs.2 is the premium per share included in the application money.

Illustration 2 (Forfeiture and Re-issue of Shares)

A Ltd. issued to public 88,000 shares of ₹100 each at par, payable as follows:

On application ₹25 per share; On allotment ₹40 per share; On 1st call ₹20 per share; and balance on Second and Final Call.

Applications were received for 80,000 shares. Mr. X holding 800 shares failed to pay first and final call money and Mr. Y holding 1600 shares could not pay the final call money. All the shares were forfeited.

Pass journal entries for forfeiture and reissue of shares if –

- (a) All forfeited shares were re-issued to Mr. M at ₹80 each fully paid up.
- (b) 2000 forfeited shares (including all shares of Mr. X) were re-issued to Mr. M at ₹90 each fully paid up.
- (c) All forfeited shares were re-issued to Mr. M at minimum re-issue price as fully called up and paid up.

Solution:

In the books of P Ltd.

Journal Dr. Cr. **Particulars** Date Amount (₹) Amount (₹) Equity Share Capital A/c...(800 x 100)....Dr. 80,000 To Calls in Arrear A/c (800 x (20 + 15))28,000 To Forfeited Shares A/c (800 x (25+40)) 52,000 Equity Share Capital A/c...(1600 x 100)....Dr. 1,60,000 To Calls in Arrear A/c (1600 x 15) 24,000 To Forfeited Shares A/c (1600 x (25+40+20)) 1,36,000 Bank A/c......(2400 x 80)...........Dr. 1,92,000 (a) Forfeited Shares A/c (2400 x 20)Dr. 48,000 To Equity Share Capital A/c (2400 x 100) 2,40,000 1,40,000 To Capital Reserve A/c 1,40,000 Bank A/c......(2000 x 90)......Dr. 1,80,000 (b) Forfeited Shares A/c (2000 x 10)Dr. 20,000 To Equity Share Capital A/c (2000 x 10) 2,00,000 Forfeited Shares A/cDr. 1,34,000 $[800 \times (25+40) - (800 \times 10)] + [(1200 \times (25+40+20) - (1200 \times 10)]$ To Capital Reserve A/c 1,34,000 Bank A/c........ (Note:1)Dr. 52,000 (c) Forfeited Shares A/cDr. 1,88,000

Note 1: Calculation of minimum re-issue price.

The maximum discount that can be offered on re-issue = $\mathbf{\xi}(52,000 + 1,36,000) = \mathbf{\xi}1,88,000$.

So, minimum re-issue price = Paid up value of re-issued shares – maximum discount

$$= (2400 \times 100) - 1,88,000$$

=52,000

To Equity Share Capital A/c (2400 x 10)

2,40,000

Section B: Auditing

Ouestion:

What do you mean by Audit Note Book? What are the contents of Audit Note Book?

Answer:

Audit Note Book is a register maintained by the audit staff to record important points observed, errors, doubtful queries, explanations and clarifications to be received from the clients. It also contains definite information regarding the day-to-day work performed by the audit clerks. In short, in an Audit Note Book a large variety of matters observed during the course of audit are recorded. The note book should be maintained clearly, completely and systematically. It serves as authentic evidence in support of work done to protect the auditor against any legal charge initiated against him for negligence after the end of the auditing. It also acts as a valuable guide for conducting audit for future years.

Contents of Audit Note Book

The following matters are generally incorporated in an Audit Note Book.

1. A list of the account books normally used and maintained.

- 2. Names of the principal officers, their duties and responsibilities.
- 3. Extracts of minutes and contracts affecting the accounts.
- 4. Extracts of correspondence with statutory authorities.
- 5. Copy of audit programme.
- 6. Nature of business carried on and important documents relating to the constitution of business like Memorandum of Association, Articles of Association, Partnership deed etc.,
- 7. Accounting methods, internal control and internal check system in operation.
- 8. Points to be included in audit report.
- 9. Routine queries like missing receipts and vouchers
- 10. Details of all important information to be used as reference for future audits.
- 11. Date of commencement and completion of audit.
- 12. Details of errors and frauds discovered during the course of audit.

Topic

Module 4: Sources of Finance and Cost of Capital

Module 11:
Data Analysis and
Modelling

INTERMEDIATE

Group II - Paper-11

Financial Management and Business Data Analytics (FMDA)

Subject: Financial Management and Business Data Analytics Financial Management Cost of Capital

Cost of capital is the rate of return that a firm must earn on its project/ investments to maintain its market value and attract funds. It is the return expected by the providers of capital (i.e. shareholders, lenders and the debt-holders) to the business as a compensation for their contribution to the total capital.

Cost of capital (k) consists of the following three components:

- (i) the riskless cost of the particular type of financing, rj;
- (ii) the business risk premium, b; and
- (iii) the financial risk premium, f

$$Or k = rj + b + f$$

Where,

k = Cost of Capital

r = Return at zero risk level

- b = Premium for business risk, which refers to the variability in operating profit (EBIT) due to change in sales.
- f = Premium for financial risk which is related to the pattern of capital structure.

Weighted Average Cost of Capital (WACC)

The Weighted Average Cost of Capital (WACC) is the overall cost of capital which includes the cost of different sources like:

- (i) Long-term debt (including debentures);
- (ii) Preference shares;
- (iii) Equity capital; and
- (iv) Retained earnings.

The steps to calculate WACC is as follows:

Step 1: Calculate the total capital from all the sources of capital.

(Long-term debt capital + Pref. Share Capital + Equity Share Capital +Retained Earnings)

Step 2: Calculate the proportion (or %) of each source of capital to the total capital.

Step 3: Multiply the proportion as calculated in Step 2 above with the respective cost of capital.

Step 4: Add the weighed component cost to get the WACC.

$$WACC = (K_e + K_d + K_p + K_s)$$

Choice of Weights in WACC

When calculating the Weighted Average Cost of Capital (WACC), the choice of weights is crucial.

There is a choice of weights between the Book Value (BV) and Market Value (MV).

- 1. Book Value (BV): Book value weight is operationally easy and convenient. While using BV, reserves such as share premium and retained profits are included in the BV of equity, in addition to the nominal value of share capital. Here, the value of equity will generally not reflect historic asset values, as well as the future prospects of an organisation.
 - Book Value of Equity: This is the net asset value of the company, essentially the total assets minus total liabilities.
 - Book Value of Debt: This represents the outstanding principal of the company's debt obligations.
 - Total Book Value: This is the sum of the book value of equity and the book value of debt.
 - Weight of Equity (Book Value): (Book Value of Equity / Total Book Value)
 - Weight of Debt (Book Value): (Book Value of Debt / Total Book Value)
- 2. Market Value (MV): Market value weight is more correct and represent a firm's capital structure. It is preferable to use MV weights for the equity. While using MV, reserves such as share premium and retained profits are ignored as they are in effect incorporated into the value of equity. It represents existing conditions and also takes into consideration the impacts of changing market conditions and the current prices of various security. Similarly, in case

of debt, MV is better to be used rather than the BV of the debt, though the difference may not be very significant. There is no separate market value for retained earnings.

How to calculate market value weights:

- (i) Determine market values: Find the market value of the company's outstanding debt and the market value of its outstanding equity.
- (ii) Calculate the total market value: Add the market value of debt and the market value of equity to get the total market value of the firm.
- (iii) Calculate the weight of debt: Divide the market value of debt by the total market value of the firm.
- (iv) Calculate the weight of equity: Divide the market value of equity by the total market value of the firm

Example 1

Calculate the WACC using the following data of ABACUS Ltd. by using:

- (a) Book value weights
- (b) Market value weights

The capital structure of the company is as under:

Particulars	(₹)
Debentures (₹ 100 per debenture)	5,00,000
Preference shares (₹ 100 per share)	5,00,000
Equity shares (₹ 10 per share)	10,00,000
	20,00,000

The market prices of these securities are:

Debentures ₹ 105 per debenture

Preference shares ₹ 110 per preference share

Equity shares ₹ 24 per equity share

Additional information:

- (i) ₹ 100 per debenture redeemable at par, 10% coupon rate, 4% floatation costs, 10-year maturity.
- (ii) ₹ 100 per preference share redeemable at par, 5% coupon rate, 2% floatation cost and 10-year maturity.
- (iii) Equity shares have ₹4 floatation cost and market price of ₹24 per share.

The next year expected dividend is ₹1 with annual growth of 5%. The firm has practice of paying all earnings in the form of dividend.

Corporate tax rate is 30%. Use YTM method to calculate cost of debentures and preference shares.

Answer:

(i) Cost of Equity (Ke)

$$K_e = \frac{D_1}{P_0 - F} + g$$

 $D_1 = Next Expected Divined = [D_0 (1 + g)]$

P₀ = Current Market Price per share

g = Constant growth rate of dividend

F = Flotation cost

$$= \frac{₹1}{₹24 - ₹4} + 0.05$$

= 0.01 or 10%

(ii) Cost of Debt (Kd)

Current market price (P_o) – Floatation cost

$$= I(1-t) \times PVAF (r,10) + RV \times PVIF (r,10)$$

Calculation of NPV at discount rate of 5% and 7%

Year	Cash flows (₹)	Discount factor @ 5%	Present Value (₹)	Discount factor @ 7%	Present Value (₹)
0	100.8	1.000	(100.8)	1.000	(100.8)
1 to 10	7	7.722	54.05	7.024	49.17
10	100	0.614	61.40	0.508	50.80
NPV			+14.65		-0.83

Calculation of IRR

$$IRR = 5\% + \frac{14.65}{14.65 - (-0.83)} (7\% - 5\%) = 6.89\%$$

Cost of Debt $(K_{4}) = 6.89\%$

(iii) Cost of Preference shares (K_n)

Current market price (P_0) – floatation cost = PD × PVAF (r,10) + RV × PVIF (r,10)

₹110 – 2% of ₹110 = ₹5×PVAF (r,10) + ₹100×PVIF (r,10)

Calculation of NPV at discount rate of 3% and 5%

Year	Cash flows	Discount factor @ 3%	Present Value	Discount factor @ 5%	Present Value
	(₹)		(₹)		(₹)
0	107.8	1.000	(107.8)	1.000	(107.8)
1 to 10	5	8.530	42.65	7.722	38.61
10	100	0.744	74.40	0.614	61.40
NPV			+9.25		-7.79

$$\overline{IRR} = 3\% + \frac{9.25}{9.25 - (-7.79)} (5\% - 3\%) = 4.08\%$$

Cost of Preference shares (Kp) = 4.08%

(a) Calculation of WACC using book value weights

Sauvas of canital	Book Value	Weights	After tax cost of capital	WACC (K _o)
Source of capital	(₹)	(a)	(b)	$(c) = (a) \times (b)$
10% Debentures	5,00,000	0.25	0.0689	0.01723
5% Preference shares	5,00,000	0.25	0.0408	0.0102
Equity shares	10,00,000	0.50	0.10	0.05000
	20,00,000	1.00		0.07743

WACC $(K_a) = 0.07743$ or 7.74%

(b) Calculation of WACC using market value weights

Source of conital	Market Value	Weights	After tax cost of capital	WACC (K _o)
Source of capital	(₹)	(a)	(b)	$(c) = (a) \times (b)$
10% Debentures (₹105× 5,000)	5,25,000	0.151	0.0689	0.0104
5% Preference shares (₹110× 5,000)	5,50,000	0.158	0.0408	0.0064
Equity shares (₹24× 1,00,000)	24,00,000	0.691	0.10	0.0691
	34,75,000	1.000		0.0859

WACC $(K_0) = 0.0859$ or 8.59%

Data Analytics

Data-Driven Decision Making

Data-driven decision making is the process of using data insights, analysis, and evidence to guide strategic and operational decisions within an organization. It involves collecting and analyzing relevant data to identify patterns, trends, and opportunities, enabling businesses to make informed choices that align with their goals. By leveraging data instead of relying solely on intuition or past experiences, organizations can minimize risks, improve efficiency, and enhance outcomes.

Importance of Data-driven decision making

Data-driven decision making is essential for several reasons:

- 1. Objective and evidence-based decisions
- 2. Improved accuracy and insights
- 3. Identifying opportunities and mitigating risks
- Enhanced strategic planning 4.
- 5. Better customer understanding and experience
- Efficiency and cost optimization
- Continuous improvement and innovation

Benefits of data-driven decision making

Data-driven decision making offers numerous benefits across various sectors and industries. Some of the key benefits of data-driven decision making are:

- 1. Accuracy and reliability
- 2. Objectivity and reduced biases
- 3. Improved insights and understanding
- 4. Identification of opportunities and risks
- 5. Enhanced strategic planning
- 6. Improved customer experience
- 7. Operational efficiency and cost optimization
- 8. Continuous improvement and innovation

Successful data-driven decision-making examples

- 1. Netflix
- 2. Amazon
- 3. Starbucks
- 4. Airbnb
- 5. Shopify
- 6. Zillow
- 7. Stitch Fix

How Data Driven Decision Making Works?

- Define Objectives: Clearly articulate the goals and objectives that the decision will address.
- 2. **Gather Data**: Collect relevant data from various sources, such as customer feedback, market research, sales data, and operational metrics.
- 3. **Analyze Data**: Utilize analytical techniques to identify patterns, trends, and relationships within the data.
- 4. Interpret Results: Draw meaningful conclusions from the analysis, considering the context and limitations of the data.
- Make Decisions: Based on the data insights, make informed decisions that align with the objectives.
- 6. Implement and Monitor: Put the decisions into action and track their impact, using the data to refine and improve the process.

