

CMA E-Bulletin

VOL 10 | NO. 10 | OCTOBER 2025

An Initiative of Directorate of Studies

Behind every successful business decision, there is always a CMA

About the Institute

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

Vision Statement

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

Mission Statement

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

Institute Motto

असतोमा सद्गमय तमसोमा ज्योतिर् गमय 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

Disclaimer:

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

Copyright © 2025 by The Institute of Cost Accountants of India

CMA E-Bulletin

VOL 10 | NO. 10 | OCTOBER 2025

An Initiative of Directorate of Studies





CONTENTS

CMA E-Bulletin

VOL 10 I NO. 10 I October 2025

Chief Patron

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

Patron

CMA Neeraj Dhananjay Joshi, Vice President, ICMAI

Editorial Board Members

CMA Vinayaranjan P., Chairman, T&EF Committee

CMA Bibhuti Bhusan Nayak

CMA Ashwin G Dalwadi

CMA (Dr.) Ashish P. Thatte

CMA Avijit Goswami

CMA Manoj Kumar Anand

CMA Rajendra Singh Bhati

CMA (Dr.) Paritosh Basu, Co-opted

CMA (Dr.) Niranjan Shastri, Co-opted

CMA Akhaya Kumar Swain, Co-opted

Chief Editor

CMA (Dr.) Debaprosanna Nandy Secretary (Officiating)

Managing Editor

CMA Avijit Mondal, Joint Director (Studies) Secretary, T&EF Committee

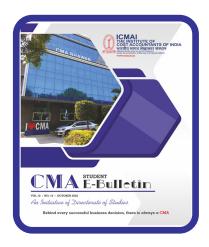
Editorial Team

CMA Samarpita Ghosal, Assistant Director (Studies) CMA Susmita Ghosh, Sr. Officer (Studies)

Editorial Office

The Institute of Cost Accountants of India CMA Bhawan
12, Sudder Street, KolKata - 700016

studies.ebulletin@icmai.in



06 - Chairman's Communique

(Training & Educational Facilities Committee)

07 - 22 - CMA Foundation Course

Syllabus 2022

(Paper 1 - 4)

23 - 70 - CMA Intermediate Course

Syllabus 2022

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

71 - 119 - CMA Final Course

Syllabus 2022

Group III (Paper 13-16) & Group IV (Paper 17-19) Electives (Paper 20A - 20C)



CHAIRMAN'S COMMUNIQUE

Dear CMA Students,

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

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

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

In addition to theoretical knowledge, practical skills are crucial for your professional development. We have designed a variety of skill development programs that focus on real-world applications and industry-relevant practices. These programs include case studies, simulation exercises, and handson training sessions that bridge the gap between academic knowledge and practical implementation.

Our collaborations with leading organizations and industry experts provide you with invaluable insights and opportunities to apply your knowledge in real-world scenarios. Through internships, live projects, and guest lectures, you can gain practical experience and understand the nuances of the industry. These collaborations also open doors to networking opportunities that can be instrumental in your career growth.

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

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

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

Warm regards.

CMA Vinayranjan P.

Chairman, Training & Educational Facilities Committee, ICMAI

CMA FOUNDATION COURSE

Syllabus 2022

Fundamentals of Business Laws -

Module 3: Sales of Goods Act, 1930

Business Communication -

Module 5: **Business** Communication

FOUNDATION

Paper-1

Fundamentals of **Business Laws and** Business Communication (FBLC)

SECTION - A: FUNDAMENTALS OF BUSINESS LAWS

MULTIPLE CHOICE QUESTIONS (MCQ)

- A contract where ownership in goods is to pass at a future date or after certain conditions are fulfilled is called:
 - (a) Sale
 - (b) Hire purchase
 - (c) Agreement to sell
 - (d) Contract of bailment
- 2. Which of the following is not included under the term "goods"?
 - (a) Electricity
 - (b) Crops standing in the field
 - (c) Money
 - (d) Water stored in tanks for sale
- 3. The essence of a valid sale under Section 4 of the Sale of Goods Act is:
 - (a) Transfer of possession
 - (b) Transfer of ownership
 - (c) Delivery of goods
 - (d) Payment of price
- 4. When specific goods perish before the contract is made without the seller's knowledge, the contract is:
 - (a) Valid
 - (b) Void
 - (c) Voidable
 - (d) Enforceable with damages
- 5. Goods are said to be specific goods when:
 - (a) They are yet to be produced
 - (b) They are identified and agreed upon at the time of contract
 - (c) They are selected from a larger quantity later
 - (d) They are in transit
- 6. The right of resale by an unpaid seller arises:
 - (a) Only with buyer's consent
 - (b) Only after court order
 - (c) In case of perishable goods or when notice given
 - (d) In every contract of sale

- 7. In a sale by sample, the bulk must:
 - (a) Resemble the sample
 - (b) Be cheaper than the sample
 - (c) Be more than the sample
 - (d) Have the same weight as the sample
- 8. The principle "risk follows ownership" means:
 - (a) Possession and ownership are same
 - (b) Risk remains with the seller until delivery
 - (c) Once ownership passes, buyer bears the risk
 - (d) Risk always remains with seller
- 9. In which of the following situations does property not pass to the buyer?
 - (a) Goods in a deliverable state
 - (b) Goods identified and agreed upon
 - (c) Goods unascertained and not appropriated
 - (d) Goods sold and delivered to carrier
- 10. Which is a warranty and not a condition?
 - (a) Fitness for purpose
 - (b) Merchantable quality
 - (c) Quiet possession
 - (d) Correspondence with description
- 11. The buyer has no right to reject goods but can claim damages only if:
 - (a) Condition is breached
 - (b) Warranty is breached
 - (c) Both (a) and (b)
 - (d) There is anticipatory breach
- 12. When the seller agrees to deliver goods to a particular carrier on buyer's direction, property passes:
 - (a) On delivery to carrier
 - (b) On receipt by buyer
 - (c) On payment of price
 - (d) On confirmation by buyer
- 13. Auction sales are governed by Section:
 - (a) 60
 - (b) 64

- (c)72
- (d) 54
- 14. A sale made under compulsion of law (e.g., court auction) is called:
 - (a) Voluntary sale
 - (b) Judicial sale
 - (c) Conditional sale
 - (d) Distress sale
- 15. A bought a consignment of milk from B for resale. Later, it was found unfit for human consumption. What right does A have?
 - (a) Claim damages only
 - (b) Reject goods for breach of condition
 - (c) Return part and keep balance
 - (d) No remedy available
- 16. A sold his car to B but agreed to retain it for a week to repair the brakes. Before delivery, the car is destroyed by fire without fault. Who bears the loss?
 - (a) A
 - (b) B
 - (c) Insurer
 - (d) Both equally
- 17. R, a trader, ordered 100 bottles of olive oil described as "pure Italian origin." The goods supplied were Spanish. Can R reject the goods?
 - (a) Yes, breach of condition as to description
 - (b) No, as both are olive oil
 - (c) Only damages available
 - (d) Depends on market value
- 18. K leaves a gold chain with L, a jeweller, for cleaning. L sells it to M, a good faith buyer. K sues M. Who owns the chain?
 - (a) K true owner
 - (b) M good faith purchaser
 - (c) L jeweller
 - (d) Shared ownership
- 19. A books 50 bags of sugar through a carrier. B, the buyer, becomes insolvent while goods are in transit. A informs the carrier to hold them. This is:
 - (a) Lien
 - (b) Resale

- (c) Stoppage in transit
- (d) Rescission
- 20. A orders 100 shirts from B based on a sample. The shirts delivered match the sample but shrank after washing. Which type of breach it will amount to?
 - (a) Breach of condition as to sample
 - (b) Breach of implied condition as to merchantability
 - (c) No breach
 - (d) Breach of warranty
- 21. In an auction, the auctioneer uses a dummy bidder to raise prices. Buyer later discovers this. The sale is:
 - (a) Valid
 - (b) Void
 - (c) Voidable at buyer's option
 - (d) Illegal but binding
- 22. A bought machinery under an agreement to sell, to be delivered after one month. Before delivery, the machinery was damaged in a storm. Who would bear the loss?
 - (a) Buyer
 - (b) Seller
 - (c) Insurer
 - (d) Both equally
- 23. B sells to C a batch of chemicals stored in his warehouse. Before delivery, C insures them. Fire breaks out and goods are lost. Who bears the loss?
 - (a) C, since ownership had passed
 - (b) B, since he was bailee
 - (c) Insurer
 - (d) Both equally
- 24. A, a seller, has sent goods to B but keeps the railway receipt in his own name. The goods are lost in transit. Risk lies with:
 - (a) A
 - (b) B
 - (c) Carrier
 - (d) Insurance company
- 25. Which of the following best defines downward communication?
 - (a) Information flowing from subordinates to superiors
 - (b) Exchange between peers

- (c) Information flowing from higher to lower levels
- (d) Informal exchange in the workplace
- 26. The main objective of feedback in communication is to:
 - (a) Lengthen the process
 - (b) Evaluate effectiveness of the message
 - (c) Delay the response
 - (d) Make communication formal
- 27. Using emojis in official business emails typically affects:
 - (a) Clarity
 - (b) Formality
 - (c) Completeness
 - (d) Feedback
- 28. Communication that flows diagonally between departments of different levels is called:

- (a) Upward
- (b) Downward
- (c) Lateral
- (d) Crosswise
- 29. The primary purpose of business memos is to:
 - (a) Announce policies and decisions within an organization
 - (b) Promote products to external customers
 - (c) Create brand awareness
 - (d) Provide entertainment
- 30. The "7Cs" of effective communication include all except:
 - (a) Clarity
 - (b) Courtesy
 - (c) Correctness
 - (d) Confrontation

Answer:

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

Fundamentals of Financial Accounting -

Module 2: Accounting for **Special Transactions**

Fundamentals of Cost Accounting -

Module 4: Fundamentals of **Cost Accounting**

FOUNDATION

Paper-2

Fundamentals of Financial and Cost Accounting (FFCA)

Sl.	Question			Answer		
No.		A	В	С	D	Answer
1	A Bill for ₹2,000 was dishonoured. Notoing charges being ₹40. It was renewed with Interest of ₹50. What will be the value of new Bill.	₹2,040	₹2,050	₹2,010	₹2,090	D
2	X of Kolkata sent out 2,000 boxes costing 100 each with the instruction that sales are to be made at cost + 45%. X draws a bill on Y for an amount equivalent to 60% of sales value. The amount of bill will be:	₹1,74,000	₹1,20,000	₹2,00,000	₹2,90,000	A
3	When due date is a public holiday, then the due date will be.	Succeeding business day	Preceeding business day	Due date will not change	After a month of payable day	В
4	Goods sent on consignment account is of the nature of	Personal	Real	Nominal	Sales	В
5	When the Bill is dishonoured, in the books of the drawer account to be debited -	BR Account	Acceptor A/c	BP Account	Payee A/c	В
6	A proforma invoice is sent by:	Consignee to Consignor	Consignor to Consignee	Debtor to Consignee	Debtor to Consignor	В
7	Memorandum Joint Venture Account is:	Personal	Real	Nominal	None of these	С
8	Del Credere is paid then A/C should be debited for unrecoverability	Consignee	Consignment	Consinor	Debtor	A
9	What is the nature of joint venture with co-venture account:	Nominal	Real	Personal	None of these	С
10	In which type of Bill, the payment of Bill is made when presented or demanded.	Clean Bill	Demand Bill	Inland Bill	Foeign Bill	В
11	A and B enter in to joint venture sharing profit and loss in the ratio 1:1. A purchased goods costing ₹20,000. B. sold the goods for ₹25,000. Both entitled to get commission of 3% each on sales, the profit will be	₹3,500	₹3,600	₹3,400	₹3,800	A
12	When Consignee incurs expense	No entry is passed in the Books of Consignor	Entry passed by both Consignor & Consignee	Entry passed only by Consignor	Entry can be passed in any pne Book	В
13	The consignment accounting is made on the basis:	Accrual	Realization	Cash	All of these	A
14	Closing stock with Consignee is shown in the Balance Sheet of	Consignee	Consignor	Agency	None of these	В
15	A Promissory Note is written by the	Debtor	Creditor	Payee	Drawer	A

Sl.	Question			Answer		
No.		A	В	С	D	Answer
16	For recording closing stock held by Consignee which account must be debited	Consignment	Consignee	Sales	Consignment Stock	D
17	Which of the following expenses are non-recurring in consignment?	Freight and insurance	Godown rent	Advertisement	Sales commission	A
18	The unsold goods with the consignee at the end of the accounting period are known as:	Closing stock	Consignment stock	Transit Stock	Goods on Consignment	В
19	A purchased goods costing ₹42,500. B sold goods of ₹40,000 at ₹50,000. Balance goods were taken over by A at same gross profit percentage as in case of sale. The amount of goods taken over will be:	₹3,125	₹2,500	₹3,000	None of these	A
20	In which type of Bill, the amount is payable on a fixed date after acceptance.	Clean Bill	After sight Bill	Accomodation Bill	At sight Bill	С
21	XZ draws a bill on YZ for ₹2,00,000 for 3 months on 1.1.2020. The bill is discounted with banker at a charge of ₹1,000. At maturity the bill return dishonoured. In the books of XZ, for dishonour, the bank account will be credited by:	₹199000	₹2,00,000	₹2,01,000	None of these	В
22	Which one is is an indirect cost?	Wages of machine operators	Carriage inward	Salary of factory supervisor	None of these	С
23	The main objective of cost accounting is to:	Ascertain selling price	Ascertain cost of products and services	Prepare financial statements	Determine tax liability	В
24	Opportunity cost is:	A sunk cost	A historical cost	The value of next best alternative foregone	A fixed cost	С
25	Which of the following is NOT a component of total cost?	Prime cost	Works cost	Selling cost	Capital cost	D
26	The document used to requisition materials from stores is called	Material requisition note	Bin card	Goods received note	Job card	С
27	Fixed costs are:	Constant per unit	Constant in total	Variable in total	Proportional to production	В
28	Conversion cost is:	Direct material + Direct labour	Direct labour + Factory overheads	. Prime cost + Selling overheads	Direct expenses + Administration cost	В
29	Overhead absorption means:	Recording of actual overhead	Charging overheads to cost units	Allocation of direct materials	None of the above	В
30	Margin of safety (MOS) is the difference between:	Actual sales and fixed cost	Actual sales and variable cost	Actual sales and break- even sales	Fixed cost and contribution	С

Fundamentals of Business Mathematics -

Module 2: Algebra

Fundamentals of Business Statistics -

Module 7: Probability

FOUNDATION

Paper-3

Fundamentals of Business Mathematics and Statistics (FBMS)

In this issue we will carry out MCQs on Algebra & Probability – refer Module 2 and Module 7 of Study guide.

- 1. What will be the value of $(7^{2}*7^{5})/(7^{-2}*7^{5})$?
 - (a) 7^4
 - (b) 7^{2*3}
 - (c) 7^2
 - (d) None of the above
- 2. Simplify $(w^t)^2$, if the value of t > 2
 - (a) w^{t2}
 - (b) $w^{2/t}$
 - (c) w^t
 - (d) w^2
- 3. Find the value of $4^{4*}4^{3}$.
 - (a) 256*64
 - (b) 16384
 - (c) 4^7
 - (d) All of the Above
- **4.** Simplify $14(a^3)^5b^2 / 2(a^3)^4$
 - (a) 7b
 - (b) $7a^5$
 - (c) $7a^3b^2$
 - (d) $7a^4b^2$
- 5. Simplify $15(a^2)^2b^0 / 5(a^3)^1$
 - (a) 3b
 - (b) 3a
 - (c) $3a^4b^0$
 - (d) $3a^3b^1$
- 6. Find the value of $\log 3^4 + \log 3^2 \log 3^3$
 - (a) $3\log \sqrt{3}$
 - (b) 4log 3
 - (c) $log 3^3$
 - (d) $\log \sqrt{3}^5$
- 7. Find the value of $(3^4/9^2) * (9/3^2)$?
 - (a) 3^0
 - (b) 3^1
 - (c) 3^{-1}
 - (d) 3^2

- **8.** Find the value of: $6^{2*}6^{3}$
 - (a) 3^{10}
 - (b) 59049
 - (c) 6^5
 - (d) 2187
- **9.** Find the value of $(9^4/9^3) * (9/9^3)$?
 - (a) 3^{-1}
 - (b) 3^{-2}
 - (c) 3^{-3}
 - (d) 3^{-7}
- 10. When the value of p>u, simplify $(2^p)^u$.
 - (a) 2^{3*u*p}
 - (b) $2^{2*u/p}$
 - (c) 2^{p*2}
 - (d) None of the Above
- **11.** Find the value of $11^{20} / 11^9$
 - (a) 11^{11}
 - (b) 11^0
 - (c) 1
 - (d) 11^2
- **12.** Simplify $81(a^7)^2b^2 / 27(a^3)^3$
 - (a) 3b
 - (b) $3a^5$
 - (c) 3a5b
 - (d) $3a^5b^2$
- 13. Higher level social and managerial decisions are concerned with specific unique situations rather than with a long series of identical situations. Social & managerial decision makers therefore rely mostly on
 - (a) Subjective probability
 - (b) Classical probability
 - (c) Empirical probability
 - (d) Conditional probability
- **14.** When we use relative frequency approach to establish probabilities, our probability figure
 - (a) Will lose accuracy as we increase the number of observations
 - (b) Will gain accuracy as we decrease the number of observations

- (c) Will gain accuracy as we increase the number of dependent observations
- (d) Will gain accuracy as we increase the number of observations
- 15. Priory probability is
 - (a) Subjective probability
 - (b) Empirical probability
 - (c) Classical probability
 - (d) Probability with Bayes' theorem
- **16.** Refer the following table:

Second	F	irst eve	nt	Total
Event	A1	A2	A3	
B1	2	1	3	6
B2	1	2	1	4
Total	3	3	4	10

- $P(B/A_2) & P(B_2, A_3)$ are
- (a) 1/3, 2/10
- (b) 1/3, 1/10
- (c) 1/10, 1/3
- (d) 1/10, 1/10
- 17. A survey by Air travelers' association revealed that 60% of its member made airline reservations last year. Two members are selected at random. The probability that both the members made airline reservations last year is
 - (a) 0.60
 - (b) 0.40
 - (c) 0.36
 - (d) 0.16
- 18. Initially, probability was a branch of
 - (a) Physics
 - (b) Statistics
 - (c) Mathematics
 - (d) Economics
- 19. If events are mutually exclusive, then
 - (a) Their probabilities are less than ne
 - (b) Their probabilities sum to one
 - (c) Both events cannot occur at the same time
 - (d) Both of them contain every possible outcome of an experiment

- **20.** If the events A and B are mutually exclusive then P $(A \cap B)$ is equal to-
 - (a) 1
 - (b) P(A) P(B)
 - (c) 0
 - (d) $P(A) + P(B) P(A \cup B)$
- **21.** If for two events A and B, $P(A \cup B) = 1$, then A and B are
 - (a) Mutually exclusive events
 - (b) Equally likely events
 - (c) Exhaustive events
 - (d) Dependent events
- 22. If P(A) = 1, then the event A is known as
 - (a) Symmetric event
 - (b) Dependent event
 - (c) Improbable event
 - (d) Sure event
- 23. If P(A) = 1, then the event A is known as
 - (a) Symmetric event
 - (b) Dependent event
 - (c) Improbable event
 - (d) Sure event
- **24.** If an unbiased coin is tossed once, then the two events head and tall are
 - (a) Mutually exclusive
 - (b) Exhaustive
 - (c) Equally likely
 - (d) All these
- **25.** The probability of an event can assume any value between
 - (a) -1 and 1
 - (b) 0 and 1
 - (c) -1 and 0
 - (d) None of these
- **26**. ____ of all probabilities is equal to 1.
 - (a) Sum
 - (b) Difference
 - (c) Product
 - (d) None of the above

- 27. Sum of probability of an event A and its complement
 - (a) 1
 - (b) 0
 - (c) $\frac{1}{2}$
 - (d) -1/2
- **28.** If A is an event and A^c its complementary event then
 - (a) $P(A) = P(A^c) 1$
 - (b) $P(A^c) = 1 P(A)$
 - (c) $P(A) = 1 + P(A^c)$
 - (d) None

- **29.** If for two events A and B, $P \neq (A \cap B) \neq P(A) P(B)$, then the two events A and B are
 - (a) Independent
 - (b) Dependent
 - (c) Not equally likely
 - (d) Not exhaustive
- **30.** Probability of occurrence of at least one of the events A and B is denoted by
 - (a) P (AB)
 - (b) P(A+B)
 - (c) P (A/B)
 - (d) None

Answer:

1	a	$(7^{2}*7^{5})/(7^{-2}*7^{5}) = (7^{2+5})/(7^{-2+5}) = (7^{7})/(7^{3}) = 7^{7-3}$ = 7^{4}
2	a	$(w^t)^2 = w^{t*2} = w^{t2}$
3	d	$4^{4*}4^3 = 4^7 = 16384$
4	С	$ 14(a^3)^5b^2 / 2(a^3)^4 = (14/2)(a^{3*5})b^2 / a^{3*4} $ $= 7a^{15}b^2 / a^{12} = 7a^{15-12}b^2 = 7a^3b^2 $
5	b	$15(a^{2})^{2}b^{0} / 5(a^{3})^{1} = (15/5) (a^{2*2})^{*}1 / a^{3*1}$ $= 3 a^{4} / a^{3} = 3a^{4-3} = 3a$
6	С	$\log 3^4 + \log 3^2 - \log 3^3 = 4\log 3 + 2\log 3 - 3\log 3$ $= \log 3 \cdot (4 + 2 - 3) = 3 \cdot \log 3 = \log 3^3$

7	a	$(3^{4}/9^{2}) * (9/3^{2}) = 3^{4}/3^{2*2} * 3^{2}/3^{2} = 3^{4\cdot4} * 3^{2\cdot2}$
		$=3^{0}*3^{0}=3^{0+0}=3^{0}$
8	с	$6^{2} * 6^3 = 6^{2+3} = 6^5 = 7776$
9	b	$(9^4/9^3) * (9/9^3) = 9^4/9^3 * 9^1/9^3 = 9^{4-3} * 9^{1-3}$
		$=9^{1}*9^{-2}=9^{1-2}=9^{-1}=3^{2^{*}-1}=3^{-2}$
10	d	simplify $(2^p)^u = 2^{p^*u}$
11	d	$11^{20} / 11^9 = 11^{20-9} = 11^{11}$
12	d	$81(a^7)^2b^2 / 27(a^3)^3 = (81/27)(a^{7*2}b^2) / a^{3*3}$
		$= 3 a^{14}b^2 / a^9 = 3 a^{14-9} b^2 = 3a^5b^2$

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

Suggestions:

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

Best Wishes.

Fundamentals of Business Economics

Fundamentals of Management

FOUNDATION

Paper-4

Fundamentals of Business Economics and Management (FBEM)

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
- 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

- 7. 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 hope you remember that, earlier on 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.

Wish you all the best !!!

CMA INTERMEDIATE COURSE

Syllabus 2022

Module 7:

Factories Act, 1948

and

Module 8:

Payment of Gratuity

Act, 1972

INTERMEDIATE

Group I - Paper-5

Business Laws and Ethics (BLE)

Overview of The Factories Act, 1948

Introduction

Factories Act, 1948, one of the most important labor laws in India, is a landmark in the history of industrial jurisprudence in India. The Act came into force on 23rd September 1948 and became effective from 1st April 1949. It replaced the Factories Acts of 1881, 1891, 1911, 1922, and 1934, which were limited in scope and could not keep pace with the industrial realities of pre and post-independence. In essence, it is a social welfare law that seeks to humanize the conditions of industrial work and lays down guidelines to regulate working hours, employment conditions, and safety standards in factories so that the growth of industrial production does not compromise the dignity and well-being of workers.

Historical Background and Rationale

Labour reforms worldwide were significantly affected by the industrial revolution in Britain during the 18th and 19th centuries, when large-scale industries such as textiles, jute, and mining, many of which were under colonial rule, relied on cheap labour, including women and children, toiling in deplorable conditions of long hours, hazardous environments, and meager wages.

The first Indian Factories Act of 1881, which was largely influenced by British rule, was primarily intended to address the concerns of British textile manufacturers over competition from Indian industry utilizing cheap child labour. It was amended several times in 1891, 1911, 1922, and 1934 to include more categories of workers and to include some basic safety and health measures, but by the 1940s, India's industrial sector had grown sufficiently large to warrant a more comprehensive statute.

The Factories Act, 1948, was therefore enacted as a consolidating Act incorporating modern principles of industrial safety and welfare, and aligned with international labour standards prescribed by the International Labour Organization (ILO).

Objectives of the Act

The main objectives of the Factories Act, 1948 are as follows:

- To provide for the health, safety and welfare of all persons employed in factories.
- To regulate working hours, leave, and employment conditions for adults, women, and young persons.
- To define the duties and responsibilities of employers and factory management in in relation to the health, safety and welfare of the persons employed therein, with a view to a proper balance between industrial production and labor welfare, the latter being an essential condition for the healthy growth of industry.

Scope and Applicability

The Act has a nationwide jurisdiction and covers all factories [as defined in Section 2(m)]:

- Any premises where 10 or more workers are working with the help of power, or
- 20 or more workers are employed without the aid of power, and
- Where manufacturing processes are carried on.

However, the Act does not apply to mines, mobile units of armed forces, railway running sheds, or hotels and restaurants. The State Governments can extend or modify the provisions as per local conditions.

Key Definitions

Some crucial terms under the Act include:

- Factory [Section 2(m)] Any premises where a manufacturing process is carried out with or without the aid of power, employing a prescribed minimum number of workers.
- Worker [Section 2(1)] A person employed, directly or through an agency, to do any manual, clerical, technical, or supervisory work for wages.
- Occupier [Section 2(n)] The person who has ultimate control over the affairs of the factory (e.g., owner, managing director).
- Manufacturing Process [Section 2(k)] Any process related to making, altering, packing, cleaning, or adapting articles for sale.

Major Provisions of the Act

1. Health Provisions (Sections 11-20)

The Act lays down detailed provisions to maintain a healthy workplace environment:

- Cleanliness (Section 11): Factories must be kept clean and free from dust, dirt, and effluvia.
- Ventilation and Temperature (Section 13): Adequate ventilation must be provided, and reasonable temperature maintained.
- Lighting (Section 17): Proper natural and artificial lighting is mandatory.
- Drinking Water (Section 18): Safe and wholesome drinking water must be made available.
- Latrines and Urinals (Section 19): Separate and sufficient sanitary facilities for male and female workers are required.

These provisions collectively aim to prevent occupational diseases and maintain basic hygiene standards.

2. Safety Provisions (Sections 21-41H)

Industrial accidents were a pressing concern when the Act was framed. Hence, the safety chapter imposes specific duties on employers to protect workers from physical harm:

- Fencing of Machinery (Section 21): All dangerous parts of machinery must be securely fenced.
- Employment of Young Persons (Section 23): Young persons must not work on dangerous machines unless fully instructed and supervised.
- Protection from Dangerous Fumes (Section 36):
 Adequate measures must be taken to prevent exposure to toxic substances.
- Precaution in Case of Fire (Section 38): Factories must have effective fire-fighting equipment and emergency exits.
- Safety Officers (Section 40B): Factories employing more than 1,000 workers must appoint qualified safety officers.

These measures recognize the employer's moral and legal obligation to provide a hazard-free workplace.