Identify and collect data Perform data analysis Implement and evaluate Organize and explore data Organize and explore data Draw conclusions Datamation

Source: https://www.datamation.com/big-data/data-driven-decision-making/

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

Conceptual Understanding of Management Accounting

Definition and Overview

Management accounting is a specialized branch of accounting that focuses on supplying relevant financial and non-financial information to internal stakeholders—primarily the management—to aid in effective decision-making, planning, and control. Unlike financial accounting, which emphasises historical data for external reporting, management accounting is future-oriented and designed to enhance operational and strategic decisions within the organisation.

According to the Chartered Institute of Management Accountants (CIMA),

"Management accounting is the application of accounting and financial management principles to create, protect, preserve, and increase value for stakeholders in both profit and non-profit organisations across the public and private sectors."

In essence, management accounting equips organizations with actionable insights through analytical tools, cost analysis, and performance measurements, aligning accounting practices with the broader strategic goals of the business. Its scope transcends traditional financial reporting by integrating diverse data sources to support managerial effectiveness.

Relationship between Management Accounting and Cost Accounting

Management accounting and cost accounting are closely linked, with cost accounting forming a vital subset of management accounting. While **cost accounting** centers on the accumulation, measurement, and analysis of production costs to support budgeting, pricing, and cost control, **management accounting** has a broader focus that includes strategic planning, performance evaluation, and decision-making based on both quantitative and qualitative data.

Cost accounting deals primarily with past data—identifying and allocating costs to determine product or service profitability. On the other hand, management accounting incorporates both historical and predictive insights, making it essential for shaping long-term strategy.

Cost data generated through cost accounting forms the foundation for many management accounting processes. However, management accounting expands the application of this data by integrating it with non-financial metrics and broader business intelligence to support cross-functional decision-making.

User Base:

- *Cost Accounting*: Mainly used by production, operations, and inventory management teams.
- Management Accounting: Utilized by top-level executives, departmental heads, and functional managers across all areas.

Comparative Analysis: Cost Accounting vs. Management Accounting

Basis of Comparison	Cost Accounting	Management Accounting	
Meaning	Focuses on cost computation, control, and reduction.	Focuses on aiding managerial decision-making.	
Application	Prevents overspending by tracking actual vs. budgeted costs.	Guides strategic planning and operational decision-making.	
Scope	Narrow and cost-centric.	Broad, covering all financial and strategic decision aspects.	
Measurement Focus	Primarily quantitative.	Both quantitative and qualitative.	
Relationship	A subset of management accounting.	Encompasses cost accounting.	

Basis of Comparison Cost Accounting		Management Accounting	
Decision-Making	Limited, based on historical data.	Extensive, based on both historical and forward-looking information.	
Statutory Requirement	Statutory in select industries.	No legal requirement for audit.	
Dependency	Functions independently.	Depends on cost and financial accounting data.	
Primary Users	Management, vendors, shareholders.	Exclusively for internal management.	

In summary, cost accounting serves as a foundational tool within the broader realm of management accounting. The integration of cost insights with other data types allows management accounting to support a wide range of strategic and operational decisions across an organization.

Scope of Management Accounting

Management accounting covers a wide array of internal processes and strategic functions, including:

- Budgeting, planning, and forecasting
- Performance measurement across organizational levels
- Benchmarking within and across organizations
- Enhancing organizational efficiency and effectiveness
- Evaluation of past and potential capital investments
- Supporting product mix, pricing, and market entry decisions
- Advising on outsourcing and make-or-buy analyses
- Prioritizing investment options involving limited resources
- Assisting in strategic decision-making across departments

Role of a Management Accountant in the Modern Business World

In today's dynamic business environment, management accountants play a critical role in ensuring the financial health, strategic alignment, and operational success of an organization. Their responsibilities include:

- Developing budgets and financial forecasts to guide planning
- Analyzing financial data to generate actionable insights

- Identifying and controlling costs to improve profitability
- Recommending cost-reduction initiatives and process enhancements
- Designing and monitoring Key Performance Indicators (KPIs)
- Conducting variance analysis to assess performance gaps
- Evaluating financial outcomes of business alternatives
- Identifying financial and operational risks and mitigating them
- Preparing internal reports for executive decisionmaking
- Ensuring compliance with financial regulations and standards
- Advising on tax planning and implications of business activities
- Leveraging technology and data analytics for financial efficiency
- Coordinating between departments to align financial strategies
- Facilitating integration of financial and operational planning

In conclusion, the management accountant has evolved from a traditional cost recorder to a strategic partner in business. Their multidimensional role spans performance management, financial control, strategic planning, and risk management—making them indispensable to modern organizational success.

1. According to CIMA, management accounting helps to

- a) Prepare tax statements.
- b) Inform operational decisions and ensure resource efficiency.
- c) Evaluate external vendors.
- d) Monitor stock exchange performance.

2. Who stated that management accounting helps formulate strategy and monitor financial control?

- a) Colin Drury
- b) Wilson and Way
- c) Johnson and Kaplan
- d) Horngren, Datar, and Rajan

3. Which activity is included in the scope of management accounting?

- a) Preparing shareholder reports
- b) Filing legal disclosures
- c) Setting inter-divisional transfer prices
- d) Conducting statutory cost audits

4. What major shift occurred in Stage 3 of management accounting evolution?

- a) Introduction of product costing
- b) Emphasis on value chain analysis
- c) Reduction of waste in production processes
- d) Focus on balance sheet optimization

5. Management accounting aids in safeguarding:

- a) Tangible assets
- b) Intangible assets
- c) Both tangible and intangible assets
- d) Only monetary assets

6. Which tool is categorized under strategic analysis in the fourth stage?

- a) Standard costing
- b) Activity-based costing
- c) PEST and SWOT analysis
- d) Cash flow statement

7. Which among the following is a traditional technique of management accounting?

- a) Value Chain Analysis
- b) Balanced Scorecard
- c) Financial Statement Analysis
- d) Kaizen

8. The International Federation of Accountants (IFAC) described Stage 1 of management accounting evolution as focused on:

- a) Internal efficiency
- b) Cost determination and financial control
- c) Strategic value creation
- d) Customer analysis

9. Which of the following is true about Stage 2 of management accounting evolution?

- a) Use of ABC and JIT
- b) Focus on strategy execution
- c) Introduction of standard costs and profitability analysis
- d) Invention of life cycle costing

10. Strategic cost management is mainly concerned with:

- a) Predicting inflation
- b) Managing balance sheets
- c) Supporting long-term competitive strategies
- d) Identifying company fraud

11. Which phase of management accounting evolution introduced concepts like JIT and Target Costing?

- a) Stage 1
- b) Stage 2
- c) Stage 3
- d) Stage 4

12. What distinguishes Stage 4 from earlier stages in the evolution of management accounting?

- a) Elimination of budgets
- b) Value creation through strategic tools
- c) Use of information solely for tax planning
- d) Decline in relevance of costing methods

Answer:

1	2	3	4	5	6
a	b	С	С	С	С
7	8	9	10	11	12
С	b	С	С	d	b

Fill in the blanks

	The defengin	
2.	The focus of t	he first stage of management accounting
	was on	and financial control.

The acronym CIMA stands for

- 3. The ______ technique is used to allocate indirect costs more accurately to products or services.
- 4. _____ is the phase in which techniques like JIT, target costing, and balanced scorecard were developed.
- 5. The abbreviation VUCA stands for Volatility, Uncertainty, Complexity, and ______.

Answer:

- 1. Chartered Institute of Management Accountants
- 2. cost determination

- 3. Activity-Based Costing
- 4. Fourth stage
- 5. Ambiguity

State True or False

- 1. Management accountants are responsible for preparing quarterly tax returns for government authorities.
- 2. The role of a management accountant includes evaluating external policy changes that may impact business operations.
- 3. Financial accounting is mandatory for all companies, but management accounting is not legally required.
- 4. A key activity of management accountants is to create fixed asset registers and ensure asset protection.
- Management accountants play no role in economic appraisals or evaluating macroeconomic impacts on the business.

Answer:

1	2	3	4	5
F	T	T	T	F

Module 2: Activity Based Costing (ABC)

Concept of Activity-Based Costing (ABC)

Activity-Based Costing (ABC) is a modern costing methodology that assigns costs to activities based on their consumption of resources and then allocates these costs to cost objects—such as products, services, or customers—according to their use of those activities. This approach allows for a more accurate representation of how resources are consumed within an organization.

According to the Chartered Institute of Management Accountants (CIMA):

"Activity-Based Costing is an approach to the costing and monitoring of activities which involves tracing resource consumption and costing final outputs. Resources are assigned to activities, and activities to cost objects based on consumption estimates. The latter utilize cost drivers to attach activity costs to outputs."

ABC helps organizations track the flow of resources and activities, offering deeper insights into the drivers of cost and performance.

Advantages of Activity-Based Costing

- 1. Improved Accuracy: Provides a more precise cost estimation for products or services by recognizing the actual consumption of activities.
- **2. Logical Overhead Allocation**: Assigns overheads in a systematic and rational manner.
- **3. Enhanced Pricing Decisions**: Offers reliable cost data, helping in the formulation of competitive pricing strategies.
- **4. Unit Cost Focus**: Concentrates on unit-level costing rather than just total cost.
- **5. Cost Reduction**: Identifies non-value-added activities, allowing for elimination or optimization.
- **6. Suitable for Multi-Product Organizations**: Especially beneficial for companies with diverse product lines.
- 7. **Highlights Inefficiencies**: Draws attention to cost-intensive areas that may require managerial intervention.

Limitations of Activity-Based Costing

- 1. **High Implementation Cost**: More expensive than traditional costing methods.
- 2. Less Suitable for Small Firms: The complexity and cost may outweigh benefits for smaller organizations.
- 3. Limited Use in Uniform Production: May not be effective where product or process variety is low.
- 4. Complexity in Selecting Cost Drivers: Identifying the most accurate and relevant cost drivers can be challenging.

ABC vs. Traditional Absorption Costing: A Comparative Overview

Aspect	Activity-Based Costing (ABC)	Traditional Absorption Costing	
Overhead Allocation	Grouped into activity cost pools	Allocated to cost centres or departments	
Cost Behavior Reflection	Reflects realistic, activity-based behavior	Based on departmental allocations, less accurate	
Cost Drivers	Activity-specific cost drivers	Primarily uses time-based drivers (e.g., labou machine hours)	
Overhead Recovery Rates	Vary across activities	Single or limited overhead rates	
Allocation of Costs	Assigned to a wide range of cost objects (products, services, customers)	Assigned mainly to cost units (e.g., products, jobs)	
Cost Control Effectiveness	Facilitates control by simplifying or eliminating activities	Less effective due to fixed cost centres	

Stages of ABC Implementation

- 1. **Identify Activities**: Recognize all the key activities carried out in the organization.
- 2. Assign Overhead Costs: Relate overheads to the identified activities.
- 3. Allocate Support Activities: Distribute the cost of supporting activities to primary ones.
- **4. Determine Cost Drivers**: Identify the factors that cause costs in each activity.
- 5. Calculate Activity Cost Driver Rates: Divide total activity costs by the quantity of their respective cost drivers.

Key Components of ABC

- 1. Activity: Any task or operation that consumes resources and incurs costs.
- 2. Cost Object: The item (e.g., product, customer, or service) for which cost measurement is required.
- **3.** Cost Driver: A variable that influences the cost of an activity. Two types:
 - o **Resource Cost Driver**: Measures the amount of resources consumed by an activity (used to assign resource costs to activities).
 - o **Activity Cost Driver**: Measures the extent of activity usage by a cost object (used to assign activity costs to products or services).
- 4. Cost Pool: A collection of individual but related cost items associated with a specific activity.

Examples of Cost Pools and Associated Cost Drivers

Activity Cost Pool	Related Cost Driver
Ordering and Receiving Materials	Number of purchase orders
Machine Setup	Number of setups
Machining	Machine hours

Assembling	Number of parts
Inspecting and Testing	Number of tests
Painting	Number of parts
Supervising	Direct labour hours

In conclusion, **Activity-Based Costing** offers a more refined and accurate method of cost allocation compared to traditional systems. By focusing on the activities that drive costs, ABC supports more strategic decision-making, better pricing, and improved cost control—particularly in complex, multi-product organizations. However, its implementation should be weighed against its complexity and cost, especially for smaller or less diverse businesses.

Multiple Choice Questions (MCQs):

1. In the ABC system, costs are traced to activities before being allocated to:

- a) Cost centers
- b) Financial statements
- c) Cost objects
- d) Revenue streams

2. Which of the following best describes the purpose of cost drivers in ABC?

- a) To standardize production processes
- b) To forecast future sales
- c) To measure the extent of resource consumption by activities
- d) To classify variable and fixed costs

3. Which scenario illustrates the use of ABC in decision-making?

- a) Allocating advertising expense equally across all products
- b) Using one overhead rate for all departments
- c) Determining product pricing based on actual activity usage
- d) Charging all factory overheads based on labor hours

4. What is a key reason for adopting ABC in a multi-product environment?

- a) Products have uniform resource requirements
- b) Overhead costs are insignificant
- c) Different products consume activities at different rates
- d) It eliminates the need for cost allocation

5. Which of the following would most likely be used as a cost driver for quality control inspections?

- a) Number of units produced
- b) Number of inspection tests
- c) Number of employees
- d) Direct material cost

6. In an ABC system, which type of cost driver links resources to activities?

- a) Output driver
- b) Activity cost driver
- c) Product cost driver
- d) Resource cost driver

7. An organization wants to streamline its operations by identifying inefficient processes. How ABC will support this goal?