3. Welfare Provisions (Sections 42-50)

The welfare provisions underscore the social responsibility of employers. Key requirements include:

- Washing Facilities (Section 42) and Rest Rooms (Section 47) for workers.
- Canteens (Section 46): Mandatory in factories with more than 250 workers.
- Crèches (Section 48): Required in factories employing more than 30 women workers.
- Welfare Officers (Section 49): Factories employing over 500 workers must appoint qualified welfare officers.

Such measures extend beyond mere safety, addressing workers' holistic well-being.

4. Working Hours and Employment Conditions

For Adult Workers (Sections 51-66):

- Maximum working hours: 48 hours per week and 9 hours per day.
- Weekly holiday (Section 52): One day off after every six consecutive working days.
- Extra wages for overtime (Section 59): Twice the ordinary rate of wages.
- Restrictions on night work for women (Section 66):

Women can work only between 6 a.m. and 7 p.m., though certain industries may be exempted with safeguards.

For Young Persons (Sections 67-77):

- Minimum age for employment: 14 years.
- Adolescents (15-18 years) must obtain a certificate of fitness from a certifying surgeon.
- Working hours and conditions for children are restricted to protect their health and education.

5. Annual Leave with Wages (Sections 78-84)

Workers who have worked for 240 days or more in a calendar year are entitled to annual leave with wages:

- One day leave for every 20 days of work performed by an adult.
- One day leave for every 15 days for a child worker.
- Leave may be carried forward up to a prescribed limit, ensuring rest and recreation for workers.

6. Penal Provisions

Violations of the Act attract penalties to ensure compliance:

- The occupier or manager of a factory can be fined up to ₹ 1,00,000 or imprisoned for up to two years (Section 92).
- Repeat offences attract enhanced penalties.

These stringent provisions emphasize the seriousness of worker safety and welfare.

Administration and Enforcement

The Act provides for a hierarchical structure of enforcement:

- a. Inspectors of Factories are appointed by State Governments to inspect factories, inquire into accidents, and ensure compliance.
- b. Certifying Surgeons are appointed to oversee medical examinations of workers, especially adolescents.

The dual administrative framework of Central and State Governments allows flexibility in implementation while maintaining uniform standards.

State-wise variations in the provisions of the Act

Since the new Occupational Safety, Health, and Working Conditions (OSHWC) Code, 2020 has not yet been fully implemented nationwide, the Central Act continues to be the main statute. The field of labor law is changing, though. The Factories Act's actual on the ground provisions now differ by state because several states have used their concurrent powers to amend the Act (or adopt rules/ordinances) to change working hours, overtime

limits, exemptions, and other operational requirements. Some of such variations are shown below:

State	Key Changes / Amendments	Effective Date / Notification	Reference / Gazette Note
Karnataka	Factories (Karnataka Amendment) Act, 2023: extended daily hours up to 12 hours/day (with consent), raised overtime limit from 75 to 125 hours/quarter; flexible shift scheduling for women.	Gazette Notification No. LD 84 LET 2023, effective from Apr 2023.	Karnataka Labour Dept. circular; State Gazette 2023.
Gujarat	Factories (Gujarat Amendment) Ordinance, 2025: allows 12-hour daily shifts, increased spread-over to 13 hours, higher quarterly overtime, and permission for women night work with safety provisions.	Ordinance No. 3 of 2025 (Gujarat Govt.), May 2025.	Gujarat Govt. Labour Dept. Notification; Ordinance text 2025.
Tamil Nadu	Factories (Tamil Nadu Amendment) Bill, 2023: empowers govt. to exempt factories from Sections 51-66 (working-hour rules); permits 12-hour flexible shifts in notified sectors.	Bill passed Apr 2023 (under Presidential assent awaited mid-2024); some rules provisionally applied.	Tamil Nadu Assembly Bill No. 11 of 2023.
Maharashtra	Proposed Factories (Maharashtra Amendment) Rules 2024-25: plans to increase weekly hours to 60 (subject to overtime compensation), introduce digital compliance portal, and permit night-shift work for women.	Draft notified Mar 2025 under Section 115; final approval expected by end-2025.	Maharashtra Govt. Labour Dept. Notification 2025.
Haryana	Factories (Haryana Amendment) Act, 2018 (continuing): raised overtime ceiling to 115 hours/quarter and introduced electronic registers. Still operative.	Effective Nov 2018.	Haryana Govt. Gazette Extraordinary 2018.
Uttar Pradesh	Extended hours up to 12/day for certain industries under temporary exemptions (2020 - present); preparing alignment with OSHWC Code.	Series of notifications 2020 - 2024 (renewed periodically).	UP Labour Dept. Circulars & Notices.
Telangana	Adopted digital safety registers and self-certification scheme (Factories Rules 2023); no major substantive hour changes yet.	Implemented January 2024.	Telangana Factories Rules (G.O. Ms. No. 5/2023).
Andhra Pradesh	No fresh amendment since 2018; following central Act 1948 until OSHWC Code enforcement.	-	Labour Dept. Circular 2024 status report.
West Bengal	Factories (West Bengal Amendment) Rules 2024: enhanced medical facilities and safety audits, but retains 9-hour daily limit.	Effective July 2024.	WB Labour Dept. Notification 2024.

Conclusion

The Factories Act, 1948, remains a cornerstone of India's labor welfare legislation. It represents a visionary attempt to humanize industrial work by ensuring safety, health, and dignity for workers. While industrial technology and employment patterns have changed dramatically since 1948, the fundamental spirit of the Act of protecting human welfare amidst economic activity continues to hold relevance.

As India aspires to become a global manufacturing hub under "Make in India," revisiting and strengthening the legacy of the Factories Act is essential. A just, safe, and inclusive industrial ecosystem not only fulfills legal mandates but also reinforces the moral commitment of a nation to its workforce.

Overview of The Payment of Gratuity Act, 1972

Introduction

The Payment of Gratuity Act, 1972, serves as a foundational component of the social security and labour welfare framework in India. Established during the early 1970s, a period characterized by the expansion of industrial employment and a burgeoning recognition of workers' rights, this legislation institutionalized gratuity as a statutory entitlement rather than a discretionary benefit. Gratuity, in its essence, is a lump-sum payment made by an employer to an employee as a token of appreciation for long and exemplary service. Prior to the enactment of this legislation, such payments were predominantly governed by company policies or collective bargaining agreements, which often resulted in ambiguity regarding employee entitlements.

By legislating gratuity, the Indian State aimed to acknowledge the significance of sustained employment and to provide financial security to employees upon retirement, resignation, or termination due to incapacity or death. More than five decades later, the Act remains a critical instrument of social protection within the employment landscape of India.

Objectives and Rationale

The Payment of Gratuity Act is grounded in social justice, aimed at protecting workers in post-independence India. Its main objectives are to provide a terminal benefit for employees after long service, ensure financial security for them and their families in retirement or unforeseen circumstances, promote loyalty within industries, and standardize gratuity payments to reduce disputes. Thus, gratuity serves as both a reward for service and an entitlement, supporting overall livelihood security.

Scope and Applicability

The Payment of Gratuity Act, 1972, is applicable throughout the entirety of India. It extends to:

- Factories, mines, oilfields, plantations, ports, and railway companies.
- Shops and establishments employing ten or more individuals, as defined by specific state Shops and Establishments Acts.

Once the Act is applicable to an establishment, it continues to hold validity even if the number of employees subsequently falls below the threshold of ten. Moreover, the Act encompasses employees in both the public and private sectors, including educational institutions,

healthcare facilities, and other organizations, as long as they meet the stipulated employment criteria. This extensive applicability underscores the government's intention to extend gratuity provisions beyond traditional industrial labour to encompass a diverse array of employment sectors.

Key Definitions and Concepts

A comprehensive understanding of the Act necessitates familiarity with several pivotal terms:

- Employee: Any individual (excluding apprentices)
 engaged for wages in any form of work, whether
 manual or supervisory, in connection with the
 operations of the establishment.
- Continuous Service: As delineated in Section 2A, this encompasses uninterrupted service and certain allowable interruptions, such as illness, accidents, authorized leave, lay-offs, strikes, lockouts, or work cessation due to factors not attributable to the employee.
- Wages: This term includes the basic pay and dearness allowance but excludes bonuses, overtime compensation, and other allowances.

The emphasis on continuous service illustrates the Act's intention to safeguard those employees who have genuinely contributed long-term labour to their organizations, even when their employment histories incorporate permissible interruptions.

Eligibility and Conditions for Payment

An employee becomes eligible for gratuity upon termination of employment if they have completed a continuous service period of at least five years with the employer. However, this requirement is waived in the event of death or disablement.

Gratuity is payable upon the following conditions:

- Superannuation (retirement upon reaching the prescribed age).
- Resignation or voluntary retirement.
- Death or disablement resulting from an accident or illness.
- Termination of employment for reasons other than misconduct.

Such provisions ensure that employees, or their dependents in the event of death, receive a financial safety net after long service.

Calculation of Gratuity

The methodology for computing gratuity is outlined in Section 4(2) of the Act:

Gratuity = $(15 / 26) \times Last$ drawn monthly wages \times Number of completed years of service

In this formula:

- 15 days' wages are allocated for each completed year of service.
- The monthly wage is divided by 26 to reflect the average number of working days in a month.
- Any service period exceeding six months is rounded up to the nearest full year.

Example:

For instance, if an employee's last drawn wages (including basic pay and dearness allowance) amount to ₹40,000 per month and they have completed 10 years and 8 months of service, the calculation would be:

Gratuity = $(15 / 26) \times 40,000 \times 11 = ₹2,53,846$

In the case of seasonal establishments, gratuity is computed at 7 days' wages for each season worked.

Ceiling on Gratuity:

The government has periodically revised the cap on gratuity payments—from ₹3.5 lakh (formerly) to ₹10 lakh (2010) and currently to ₹20 lakh, as per the 2018 amendment. Employers retain the discretion to provide a higher gratuity amount under more favourable service conditions or contractual agreements.

Nomination and Payment Procedure

Employees must submit a nomination within one year of completing their service to ensure gratuity is paid to the designated nominee upon their demise. Employers must calculate and pay the gratuity within 30 days; if delayed, they must provide simple interest unless the delay is due to the employee's actions. If disputes arise over gratuity payment or amount, employees can appeal to the Controlling Authority, which has the power to enforce payment.

Forfeiture of Gratuity

While gratuity is recognized as a statutory right, it is subject to potential forfeiture, either partially or wholly, under specific circumstances. Forfeiture may occur to the extent of damage or loss resulting from the employee's deliberate actions, omissions, or negligence. Furthermore, gratuity may be forfeited in whole or in part should an employee's services be terminated due to riotous or disorderly conduct, or any acts of moral turpitude committed during the course of employment.

Administration and Enforcement

The Act empowers both Central and State Governments to appoint a Controlling Authority for gratuity administration, granting it the power to conduct inquiries and enforce compliance. Employers must keep detailed records of employee service, wages, and gratuity, and may need to submit specified information. Failure to comply may lead to penalties, including fines or imprisonment for wilful default or misrepresentation.

Funding of Gratuity Liability

Section 4A permits employers to secure their gratuity liabilities via mechanisms such as insurance with the Life Insurance Corporation of India (LIC) or through the establishment of an approved gratuity fund managed by appointed trustees. While this mechanism is not obligatory for all employers, it facilitates liquidity to ensure prompt gratuity payments and diminishes the risk of default.

Amendments and Recent Developments

The Payment of Gratuity (Amendment) Act of 2018 introduced two pivotal modifications to the original legislation. Firstly, the amendment raised the ceiling on gratuity from ₹10 lakh to ₹20 lakh for employees encompassed by the Act, a development that underscores the increasing recognition of employee entitlements. Secondly, it conferred upon the Central Government the authority to periodically revise the ceiling amount without necessitating further legislative action. This flexibility aligns with the goals of modern employment regulations.

Judicial Interpretation and Case Law

The role of the judiciary in interpreting the Payment of Gratuity Act has been instrumental over time. Several landmark judgments have significantly influenced its application. For instance, in *Delhi Cloth & General Mills Co. Ltd. v. Workmen (1970)*, the Supreme Court articulated that gratuity constitutes a statutory right, arising from the provision of long service, rather than a discretionary benefit. Similarly, in *Bharat Gold Mines Ltd. v. Regional Labour Commissioner (1994)*, the Court emphasized that once gratuity becomes due, the employer is precluded from withholding it, except under the conditions explicitly outlined in the Act. More recently, in *Union Bank of India v. CG Ajay Babu (2018)*, the

Court clarified that forfeiture of gratuity is permissible solely in circumstances where termination is a result of misconduct associated with moral turpitude during the course of employment. Through judicial interpretations, the courts have consistently upheld that the Act prioritizes employee interests while attempting to balance employer rights.

Challenges in Implementation

Despite the progressive intent behind the Payment of Gratuity Act, several practical challenges hinder its effective implementation.

- 1. Awareness Gaps: Many employees, particularly in small businesses, are unaware of their gratuity rights.
- 2. Non-compliance: Some employers fail to pay gratuity on time and may misclassify employees to avoid compliance.
- 3. Disputes Regarding Continuity of Service: Changes like restructuring often lead to disputes over service continuity.

4. Delayed Enforcement: Labor authorities are often slow, taking months or years to resolve disputes due to heavy workloads.

Addressing these issues requires digitizing labour records, raising awareness, and improving dispute resolution processes.

Conclusion

The Payment of Gratuity Act of 1972 is a key labour welfare statute in India, recognizing the need for financial security for long-serving employees. While it has evolved through amendments and judicial interpretation, its core goal remains: to reward loyalty, promote social justice, and ensure dignity in retirement. For employers, complying with the Act is both a legal obligation and an ethical responsibility. Employees must understand their gratuity rights to secure financial stability after leaving work. As gig work and dynamic employment structures rise, the Act's focus on protecting long-term workers continues to shape India's labour and social security system.

Module 5: Lease Accounting

Module 8:
Hire Purchase and
Installment Sale
Transactions

INTERMEDIATE

Group I - Paper-6

Financial Accounting (FA)

Lease Accounts / Hire Purchase and Instalment Sale Transactions Lease Accounts

Lease accounting is the process by which companies account for leases (agreements to use an asset for a period in exchange for payment). Lease transactions can have significant effects on a company's financial statements, including its balance sheet, income statement, and cash flow.

A lease is a contractual agreement where one party (the lessor) provides an asset for use by another party (the lessee) in exchange for periodic payments. Leases are an essential financial tool for companies, as they allow access to expensive equipment or property without the immediate need for full ownership.

Leases can be categorized into several types based on factors like the ownership rights, the nature of the contract, the accounting treatment, and the type of asset. Understanding these different types of leases is crucial for both lessors and lessees.

Types of Leases

There are two primary types of leases under modern accounting standards:

1. Finance Lease (Capital Lease)

A finance lease, also known as a capital lease, is a type of lease in which the lessee assumes all the risks and rewards associated with ownership of the leased asset. Although the lessor retains legal ownership, the lessee records the asset on their balance sheet as if they own it. This type of lease is typically long-term, and the asset is generally used for most or all of its useful life.

- The lease transfers ownership of the asset to the lessee at the end of the lease term (in some cases).
- The lessee has the option to purchase the asset at a bargain price at the end of the lease.
- The lease term is usually for a significant portion of the asset's useful life.
- The present value of lease payments is equal to or exceeds the asset's fair value.
- The lessee capitalizes the lease by recognizing both a right-of-use asset and a corresponding lease liability.

2. Operating Lease

An operating lease is more like a rental agreement where the lessee uses the asset but does not take on the risks and rewards of ownership. The asset is returned to the lessor at the end of the lease term. This lease is typically short-term and is used for assets that are not intended to be purchased.

Key Features:

- The lessee does not assume ownership of the asset at the end of the lease.
- The lease term is usually shorter than the asset's economic life.
- Lease payments are considered operational expenses.
- No asset or liability is recorded on the balance sheet by the lessee (under older standards; under IFRS 16 and ASC 842, most leases must now be capitalized).

Journal Entries for Lease Accounting

Example 1: Initial Recognition (Finance Lease)

Lessor's Books:

- Debit: Lease Receivable (Present value of lease payments)
- Credit: Asset (Carrying value of the asset)

Lessee's Books:

- Debit: Right-of-Use Asset (Present value of lease payments)
- Credit: Lease Liability (Present value of lease payments)

Example 2: Lease Payment (Finance Lease)

Lessor's Books:

- Debit: Cash (Amount of payment received)
- Credit: Lease Receivable (Reduction in lease receivable)

Lessee's Books:

- Debit: Lease Liability (Reduction in lease liability)
- Debit: Interest Expense (Interest on lease liability)
- Credit: Cash (Amount of lease payment)

Hire Purchase

Hire Purchase and Instalment Sale Transactions

Hire Purchase and Instalment Sale Transactions are methods of purchasing goods or assets where the payment is made in installments over time rather than a lump sum. These methods allow buyers to acquire assets without immediate full payment.

Hire Purchase System

In a Hire Purchase agreement, the buyer (hirer) takes possession of the asset immediately but does not own it until the final installment is paid. The ownership (title) of the asset transfers to the buyer only after the payment of all installments. It is typically used for purchasing goods such as vehicles, machinery, and equipment.

Key Features of Hire Purchase:

- Possession: The buyer gets possession of the asset immediately.
- **Ownership:** Ownership remains with the seller (financier) until the last installment is paid.
- Default: If the buyer defaults, the seller can reclaim the asset.
- **Interest:** Interest is charged on the outstanding balance.
- **Rights:** The buyer has the right to use the asset but not to sell or transfer it until ownership passes.

Accounting Treatment in Hire Purchase:

- The asset is shown in the buyer's books even though ownership hasn't transferred.
- The interest is treated as a finance cost and spread over the period of the agreement.
- Each installment payment is split into two parts: principal repayment and interest.

Journal Entries:

1. On Purchase of Asset (initial recognition):

o Debit: Asset Account

Credit: Hire Vendor Account (for the cost of the asset)

2. For Interest Payment:

o Debit: Interest Expense Account

o Credit: Hire Vendor Account

3. For Installment Payment:

o Debit: Hire Vendor Account

o Credit: Cash/Bank Account

Instalment Sale System

In an Instalment Sale transaction, ownership of the asset is transferred to the buyer immediately upon signing the agreement. However, the payment is made over several installments. If the buyer defaults, the seller cannot reclaim the asset as ownership has already transferred.

Key Features of Instalment Sale:

- **Possession and Ownership:** Both possession and ownership are transferred to the buyer at the time of sale.
- **Default:** If the buyer defaults, the seller cannot take back the asset but may seek legal remedies.
- **Interest:** Interest is usually charged on the outstanding balance.
- **Security:** Sometimes, the asset serves as security for the unpaid installments.

Accounting Treatment in Instalment Sale:

- The buyer records the asset at its full cost in the books.
- Interest is recognized as an expense over time.
- Each installment payment is split between principal and interest.

Journal Entries:

1. On Purchase of Asset:

o Debit: Asset Account

o Credit: Instalment Vendor Account

2. For Interest Payment:

o Debit: Interest Expense Account

o Credit: Instalment Vendor Account

3. For Installment Payment:

o Debit: Instalment Vendor Account

o Credit: Cash/Bank Account

Key Differences Between Hire Purchase and Instalment Sale

Aspect	Hire Purchase	Instalment Sale
Ownership Transfer	After the last installment is paid.	Immediately upon signing the agreement.
Seller's Rights in Default	Can repossess the asset.	Cannot repossess; may sue for damages.

Aspect	Hire Purchase	Instalment Sale
Interest Treatment	Interest on the outstanding balance.	Interest on the outstanding balance.
Legal Rights	Buyer has possession but not ownership.	Buyer has both possession and ownership.
Accounting Treatment	Asset recorded at cost with ownership conditional.	Asset recorded with immediate ownership.

Questions:

- 1. Which of the following is recognized on the lessee's balance sheet under a finance lease?
 - a) Lease payments only
 - b) Right-of-use asset and lease liability
 - c) Only lease expense
 - d) Depreciation only
- 2. What is the right-of-use asset in lease accounting?
 - a) The physical asset being leased
 - b) The lease payments made over the lease term
 - c) The lessee's right to use the leased asset
 - d) The present value of the lease payments
- 3. What is the main difference between a finance lease and an operating lease for the lessee?
 - a) A finance lease requires asset ownership at the end of the lease term
 - b) A finance lease recognizes both the asset and liability on the balance sheet, whereas an operating lease only recognizes expenses
 - c) Operating leases are always shorter in duration
 - d) A finance lease does not involve lease payments
- 4. In a finance lease, what is the journal entry for lease payments made by the lessee?
 - a) Debit: Lease Liability, Credit: Cash
 - b) Debit: Lease Expense, Credit: Lease Liability
 - c) Debit: Lease Liability, Credit: Lease Receivable
 - d) Debit: Cash, Credit: Lease Receivable
- 5. In an operating lease, how are lease payments recognized in the lessee's books?
 - a) As a liability
 - b) As an asset
 - c) As an expense
 - d) As a revenue

- 6. Which of the following is true about an instalment sale?
 - a) Ownership is transferred immediately.
 - b) Ownership is retained by the seller until the last installment is paid.
 - c) The buyer has no legal right to use the asset until full payment.
 - d) Interest is not charged in an instalment sale.
- 7. In a hire purchase agreement, what happens if the buyer defaults on payments?
 - a) The seller sues for damages.
 - b) The seller repossesses the asset.
 - c) The buyer continues to own the asset.
 - d) The agreement is renegotiated.
- 8. Which accounting entry is common to both hire purchase and instalment sale transactions?
 - a) Debit Asset Account
 - b) Credit Interest Expense Account
 - c) Debit Hire Vendor Account
 - d) Debit Bank Account
- 9. In an instalment sale, what does the first installment include?
 - a) Only principal repayment
 - b) Only interest payment
 - c) Both principal and interest
 - d) Neither principal nor interest
- 10. In an instalment sale, the seller's recourse in case of default is:
 - a) Repossessing the asset
 - b) Retaining ownership
 - c) Suing for unpaid installments
 - d) Re-negotiating the contract

Answer:

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

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

INTERMEDIATE

Group I - Paper-7A

Direct Taxation (DT)

Set off and Carry Forward of Losses

In the evolving business environment, losses are an inevitable part of operations—whether from business downturns, speculative activities, or capital investments. The Income-tax Act, 1961 offers a systematic framework for setting off such losses against taxable income in the same year or carrying them forward to future years. This flexibility not only eases the tax burden in lean periods but also promotes long-term investment planning and risk-taking among taxpayers.

Set-off provisions

A. Intra-Head Adjustment [Sec. 70]

Loss from one source can be adjusted against income from another source under the same head.

Head of Income	Set-Off Rules	
Capital Gains	$STCL \leftrightarrow STCG/LTCG$, $LTCL \leftrightarrow LTCG$ only	
Business Income (Speculative)	peculative loss ↔ speculative income only	
Business Income (Non-Speculative)	Non-Speculative loss ↔ Speculative / Non-speculative business income	
Specified Business (u/s 35AD)	Only from other specified businesses	
Owning & Maintaining Race Horses	Only from the same activity income	
Exempt Income (Sec. 10)	No set-off allowed	
Lottery, betting, gambling (Sec. 115BB)	No loss can be set off against such income No set-off allowed (Sec. 115BBE)	
Unexplained Income (Sec. 68–69D)		

B. Inter-Head Adjustment [Sec. 71]

Loss under one head can be adjusted against income under other heads, subject to restrictions:

Nature of Loss	Set-Off Allowed Against	
Capital Loss	Not against other heads	
House Property	Any head (old regime – max 2 Lakhs)	
	Under the new tax regime, no adjustment with income under the other head	
Unabsorbed Depreciation	Depreciation Any head except Salaries	
Business Loss	Any head except Salaries	
Owning Race Horses	Not allowed against other heads	
Lottery / Gambling / Unexplained	sambling / Unexplained No set-off allowed	

Note:

- Priority is to be given to set off losses that cannot be carried forward.
- Wherever reference is given for unabsorbed depreciation, it includes reference to unabsorbed capital expenditure on scientific research and unabsorbed capital expenditure on promotion of family planning among employees

Carry Forward provisions

The table given below highlights the rule of carry forward of loss –

Sec.	Type of loss to be carried forward & set off	Income against which carried forward loss can be set off in next year(s)	For how many years loss can be carried forward	Is it necessary to submit return of loss in time
71B	House property loss	Income under the head "Income from house property"	8 years	No
72	Non-speculation business loss (other than depreciation etc.)	Any income under the head 'Profits & gains of business or profession' (whether from speculation or otherwise)	8 years	Yes

Sec.	Type of loss to be carried forward & set off	Income against which carried forward loss can be set off in next year(s)	For how many years loss can be carried forward	Is it necessary to submit return of loss in time
32(2)	Unabsorbed depreciation, capital expenditure on scientific research and family planning	Any income other than Income under the head Salaries and winning from lotteries, etc.	Indefinite years	No
73	Speculation business loss	Income from speculation transaction.	4 years	Yes
73A	Loss of specified business covered u/s 35AD	Income from any specified business.	Indefinite years	Yes
74	Short term Capital Loss	Income under the head "Capital gains"	8 years	Yes
74	Long term Capital Loss	Long term capital gain	8 years	Yes
74A	Loss from activity of owing and maintaining race horses	Income from the activity of owing and maintaining race horses	4 years	Yes

The ability to carry forward losses is subject to specific conditions, most notably the requirement to file the income tax return within the due date prescribed under section 139(1). Failure to comply can lead to forfeiture of this benefit. Moreover, certain losses like speculative, capital, and specified business losses have additional restrictions and dedicated time limits for adjustment. Hence, understanding the interplay of these provisions is crucial for ensuring tax efficiency and avoiding litigation.

Strategic Tax Planning Tips

• File loss return within due date (Sec. 139(3)) to preserve right to carry forward.

Multiple Choice Questions:

Choose the correct alternative

- Unabsorbed business losses cannot be carried for more than
 - a. 7 assessment years
 - b. 8 assessment years
 - c. 10 assessment years
 - d. 12 assessment years
- 2. Long term capital loss can be adjusted against
 - a. Any income excluding winning from lottery
 - b. Any capital gains
 - c. Any long term capital gain
 - d. Any speculative business income
- 3. Loss from Derivative trading is
 - a. Short-term Capital Loss

- Prioritize adjustment of non-carry forward losses first.
- Plan set-offs considering tax regimes (Old/New)—as some losses are not permitted under new regime.

Conclusion

The mechanism of set-off and carry forward of losses plays a pivotal role in ensuring that taxpayers are taxed only on their real income. By strategically applying these provisions, one can achieve legitimate tax savings while maintaining compliance. A sound understanding of these rules not only helps in efficient tax planning but also ensures proper filing of returns and timely utilisation of losses before expiry.

- b. Speculative business loss
- c. Non-speculative business loss
- d. Loss u/h 'Income from Other Sources'
- **4.** Loss from specified business covered u/s 35AD can be adjusted against
 - a. Any other business income
 - b. Any income except salary
 - c. Income from other specified business
 - d. Cannot be adjusted
- 5. Unabsorbed depreciation can be carried forward for
 - a. Any number of years
 - b. 8 years
 - c. 4 years
 - d. 7 years

Module 5: Goods and Services Tax (GST) Laws

INTERMEDIATE

Group I - Paper-7B

Indirect Taxation

Input Tax Credit - A Strategic Tool Under GST

Input Tax Credit (ITC) is one of the cornerstones of the Goods and Services Tax (GST) regime, designed to eliminate the cascading effect of taxes and ensure tax neutrality. It empowers registered taxpayers to claim credit of GST paid on purchases or inward supplies, thereby reducing the effective tax burden. A sound understanding of ITC provisions is essential not only for tax optimization but also for ensuring compliance with the evolving GST framework.