- a) Simplified record-keeping
- b) Identification of non-value-adding activities
- c) Uniform cost allocation
- d) Budget variance analysis

8. If assembling costs of ₹900,000 are related to 6,000 parts assembled, what is the cost driver rate?

- a) ₹100
- b) ₹125
- c) ₹150
- d) ₹175

9. What is the main objective of calculating activity cost driver rates in ABC?

- a) To eliminate overheads
- b) To determine profit margins
- c) To assign activity costs proportionately to cost objects
- d) To track direct material usage

10. Which of the following activities would most likely be classified as a support activity in ABC?

- a) Product packaging
- b) Assembly of goods
- c) Equipment maintenance
- d) Quality testing

11. A department incurs ₹2,400,000 in overhead for an activity performed 800 times annually. What is the cost per activity occurrence?

- a) ₹2,000
- b) ₹2,500
- c) ₹3,500
- d) ₹3,000

12. Why is ABC more suitable for complex manufacturing environments?

- a) It ignores indirect costs
- b) It simplifies labor costing
- c) It traces multiple overheads based on actual activity consumption
- d) It avoids the need for activity identification

Answer

1	2	3	4	5	6	7	8	9	10	11	12
c	С	С	с	b	d	b	c	c	С	d	с

Fill	in the blanks
1.	In ABC, costs are ultimately assigned to such as products, services, or customers.
2.	A is a factor that influences or drives the cost of an activity.
3.	The concept of ABC was first defined in the late 1980s by
4.	ABC helps organizations identify activities that do not add value to the product or service.
5.	In contrast to traditional costing, ABC provides a more allocation of overheads.
Ans	swer
1.	cost objects
2.	cost driver
3.	Robert Kaplan and William Burns
4.	non-value-added
5.	accurate
Trı	ne and False
1.	ABC assigns overhead costs to products based solely on direct labor hours.
2.	In Activity-Based Costing, activities are used as the basis for allocating costs to cost objects.
3.	ABC is especially useful for organizations that produce a single product with minimal overhead.
4.	Cost drivers in ABC help determine how much of an activity's cost should be assigned to a product.
5.	One of the benefits of ABC is identifying non-value-added activities that can be eliminated.
Ans	swer
1.	False
2.	True
3.	False
4.	True
5.	True

CMA FINAL COURSE

Syllabus 2022

Module 4: SEBI Laws and Regulations

FINAL

Group III - Paper-13

Corporate and **Economic Laws** (CEL)

Insider Trading in India

Definition:

Insider trading refers to the act of buying, selling, or dealing in securities of a listed company by individuals who have access to unpublished price-sensitive information (UPSI).

Governing Law:

Primary Regulation: SEBI (Prohibition of Insider Trading) Regulations, 2015

Regulatory Authority: Securities and Exchange Board of India (SEBI)

Key Concepts

- 1. Insider: An individual who is either a connected person or has access to UPSI. This includes:
- Promoters
- Directors
- Employees
- Consultants
- Auditors
- · Legal advisors
- Immediate relatives
- 2. Unpublished Price-Sensitive Information (UPSI): Non-public information that can significantly influence a company's share price.

Examples:

- Financial results
- Mergers & acquisitions
- · Dividend declarations
- Major business expansions
- Changes in key management

Types of Insider Trading

Legal Insider Trading:

Permitted when disclosures are made in compliance with SEBI regulations.

Example: Promoters buying shares and reporting the transaction to the stock exchange.

Illegal Insider Trading:

Occurs when trades are executed based on UPSI before it becomes public.

Example: An auditor purchasing shares before financial results are announced.

Mandatory Disclosures

Under SEBI PIT Regulations, insiders must file disclosures as follows:

Form B – Initial Disclosure:

Submitted by promoters, KMPs, directors, and employees upon becoming insiders.

Form C – Continual Disclosure:

This form is used for ongoing disclosures that must be filed whenever there is a change in the shareholding of designated persons or their immediate relatives.

Trading Windows and Blackout Periods

- Companies must establish defined trading windows during which insiders can trade.
- Trading is prohibited during the "blackout period" or "trading window closure," which is enforced to prevent insider trading. This restriction generally applies around the time of financial results announcements or other significant corporate developments. Specifically, the trading window remains closed from the end of the financial period until 48 hours after the public disclosure of results. Additionally, the compliance officer may close the trading window at any time when designated persons are likely to have access to unpublished price-sensitive information (UPSI).

Penalties for Insider Trading

Any person found guilty of insider trading shall be liable to a penalty which shall not be less than ten lakh rupees but which may extend to twenty-five crore rupees or three times the amount of profits made out of insider trading, whichever is higher.

Case: Rakesh Agrawal vs. SEBI (2003–2004)

Rakesh Agrawal, then Managing Director of ABS Industries Ltd., was engaged in confidential talks regarding the company's takeover by the German multinational Bayer AG. Prior to the public disclosure of the deal, he purchased ABS shares in the names of his relatives, anticipating a price increase following the official announcement.

The Securities and Exchange Board of India (SEBI) charged him with insider trading under the SEBI (Insider Trading) Regulations, 1992, for dealing in shares based on unpublished price-sensitive information (UPSI).

Agrawal appealed the decision, and in 2004, the Securities Appellate Tribunal (SAT) ruled in his favor. While acknowledging that he was an insider who traded on UPSI, the tribunal accepted that he did not trade for personal gain but to facilitate Bayer AG's acquisition, which required acquiring at least 51% of ABS's shares. Since there was no dishonest or malicious intent, SEBI's penalty was set aside.

The case is notable for highlighting that intent plays a crucial role in determining liability for insider trading under Indian law.

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. If the cost of an investment is ₹50,000 and it results in a net cash inflow of ₹3,600 per annum forever, the Net Profitability Index of the investment is _____ (assume a discount rate of 8%)
 - A. 0.9
 - B. (-) 0.1
 - C. 1.11
 - D. 0.8

Solution:

PV of NCF = 3600/8% = ₹45,000

Cost of Investment = ₹50,000

Net Profitability Index = (45,000 - 50,000)/50,000 = (-) 0.1

So, the correct option is (B)

2. A project has the following cash flows:

Year	0	1	2	3
Cash Flow (₹ Lakh)	-50	60	-30	80

If discount rate is 20%, then the NPV of the project is_____

- A. 23.50
- B. 24.68
- C. 25.48
- D. 23.00

Solution:

$$NPV = [60/(1.20)^{1} - 30/(1.20)^{2} + 80/(1.20)^{3}] - 50 = 25.48$$

So, the correct option is (C)

- 3. A project with an initial investment of ₹200 lakhs and life of 10 years generates cash flows after tax (CFAT) of ₹40 lakh per annum. The Payback Reciprocal is _____
 - A. 25%
 - B. 20%
 - C. 10%
 - D. 30%

Solution:

$$PBP = 200/40 = 5 \text{ years}$$

Payback reciprocal = 1/PBP = 1/5 = 0.20 = 20%

So, the correct option is (B)

- 4. The NPV of a 5-year project is ₹500 lakh and PVIFA at 10% for 5 years is 3.79. The Equivalent Annual Benefit of the project is _____
 - A. ₹131.93 lakh
 - B. ₹189.50 lakh
 - C. ₹113.92 lakh
 - D. ₹193.30 lakh

Solution

Equivalent Annual Benefit = NPV/PVIFA = 500/3.79 = ₹131.93

So, the correct option is (A)

• Comprehensive Problems

Illustration 1

A company is engaged in evaluating an investment project which requires an initial cash outlay of $\[Tilde{?}\]$ 2,50,000 on equipment. The project's economic life is 10 years and its salvage value $\[Tilde{?}\]$ 30,000. It would require current assets of $\[Tilde{?}\]$ 50,000. An additional investment of $\[Tilde{?}\]$ 60,000 would also be necessary at the end of five years to restore the efficiency of the equipment. This would be written off completely over the last five years. The project is expected to yield annual profit (before tax) of $\[Tilde{?}\]$ 1,00,000. The company follows the sum of the years' digit method of depreciation. Income-tax rate is assumed to be 40%. Should the project be accepted if the minimum required rate of return is 20%?

Solution:

Calculation of Present Values

Year	EBIT (₹)	Dep. (₹)	PBT (₹)	PAT (₹)	CF (₹)	PVIF	PV(₹)
1	1,00,000	40,000	60,000	36,000	76,000	0.833	63,308
2	1,00,000	36,000	64,000	38,400	74,400	0.694	51,634
3	1,00,000	32,000	68,000	40,800	72,800	0.579	42,151
4	1,00,000	28,000	72,000	43,200	71,200	0.482	34,318
5	1,00,000	24,000	76,000	45,600	69,600	0.402	27,979
6	1,00,000	40,000	60,000	36,000	76,000	0.335	25,460
7	1,00,000	32,000	68,000	40,800	72,800	0.279	20,311
8	1,00,000	24,000	70,000	45,600	69,600	0.233	16,217
9	1,00,000	16,000	84,000	50,400	66,400	0.194	12,882
10	1,00,000	8,000	92,000	55,200	63,200	0.162	10,238
							3,04,498

PV of Cash Outflows	(₹)
Initial cost	2,50,000
Current assets	50,000
Investment - ₹ 60.000 x PVIF (20%, 5)	24,120
Total	3,24,120

PV of Cash Outflows	(₹)	
Annual Inflows		3,04,498
Salvage value	30,000	
Current assets	50,000	
PV of ₹80,000 = 80000 x PVIF (20%, 10)		12,960
Total		3,17,458

The NPV of the proposal, therefore, is ₹ 3,17,458 – ₹ 3,24,120 = ₹ (-) 6,662.

Since the NPV of the proposal is negative, the proposal needs to be rejected.

Working Notes:

1. The depreciation of different years have been calculated as per sum of the year's digit method as follows: Initial outlay – Salvage value *i.e.*, ₹2,50,000 – ₹30,000 is to be depreciated over 10 years.

The sum of the years digits for the years 1 - 10 is 55. So, depreciation for year 1 is ₹2,20,000 × (10/55) and for the year 2 it is 2,20,000 × (9/55) and so on. The total depreciation for first 5 years is ₹1,60,000 and so the written down value of the asset at the end of year 5, is ₹90,000 (*i.e.*, ₹2,50,000 – ₹1,60,000). A capital expenditure of ₹60,000 is required at that stage. So, the total cost required to be depreciated is ₹1,20,000 (*i.e.*, 90,000 + 60,000 – 30,000) and as per the sum of the years digit method for 5 years (*i.e.*, remaining life), the depreciation for the year 6 is ₹1,20,000 × (5/15), for year 2 is ₹1,20,000 × (4/15) and so on.

- 2. The cash flows for different years have been calculated as Profits after Tax + depreciation.
- 3. The current assets of ₹ 50,000 would be released at the end of year 10 and therefore, it has been included in the inflow of year 10.

Illustration 2: (Choice of Best Air-Conditioning System).

Cozy Comforts Associates proposed to install a central air-conditioning system in their city office building. As part of the Company's long-range plan, the office building is due to be disposed of on 31st December 2022 and the company believes that whichever system is installed, it will add some ₹1 lakh to the resale value at that time. Three system gas, oil and solid fuel — are regarded as feasible. Cosy Comforts Associates estimates that the costs of installing and running the three systems are as follows:

(i) Installation costs (payable on 1st January 2020):

Gas ₹ 1,70,000

Oil ₹ 1,50,000

Solid Fuel ₹ 1,40,000

(ii) Annual fuel costs (payable at the end of each year):

Annual fuel costs will depend on the severity of the weather each year and on the rate of increase in fuel prices. At the prices expected to exist during 2020, annual fuel costs will be:

	Severe weather	Mild weather
Gas	₹ 40,000	₹ 24,000
Oil	53,000	37,000
Solid Fuel	45,000	36,000

The company estimates that in each year there is a 70% chance of severe weather and a 30% chance of mild weather.

The chance of particular weather in any one year is independent of the weather in other years.

Fuel prices during 2021 and 2022 are expected to increase at either 15% per annum probability equal to 0.4) or 24% per annum (probability equal to 0.6). Whichever rate of price increase obtains in 2021 will be repeated in 2022.

(iii) Maintenance cost (payable at the end of the year in which they are incurred)

Gas 2,500 per annum
Oil 2,000 per annum
Solid Fuel 10,000 in 2021

All maintenance costs are fixed by contract when the system is installed. Cosy Comforts Associates feel that the systems are equivalent for air-conditioning purpose. They have a cost of 20% per annum in money terms.

- a) **Prepare** calculations showing which central air-conditioning system should be installed, assuming that the decision will be based on the expected present values of the costs of each system.
- b) The discounting factor at 20% for years, 1, 2 and 3 are 0.833, 0.694 and 0.579 respectively.

Solution.