Understanding Input Tax Credit



Input Tax Credit allows a registered person to claim credit for the GST paid on purchases of goods, services, or capital goods used in the course or furtherance of business. It ensures tax is levied only on the value addition, thereby avoiding 'tax on tax'.

Mechanism of ITC

The credit mechanism is structured to ensure seamless flow of tax credit across the supply chain. ITC is available on:

- ☐ Inputs Goods used in production or supply.
- ☐ Input Services Services used in the business.
- ☐ Capital Goods Plant, machinery, and equipment used in business.

The eligible tax paid on these components can be offset against the outward tax liability, thereby reducing the net payable tax.

Conditions for Availing ITC

To claim ITC, the following criteria must be satisfied:

Condition	Requirement
Registration under GST	Only registered persons are eligible.
Possession of Tax Invoice	Valid tax invoice or document required.
Receipt of Goods/Services	The goods/services must have been actually received.
Tax Payment by Supplier	The supplier must have paid the tax to the government.
Return Filing Compliance	Supplier has reported the invoice in GSTR 1; and
	GSTR-3B must be filed by the taxpayer to claim ITC.
Business Use	Inputs must be used for business (not personal use).

Blocked Credits under GST

Section 17(5) of the CGST Act lists specific goods and services for which ITC is not allowed, known as blocked credits. These include:

Category	Description
Motor Vehicles	Except when used for transportation of goods or certain specified services.
Personal Consumption	Goods/services used for non-business, gifts, CSR activities, or personal use.
Food, Beverages & Club Services	ITC not allowed unless used to make an outward taxable supply.
Works Contract	Restricted for immovable property unless for further supply of such service.
Employee Benefits	Travel, health insurance, etc., unless mandatory under any law.

Strategies for Maximizing ITC Benefits

To fully leverage ITC provisions, businesses may adopt the following strategies:

- Ensure Timely Compliance: File returns and reconcile GSTR-2B with purchase registers regularly.
- Vendor Due Diligence: Ensure vendors are GST-compliant and taxes are properly deposited.
- **Efficient Documentation**: Maintain valid invoices and records to support
- Monitor Reverse Charge: Where applicable, discharge liability under reverse charge and claim eligible ITC.
- Segregate Non-Eligible Inputs: Clearly demarcate business and personal use to avoid ineligible claims.

Conclusion

Input Tax Credit serves as a cornerstone in achieving tax neutrality under GST. It not only reduces the effective cost of goods and services but also enhances business liquidity. However, the benefit of ITC comes with the responsibility of strict compliance and due diligence. Businesses must stay updated with statutory changes, especially those concerning blocked credits and supplier compliance. A proactive ITC management strategy can significantly enhance tax efficiency and ensure smooth functioning in the GST ecosystem.

STRATEGIES FOR MAXIMIZING ITC BENEFITS

To fully leverage ITC provisions, businesses may adopt the following strategies:



Ensure Timely Compliance

File returns and reconcile GSTR-2B with purchase registers regularly



Vendor Due Diligence

Ensure vendors are GST-compliant and taxes are properly deposited



Efficient Documentation

Maintain valid invoices and records to support ITC claims



Monitor Reverse Charge

Where applicable, discharge liability under reverse charge and claim eligible ITC



Segregate Non-Eligible Inputs

Clearly demarcate business and personal use to avoid ineligible laims

Module 6: Cost Accounting Techniques

INTERMEDIATE

Group I - Paper-8

Cost Accounting (CA)

Standard Costing and Variance Analysis

The Standard Costing and Variance Analysis is an important chapter for our students, especially in the Intermediate level. Any problem on Standard Cost for working out different variances like Material cost variances, Labour cost variances, Overhead variances, Sales variances, Sales Margin variances can be worked out by using a standard format applicable to all variance analysis. Most of the students are afraid of this important chapter only because of different formulae for different analysis. But a standard format may be introduced to eliminate such difficulties. The calculation of Mix Variance is necessary only when there are more than one type of component for producing an article. Here Standard cost means the standard cost for actual production.

It is very difficult to compare and find out the reasons of cost fluctuation through Historical Costing, as it ascertains cost after they have been incurred. The reasons for cost fluctuation apart from variations in output or units produced may be detected through introductions of standard costing.

Standard, Standard-cost and Standard costing

The term **standard** is a predetermined measurable quantity set in defined conditions against which actual performance can be compared. In a word, we can say the term standard refers to predetermined rate against which performance is judged.

Standard-cost is defined by CIMA in the following way: A predetermined calculation of how much cost should be used under specified working conditions. It is built up from an assessment of the value of cost elements and correlates technical specification and qualification of material, labour and other costs to the prices and/or usage rates expected to apply during the period in which the standard cost is intended to be used. Its main purpose is to provide basis for control through variance accounting for the valuation of stock and work-in-progress and in some cases for setting prices.

The technique by which standard costs are used is known as-**Standard costing**. It involves the setting of predetermined cost estimates in order to provide a basis for comparison with actual Standard cost is universally accepted as an effective tool for cost control in industries.

The objectives of standard costing are:

- (a) To provide an accepted basis for assessing performance and efficiency.
- (b) To control cost by introducing standards and analysis of variances.
- (c) To assist in setting budgets.
- (d) To motivate staff and management.

- (e) To help in assigning responsibility for non-standard performance in order to correct deficiencies or to capitalise the benefits.
- (f) To provide basis for estimating.
- (g) To provide guidance on possible ways for improving performance.

Problems in setting Standard costs

The problems involved in setting standard costs are:

- (a) Deciding how to deal inflation into planned unit costs:
- (b) Deciding on the quality of materials to be used;
- (c) Estimating material prices where seasonal price variations or bulk purchase discount may be significant.
- (d) Deciding on the appropriate mixture where some change in the mix is possible.
- (e) The cost of setting up and maintaining a system for establishing standards.

Standard costing and Budgetary control:

Both standard costing and Budgetary control are used for controlling the business operations by establishing predetermined standard and comparing the standard with actual. Budgetary control is usually operated without standard costing but it is difficult to implement the standard costing without budgetary control. A system of budgetary control in conjunction with standard costing is more helpful.

Material cost variances:

Material cost variance is the difference between the actual direct material cost incurred and the standard direct material cost specified for the production achieved. Material cost variances are analysed under two heads, viz. material price variance and material usage variance.

- (a) Material price variance: This is that portion of cost variance which is due to difference in rate of material between standard and actual per unit of material applied to the actual quantity of material purchased or used
- (b) Material usage variance: This is that portion of material cost variance which is due to the difference between the actual quantity used and the amount which should have been used, valued at standard price as was fixed beforehand. Material usage variances can be further analysed under two heads (i) Material mix variance. (ii) Material yield variance.

(i) Material mix variance:

One of the reasons for material usage variance is the change in the composition of the material mix. The mix variance is the difference between actual composition of mix and standard composition of mixing of the total quantity of input of production used.

(ii) Material yield variances:

It is the difference between the standard cost of production achieved and the actual total quantity of materials used at standard ratio/composition at standard price. A low actual output or yield will give adverse result which indicates that the consumption of material was more than the standard. A high actual yield indicates efficiency, but a consistent high yield is a pointer for the revision of the standard.

Direct Labour Cost Variance:

Direct Labour Cost variance is the difference between the actual direct wages paid and the standard direct wages specified for the activity achieved. As in the case of material cost variances, labour cost variance is analysed into two separate variances, viz. Labour rate variance and Labour efficiency variance.

- (a) Labour rate variance (Wages rate variance): This is due to difference between the actual standard wage rate per hour applied to the total hours worked. Labour rate variance is comparable material price variance and is calculated in the similar manner.
- **(b) Labour efficiency variance:** This is due to the difference between the standard cost of labour for the actual output or the cost of standard hours which should have been worked for the output and the hour actually paid, valued at standard wage rate. This is similar to the material e variance. The labour efficiency variances are sub-divided in three parts: (i) Labour mix or Gang. variance, (ii) Labour idle time variance, iii) Labour yield variance.
- (i) Labour mix variance: It is that portion of labour efficiency variance which is due to difference between actual composition of gang at standard rate and the actual hour or days in standard ratio of composition specified for a gang.
- (ii) Idle time variance: This variance-which forms a portion of labour efficiency variance-presented by the standard cost of the actual hours for which the workers remain idle due to abnormal circumstances. It is the standard cost of difference between the actual hours paid and actual hours worked.
- (iii) Labour yield variance: It is that part of the labour efficiency variance which is due to difference between actual output at standard rate for each unit of finished product and the standard cost of the actual hours worked at standard composition.

Overhead Cost variance:

Overhead Cost variance or overall overhead variance is the difference between the actual overhead incurred and the overhead charged or applied into the Job or process at the standard overhead rate. Overhead cost variance and its component variance may be computed and analysed separately for fixed and variable overheads and for each cost centre.

Variable overhead variance: Variable overhead per unit does not change with the change in units. Total variable cost increases or decreases with change in unit like direct material cost or direct labour cost. Variable overhead costs are sub-divided in two divisions (i) V/OH Expenditure variance ii) V/O.H. Efficiency variance.

Fixed overhead variance:It represents the difference between actual fixed overhead incurred and standard cost of fixed overhead for production.

(i) fixed overhead expenditure variance:

It is the difference between actual fixed overhead incurred and the amount of fixed overhead which should be spent according to budget or standard during the period.

(ii) Fixed overhead volume variance:

It is the difference between budgeted fixed overhead for the period and the standard fixed overhead for actual production.

- (a) Calendar variance/Idle time variance: The difference between budgeted fixed overhead and fixed overhead for days available during the period at standard rate.
- **(b)** Capacity variance: it is the difference between capacity utilised and planned capacity. The difference between budgeted fixed overhead for the hours available at standard rate and the fixed overhead for actual hours worked at standard rate. Capacity variance arises when the budgeted capacity differs from capacity available.
- **(c) Efficiency variance**: Fixed overhead efficiency variance is that portion of volume variance which reflects output arising from efficiency being above or below standard. It is due to the difference between budgeted or standard efficiency and actual efficiency in utilisation of fixed common facilities.

Sales variances:

Sales Variance is the difference between the actual value of sales achieved in a given period and budgeted value of sales. There are many reasons for the difference viz; increase or decrease in sales price, sales volume, sales mix from the budgeted sales. The Sales Variances are analysed by using two methods — one, Sales Variances based on turnover and the other is Sales Variances based on margin.

Now, for easier understanding we are trying to solve a problem given below:-

Problem:

XYZ Ltd. Produces an article by blending two basic raw materials. It operates a standard costing system and the following standards have been set for raw materials:

Material	Standard Mix	Standard Price per Kg
A	40%	₹4
В	60%	₹3

The standard loss in processing is 15%. During April 2025 the Company produced 1700 kgs. Of finished output.

The position of stock and purchases for the month of April 2025 are as under:

Material	Stock on 1/4/25(kgs)	Stock on 30/4/25(kgs)	Purchased in April 25
A	35	5	800 kgs for ₹ 3400
В	40	50	1200kgs for ₹ 3000

Opening stock are valued at standard price i.e. under FIFO basis:

Calculate the following variances:

- 1) Material price variance.
- 2) Material usages variance.
- 3) Material yield variance.
- 4) Material mix variance
- 5) Material cost variance

Solution:

Standard cost per kg of output :-

Let, 100 kgs. were the input.

Less: 15% Normal Loss, i.e. 15 Kgs.

Available 85 Kgs = ₹ 340.

Standard cost = 340/85 = ₹4 per Kg.

Standard Cost	Standard Cost o	Actual Cost		
Standard Cost	At standard mix	At actual mix	Actual Cost	
S.C. x Output.	St. Mix x Std rate	Actual mix. X Std. Rate	A .Q x A. Rate	
4 x 1700	A:- 808 x ₹ 4 = ₹ 3232	A :- 830 x 4 = ₹ 3320	A:-35 x 4.00 = ₹ 140	
	B:- 1212x ₹ 3= ₹ <u>3636</u>	B :-1190x 3 =₹ 3570	795 x 4.25 = ₹ 3378.75	
	<u>2020</u>	<u>2020</u>	B:- 40 x 3.00 =₹ 120	
	Std ratio: 2020 in 40:60		1150 x 2.50 = ₹ 2875	
6800	6868	6890	6513.75	
M4	M3	M2	M1	

Material Price Variance = M2 - M1 = 376.25

Material Mix Variance = M3 - M2 = 22 (A)

Material Yield Variance = M4 - M3 = 68 (A)

Material Usages Variance = M4 - M1 = 286.25 (F)

Reconciliation:

MCV : ₹ 286.25 (F) = MPV : ₹ 376.25 (F) + MUV : ₹90 (A) MUV : ₹90 (A) = MMV : ₹22 (A) + MYV : ₹68 (A)

Module 4:
Application of
Operation Research
- Production
Planning and
Control

INTERMEDIATE

Group II - Paper-9

Operations
Management
and Strategic
Management
(OMSM)

Operations Management

In this issue let us discuss Application of Transportation model in Production Planning and Control.

The transportation (TP) model is one of the simplest and most useful LP templates for solving many Production Planning & Control (PPC) problems because PPC often boils down to "which plant/line should supply which demand point, at what volume, to minimise cost (or maximise profit) subject to capacities and demands."

Why transportation LP fits PPC

Transportation LP is used when:

You have sources with capacities (plants, production lines, time-period production capacity).

You have sinks with known demands (warehouses, stores, customer orders, and time-period demands).

You have a unit cost (production cost + shipping cost) for sending one unit from each source to each sink.

Objective is usually to minimize total cost (or maximize total profit) subject to supply and demand constraints.

This fits many PPC tasks: deciding how much each plant/line produces and where that production goes, meeting customer/delivery schedules, handling multiple shift capacities, etc.