Expected Fuel Cost

	Severe weather	Mild weather	Expected Cost
Gas	(40,000 X 0.70) +	(24,000 x 0.30)	=₹35,200
Oil	$(53,000 \times 0.70) + ($	(37,000 x 0.30)	= ₹ 48,200
Solid Fuel	$(45,000 \times 0.70) + ($	(36,000 x 0.30)	=₹42,300

Fuel costs are expected to increase at the expected rate of $(15\% \times 0.40) + (25\% \times 0.60) = 21\%$

(NVP of Cash Flows of various alternatives)

Gas

Year	0	1	2	3
Installation	1,70,000			
Fuel Costs		35,200	42,592	51,536
Maintenance		2,500	2,500	2,500
lash Flows	1,70,000	37,700	45,092	54,036
Discounting Factor		0.833	0.694	0.579
NPV	1,70,000	31,404	31,294	31,287
Total NPV = ₹ 2,63,985 in Gas sys	stem			
OIL:				
Year	0	1	2	3
Installation	1,50,000			
Fuel Costs		48,200	58,322	70,570
Maintenance		2,000	2,000	2.000
Cash Flows	1,50,000	50,200	60,322	72,570
Discounting Factor	-	0.833	0.694	0.579
NPV	1,50,000	41,817	41,863	42,018

Total NPV - ₹ 2,75,698 in Oil sy				
Solid Fuel:				
Year	0	1	2	3
Installation	1,40,000			
Fuel Costs		42,300	51,183	61,931
Maintenance	_		10,000	
Cash Flows	1,40,000	42,300	61,183	61.931
Discounting Factor		0.833	0.694	0.579
NPV	1,40,000	35,236	42,461	35,858
Total NPV = ₹ 2,53,555 for Sol				

Comment: Since, NPV of cash flow is lowest in solid fuel, this alternative is recommended of the proposed three alternatives. However, this alternative should be recommended comparing the following two factors.

- (a) Value of present system (not given).
- (b Present value of cash flows due to enhancement of building, i.e., $₹1,00,000 \times 0.579 = ₹57,900$.

Therefore, net cost of solid fuel system - ₹2,53,555 - ₹57,900 = ₹1,95,655.

This solid fuel system should be introduced when present air conditioning cost is greater than ₹1.95,655.

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 India's corporate tax framework, **Minimum Alternate Tax (MAT)** serves as a tool to ensure tax equity by bringing "zero-tax companies" into the tax net. Introduced to prevent misuse of exemptions and deductions, MAT is levied under Section 115JB on book profits. This provision reflects a shift from income-based taxation to profit-based minimum taxation and plays a critical role in strategic tax planning and compliance for companies.

At times it may happen that a taxpayer, being a company, may have generated income during the year, but by taking the advantage of various provisions of Income-tax Law (like exemptions, deductions, depreciation, etc.), it may have reduced its tax liability or may not have paid any tax at all. Due to increase in the number of zero tax paying companies, MAT was introduced by the Finance Act, 1987 with effect from assessment year 1988-89. Later on, it was withdrawn by the Finance Act, 1990 and then reintroduced by Finance (No. 2) Act, 1996, w.e.f. 1-4-1997.

The objective of introduction of MAT is to bring into the tax net "zero tax companies" which in spite of having earned substantial book profits and having paid handsome dividends, do not pay any tax due to various tax concessions and incentives provided under the Income-tax Law. Since the introduction of MAT, several changes have been introduced in the provisions of MAT and today it is levied on companies as per the provisions of section 115JB.



Basic provisions of MAT

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

- a. 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.
- b. Tax computed @ 15% (plus surcharge and cess as applicable) on book profit (manner of computation of book profit is discussed in later part). The tax computed by applying 15% (plus surcharge and cess as applicable) 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 (including surcharge and cess) 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 + surcharge (SC) + Health & education cess.

However, the provisions of MAT are not applicable on:

- a. The domestic companies which have opted for tax regimes u/s 115BAA or sec. 115BAB;
- b. Any income accruing or arising to a company from the life insurance business referred to in sec. 115B;
- c. Shipping company, the income of which 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:

- i. 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
- ii. 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 44AB, 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	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:	XXX	
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		
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	

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
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
Less: Following items (if they are credited to the statement of profit and loss		
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:	XXX	
• 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		
The amount (if any, credited to the statement of profit and loss) representing	XXX	
a. 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		
b. notional gain resulting from any change in carrying amount of said units; or		
c. 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;		
Income by way of royalty in respect of patent chargeable to tax u/s 115BBF	xxx	

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

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.

Particulars	Amount	Amount
Aggregate amount of unabsorbed depreciation and loss brought forward in case of:	xxx	
a. 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;		
b. 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	1	
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)	1	
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

MAT credit

A company has to pay higher of normal tax liability or liability as per MAT provisions. If in any year the company pays liability as per MAT, then it is entitled to claim credit of MAT paid over and above the normal tax liability in the subsequent year(s). The provisions relating to carry forward and adjustment of MAT credit are given in section 115JAA.

A company is entitled to claim MAT credit i.e. excess of MAT paid over the normal tax liability. The credit of MAT can be utilised by the company in the subsequent year(s). The credit can be adjusted in the year in which the liability of the company as per the normal provisions is more than the MAT liability. The set off in respect of brought forward MAT credit shall be allowed in the subsequent year(s) to the extent of the difference between the tax on its total income as per the normal provisions and as per the MAT provisions.

The MAT credit can be carried forward only for a period of 15 years after which it will lapse. In other words, if MAT credit cannot be utilised by the company within a period of 15 years (immediately succeeding the assessment year in which such credit was generated), then such credit will lapse. No interest is paid to the taxpayer in respect of such credit.

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.

MAT was introduced to limit the tax deductions / exemptions so that companies pay a "minimum" amount as tax to the government. The MAT operates with a "MAT credit" carry forward mechanism that allows a company to carry forward the "excess" tax paid due to MAT (as against its normal tax liability) in a tax year, to be utilised in future as a credit to offset its regular tax liability.

Conclusion

Minimum Alternate Tax (MAT) plays a crucial role in ensuring that companies with substantial book profits contribute a fair share of taxes, even if they avail of various exemptions and deductions under the Income Tax Act. By mandating a minimum tax based on book profits, MAT promotes equity among taxpayers and prevents the phenomenon of "zero-tax companies." Companies must carefully consider MAT provisions in their tax planning and financial decision-making processes.

Module 1: Introduction to Strategic Cost Management

FINAL

Group III - Paper-16

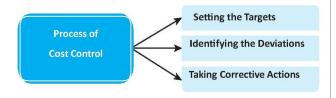
Strategic Cost Management (SCM)

Cost Control and Cost Reduction

1.0 Cost Control

'Cost Control' is defined as the regulation by executive action of the costs of operating an undertaking, particularly where such action is guided by cost accounting. Thus, cost control is the guidance and regulation through an executive action and this executive action is exercised in respect of all the expenses incurred in operating an undertaking. Cost control comprises all procedures and measures by which the cost of carrying out an activity is kept under check and aims at ensuring that costs do not go beyond the targeted level. Standard Costing and budgetary control are the conventional techniques adopted for cost control.

Cost control is exercised through setting standards of targets and comparing actual performance therewith, with a view to identify the deviations from standard norms and taking corrective actions in order to ensure that future performance conforms to standard norms. In other words, it is a scientific management technique to contain the costs of doing business. Cost control is concerned with the ways and means of keeping the costs at a lower level, without affecting efficiency and effectiveness.



1.01. Steps of Cost Control:

Cost control involves the following steps and covers the various facets of the management:

- i. Planning: First step in cost control is to establish plans/targets. The plan/target may be in the form of budgets, standards, estimates and even past actual may be expressed in physical as well as monetary terms. These plans/targets serve as yardsticks by which the planned objective can be assessed.
- **ii. Communication:** The plan and the policy laid down by management are made known to all those responsible for carrying them out. Communication is established in two directions; directives are issued by higher level of management to the lower level for compliance and the lower-level executives report performances to the higher level.

- iii. Motivation: The plan is given effect to and performance starts. The performance is evaluated, costs are ascertained and information about results achieved are collected and reported. The fact that costs are being complied for measuring performances acts as a motivating force and makes individuals endeavour to better their performances.
- iv. Appraisal and Reporting: The actual performance is compared with the predetermined plan and variances, i.e. deviations from the plan are analyzed as to their causes. The variances are reported to the proper level of management.
- v. Decision Making: The variances are reviewed and decisions taken. Corrective actions and remedial measures or revision of the target, as required, are taken.

1.02 Key points for exercising effective Cost Control

- Quantity and price standards should be set to, or be estimated for, each physical unit. The factors influencing variances should not be ignored (inadequate facilities, poor organisation and poor materials).
- ii. To make the standards realistic, all concerned should be associated in determining standard costs.
- iii. The data collected should be kept to a minimum, and proper collection and processing of cost control data are important.
- iv. The different variances, price, usage, mix and efficiency should be considered, whether they are relating to materials, labour or overheads.
- v. No amount of detailed analysis of the cost of variances can undo what has already been done; however, control measures should ensure that such mistakes are not repeated. The only way to prevent excess costs in practice is for the manager to take action before the event.
- vi. The essentials of effective cost control not only include realistic targets (based on work study data) but also flexible attitudes regarding the standards set.

It shall always be remembered that cost control implies deriving maximum benefits for the costs incurred. In other words, the objective of cost control is the performance of the same job at a lower cost or a better performance for the same cost.

1.03 Advantages of cost control

The advantages of cost control are mainly as follows:

- i. Achieving the expected return on capital employed by maximising or optimising profit.
- ii. Increasing the productivity of the available resources.
- iii. Delivering the product or service to the customers at a reasonable price.
- iv. Continued employment and job opportunity for the workers
- v. Economic use of limited resources of production
- vi. Increased credit worthiness,
- vii. Prosperity and economic stability of the industry

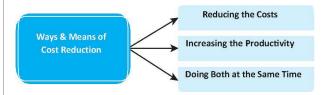
2.0. Cost Reduction

Cost reduction is defined as the real and permanent reduction in the unit costs of goods manufactured or services rendered without impairing their suitability for the intended use.

As will be seen from the definition, the **reduction in costs should be real and permanent**. Reductions due to windfalls, fortuities receipts, changes in government policy like reduction in taxes or duties, or due to temporary measures taken for tiding over the financial difficulties do not fall under the purview of cost reduction. At the same time, a programmer of cost reduction should in no way affect the quality of the products nor should it lower the standards of performance of the business.

Profit is the result of two variable factors, viz., sales and cost. The wider the gap between these two factors, the larger is the profit. Thus, profit can be maximised either by increasing sales or by reducing cost. In a competition-less market or in case of monopoly products, it may perhaps be possible to increase prices to earn more profits and the need for reducing costs may not be felt. Such conditions cannot, however, exist paramount and when competition comes into play, it may not be possible to increase the sale price without having its adverse effect on the sale volume, which, in turn, reduces profit. Besides, an increase in prices of finished products has the ultimate effect of pushing up the raw material prices, wages of employees and other expenses all of which tend to increase costs.

In the long run, substitute products may come up in the market, resulting in loss of business. Avenues have, therefore, to be explored and methods devised to cut down expenditure and thereby reduce the cost of products. In short, cost reduction would mean maximization of profits by reducing cost through economies and savings in costs of manufacture, administration, selling and distribution.



Broadly speaking reduction in cost per unit of production may be affected in two ways viz.,

- i. By reducing expenditure, the volume of output remaining constant, and
- ii. By increasing productivity, i.e.., by increasing volume of output and the level of expenditure remaining unchanged.

These aspects of cost reduction are closely linked and they act together; there may be a reduction in the expenditure and at the same time, an increase in productivity.

2.01. Five steps to Strategic Cost reduction

A research study conducted by PWC puts forward the following five steps for strategic cost reduction to ensure that the business can sustain competitive relevance and maximise its potential.

- i. Start with strategy: Have a clear view of cost reduction strategy and ensure it is consistently understood across the organisation.
- ii. Align costs to strategy: Look across the whole organisation and differentiate the strategically-critical 'good- costs' from the non-essential 'bad-costs'.
- **iii. Aim high:** Be bold, be brave and be creative use technology, innovation and new ways of working to radically optimise the cost base.
- iv. Set direction and show leadership: Deliver cost optimisation as a strategic, business transformation Programme.
- v. Create a culture of cost optimisation: Ensure that a culture of ownership is embedded and continuous improvement is incentivised.

There are huge top and bottom-line rewards for getting this right. Your business will be more differentiated and equipped to deliver on its objectives. You'll also be less reliant on pricing to compete in the market as resources are targeted at high earning growth business. Without this clear sense of what costs to keep and what ones to eliminate, you run the risk of being left behind.

2.02. Tools & Techniques of Cost Reduction

There are several tools and techniques that are adopted in achieving cost reduction. Some of the vital ones which are normally used are listed below.

- i. Value Analysis
- ii. Business Process Re-engineering.
- iii. Simplification & Standardisation
- iv. Benchmarking
- v. Financial Restructuring
- vi. Work Study

- vii. Job Evaluation
- viii. Quality Control
- ix. Inventory Control
- x. Credit Control
- xi. Lean Management
- xii. Target Costing

Any of these tools and techniques can be applied solely to get the benefit or in combination to achieve best possible results.

3.0. Difference between Cost Control and Cost Reduction

Controlling the costs, with reference to the pre-determined standards or benchmarks, is the main focus of cost control whereas the primary focus of cost reduction is permanent reduction in costs. In that cost reduction is a process that actually starts from the point where cost control ends. The key distinctions, nomenclature wise, between cost control and cost reduction can be tabulated as follows:

Sl.	Nomenclature	Cost Control	Cost Reduction
1	Objective	Containing the cost in accordance with the pre-set targets	Exploring ways and means of improving the targets for reduced costs
2	Approach	Attaining lowest possible costs under the existing circumstances	A continuous process of analysis to find out new ways & means to achieve reduction in costs.
3	Nature	Preventive function	Corrective function
4	Emphasis	The emphasis is on the past i.e. on predetermined standards	The emphasis is on the present and the future i.e. on feasible permanent reductions
5	Assumptions	Assumes the existence of certain standards or norms	Assumes the existence of concealed potential savings in the standards or norms

Module 9: Basics of Management Audit

Module 14: Internal Control and **Internal Audit**

FINAL

Group IV - Paper-17

Cost and Management Audit (CMAD)

What is Management Audit

A Management Audit is an independent review, analysis, and assessment of the competencies and capabilities of a company's management in carrying out the corporate objectives. The purpose of a Management Audit is not to appraise individual executive performance but to evaluate the management team's effectiveness with respect to their work in the interests of all the stakeholders, maintaining good relations with the employees, and upholding reputational standards.