Many multinational corporations (MNCs) routinely face production planning and control (PPC) problems that are naturally structured as transportation-type linear programming (LP) problems.

Illustration 1: Global Supply Allocation (FMCG / Consumer Goods)

Example MNCs: Unilever, Procter & Gamble, Nestlé

Problem:

These companies operate multiple manufacturing plants worldwide producing soaps, shampoos, and packaged food. Each plant has limited production capacity, while demand comes from different regional markets (Asia, Europe, Americas).

Challenge: Decide how many units each plant should produce and ship to each market to minimize total production + transportation cost, while ensuring each region's demand is met.

Why Transportation Model fits:

Plants = sources (supply), regional warehouses/markets = destinations (demand), shipping/production cost per unit = transportation cost.

Illustration 2: Multi-plant Automotive Production and Distribution

Example MNCs: Toyota, Ford, Hyundai, Volkswagen

Problem:

Automotive MNCs have multiple assembly plants (e.g., in India, Thailand, Germany, USA). Each plant can produce several vehicle models but has capacity limits and different logistics costs to reach each regional dealership or distribution hub.

Challenge: Allocate production quantities from each plant to each regional market to minimize cost and lead time, considering transport distance and currency exchange.

Transportation Model use:

Plants act as supply points; regional sales zones or ports act as demand points; cost matrix represents logistics + tariff + production costs.

Illustration 3: Pharmaceutical Production & Distribution Planning

Example MNCs: Pfizer, Novartis, Glaxo Smith Kline (GSK)

Problem:

Pharma MNCs produce medicines in a few FDA/EU-approved plants but distribute globally. Each country has strict regulatory constraints and varying demand.

Challenge: Decide optimal dispatch quantities from each approved plant to each country warehouse to minimize cost while avoiding stock-outs and ensuring product shelf-life compliance.

Transportation Model use:

Each plant's monthly output = supply; each country's forecasted demand = demand; shipping and cold-chain handling cost = transportation cost.

Illustration 4: Semiconductor / Electronics Production Load Balancing

Example MNCs: Intel, Samsung, TSMC, Foxconn

Problem:

Different fabrication plants (fabs) produce chips/components with varying yields and capacities. Assembly/test facilities in other countries demand chips.

Challenge: Allocate production among fabs and distribution centers to minimize logistics + production cost and maximize utilization under wafer supply and demand constraints.

Transportation Model use:

Fabs = sources, assembly/test centers = destinations, cost per wafer shipped = transport cost; model balances multilocation flows efficiently.

Key Managerial Benefits

Minimizes total cost (production + logistics).

Balances plant utilization.

Ensures demand satisfaction across regions.

Reduces decision complexity via structured LP formulation.

Provides sensitivity insights (e.g., effect of transport cost changes).

Let us now take some Numerical

01.

A company has three cement plants from which cement has to be transported to four distribution centers. With identical costs of production at the three plants, only variable costs involved are transportation costs. The monthly demand at the four distribution centers and the distance from the plants to the distribution centers in km are given below:

	W	X	Y	Z	Production (T)
A	500	1000	150	800	10000
В	200	700	500	100	12000
С	600	400	100	900	8000
Demand (T)	9000	9000	10000	4000	

The transportation charges are R10 per tonne per km. Suggest transportation schedule and indicate the total minimum transportation cost.

Solution:

	W	X	Y	Z	Production (T)				
A	500	1000	150	800	10000	350	350	350	
			10000						
В	200	700	500	100	12000	100	100	300	500
	8000			4000					
С	600	400	100	900	8000	300	300	300	200
	1000	7000							
Dummy	0	0	0	0	2000	0			
		2000							
Demand (T)	9000	9000	10000	4000					
	200	400	100	100					
	300	300	50	700					
	300	300	50			·			
	400	300				·			

Infeasible. So taking very small amount at one of independent cell with minimum cost. Except cell BX all are independent. Out of that Dummy Y and Dummy Z are minimum. We have taken arbitrarily

	W	X	Y	Z	Production (T)
A	500	1000	150	800	10000
			10000		
В	200	700	500	100	12000
	8000			4000	
С	600	400	100	900	8000
	1000	7000			
Dummy	0	0	0	0	2000
		2000			
Demand (T)	9000	9000	10000	4000	

VOL 10 I NO. 10

U1+V3=150, V3=150	U1+V1-500 = 0 + 350-500 = -150
U2 + V1 = 200, U2 = -150	U1 + V2-1000 = 0 + 150-1000 = -850
U2 + V4 = 100, V4 = 250	U1+V4-800 = 0 + 250 - 800 = -550
U3+V1=600, V1=350	U2+V2-700 = -150+150-700 = -700
U3 + V2 = 400, U3 = 250	U2 + V3-500 = -150+150-500 = -500
U4 + V2 = 0, V2 = 150	U3+V3-100 = 250+150-100 = 300
U4 + V3 = 0, U4 = -150	U3+ V4-900 = 250 +250-900 = -400
	U4+V1-0 = -150-150-0 = -300
	U4+V4-0 = -150+250-0 = 100

Not optimal. Maximum positive we take

	W	X	Y	Z	Production (T)
A	500	1000	150	800	10000
			10000		
В	200	700	500	100	12000
	8000			4000	
С	600	400	100	900	8000
	1000	7000	(+)		
Dummy	0	0	0	0	2000
		2000			
Demand (T)	9000	9000	10000	4000	

U1+V3 = 150, V3 = 150	U1+V1-500 = 0 + 350-500 = -150
U2 + V1 = 200, U2 = -250	U1 + V2-1000 = 0 + 150-1000 = -850
U2 + V4 = 100, V4 = 350	U1+V4-800 = 0 + 250 - 800 = -550
U3+V1=600, V1=650	U2+V2-700 = -150+150-700 = -700
U3 + V2 = 400, V2 = 450	
U3 + V3 = 100, U3 = -50	U2 + V3-500 = -150+150-500 = -500
U4 + V2 = 0, $U4 = -450$	U3+V1-0 = -50+650-0 = 600
	U3+V3-0 = -50+150 - 0 = 100
	U3 + V4 - 0 = -50 + 350 - 0 = 300

Not optimal. Taken maximum positive cell

	W	X	Y	Z	Production (T)
A	500	1000	150	800	10000
			10000		
В	200	700	500	100	12000
	8000			4000	
С	600	400	100	900	8000
		8000	(+)		
Dummy	0	0	0	0	2000
	(+) 1000	1000			
Demand (T)	9000	9000	10000	4000	

$$U1+ V3 = 150, V3 = 150$$
 $U1+ V1-500 = 0 + 450 - 500 = -50$
 $U2 + V1 = 200, U2 = -250$ $U1+ V2 - 1000 = 0 + 450 - 1000 = -550$
 $U2 + V4 = 100, V4 = 350$ $U1 + V4-800 = 0 + 350 - 800 = -450$
 $U3 + V2 = 400, V2 = 450$ $U2 + V2 - 700 = -250 + 450 - 700 = -500$
 $U3 + V3 = 100, U3 = -50$ $U2 + V3 - 500 = -250 + 150 - 500 = -600$
 $U4 + V1 = 0, V1 = 450$ $U3 + V1 - 600 = -50 + 450 - 600 = -250$
 $U4 + V2 = 0, U4 = -450$ $U3 + V4-900 = -50 + 350 - 900 = -600$
 $U4 + V3 - 0 = -450 + 150 = -300$
 $U4 + V4 - 0 = -450 + 350 - 0 = -100$

Optimal: 10000*150 + 8000*200 + 4000*100 + 800*400 = 670000*10 = 6,700,000

Q2.

A company has four factories situated in different locations (A, B, C, D) in the country and four sales agencies in four other locations (1, 2, 3,4) in the country. The cost of production (R per unit), the sale price (R per unit), shipping cost (R per unit) in the cells of matrix, monthly capacities and monthly requirements are given below:

	1	2	3	4	Total	Cost of Production
A	7	5	6	4	10	10
В	3	5	4	2	15	15
С	4	6	4	5	20	16
D	8	7	6	5	15	15
Total	8	12	18	22		
Sales Price	20	22	25	18		

Find the monthly production and distribution schedule which will maximise profits

Solution:

Profit in A1: 20-(10+7) = 3, similarly in other cells. So profit matrix is

	1	2	3	4	Total
A	3	7	9	4	10
В	2	2	6	1	15
С	0	0	5	-3	20
D	-3	0	4	-2	15
Total	8	12	18	22	

Balanced problem with maximisation problem. So next matrix is from the highest proft value deduct each profit component in all cells

	1	2	3	4	Total				
A	6	2	0	5	10	2	3		
		10							
В	7	7	3	8	15	4	0	0	
				15					
С	9	9	4	12	20	5	0	0	0
	2		18						
D	12	9	5	11	15	4	2	2	2
	6	2		7					
Total	8	12	18	22					
	1	5	3	3					
	1	5		3					
	2	2		3					
	3	0		1					

Feasible as no of occupied cells = 7 = m+n-1 = 7

Modi:

U1 + V2 = 2, U1 = 0, V2 = 2U1+V1-6=0+5-6=-1, U1+V3-0=0+0-0=0

U2 + V4 = 8, U2 = 4U1+V4-5=0+4-5=-1

U2+V1-7=4+5-7=2, U2+V2-7=4+2-7=-1U3 + V1 = 9, U3 = 4

U3 + V3 = 4, V3 = 0U2 + V3 - 3 = 4 + 0 - 3 = 1

U3+V2-9=4+2-9=-3, U3+V4-12=4+4-12=-4U4 + V1 = 12, V1 = 5

U4 + V2 = 9, U4 = 7U4 + V3 - 5 = 7 + 0 - 5 = 2

U4 + V4 = 11, V4 = 4

	1	2	3	4	Total
A	6	2	0	5	10
		10			
В	7	7	3	8	15
				15	
С	9	9	4	12	20
	8		12		
D	12	9	5 (+)	11	15
	0	2	6	7	
Total	8	12	18	22	

	1	2	3	4	Total	U
A	6	2	0	5	10	0
	-3	10	-2	-1		
В	7	7	3	8	15	4
	0	-1	-1	15		
С	9	9	4	12	20	6
	8	-1	12	-2		
D	12	9	5	11	15	7
	-2	2	6	7		
Total	8	12	18	22		
V	3	2	-2	4		

So optimal. A2: 10 *7 + B4: 15*1 + C1:8*0 + C3: 12*5 + D2: 2*0 + D3: 6*4 + D4:7*(-2) = 155

Q3.

The table given below has been taken from the solution procedure of a transportation problem, involving minimisation of cost in rupees

	X	Y	Z	Total Capacity
A	4	8	8	56
	31	25		
В	16	24	16	82
	41		41	
С	8	16	24	77
		77		
Monthly demand	72	102	41	

- (i) Is the solution optimal? If not find out the optimal solution
- (ii) Does the problem have multiple optimal solution? Give reasons. If so find one more optimal solution **Solution:**

(i)

	X	Y	Z	Total Capacity	U
A	4	8	8	56	0
	31	25	-4		
В	16	24	16	82	12
	41	-4	41		
С	8	16	24	77	8
	+4	77	-12		
Monthly demand	72	102	41		
V	4	8	4		

	X	Y	Z	Total Capacity
A	4	8	8	56
	31	25		
В	16	24	16	82
	41		41	
С	8	16	24	77
	+	77		
Monthly demand	72	102	41	

	X	Y	Z	Total Capacity	U
A	4	8	8	56	0
	-4	56	-8		
В	16	24	16	82	16
	41	0	41		
С	8	16	24	77	8
	31	46	-12		
Monthly demand	72	102	41		
V	0	8	0		

Optimal but not unique as BY is zero

(ii)

	X	Y	Z	Total Capacity
A	4	8	8	56
	-4	56	-8	
В	16	24	16	82
		41	41	
С	8	16	24	77
	72	5	-12	
Monthly demand	72	102	41	

Suggestions:

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

Best Wishes.

Module 4:
Accounts of
Banking, Electricity
and Insurance
Companies

Module 7:
Provisions Relating
to Audit under
Companies Act,
2013

INTERMEDIATE

Group II - Paper-10

Corporate
Accounting and
Auditing (CAA)

Section A: Corporate Accounting

Topic: Accounts of Banking, Electricity and Insurance Companies

Multiple Choice Questions:

- 1. Under IRDAI (Preparation of Financial Statements and Auditor's Report of Insurance Companies) Regulations, the amount of claims incurred in a general insurance company is computed as:
 - A. Claims paid + outstanding claims at end outstanding claims at beginning
 - B. Claims paid + outstanding claims at end reinsurance claims recoverable
 - C. Claims paid + outstanding claims at end + surveyor and legal fees - claims recoverable from reinsurers - outstanding claims at beginning
 - D. Claims paid + surveyor and legal fees reinsurance recoveries at beginning

Answer: C; Claims paid + outstanding claims at end + surveyor and legal fees - claims recoverable from reinsurers - outstanding claims at beginning

- 2. Which of the following items does not appear in the Revenue Account of a General Insurance Company?
 - A. Premium earned (net)
 - B. Commission on reinsurance ceded
 - C. Interest and dividend on investments
 - D. Change in mathematical reserves

Answer: D; Change in mathematical reserves

(Note: Change in mathematical reserves appears in Life Insurance Revenue Account, not General Insurance.)