Some of the definitions to bring more clarity are given hereunder:

Management Audit means an impartial evaluation of management performance beyond that implicitly provided by historical results.

- Burton

Management Audit may be more specifically defined as being an investigation of a business from the highest level downwards to ascertain whether sound management prevails throughout, thus facilitating the most effective relationship with the outside world and the most efficient organization and smooth running internally.

- Leslie Howard

The Management Audit can be defined as a comprehensive and constructive examination of an organization structure of a company, institution, or branch of Government, or any component thereof, such as division or department and its plan and objectives, its means of operation, and its use of human and physical facilities.

- William P. Leonard

What are the qualifications of Management Auditor

Management Audit is not covered by any statute in India. Hence, no qualification bar can exist. Any person, possessing certain qualities can perform MANAGEMENT AUDIT. Not the qualifications but qualities are most important.

The management auditor should have the following qualities:

 A management auditor should have good knowledge and experience of all Managerial Functions.

- An Auditor should have good knowledge of financial, cost statements analysis techniques.
- He who knows about economics and business laws, etc.
- Understanding of Organization structure and decisions taken by management the working of the organization and its problems is also required.
- Thorough understanding of all processes and control aspects.
- He should know and understand the objectives of the organization very well.
- He should understand planning, budgets, rules, and procedures to be applied in management reviews.
- He should be well-versed with the entire production process.
- _ He should have enough knowledge and experience to understand the reason behind the lack of coordination between different departments.
- He should have the quality of giving practical and achievable solutions to the problems in the organization.

A Management auditor should have the following specific knowledges

- i. Ability to understand and gauge business problems.
- ii. General understanding of the organization.
- iii. Expert knowledge on the principle of delegation of authority, management by objective, management by exception, management planning and control and the different budgetary systems, and those of internal control devices (viz. flow chart, the flow of work, analysis of work schedules, etc.,).
- iv. Sufficient knowledge and experience in preparing various reports for presentation.
- v. General understanding of different laws-General laws, Company law, Tax laws FEMA, etc. that affect the functioning of the whole of the organization.
- vi. Background knowledge about-Engineering, Statistics, Costing, Management Accounting, financial accounting, industrial psychology, Managerial economics, etc.

What can be achieved from Management Audit

Management Audit is often used by the Management to get help on their specific purposes. Despite Management Audit not having any specific statutory obligations, the same looks after interest of the Organization as desired by the Management from time to time.

- _ It helps management in setting appropriate decision making for sound and effective targets.
- _ It suggests management in getting desired results and revealing any defects and irregularities in the process of management.
- Management audit helps the management in the effective discharge of their duties and responsibilities.
- _ It helps in identification of process gaps and strengthening of controls. the coordination of various departments.
- Suggests appropriate cost-effective implementation of plans.
- _ It helps management to make plans and policies with more objectivity.
- _ It is beneficial for achieving the set objectives of the management.
- _ It is helpful to management by providing input on process gaps and way forward to improve, evaluate the performance of management.
- _ It is helpful to strategize resources and improvement planning.

Management Audit Programme

A management audit program is an essential prerequisite for conducting the audit. It is a plan of action drawn in advance to take up the audit assignment, and to help the auditor to cover the entire area of his function thoroughly. He should lay down for himself a proper procedure to be followed to complete the work intime, giving thorough coverage to all aspects. An efficient management audit program shall comprise the following:

- i. Review of the Organizational objectives and plans
- ii. Study of the policies and practices of the management.
- iii. A critical review of the organizational structure
- iv. Study of the systems and procedures
- v. Evaluation of operations

- vi. Study of the efficiency of the use of physical resources available
- vii. Exercise of proper management control
- viii. Maintain a suitable monitoring system through a management information system (MIS)
- ix. Check on adherence to the statutory obligation and
- x. Above all, review the efficiency

Management Audit Report (MAR)

It is important to prepare a good MAR. A good MAR can motivate the management and get the required results.

The detailed characteristics of a good management audit report can be summarized as follows:

- (i) Pertinence
- (ii) Comprehensiveness
- (ili) Brevity
- (iv) Timeliness
- (v) Motivating
- (vi) Formatting

What is Internal Audit

Corporates exist to create value or benefit to their owners, other stakeholders (not only stockholders), customers, and clients. Institute of Internal Auditors define, Internal Audit as -

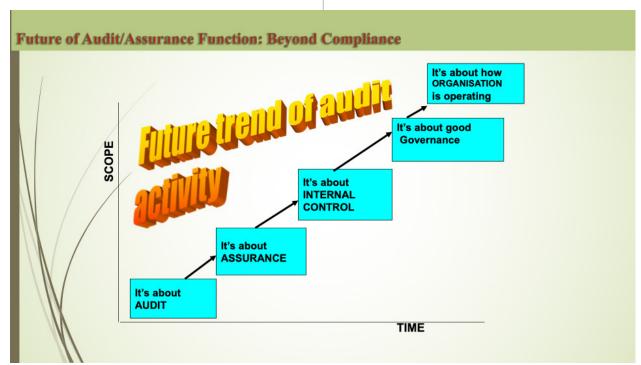
".. an independent, objective assurance and consulting activity designed to add value and improve an organisation's operations. It helps an organisation accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve effectiveness of risk management, control and governance process."

Let's take an example of 'value add', and how the same can be achieved. A 'bulk packing' center operates with two Packing Machines on three shift basis. Daily deployment schedule is of 18 Operators (3/Shift/Packer) in three Shifts (Shift I: 6 a.m to 2 p.m and so on) for the two Packing Machines. Job descriptions and work content of Operators are given hereunder.

a. Bag feeding in nozzles - one operator each at each discharge end of double discharge facility. Rotationwise off is taken by the workmen to ensure continuity of discharge operation. Such offs are necessary because dust spread and bio breaks.

- b. The aforesaid modus of on and off/rest is mutually settled by the gang.
- c. Our proposition indicates uninterrupted production with 5 workmen denoted as 1,2,3,4,5 (instead of 6 per shift) by maintaining the prevalent off/rest time mutually agreed upon amongst workmen.
- d. It is pertinent to mention here that recesses not being planned/ projected at the start and last lap of the eight hours shift as per prevalent system.
- e. Considering continuity of effective working time span, that is, half an hour, one hour and so on; many propositions can be build. Based on wage rate, savings can be achieved through modified such matrices.

In view of the above, Internal Audit is no longer only a Compliance function, The emerging role of Internal Audit is depicted below:



What is Internal Control

Internal Control is defined as the mechanisms, rules, and procedures (1) implemented by a company to ensure the integrity of financial and accounting information, (2) promote accountability, and (3) prevent fraud. Besides complying with laws and regulations and preventing employees from misuse of assets or committing fraud, internal controls can help improve operational efficiency by improving the accuracy and timeliness of financial reporting. The constituents are -

- 1. Developing of SOP (Standard Operating Process), Guidance Notes, Process Notes
- 2. Maintenance (Better through SAP/ERP) of MIS, Verification of Assets, developing control environment
- 3. IFC (Internal Financial Control)

Relationship between Internal Control and Internal Audit

Primarily, Internal control is a preventive system while Internal audit is a detective and corrective function. Both work together to enhance governance, risk management, and accountability in an organization. Lapses in internal control may lead to fraud and unidentified leakages.

Aspect	Description
Role	Internal control is what the organization does to manage risk; internal audit is how it checks whether those controls work.
Dependency	Internal audit relies on a sound internal control system to assess risk and perform effective audits.
Evaluation	Internal auditors evaluate the design and effectiveness of internal controls.
Improvement	Internal audits can recommend improvements to strengthen internal controls.
Independence	While internal control is the responsibility of management, internal audit must be independent from the operations it reviews.
Conduct	Internal Audit can be performed by Internal Staff or outsourced teams. The laying down of Internal control is the responsibility of Management and Staff.

Module 1:
Specific Accounting
Standards

Module 2:
Valuation of
Shares (including
Determination
of Goodwill,
Post-valuation
of Tangible and
Intangible Assets)

FINAL

Group IV - Paper-18

Corporate Financial Reporting (CFR)

Topic: Valuation of Shares

• Comprehensive Problem

Illustration 1: Valuation of Shares Under Asset Backing Method

Following is the extracted Balance Sheet of P Ltd. as at 31st March, 2021:

Liabilities	Amount (₹)	Assets	Amount (₹)
Equity Share Capital (₹10)	10,00,000	Plant & Machinery	12,30,000
8%, Preference Share Capital (₹100)	4,00,000	Goodwill at cost	1,00,000
General Reserve	3,60,000	Investments (at face value)	2,00,000
Balance of Profit & Loss	2,50,000	Stock	4,20,000
Short- term bank loan	2,00,000	Sundry Debtors	1,00,000
Sundry Creditors	5,40,000	Cash at Bank	7,00,000
	27,50,000		27,50,000

Additional information:

- a. Plant & Machinery are worth 25% more than their actual book value.
- b. 70% of the Investments are non-trading and the balance is trading. All investments are to be valued at 20% above cost. Dividend at uniform rate of 20% is earned on all investments.
- c. For the purpose of valuation of shares, goodwill is to be valued on the basis of 3 years purchase of super profits based on average trading profits of the last three years. Net profits (after tax) are as follows-

Year	₹
2018-2019	1,00,000
2019-2020	95,000
2020-2021	1,05,000

- d. Depreciation on appreciated value of Plant & Machinery is not to be considered for valuation of goodwill.
- e. In 2018-2019, a new machinery costing ₹40000 was purchased but wrongly charged as revenue and no effect has been given yet to rectify the same.
- f. Depreciation is charged on Plant & Machinery @ 15% p.a. under Straight Line Method.
- g. The return on capital employed is 15%. Tax rate is 40%.

Find out the value of each fully paid equity share under Net Asset Backing Method.

Solution:

Calculation of Closing Trading Capital Employed

Particulars	Amount (₹)	Amount (₹)	Amount (₹)
Plant and Machinery		12,30,000	
Add. New Machinery	40,000		
Less. Depreciation (40000x15%x3)	18,000		
		22,000	
		12,52,000	

Add. Appreciation @ 25%	3,13,000	
Current market value of P/M		15,65,000
Add. Trade investment (200000x30%x120%)		72,000
Add. Stock		4,20,000
Add. Sundry Debtors		1,00,000
Add. Cash at bank		7,00,000
		28,57,000
Less. S. Creditors and STL		7,40,000
Closing trading capital employed		21,17,000

Calculation of Annual Maintainable Trading Profit After Tax

	2018-19	2019-20	2020-21
Profit after tax	1,00,000	95,000	1,05,000
Add. Machinery wrongly treated as revenue (after tax) [40,000 x 50%]	20,000		
Less. Depreciation on the above after tax	3,000	3,000	3,000
Less. Income from non-trading investment [2,00,000x70%x20% x 50%]	14,000	14,000	14,000
	1,03,000	78,000	88,000

Average Annual Maintainable Trading Profit After Tax = (1,03,000+78,000+88,000)/ 3 = 89,667

Calculation of Average Trading Capital Employed

Closing trading capital employed	21,17,000
Less. ½ of current year's trading profit after tax (88,000 x 1/2)	44,000
	20,73,000

Calculation of Super Profit

Average Annual Maintainable Trading Profit After Tax	89,667
Less. Normal return on average trading capital employed (20,73,000 x 15%)	3,10,950
	(-) 2,21,283

Value of goodwill = Nil

Calculation of Net Assets available to ESH

Trading capital employed	21,17,000
Add. Goodwill	Nil
Add. Non-trading investment (200000 x 70%) x120%	1,68,000
	22,85,000
Less. Preference shareholders' claim	4,00,000
Net Assets available to ESH	18,85,000

Value of each fully paid equity share = 18,85,000/100000 = ₹18.85

Illustration 2: Valuation of Shares Under Yield Method

From the following information, find out the value of each equity share under yield method:

20,000, 12% Preference shares of ₹ 10 each fully paid ₹ 2,00,000

25,000 Equity shares of ₹ 10 each fully paid ₹ 2,50,000

20,000 Equity shares of ₹ 10 each ₹ 7.50 paid up

₹ 1,50,000

Expected profit per year before taxes

₹ 2,25,000

Rate of Tax: 40%

Transfer to General Reserve: 20% of profit after taxes

Normal rate of return on equity capital: 15%

Rate of equity dividends for last 3 years are 14%, 13% and 15% respectively. Similar companies pay dividend @ 12.50% on paid up equity capital.