- does IRDAI require segregation Policyholders' and Shareholders' Funds in a Life Insurance Company's Balance Sheet?
 - A. To combine investment results
 - B. Because the assets of policyholders cannot be used for shareholders' benefit
 - C. Because policyholders and shareholders share equal profits
 - D. For tax computation purposes only

Answer: B; Because the assets of policyholders cannot be used for shareholders' benefit

- 4. The Reserve for Unexpired Risks (URR) in General Insurance represents:
 - A. Claims outstanding at year end
 - B. Premium income pertaining to the next accounting year

- C. Estimated liability on unreported claims
- D. Investment reserve of the company

Answer: B; Premium income pertaining to the next accounting year

- The presentation of financial statements of insurance companies in India is governed by:
 - A. Schedule III of the Companies Act, 2013
 - B. IRDAI (Preparation of Financial Statements and Auditor's Report of Insurance Companies) Regulations, 2002
 - C. AS 11
 - D. Companies (Accounting Standards) Rules, 2021

Answer: B; IRDAI (Preparation of Financial Statements and Auditor's Report of Insurance Companies) Regulations, 2002

- In a General Insurance Company, Premium Earned (Net) is calculated as:
 - A. Premium written premium ceded to reinsurers
 - B. Premium written unexpired risk reserve at end + unexpired risk reserve at beginning
 - C. Premium received during the year only
 - D. Premium written + outstanding premiums

Answer: B; Premium written - unexpired risk reserve at end + unexpired risk reserve at beginning

Comprehensive Numerical Questions

Valuation Balance Sheet

Revenue Account or Balance Sheet of a life insurance company does not disclose the profit or loss for a given period. For the purpose of ascertaining profits or losses of a life insurance company, a Valuation Balance Sheet is prepared once in every two years by a life insurance company. Valuation is a highly technical task and is done by experts in this field known as 'Actuaries'. The following steps are required to be followed for valuation:

- Step 1: Calculation of present value of the insured amounts of current policies, which will have to be paid in future by the company.
- Step 2: Calculation of present value of premium in respect of current policies, which will be received in future by the company.
- Step 3: Calculation of 'net liabilities' which is the difference between the present value of Step 1 and present value of Step 2.

Step 4: Surplus / profit or deficiency / loss is found out from Valuation Balance Sheet. The format of Valuation Balance Sheet is as follows:

Valuation Balance Sheet as on

Particulars	₹	Particulars	₹
To Net liability as per Actuarial valuation	**	By Balance of Life Insurance Fund (as per Balance Sheet)	**
To Surplus (Bal. fig)	**	By Deficiency (Bal. fig)	**
	***		***

Note: Disposal of Surplus

95% of the surplus must be utilised for the benefit of policyholders and 5% of the surplus will be given to shareholders. Consider the following illustrations.

Illustration 1

The life fund of a life assurance company was ₹4,32,40,000 as on 31.3.2025. The interim bonus paid during the intervaluation period was ₹7,40,000. The periodical actuarial valuation determined the net liability at ₹3,71,25,000. Surplus brought forward from the previous valuation was ₹42,50,000. Calculate the net profit for the valuation period.

Solution:

Valuation Balance Sheet as at 31st March, 2025

Particulars	₹	Particulars	₹
Net Liability	3,71,25,000	Life Insurance Fund	4,32,40,000
Surplus (Balancing figure)	61,15,000		
	4,32,40,000		4,32,40,000

Net Profit for the Valuation Period

Particulars	₹
Surplus as per Valuation Balance Sheet	61,15,000
Add: Interim bonus paid to the Policyholders during the inter-valuation period	7,40,000
	68,55,000
Less: Surplus brought forward from previous valuation	42,50,000
Net Profit	26,05,000

Illustration 2

The following balances are extracted from the books of XY Life Insurance Corporation:

	₹ in lakh
Life insurance fund (as on 31.3.2025)	800
Net Liabilities as per Valuation	600
Interim Bonus Paid	75

You are required to show:

- (a) the Valuation Balance Sheet as on 31.3.2025
- (b) the Distribution Statement

Solution:

In the books of XY Life Insurance Company Valuation Balance Sheet as at 31st March, 2025

Particulars	₹	Particulars	₹
Net Liability	600	Life Insurance Fund	800
Surplus (Balancing figure)	200		
	800		800

Distribution Statement

Particulars		
Surplus as per Valuation Balance Sheet		
Add: Interim bonus paid to the Policyholders	75	
Profit available for distribution	275	
Share of Policyholders (95% of ₹275 lakh)		
Less: Interim bonus paid	75.00	
Amount due to Policyholders	186.25	
Share of Shareholders (5% of ₹275 lakh)	13.75	

Section B: Auditing

Topic: Provisions Relating to Audit under Companies Act, 2013

Multiple Choice Questions:

- 1. Under the Companies Act, 2013, the appointment of the first auditor of a company other than a government company is made by:
 - A. The shareholders in the first annual general meeting
 - B. The Board of Directors within 30 days of incorporation
 - C. The Central Government
 - D. The Audit Committee only

Answer: B; The Board of Directors within 30 days of incorporation

- 2. If the Board of Directors fails to appoint the first auditor within 30 days of incorporation, the appointment shall be made by:
 - A. The shareholders in an extraordinary general meeting
 - B. The Central Government
 - C. The members of the company within 90 days at an extraordinary general meeting
 - D. The Registrar of Companies

Answer: C; The members of the company within 90 days at an extraordinary general meeting

- **3.** In the case of a Government company, the auditor is appointed by:
 - A. The Comptroller and Auditor General of India (C&AG)
 - B. The Board of Directors
 - C. The Central Government, Ministry of Finance
 - D. The shareholders at the annual general meeting

Answer: A; The Comptroller and Auditor General of India (C&AG)

- **4.** Under Section 139(1) of the Companies Act, 2013, the auditor appointed in the annual general meeting shall hold office:
 - A. For a term of 3 years
 - B. For a term of 5 consecutive years
 - C. Till the next annual general meeting only
 - D. At the discretion of the Board

Answer: B; For a term of 5 consecutive years

- **5.** As per Section 139(2) of the Companies Act, 2013, rotation of auditors is mandatory for:
 - A. All private companies
 - B. Only Government companies

- C. Listed companies and certain prescribed classes of companies
- D. Only foreign companies operating in India

Answer: C; Listed companies and certain prescribed classes of companies

- **6.** The casual vacancy in the office of an auditor, in the case of a company other than a government company, shall be filled by:
 - A. The shareholders in general meeting within 3 months
 - B. The Board of Directors within 30 days
 - C. The Registrar of Companies
 - D. The Central Government

Answer: B; The Board of Directors within 30 days

- 7. An auditor can be removed before expiry of his term by:
 - A. The Board of Directors with prior approval of shareholders
 - B. The shareholders after obtaining prior approval of the Central Government
 - C. The Audit Committee directly
 - D. The Registrar of Companies with C&AG approval

Answer: B; The shareholders after obtaining prior approval of the Central Government

- **8.** Under Section 143 of the Companies Act, 2013, the auditor has the right of access to:
 - A. Only those books of account kept at the registered office

- B. All books of account and vouchers of the company at all times
- C. Only management-approved documents
- D. Only Board minutes and financial statements

Answer: B; All books of account and vouchers of the company at all times

- **9.** As per Section 143(12), if an auditor has reason to believe that a fraud involving prescribed amount is being or has been committed, he shall:
 - A. Report the matter to the Audit Committee or Board immediately
 - B. Report directly to the shareholders
 - C. Report to the Central Government within the prescribed time and manner
 - D. Report only after confirmation by management

Answer: C; Report to the Central Government within the prescribed time and manner

- **10.** Under Section 145 of the Companies Act, 2013, the auditor's report is required to be:
 - A. Signed only by the company secretary
 - B. Signed by the auditor or partner of the audit firm in his own name
 - C. Countersigned by the Board of Directors
 - D. Digitally signed by the CFO

Answer: B; Signed by the auditor or partner of the audit firm in his own name

Module 5: **Capital Budgeting**

Module 11: Data Analysis and Modelling

INTERMEDIATE

Group II - Paper-11

Financial Management and **Business Data** Analytics (FMDA)

Financial Management

Internal Rate of Return (IRR)

Internal Rate of Return (IRR) is one of the techniques of capital budgeting. It is the rate of return at which the net present value of a project becomes zero. So, IRR equates the present value of expected future cash inflows with the initial capital outlay.

For the computation of the IRR, we use the same formula as NPV. To derive the IRR, we apply trial and error method to make the difference between the present value of expected future cash inflows with the initial investment zero.

IRR refers to that discount rate (i) such that

Present value of cash inflows = Present value of cash outflows

Or, Present value of cash inflows – Present value of cash outflows = 0

Or, NPV = 0

Therefore, at IRR, NPV = 0 and PI = 1.

The formula for computation of IRR using NPV is written as under:

The formula for the net present value can be written as:

$$IRR = \frac{Present \ value \ of \ the \ expected \ cash \ inflows}{(1+i)^n} - Initial \ Investment$$

Where, i = Discount rate

n = No. of period

If we use the net present value formula and set it equal to zero. The formula would be:

$$0 = C_0 + \frac{C_1}{(1 + IRR)^1} + \frac{C_2}{(1 + IRR)^2} + ... + \frac{C_n}{(1 + IRR)^n}$$

 $C_t =$ Net cash flow for period t

 C_0 = Initial investment at time 0

t = Time period

Computation of IRR

The IRR is to be determined by trial-and-error method. The following steps can be used for its computation.

- Step 1: Compute the present value of the cash flows from an investment, by using arbitrary by selected interest rate.
- Step 2: Then compare the present value so obtained with capital outlay.
- **Step 3:** If the present value is higher than the cost, then the present value of inflows is to be determined by using higher rate.
- **Step 4:** This procedure is to be continued until the present value of the inflows from the investment are approximately equal to its outflow.
- **Step 5:** The interest rate that brings about equality is the internal rate of return.

In order to find out the exact IRR between two near rates, the following formula is to be used.

$$IRR = L + \frac{P_1 - C_0}{P_1 - P_2} \times D$$

Where, L = Lower rate of interest

 P_1 = Present value at lower rate of interest

 P_2 = Present value at higher rate of interest

 $C_0 = Cash outlay$

D = Difference in rate of interest

Accept-Reject Decision:

Thus, the IRR acceptance rules are -

Accept if IRR > kReject if IRR < k

May accept or reject if IRR = k

Where, 'k' is the cost of capital.

NPV and IRR

NPV and IRR are both discounted cash flow methods for evaluating investments, but NPV measures the project's total value in rupees while IRR measures its annual percentage return. NPV calculates the difference between the present value of cash inflows and outflows, while IRR is the discount rate at which the NPV is zero. For projects of different sizes, NPV is better, while IRR is better for comparing projects with similar cash flows and sizes.

NPV Vs IRR

Basis	NPV	IRR
Definition	The net present value of future cash inflows minus the present value of the investment's cash outflows.	
Time value of money concept	✓	✓
Criterion to accept/reject	NPV > 0	IRR > Required rate of return (%)
Result in express	Monetary value	Rate (percentage)
Different discount rates can be applied to a single project	✓	×
Appropriate for ranking mutually exclusive projects	✓	×

Illustration 1

Following are the data on a capital project being management of XYZ Ltd.

Project P:

Annual cost saving	₹4,00,000
Useful life	4 Years
IRR	15%
Profitability index (PI)	1.064
NPV	?
Cost of capital	?
Cost of project	?
Payback period	?
Salvage value	0

Find the missing values considering the following table of discount factor only.

PV Factor	15%	14%	13%	12%
1	0.869	0.877	0.885	0.893
2	0.756	0.769	0.783	0.797
3	0.658	0.675	0.693	0.712
4	0.572	0.592	0.613	0.636
	2.855	2.913	2.974	3.038

Answer:

Calculation of Cost of project:

Annual cost saving = Cash inflow = ₹4,00,000

Useful life = 4 years

IRR = 15%

At 15% IRR, total present value of cash inflow is equal to initial cash outlay.

Total present value of cash inflow @ 15% for 4 years is 2.855 = 4,00,000

Thus, Project cost = ₹11,42,000.

Calculation of payback period:

Year	CFAT (₹)	Cumulative CFAT (₹)
1	4,00,000	4,00,000
2	4,00,000	8,00,000
3	4,00,000	12,00,000
4	4,00,000	16,00,000

Payback Period = 2 Years +
$$\frac{₹11,42,000 - 8,00,000}{4,00,000} \times 12 = 2 \text{ Years and } 10.26 \text{ months.}$$

Calculation of Cost of Capital

$$Profitability\ Index = \frac{Total\ Present\ Value}{Initial\ Investment}$$

$$1.064 = \frac{\text{Total Present Value}}{\text{₹}11.42,000}$$

Total Present Value = ₹12,15,088

Year	Cash Flow	PV Factor	PV
1 to 4	₹4.00.000	let be <i>x</i>	4.00.000x

Hence,
$$4,00,000x = ₹12,15,088 = 3.038$$

From the present value table, discount factor for 4 years is 3.038 at 12%.

So, Cost of Capital = 12%

Net Present Value = ₹12,15,088 - ₹11,42,000 = ₹73,088

Illustration 2

A project is expected to generate CFAT of 3,56,000. Other data relating to project are as follows:

- Useful life 6 years.
- Risk free rate = 8%
- Certainty factor = 0.9
- Tax rate 35%
- Initial investment = 12,00,000.
- Depreciation Method = SLM.

Calculate risk adjusted IRR of the project using rates of 8% & 16%.

Answer:

	Net present value (NPV) at 8%					
Year	CFAT	CE	Adjusted CFAT	PV Factor (8%)	PV	
(1)	(2)	(3)	$(4) = 2 \times 3$	(5)		
1 to 6	₹ 3,56,000	0.9	₹3,20,400	4.623	₹ 14,81,209	
Less: Initial Outlay				₹ 12,00,000		
NPV				₹ 2,81,209		

	Net present value (NPV) at 16%					
Year	CFAT	CE (3)	Adjusted CFAT	PV Factor (16%)	PV	
(1)	(2)		$(4) = 2 \times 3$	(5)		
1 to 6	₹ 3,56,000	0.9	₹3,20,400	3.685	₹ 11,80,674	
Less: Initial Outlay				₹ 12,00,000		
NPV				(₹ 19,326)		

IRR =
$$8 + \frac{₹2,81,209}{₹2,81,209 - (₹19,326)} × 8$$

= $8 + 7.49$
= 15.49% (approximate)

DATA ANALYTICS DATA ANALYSIS AND MODELLING

Descriptive Analytics

Descriptive analytics is a frequently employed style of data analysis in which historical data is collected, organised, and presented in a readily digestible format. Descriptive analytics focuses exclusively on what has already occurred in an organisation and, unlike other types of analysis, does not utilise its results to draw inferences or make forecasts.