Solution:

Earnings Yield (For majority shareholders):

Particulars	₹
Expected profit before taxes per year	2,25,000
Less: Taxes @ 40%	90,000
Distributable profit after tax per year	1,35,000
Less: Transfer to general reserve @ 20%	27,000
Profit available to shareholders	1,08,000
Less: Preference dividend @ 12% on ₹ 2,00,000	24,000
Profit available for equity shareholders	84,000

Paid up equity capital = (₹2,50,000 + ₹1,50,000) = ₹4,00,000

Expected rate of return = [(Profit available for equity shares) x100]/ (Paid up equity capital)

 $= (₹84,000 \times 100)/₹4,00,000 = 21\%$

Normal rate of return on equity capital = 15%

Yield value per share = [(Expected rate of return) x (Paid up value)]/ (Normal rate of return)

For fully paid-up shares = (21% x ₹10)/15% = ₹14.00

For partly paid-up shares = $(21\% \times ₹7.50)/15\% = ₹10.50$

Dividend Yield (For minority shareholders)

Average rate of dividend = (14+13+15) / 3 = 14%

Normal rate of dividend = 12.5%

Fully Value per share = $14 / 12.5 \times 10 = ₹11.20$

Partly paid up = $14/12.5 \times 7.50 = ₹8.40$

Topic: Specific Accounting Standards Sub Topic: Ind AS 36: Impairment of Assets

• Multiple Choice Questions

1. EARTH Ltd. purchased an equipment for ₹51 lakhs on April 1, 2022. The useful life of the equipment is 5 years and the residual value is estimated to be ₹1 lakh. The company adopts straight line method of depreciation. On March 31, 2023, a test for impairment was conducted after obtaining the following information:

Fair value less costs to sell = ₹36 lakhs

Value in use = ₹32 lakhs

Having regard to Ind AS 36, what will be the impairment loss to be recognized for the year ending March 31,2023?

- A. ₹4,00,000
- B. ₹9,00,000
- C. ₹5,00,000
- D. None of the above

Solution:

Calculation of Impairment Loss

	₹ in lakh
Cost of Acquisition	51
Depreciation to be provided in 2022-23 [(51-1)/5]	10
Carrying Amount as on 31.03.2023	41
Fair Value as on 31.03.2023	36
Value in use	32
Recoverable value (higher of fair value and value in use)	36
Impairment Loss	5

Hence, (C) is the correct answer.

• Comprehensive Problem

Illustration 1

D Ltd. acquired a machine on 1st April, 2017 for ₹28 crores that had an estimated useful life of 7 years. The machine is depreciated on straight line basis and does not carry any residual value. On 1st April, 2021, the carrying value of the machine was reassessed at ₹20.40 crores and the surplus arising out of the revaluation being credited to revaluation reserve. For the year ended March 2023, conditions indicating an impairment of the machine existed and the amount recoverable ascertained to be only ₹3.16 crores. The company had followed the policy of writing down the revaluation surplus by the increased charge of deprecation resulting from the revaluation.

You are required to calculate the loss on impairment of the machine and show how this loss is to be treated in the books of KOEL Ltd.

Solution:

Statement Showing Impairment Loss

		(₹ in crores)
Carryin	g amount of the machine as on 1st April 2017	28.00
Depreci	ation for 4 years i.e., 2017-18 to 2020-21 [(28 crores/7 years) x 4 years]	(16.00)
Carryin	g amount as on 31.03.2021	12.00
Add: U ₁	pward Revaluation (credited to Revaluation Reserve account)	<u>8.40</u>
Carryin	g amount of the machine as on 1st April 2021 (revalued)	20.40
Less: D	eprecation for 2 years i.e., 2021-22 & 2022-23	
	[(20.40 crores/3 years) x 2 years]	(13.60)
Carryin	g amount as on 31.03.2023	6.80
Less: Re	ecoverable amount	(3.16)
Impairment loss		3.64
Less:	Balance in revaluation reserve as on 31.03.2023	
	Balance in revaluation reserve as on 31.03.2021 8.40	
Less:	Enhanced depreciation met from revaluation reserve	
	$2021-22 & 2022-23 = (6.80 - 4.00) \times 2 \text{ years}$ (5.60)	
Impairment loss set off against revaluation reserve balance as per para 60 of Ind AS 36, Impairment of Assets		(2.80)
Impairn	nent Loss to be debited to Profit and Loss Account	0.84

Module 1: Supply under GST -A Refresh

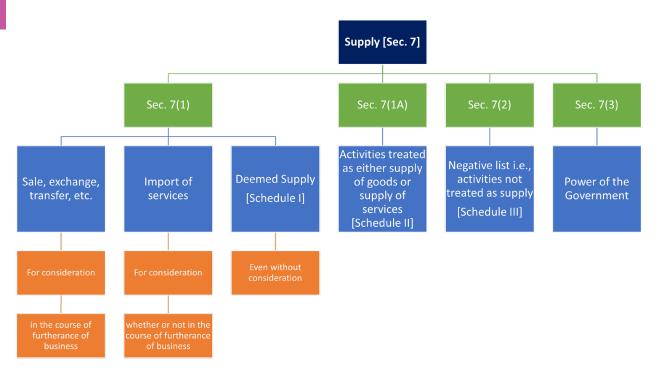
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Group IV - Paper-19

Indirect Tax Laws and Practice (ITLP)

Supply Under GST

In the GST regime, the concept of "supply" lies at the core of taxability. Unlike the previous system where different taxable events existed for goods and services, GST consolidates them under one 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. Few 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 of 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 to the CGST Act, 2017, activities as mentioned below shall be treated as supply even if made without consideration:

 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. Further, the person may take more than one registration within a State if the person has multiple business verticals. 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" under GST governs the entire framework of tax liability. A precise understanding of its scope — including exceptions, deemed supplies, and non-supplies — is crucial for compliance and accurate tax planning. For CMA professionals, interpreting supply provisions correctly ensures proper valuation, timing, and treatment of transactions under the law.

Topic

Module 4: Enterprise Risk Management

ELECTIVES

Paper-20A

Strategic Performance Management and Business Valuation (SPMBV)

Enterprise Risk Management Write Up

In a world increasingly characterised by disruption, uncertainty, and rapid transformation, enterprise risk management (ERM) has emerged as an indispensable discipline for organisations striving not merely to survive but to thrive. Traditional risk management models, which once prioritised static controls and reactive strategies, are now giving way to dynamic, integrated frameworks designed to respond swiftly to volatility.

Volatile times—be they driven by geopolitical instability, economic downturns, pandemics, environmental crises, or technological upheaval—require a re-evaluation of the assumptions and methodologies underpinning ERM. This essay explores the challenges of implementing ERM during periods of volatility, examines the practical adjustments organisations must make, and discusses where risk management efforts often falter under stress. It concludes with a case study that illustrates ERM in action during one of the most turbulent periods in recent memory.

1. Understanding Volatility in the Context of Risk

Volatility is defined by rapid, unpredictable change. In financial markets, it typically refers to the degree of variation in trading prices over time. However, in the broader context of ERM, volatility refers to external and internal changes that increase uncertainty in the organisation's ability to achieve its objectives.

Sources of volatility may include:

Sudden shifts in regulatory regimes.

Global health crises, such as the COVID-19 pandemic.

Geopolitical conflicts or trade wars.

Technological disruption.

Climate events and environmental disasters.

Social unrest and demographic shifts.

Each of these introduces systemic risks that can cascade across an enterprise, often simultaneously. During such times, a linear or siloed approach to risk management is insufficient; instead, organisations must adopt a more adaptive, interconnected risk framework.

2. The Challenges of ERM in Volatile Environments

Implementing ERM in volatile contexts introduces a set of practical challenges that are markedly different from those encountered during stable periods.

a) The Speed of Change

Volatility compresses decision-making timelines. Risk identification, assessment, and mitigation processes that once operated on monthly or quarterly cycles must now be near real-time.

Issue: Most organisations are structurally and culturally unprepared to move at such speed. ERM frameworks often lack the agility required for instantaneous adjustments, especially when embedded in bureaucratic governance structures.

b) Data Deficiency and Information Overload

Paradoxically, in volatile periods, risk managers often face both insufficient data and excessive noise.

Issue: In the early days of the COVID-19 pandemic, organisations were forced to make critical decisions with incomplete data—yet they were also bombarded with conflicting information from governments, health agencies, media, and analysts. The ability to distinguish signal from noise becomes essential, and many ERM frameworks lack robust mechanisms for doing so.

c) Scenario Planning Under Extreme Uncertainty

Scenario planning, a core ERM tool, becomes increasingly complex in volatile environments. The range of possible outcomes broadens dramatically, rendering traditional models less effective.

Issue: During extreme volatility, even the "worst-case scenario" may underestimate actual outcomes. For example, financial institutions that had prepared for economic downturns in 2007–08 had not foreseen the systemic collapse that occurred. Black Swan events remain difficult, if not impossible, to predict.

d) Resource Allocation and Strategic Trade-offs

ERM typically requires coordinated cross-functional input, but in volatile times, resources are stretched thin, and competing priorities abound.

Issue: Crisis response often takes precedence over long-term risk planning. As departments focus on immediate operational continuity, the strategic oversight required for effective ERM may diminish. This can result in misaligned responses and fragmented risk ownership.

3. The Evolution of ERM Tools and Methodologies in Response to Volatility

In recent years, organisations and researchers have been refining ERM methodologies to better cope with instability and complexity.

a) Dynamic Risk Registers

Traditional risk registers are static documents updated periodically. In volatile times, these must become dynamic, cloud-based platforms integrated with real-time data feeds, allowing for continuous monitoring and updates.

b) Agile Risk Governance

An emerging best practice is the formation of crossfunctional risk "tiger teams" or rapid response units. These teams operate outside of conventional hierarchies and can quickly convene to assess emerging risks and formulate coordinated responses.

c) Predictive Analytics and Early Warning Systems

Machine learning and predictive analytics are increasingly embedded in ERM to anticipate risks before they materialise. These systems learn from historical and real-time data to flag anomalies, emerging patterns, or leading indicators of potential crises.

Limitation: In environments with no precedent—such as a novel pandemic—machine learning systems are of limited utility. Human oversight remains crucial.

d) Risk Appetite Recalibration

Volatile environments often necessitate a recalibration of the organisation's risk appetite. During crises, organisations may shift from aggressive growth to preservation of capital and stability.

Example: A private equity firm may halt new investments and focus on operational triage for portfolio companies. A manufacturing firm may postpone expansion plans in favour of cash conservation.

4. Cultural and Psychological Aspects of ERM in Volatile Times

ERM is not merely a technical process; it is also deeply embedded in organisational culture. Volatility reveals latent weaknesses in risk culture and decision-making processes.

a) Risk Blindness and Overconfidence

During stable periods, success may breed complacency. Organisations may underestimate the likelihood or severity of certain risks, particularly those they have never encountered before.

Problem: This overconfidence can be catastrophic in volatile environments. Companies unaccustomed to disruption may take longer to react or deny the seriousness of emerging threats.

b) Communication Breakdowns

Clear and honest communication is essential during uncertain times. ERM frameworks often fail when information does not flow freely across levels and functions.

Problem: Silence or misinformation can exacerbate panic, degrade morale, and paralyse response strategies. In worst-case scenarios, it can result in regulatory breaches or reputational damage.

c) Short-Termism and Strategic Drift

Under pressure, organisations may abandon long-term strategies in favour of short-term fixes. ERM must ensure that decisions taken during crises are consistent with the organisation's core values and risk appetite.

Solution: Embedding risk-informed thinking into the strategic planning process helps organisations remain grounded and resilient, even when forced to make rapid adjustments.

5. Areas Where ERM Typically Fails in Volatile Times

Even the most well-conceived ERM frameworks can falter under pressure. Understanding common failure points is critical to improving resilience.

a) Siloed Risk Ownership

In volatile periods, risks are no longer confined to one domain (e.g., finance, operations, or compliance). They are interconnected.

Failure Point: ERM frameworks that operate in silos fail to capture the compound nature of emerging threats. For instance, a cyberattack may begin as a technical issue but quickly evolve into a legal, reputational, and operational crisis.

b) Inadequate Stress Testing

Many organisations conduct stress testing only at annual intervals, often using benign assumptions.

Failure Point: In volatile times, these tests are inadequate. Stress testing should be dynamic, iterative, and designed to break assumptions rather than confirm them.

c) Poor Board Oversight

Boards are ultimately responsible for enterprise-wide risk. However, in many firms, board engagement with ERM remains superficial.

Failure Point: When volatility strikes, boards that have not meaningfully engaged in scenario planning or risk governance may be unprepared to guide the organisation effectively.

d) Over-Reliance on Historic Data

Traditional ERM models rely heavily on historical data to inform risk probabilities.

Failure Point: In volatile environments, past performance is often a poor predictor of future outcomes. The models themselves become unreliable, particularly when encountering novel disruptions.

Case Study: ERM at Maersk During the NotPetya Cyberattack

Background

A.P. Møller-Mærsk, a Danish conglomerate and one of the world's largest shipping companies, became a highprofile casualty of the NotPetya cyberattack in June 2017. The malware, originally targeted at Ukraine, spread indiscriminately and encrypted critical systems across the Maersk network.

Response and ERM Implications

Maersk's operations came to a standstill. Ports, terminals, and logistics services were paralysed. ERM failures were immediately evident—while cyber risks were acknowledged in their risk register, the organisation had not anticipated the scale and speed of the disruption.

However, Maersk also demonstrated remarkable adaptive capacity:

It rebuilt critical infrastructure within 10 days.

Risk governance was shifted temporarily to an emergency response unit that bypassed usual bureaucracy.

External partnerships (e.g., Microsoft) were leveraged to accelerate systems recovery.

Lessons Learned

Volatility requires resilience, not just prevention. Maersk's rapid response mitigated damage even though its initial risk defences failed.

Cross-functional ERM is vital. The company's ability to mobilise resources across departments was crucial.

Board-level engagement in cybersecurity became a priority post-incident, leading to long-term improvements in Maersk's digital risk posture.

Conclusion

Enterprise Risk Management in volatile times is no longer an option—it is a strategic imperative. The traditional emphasis on identification, control, and compliance must evolve into a broader, more dynamic practice that anticipates change, absorbs shocks, and responds with agility. While volatility introduces profound challenges, it also offers organisations an opportunity to strengthen their resilience, rethink outdated models, and emerge stronger.

However, ERM can falter when it is divorced from operational realities, reliant on historical data, or hindered by organisational silos. To succeed, it must be integrated, adaptive, and aligned with both culture and strategy. As the Maersk case shows, even when volatility overwhelms defences, the right cultural and operational reflexes can mitigate impact and ensure recovery.

In a volatile world, risk cannot be eliminated—but it can be managed intelligently, provided organisations are willing to rethink how they see it, measure it, and respond to it. The challenge for modern ERM is not simply to protect against the unexpected but to prepare the enterprise to flourish in its midst.

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

Risk management in banking is a comprehensive approach that identifies, assess and mitigate risks that banks face on a daily basis, such as financial transactions, data privacy, anti-money laundering (AML) regulations, and customer protection laws through tools and controls to manage risks.

Just like any other organization, banks are exposed to various types of risks. However, being integral to the functioning of global financial systems, they require robust risk management processes. Banking risk management refers to the proactive and continuous process of identifying, assessing, and controlling risks that a bank may face in its day-to-day operations with the goal of ensuring stability and sustainability.

Effective risk management in banking can help ensure financial stability, protect the interests of depositors and investors, and maintain the overall health of the banking system. It is a critical function that requires ongoing attention and adaptation to the evolving financial landscape.

Types of Risk Management in Banking:

Banking institutions face various types of risks, such as operational risks, compliance risks, credit risks, etc., which can pose a serious threat to their operations and stability, if not addressed in a timely manner. The main types of risks in banking include:

Credit Risk: Credit risk refers to the potential for losses resulting from borrowers' inability to fulfil their financial obligations. Banks face credit risk when borrowers default on loans or fail to make timely repayments. Effective credit risk management involves assessing borrowers' creditworthiness, setting appropriate credit limits, and implementing strategies to mitigate potential losses through diversification and collateralization.

Market Risk: Market risk encompasses the possibility of losses in a bank's trading and investment portfolios due to changes in market conditions. This risk can arise from fluctuations in interest rates, exchange rates, equity prices, commodity prices, or other market variables. Banks manage market risk by hedging, diversifying portfolios, and using financial derivatives to mitigate exposures to adverse market movements.

Operational Risk: Operational risk arises from inadequate or failed internal processes, systems, people, or external events. It includes risks associated with fraud, errors, system failures, cyber-attacks, natural disasters, and regulatory compliance failures. Smart operational risk management involves implementing robust internal controls, conducting regular audits, and enhancing employee training to minimize operational vulnerabilities.

Liquidity Risk: Liquidity risk is the risk that a bank may not have sufficient liquid assets to meet its short-term financial obligations. It arises when there is an imbalance between a bank's liquid assets (e.g., cash, short-term investments) and its liabilities (e.g., customer deposits, short-term borrowings). Banks manage liquidity risk by maintaining adequate liquidity buffers, diversifying funding sources, and implementing contingency funding plans.

Interest Rate Risk: Interest rate risk refers to the potential impact of interest rate fluctuations on a bank's profitability and financial condition. Banks with significant exposure to interest-sensitive assets and liabilities, such as loans, deposits, and fixed-income securities, are vulnerable to interest rate risk. The damage control for this usually involves using hedging instruments, setting risk limits, and optimizing the asset-liability mix to mitigate the adverse effects of interest rate changes.

Compliance Risk: Compliance risk is the risk of legal and regulatory sanctions, financial loss, or reputational damage resulting from violations of laws, regulations, policies, or ethical standards. Banks must adhere to a complex web of regulations governing capital adequacy, consumer protection, anti-money laundering, and data privacy. Compliance risk management involves robust internal controls, ongoing monitoring, and proactive measures to address regulatory changes and emerging compliance issues.

Importance of Risk Management:

It is important for banks to efficiently and proactively manage various risks they face to safeguard banking operations, reputation, and customer assets amidst intensifying stakeholder expectations. Below are five reasons explaining why risk management is crucial for banks: Ensuring Financial Stability: Banks operate in a dynamic environment where economic factors, market trends, and policies constantly change. These fluctuations can have significant impacts on a bank's operations. Effective risk management ensures that banks remain stable and solvent by identifying, assessing, and mitigating potential risks before they can escalate into serious issues.

Facilitating Efficient Capital Allocation: Risk management helps banks allocate capital efficiently by identifying areas where risks are most significant. This ensures that resources are directed to areas that offer optimal returns while managing exposure to potential losses.

Trust and Reputation: In the banking industry, trust is a currency as valuable as any financial asset. Effective risk management helps in building and maintaining trust among customers, investors, and other stakeholders.

Optimizing Returns: By carefully managing risks, banks can optimize their return on investments. It involves a calculated approach towards risk-taking, where the potential returns are weighed against the possible risks. Such a balanced strategy prevents banks from making reckless decisions that might promise high returns but could lead to significant losses, ensuring that the bank's assets are invested wisely.

Long-term Growth and Sustainability: A robust risk management framework allows banks to make informed decisions, optimize their risk-return profile, and invest in growth opportunities with a clear understanding of the potential risks. It positions the bank as a stable and reliable entity, attractive to investors and partners.

Challenges in Bank's Risk Management:

Risk management in banking faces notable hurdles, such as cybersecurity threats in today's digital age where safeguarding financial data is crucial. Banks also grapple with evolving regulations and must navigate varied global markets, each with distinct risk profiles and rules.

The rise of complex financial products presents growth opportunities but requires specialized risk expertise. Balancing profit goals with careful risk assessment amid economic and political changes remains a key challenge in managing credit risk. Despite the clear importance of risk management, banks face numerous challenges in this area, some of which are outlined below:

Cybersecurity Threats: As banks increasingly digitalize their operations, cybersecurity emerges as a significant risk. Protecting sensitive financial information against hackers and breaches is a continuous challenge due to the sophisticated and evolving nature of cyber threats. Balancing security measures with user convenience adds another layer of complexity.

Regulatory Changes: The regulatory environment for banks is in a state of flux, with new laws and amendments often coming into force. Keeping abreast of these changes and ensuring compliance can be daunting, requiring constant vigilance and adaptation. The global nature of banking adds another degree of complexity, as institutions must navigate a patchwork of international, national, and local regulations.

Complex Financial Products: The innovation of complex financial products offers banks new avenues for growth but also presents new risk management challenges. Understanding the intricate workings of these products, assessing their risk profile, and managing these risks effectively demand specialized knowledge and skills. Banks must invest in training and development to equip their teams to handle these complexities efficiently.

Globalization of Financial Markets: As banks expand their operations globally, they are exposed to new markets with varying risk profiles, including different regulatory regimes, political instability, and economic volatility. Managing these diverse and often unfamiliar risks requires a nuanced understanding of local markets and international risk management standards. The challenge is to maintain a consistent risk management approach while adapting to local conditions and regulations.

Credit Risk Management: Assessing the credit worthiness of borrowers and setting appropriate interest rates pose ongoing challenges. Economic downturns, shifts in the market, or unforeseen circumstances affecting borrowers can significantly impact a bank's loan portfolio. Balancing the pursuit of profitability with prudent risk assessment is a delicate endeavour.

Introduction to Insurance Business

The insurance industry is critical for any country's economic development. A well-developed insurance sector boosts risk-taking in the economy, as it provides some security in the event of an unforeseen, loss-causing incident. It also provides much-needed support to family members in the case of loss of life or health. Since the assets under management of insurance companies represent long-term capital, they also act as a pool in which to invest in long-term projects such as infrastructure development.

The insurance industry in India has also grown along with the country's economy. Several insurance companies in the country are expanding their operations, across both the public and private sector.

Insurance, being an integral part of the financial sector, plays a significant role in India's economy. Apart from protection against mortality, property and casualty risks and providing a safety net for individuals and enterprises in urban and rural areas, this sector encourages savings and provides long-term funds for infrastructure development and other long gestation projects of the country. The development of the insurance sector is necessary to support its continued economic transformation.

The public sector insurance companies operating in the sector are: 1. Life Insurance Corporation of India; 2 National Insurance Company Limited; 3. The Oriental Insurance Company Limited; 4. United India Insurance Company Limited; 5. The New India Assurance Company Limited; 6. General Insurance Corporation of India; 7. Agriculture Insurance Company of India Limited and 8. Export Credit Guarantee Corporation of India Limited.

History:

The history of India's insurance industry reflects the history of India's economy. Insurance companies in India were nationalised during pre-liberalisation. This was done to protect the interests of policyholders. Two state-owned insurance companies were thus created: the Life Insurance Corporation in 1956, and the General Insurance Corporation in 1972 for the non-life insurance business.

Post liberalization, the industry was opened up. The

Insurance Regulatory and Development Authority of India (IRDAI) was created in 1999 to regulate the insurance industry in India. Thus, the insurance sector was opened to private players. This allowed foreign players to collaborate with Indian entities to enter the sector.

The number of insurance companies in India has increased quickly and continuously, and this has led to a vibrant insurance sector- with more variety and affordability for the consumer.

Sector Reforms:

The insurance sector was opened for private participation with the enactment of the Insurance Regulatory and Development Authority Act, 1999. The Insurance Regulatory and Development Authority of India (IRDAI) is functioning from its head office in Hyderabad, Telangana. The mission of the Authority includes: (i) To protect the interest of and secure fair treatment to policyholders; (ii) To bring about speedy and orderly growth of the insurance industry (including annuity and superannuation payments), for the benefit of the common man and to provide long term funds for accelerating growth of the economy; (iii) To set, promote, monitor and enforce high standards of integrity, financial soundness, fair dealing and competence of those it regulates; (iv) To ensure speedy settlement of genuine claims, to prevent insurance frauds and other malpractices and put in place effective grievance redressal machinery; (v) To promote fairness, transparency and orderly conduct in financial markets dealing with insurance and build a reliable management information system to enforce high standards of financial soundness amongst market players; (vi) To take action where such standards are inadequate or ineffectively enforced; (vii) To bring about optimum amount of self-regulation in day-to-day working of the industry consistent with the requirements of prudential regulation.

Since the opening up this sector for private and foreign investment in the year 2000, the number of participants in the insurance industry has gone up from seven (7) insurers (including the Life Insurance Corporation of India, four public sector general insurers, one specialized

insurer and General Insurance Corporation as the national re-insurer) to sixty-seven (67) insurers as on March 31, 2021 operating in the life, general, and reinsurance segments (including specialized insurers, namely Export Credit Guarantee Corporation Limited and Agricultural Insurance Company of India Limited). As on March 31, 2021, there are 24 Life insurers including one in Public Sector, 25 general insurers including four in public sector, two specialized insurers in Public Sector, five Stand-Alone Health Insurers (SAHI) and 11 reinsurers including one in Public Sector.

One of the key reforms undertaken in this sector is the passing of Insurance Laws (Amendment) Act, 2015, which paved the way for major reform related amendments in the Insurance Act, 1938, the General Insurance Business (Nationalization) Act, 1972 and the Insurance Regulatory and Development Authority (IRDA) Act, 1999. The amendment Act removed the redundant provisions in the legislation and incorporated certain provisions to provide IRDAI with the flexibility to discharge its functions more effectively and efficiently. It also provided for enhancement of the foreign investment cap in an Indian insurance company from 26 per cent to an explicitly composite limit of 49 per cent with the safeguard of Indian ownership and control. The Amendment Act enabled foreign reinsurers to set up branches in India. It also enabled Lloyds of UK and its members to operate in India through setting up of branches for the purpose of reinsurance business or as investors in an Indian Insurance Company within the 49 per cent cap. This Act has recognized 'health insurance business' as a separate vertical by retaining the capital requirements for health insurers as applicable for Life and Non-life insurance companies.

Pursuant to the amendment to the Indian Insurance Companies (Foreign Investment) Rules, 2015 by the Indian Insurance Companies (Foreign Investment) Amendment Rules, 2019, the cap to foreign equity investment for intermediaries or insurance intermediaries was removed which paved the way to open this channel with 100 per cent FDI.

Further amendment in the Insurance Act, 1938 was brought by promulgating the Insurance (Amendment) Act, 2021 enacted on March 25, 2021 by which the

Government has further enhanced the FDI cap from 49 per cent to 74 per cent in Indian Insurance Companies. Based on this amendment and the corresponding rules issued by the Government, IRDAI has issued a regulation namely IRDAI (Indian Insurance Companies) (Amendment) Regulations, 2021 vide Gazette notification dated July 07, 2021.

Net Owned Fund requirement for foreign insurers engaged in reinsurance business through a branch established in International Financial Services Centre has been reduced from ₹5000 crore to ₹1000 crore vide Finance Act, 2019, dated 1.8.2019.

IRDAI (regulation of insurance business in Special Economic Zone) Rules, 2015 were amended through IRDAI (regulation of insurance business in Special Economic Zone) Amendment Rules, 2020 notified on 30.7.2020 to include a provision for the Insurance Intermediaries to operate in Special Economic Zones.

In 2014, orders passed by the IRDAI and Pension Fund Regulatory and Development Authority (PFRDA) were also made appealable in Securities Appellate Tribunal (SAT). Insurance (Appeal to Securities Appellate Tribunal) Rules, 2016 and Insurance (Procedure for Holding Inquiry by Adjudicating Officer) Rules,2016 were notified on 17.02.2016. The Insurance (Appeal to Securities Appellate Tribunal) Rules, 2016 were amended vide Insurance (Appeal to Securities Appellate Tribunal) Amendment Rules, 2021 notified on 15.4.2021 to provide a reasonable time limit within which the appellant can rectify the defect in his memorandum of appeal and also the manner in which the defect in the Memorandum of Appeal shall be communicated to the appellant in respect of cases where the appeal has been sent by post.

To resolve complaints of all personal lines of insurance, group insurance policies, policies issued to sole proprietorship and micro enterprises on the part of Insurance companies and their agents and intermediaries in a cost effective and impartial manner. The Central Government notified the Insurance Ombudsman Rules, 2017 on 27.04.2017. These rules were amended vide the Insurance Ombudsman (Amendment) Rules, 2018 on 17.08.2018. The said rules were further amended vide notification dated 02.03.2021 and 18.05.2021 on

the recommendations of the Committee on Subordinate Legislation (CoSL), Lok Sabha to make institution of Insurance Ombudsman more efficient and transparent.

In order to facilitate Initial Public Offer (IPO) of Life Insurance Corporation of India (LIC), Life Insurance Corporation Act, 1956 (LIC Act) was amended through Finance Act, 2021. Amended provisions of LIC Act became effective from 30.6.2021. The amendments in LIC Act include amendments in respect of capital structure, Corporate Governance, financial disclosures & audit and distribution of surplus besides other related amendments. Rules and regulations under LIC Act have also been amended pursuant to the said amendment.

The General Insurance Business (Nationalisation) Act, 1972 has been amended through the General Insurance Business (Nationalisation) Amendment Act, 2021 (No. 37 of 2021) and notified on August 19, 2021 to enable greater private participation in the public sector insurance companies under the Act. The said Act has come into force with effect from 27.08.2021.

The Government disinvested 3.5% of its shares in LIC on 17th May, 2022 with the objective to unlock the value of Government's investment. It also enabled LIC to raise capital for meeting its future growth requirements, without depending on the public exchequer and improve governance through greater market discipline and transparency, arising from listing requirements and disclosures. IPO has also enabled the public to acquire stake in LIC and benefit from the same. LIC shares were listed on both NIFTY and Sensex.

Keeping in view the global practices, a notification has been issued under section 2CA of the Insurance Act, 1938 on 4.7.2022 to apply certain sections of the said Act to an insurer carrying on the business of insurance as a financial institution in an International Financial Services Centre only with such exceptions, modifications and adaptations as specified therein.

Topic

Module 2:
The Entrepreneurial
Ecosystem

ELECTIVES

Paper-20C

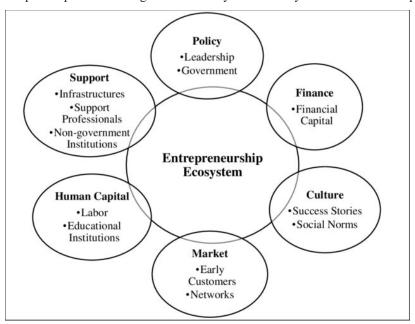
Entrepreneurship and Start Up (ENTS)

The Entrepreneurial Eco-system

An entrepreneurial ecosystem refers to the interconnected network of individuals, organizations, and resources that support and foster the growth of new businesses within a specific geographic area. It is a set of interdependent actors and factors coordinated in such a way that they enable productive entrepreneurship.

The Entrepreneurship Ecosystem means various constituents like entrepreneurs, organizational stakeholders, employees and other individuals, and organizations etc., which facilitate or limit the development of entrepreneurs in a location / region of interest.

There can be other stakeholders like policy institutions, educational set ups, financial institutions and investors, R & D centers, civil society outfits, industry associations, unions, legal institutions, multinationals, etc. In spite of multiplicity of these factors in the ecosystem driving or hindering entrepreneurship, certain factors may have relatively more influence than others. For example, we can see certain cities in India like Bengaluru, Hyderabad and few other states have seen more entrepreneurial activity compared to many other Indian cities. It may also depend on the stage of ecosystem evolution in specific places meaning a mature ecosystem is likely to foster more entrepreneurship.



Why entrepreneurial ecosystem is important?

An entrepreneurial ecosystem is crucial because it fosters a supportive environment for new businesses to thrive, ultimately driving economic growth and innovation. It's a network of interconnected factors – including people, organizations, institutions, and policies – that interact to facilitate the creation and growth of ventures. The key reasons are narrated below:

- 1. **Economic Development:** Entrepreneurial ecosystems contribute to a nation's or region's economic development by promoting job creation, innovation, and the overall competitiveness of local businesses.
- 2. **Innovation:** By providing access to resources, talent, and support, these ecosystems enable entrepreneurs to develop and commercialize new ideas and technologies.
- 3. **Job Creation:** A strong entrepreneurial ecosystem leads to the creation of new businesses, which in turn generate new employment opportunities.
- 4. Resource **Access:** Ecosystems facilitate access to crucial resources like funding, mentorship, and business support services, which are vital for startups.

- 5. **Collaboration and Network Building:** They encourage collaboration and networking among entrepreneurs, investors, mentors, and other key stakeholders.
- 6. **Culture of Entrepreneurship:** A supportive ecosystem fosters a culture of entrepreneurship, encouraging individuals to take risks and pursue their business ideas.
- 7. **Social Mobility:** By providing opportunities for individuals to start and grow their businesses, entrepreneurial ecosystems can promote social mobility and reduce inequality.
- 8. **Sustainable Growth:** While fostering economic growth, these ecosystems also offer opportunities for sustainable practices through innovative solutions and supportive policies.

Factors Influencing Entrepreneurial Ecosystem

An entrepreneurial ecosystem is influenced by a variety of interconnected factors that can be broadly categorized into economic, social and cultural, political and legal, technological, and psychological factors. These factors interact to create an environment that either fosters or hinders entrepreneurial activity.

Isenberg (2011) has also categorized these various elements into six main activities. These activities are: policy, finance, culture, institutional and infrastructural supports, human capital and markets. However, the key factors are briefly discussed:

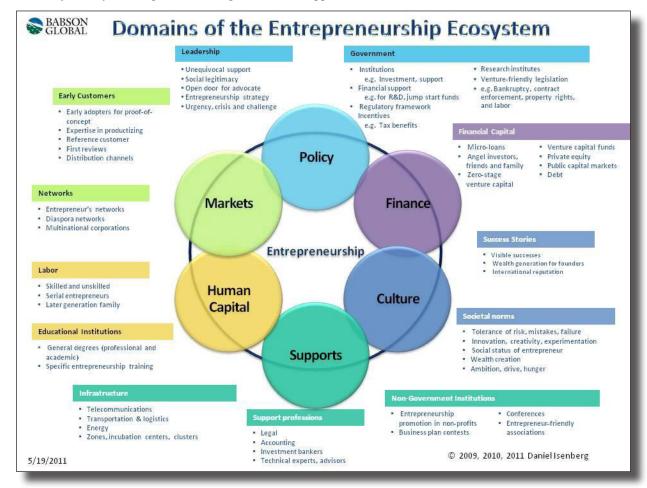
- 1. Access to Capital: Availability of funding (seed funding, venture capital, loans) is crucial for startups and scaling businesses.
- 2. **Market Conditions:** The demand for new products and services, competition, and overall market size significantly impact entrepreneurial success.
- 3. **Cultural Attitudes:** Societal views on entrepreneurship, risk-taking, and failure influence the willingness of individuals to pursue entrepreneurial ventures.
- 4. **Infrastructure:** Reliable infrastructure (transportation, communication, energy) is essential for efficient business operations.
- 5. **Government Policies:** Subsidies, grants, tax breaks, and regulations can either encourage or discourage entrepreneurship.
- 6. **Legal Framework:** Business registration processes, intellectual property rights, and overall legal protections influence the ease of starting and operating a business.
- 7. **Technological Advancements:** New technologies create opportunities for innovation and the development of new products and services.
- 8. **Motivation and Drive:** Entrepreneurs' personal ambition, passion, and drive are essential for overcoming challenges.
- 9. **Risk Tolerance:** The willingness to embrace uncertainty and potential failure is a key characteristic of successful entrepreneurs.
- 10. Human Capital: The availability of skilled workers and talent is crucial for building and scaling businesses.
- 11. **Research and Development (R&D):** Innovation and technological advancements are often driven by R&D activities.
- 12. **Supportive Stakeholders:** Incubators, accelerators, mentors, and other support organizations play a vital role in nurturing and guiding startups

Domains of Entrepreneurship Ecosystem

An entrepreneurship ecosystem can be broadly categorized into six key domains: Policy, Finance, Culture, Support, Human Capital, and Markets. These domains represent the essential elements that interact to foster or hinder entrepreneurial activity within a specific region.

According to Babson Global, the ecosystem has six parts: Culture, Markets, Human Capital, Finance, Supports, and Policy.

- 1. Culture: Culture covers societal norms and success stories that help to inspire people to become entrepreneurs.
- 2. Markets: Markets cover entrepreneurial networks and customers.
- 3. Human Capital: Human capital includes education system and the skill level of the workforce.
- 4. Finance: Finance domain includes the full spectrum of financial services available to entrepreneurs.
- **5. Supports:** Support domain includes non-governmental institutions, infrastructure and the professionals support such as investment bankers, technical experts and advisors.
- 6. Policy: Policy covers government regulations and support.



Entrepreneurial ecosystems and innovation

- 1. Entrepreneurial ecosystems foster innovation by providing access to resources and support, ecosystems enable entrepreneurs to develop and refine their ideas, test prototypes, and bring their products or services to market.
- 2. It helps to collaborate and knowledge sharing within the ecosystem can lead to new ideas and solutions.

- 3. A supportive culture encourages experimentation and calculated risk-taking, which are essential for innovation.
- 4. The availability of funding, talent, and infrastructure allows entrepreneurs to scale their businesses and bring innovative products to a wider audience.

Examples of successful entrepreneurial ecosystems

- 1. Silicon Valley, USA: Known for its concentration of tech companies, venture capital firms, and talent, Silicon Valley is a leading example of a thriving entrepreneurial ecosystem.
- 2. Bangalore, India: Emerging as a prominent startup hub, Bangalore boasts a growing ecosystem with strengths in technology, innovation, and entrepreneurship.
- 3. Tel Aviv, Israel: Renowned for its strong cybersecurity and biotech sectors, Tel Aviv has fostered a vibrant ecosystem with a focus on innovation and global market access

The Role of Government Initiatives in Boosting Startups



Source: Govt. of India Startup Initiatives

India's startup ecosystem is bustling with innovation, ambition, and a strong entrepreneurial fervor. India emerges as the world's third-largest startup ecosystem. It expands digital infrastructure, business-friendly reforms, government funding, and the entrepreneurial spirit are key enablers of a thriving startup sector in India. The key initiatives are:

- 1. **Startup India Initiative:** Launched in 2016, this flagship program aims to build a robust startup ecosystem, encouraging innovation, job creation, and economic growth.
- 2. **Tax Benefits:** The government provides tax exemptions and other financial incentives to reduce the burden on startups, encouraging investment and growth.
- 3. **Ease of Doing Business:** Initiatives like self-certification and relaxed norms for public procurement aim to simplify compliance and reduce bureaucratic hurdles for startups.
- 4. **Intellectual Property Rights:** Support in patent filing and other legal matters helps startups protect their innovations.
- 5. **Promoting Foreign Partnerships:** Schemes and reforms encourage global trade and foreign investment, providing startups with access to international markets and resources.
- 6. **Fund of Funds:** The government utilizes a "Fund of Funds" to provide financial assistance to startups, supporting their growth and scaling.
- 7. **Credit Guarantee Scheme:** This scheme provides a safety net for startups seeking loans, making it easier for them to access capital.

- 8. Seed Capital: State governments, in some cases, offer seed capital to help small entrepreneurs launch their businesses.
- 9. Incubation and Acceleration: The government supports the establishment of incubation centers and innovation hubs, providing startups with infrastructure, mentorship, and access to resources.
- 10. Research and Development: Initiatives promote collaboration between research institutions and industries, fostering innovation and access to cutting-edge technologies for startups.
- 11. Skill Development: Programs like those offered by the Ministry of Skill Development and Entrepreneurship (MSDE) aim to equip entrepreneurs with the necessary skills and knowledge.
- 12. Digital Platforms: Online portals like Startup India facilitate access to information, services, and resources for startups.
- 13. Awareness and Advocacy: Government institutions and programs work to create awareness about entrepreneurship and its potential, particularly among youth.
- 14. Education and Training: Entrepreneurship education and training programs are designed to equip individuals with the skills and knowledge to start and manage businesses.
- 15. **Mentorship and Networking:** The government facilitates mentorship programs and networking opportunities to connect startups with experienced professionals and investors.
- 16. Inclusive Growth: Initiatives like PM-JANMAN, which focuses on particularly vulnerable tribal groups, demonstrate the government's commitment to inclusive entrepreneurship.

By actively promoting entrepreneurship through policy, funding, infrastructure, and support, the Government of India is playing a vital role in shaping a dynamic and thriving startup ecosystem.

Source: https://www.investindia.gov.in/blogs/role-government-initiatives-boosting-startups

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Submission Guidelines:

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- 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.

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