Descriptive Analytics Process

The descriptive analytics process can be divided into several key steps, each of which plays a crucial role in extracting meaningful insights from the data. Following are the steps:

- 1. Data collection: The first step in the descriptive analytics process is to gather relevant data from various sources. This data could be sourced from databases, spreadsheets, surveys, or other structured or unstructured data repositories. The data collected should be comprehensive and representative of the subject being analyzed. It is important to ensure the accuracy and integrity of the data during the collection process.
- 2. Cleaning and preparation: This step involves

identifying and resolving issues such as missing values, inconsistencies, duplicates, and outliers. Data cleaning ensures the data is high quality, reliable, and ready for further analysis. Data preparation can also involve transforming the data into a consistent format and encoding categorical variables for analysis.

- 3. **Exploration:** In this step, data analysts explore the data to understand its characteristics better and identify initial patterns or trends. This can be achieved through various techniques such as summary statistics, data visualization, and exploratory data analysis. Summary statistics, including measures such as mean, median, mode, and standard deviation, provide an overview of the data's central tendencies and dispersion.
- 4. Segmentation: Data segmentation involves dividing the dataset into meaningful subsets based on specific criteria. This segmentation can be done based on variables such as demographics, geographic location, time periods, or product categories. Segmenting the data allows for a more focused analysis and helps uncover insights specific to each segment.
- 5. Summary and key performance indicators (KPIs): Descriptive analytics aims to summarize

- data to provide key insights. This involves calculating summary measures such as averages, totals, percentages, or ratios relevant to the subject being analyzed. Key performance indicators (KPIs) are specific metrics that help evaluate the performance of a business process, product, or service. KPIs provide actionable information and serve as benchmarks to assess progress or performance against specific goals or objectives.
- 6. **Historical trend analysis:** Descriptive analytics includes analyzing historical trends to understand how variables or metrics have changed over time. This analysis reveals patterns, seasonality, or long-term trends. For example, analyzing sales data over several years can reveal sales peaks during certain seasons or identify declining trends in specific product categories. Historical trend analysis helps identify patterns.
- 7. **Data reporting and visualization:** The insights and findings derived from the descriptive analytics process must be communicated effectively. This is typically done through reports or visual dashboards. Reports summarize the analysis and findings, including summary statistics, visualizations, and narrative descriptions.
- 8. Continuous monitoring and iteration: Descriptive analytics is not a one-time process. It requires continuous data monitoring and regular updates to stay informed about evolving patterns and trends. As new data becomes available, the analysis must be updated to capture the most recent information. Continuous monitoring allows for ongoing assessment, evaluation, and adaptation of strategies based on changing data insights.

Module 7:
Forecasting,
Budgeting and
Budgetary Control

INTERMEDIATE

Group II - Paper-12

Management Accounting (MA)

Module 7.1: Budgeting

Budgeting has gained widespread acceptance as a fundamental and powerful tool for short-term planning, coordination, and control in organisations of all sizes. Through budgeting, a business can clearly define its financial and operational objectives for a given accounting period. This process helps organisations anticipate their future activities, measure expected performance, and maintain control over income and expenditure. Budgeting is a core element of management accounting because it integrates financial planning with decision-making, resource allocation, and cost management. It also assists managers in coping with challenges such as inflation, rising costs, and changing market conditions by setting realistic financial boundaries and targets for the business.

When effectively applied, budgeting provides management with the ability to anticipate problems, measure performance, and ensure that different departments work towards a common goal. It also strengthens internal communication and helps management make informed decisions based on quantitative evidence.

Understanding Budgets

A **budget** is a detailed, quantitative plan prepared and approved before a specific period, outlining a company's policies, actions, and goals. It reflects the expected income, expenditure, and capital allocation over that period, providing a roadmap for achieving organisational objectives. Budgets are both financial and operational in nature, serving as tools for planning, performance evaluation, and control.

Budgets are prepared for different areas of business, including sales, production, labour, materials, and cash management. By linking all these areas, budgeting ensures that resources are efficiently used and that organisational goals are realistic and achievable. It also provides a benchmark against which actual performance can be compared, allowing managers to identify variances and implement corrective measures promptly.

Forecast vs. Budget

Forecasting and budgeting are closely related but serve different purposes. **Forecasting** is the process of predicting future events or trends based on past and present data. It focuses on what the organisation is *likely* to achieve if current trends continue. **Budgeting**, on the other hand, sets out what the organisation *intends* to achieve, detailing the financial operations needed to meet desired revenue goals and control costs.

Forecasting always precedes budgeting, as it provides the essential data and assumptions used in budget preparation. Forecasts may cover factors such as future sales, market demand, raw material prices, and wage levels. Based on

this information, a budget translates these estimates into specific targets and plans of action.

Key differences between budgets and forecasts include:

- A **budget** is a formal financial plan that sets measurable goals and standards for performance.
- A forecast is an estimation of likely future outcomes based on historical data and market trends.
- Budgets are usually prepared annually, whereas forecasts are updated regularly.
- Variance analysis applies to budgets to compare planned and actual results, but not to forecasts.
- A budget defines what should happen, whereas a forecast predicts what is likely to happen.

In essence, forecasting helps in preparing the assumptions, while budgeting converts those assumptions into actionable plans that guide the company's financial direction.

Uses of Budgets

Budgets play several vital roles within management accounting, contributing to effective planning, control, and communication across departments.

Primary Uses:

- Quantifying planned use of resources such as materials, labour, and machinery.
- Estimating expected income and costs associated with operations.
- Assisting in resource procurement and scheduling to avoid shortages or waste.

Secondary Uses:

- Managing payments and receipts through cash budgets.
- Ensuring sufficient liquidity by monitoring collections from debtors and controlling cash outflows.

Tertiary Uses:

- Communicating organisational goals and responsibilities to employees.
- Acting as a basis for negotiation between departments or with external stakeholders.
- Supporting performance evaluation and reward systems by linking pay or bonuses to budget achievements.

Overall, budgeting is not only a financial planning tool but also a communication and motivation instrument that fosters accountability and efficiency within an organisation.

Features of a Budget

- 1. Financial and/or Quantitative Statement: Budgets express organisational plans in measurable, numeric terms such as revenue, costs, or production units.
- **2. Futuristic:** Budgets are prepared and approved before the operational period begins, providing direction for future activities.
- **3. Goal-Oriented:** They are designed to achieve specific organisational objectives, aligning departmental activities with overall corporate goals.
- **4. Comprehensive Components:** Budgets encompass income, expenditure, and capital utilisation, ensuring a complete view of financial performance.

Objectives of Budgeting

- 1. To encourage self-assessment and critical analysis of operations at all organisational levels.
- To engage management in coordinated planning, ensuring that all departments work toward clearly defined objectives.
- 3. To define and crystallise company policies, strategies, and performance standards.
- 4. To promote efficient use of both financial and human resources.
- 5. To identify potential areas of improvement, inefficiency, or cost reduction.
- 6. To facilitate better understanding of the organisation's relationship with its external business environment, including market and economic conditions.

By fulfilling these objectives, budgeting promotes both operational efficiency and financial discipline, leading to improved decision-making and long-term stability.

Key Considerations in Annual Budget Preparation (Manufacturing Firms)

Preparing an annual budget for a manufacturing firm involves addressing several important questions across different operational areas:

Product Sales:

- What products will be produced and sold?
- What quantities of each product will be sold?
- When and where will these products be sold?

Product Procurement (if buying for resale):

- When will products be purchased?
- Who will supply them?
- How much will each product cost?

Manufacturing Process (Materials):

- How much material will be required?
- Where and when will materials be sourced?
- How much will be paid, and at what time?
- What quantities will be purchased and stored?

Labour Requirements:

- How much labour will be required for production?
- How many workers of each category will be needed?
- When will they be hired and paid?

Other Costs:

- What will be the estimated costs of salaries, rent, insurance, administration, and other overheads?
- When will these costs be incurred?
- Who will be responsible for payments and supplies?

This structured approach ensures that all resources—financial, human, and material—are aligned with production and sales goals.

Conclusion

Budgeting serves as a cornerstone of modern management accounting, enabling businesses to plan, monitor, and control their operations effectively. It combines forecasting, financial planning, and performance measurement to ensure the efficient use of resources and the achievement of organisational objectives. While forecasts help predict future conditions, budgets provide the concrete steps needed to reach desired outcomes.

An effective budgeting system encourages teamwork, enhances accountability, and ensures that every department operates within a coordinated framework. Through this process, managers gain valuable insight into both short-term financial control and long-term strategic direction.

Multiple Choice Questions (MCQs):

- 1. A budget is mainly a:
 - a) Financial plan
 - b) Marketing plan
 - c) Production process
 - d) Human resource policy
- 2. Budgeting is an important tool of:
 - a) Financial accounting
 - b) Management accounting
 - c) Cost accounting only
 - d) Marketing management

- 3. The CIMA defines a budget as a plan quantified in:
 - a) Time
 - b) Monetary terms
 - c) Quantity terms only
 - d) Labour terms
- 4. Forecasting precedes:
 - a) Accounting
 - b) Budget preparation
 - c) Reporting
 - d) Variance analysis
- 5. A forecast means:
 - a) Estimation of future trends
 - b) Setting financial targets
 - c) Determining past events
 - d) Measuring actual outcomes
- 6. The main objective of budgeting is to:
 - a) Increase employees
 - b) Control long-term liabilities
 - c) Coordinate business activities
 - d) Avoid external factors
- 7. The key factor in budgeting is also known as:
 - a) Dominating factor
 - b) Controlling factor
 - c) Limiting factor
 - d) Critical point
- 8. Budget centre refers to:
 - a) Department under budget control
 - b) Cost centre
 - c) Sales division
 - d) Accounting section
- 9. Budget officer is usually from:
 - a) HR team
 - b) Accounting staff
 - c) Sales department
 - d) Marketing division
- 10. Budget manual includes:
 - a) Financial statements
 - b) Procedures of budgeting

- c) Employee salaries
- d) None of these
- 11. Realistic objectives in budgeting mean:
 - a) Easy targets
 - b) Logically attainable goals
 - c) Very difficult goals
 - d) Undefined targets
- 12. Fixed budget is:
 - a) Time consuming
 - b) Simple to prepare
 - c) Suitable for seasonal trade
 - d) Complicated

Answer:

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

Fills in the blanks

- 1. The budget period is often subdivided into months or
- 2. Fixed budgets are suitable when demand is and stable.
- 3. Support of _____ management is essential for budgeting success.
- 4. Budgetary control involves comparison of actual results with figures.

Answer:

1	2	3	4
Quarters	Certain	Тор	Cost

True and False

- 1. The budget committee usually includes departmental heads and the Managing Director as chairman
- The budget period is always fixed for five years in all organisations.
- 3. The budget manual provides written guidance about budgeting organisation and procedures.
- 4. Coordination between different departments is not an objective of budgeting.
- 5. In budgeting, defining responsibilities ensures that every executive knows what is expected of them.

Answer:

1	2	3	4	5
T	F	T	F	T

Module 7.4: Formulation of Various Types of Budgets

Budgeting Concepts and Types

Fixed Budget

- Designed to remain unchanged regardless of activity levels.
- Prepared for a specific level of activity.
- Suitable under static conditions.
- Does not reflect cost variances due to activity changes.

Flexible Budget

- Adjusts according to different activity levels.
- Accounts for fixed, variable, and semi-variable costs.
- Useful for businesses with fluctuating sales or production.
- Methods for preparation:
- Multi-Activity Method
- Ratio Method
- Charting Method
- Advantages include easy adjustment, better cost control, and improved decision-making.
- Limitations include complexity and need for expertise.

Functional Budgets

Sales Budget

- Estimates quantity and price for each product and market segment.
- Factors include market locality, customer type, product popularity, competition, seasonal fluctuations, and advertising impact.

Production Budget

- Estimates the required production based on sales forecast and inventory policy.
- Considers production plans, capacity, inventory, sales policy, and management policy.

Direct Material Budget

- Estimates raw materials needed for production.
- Based on production budget and inventory policies.

Direct Labour Budget

• Estimates labour hours and costs needed for production targets.

Production Overheads Budget

• Estimates indirect costs related to manufacturing.

Office & Administration Overheads Budget

 Covers expenses related to office operations and administration.

Selling & Distribution Overheads Budget

 Includes expenses directly related to sales and distribution activities.

Advertising Cost Budget

• Plans promotional expenditures.

Research & Development Expenditure Budget

• Estimates costs for R&D activities.

Capital Expenditure Budget

 Plans investment on fixed assets over short or long terms.

Cash Budget

• Estimates cash receipts and payments to ensure liquidity.

Specialized Budgeting Approaches

Activity-Based Budgeting

- Focuses on costs by activity rather than by traditional expense categories.
- Helps in identifying and reducing non-value-added activities.

Zero-Based Budgeting (ZBB)

- Requires justification for all budget items each period.
- Encourages resource allocation based on priorities.
- Promotes efficiency but can be time-consuming.

Performance Budgeting

 Budgets linked to specific functions, activities, and performance targets.

Rolling Budget

- Continuously updated budget extending over future periods.
- Enhances adaptability and planning accuracy.

Outcome Budget

- Focuses on results and impacts of expenditures.
- Measures program accomplishments beyond just financial outlays.

Budgetary Control

Establishing budgets aligned to responsibilities and policies.

- Comparing actual results with budgets to manage deviations.
- Supports planning, coordination, motivation, and communication.
- Requires timely, relevant reports focused on significant variances.
- Complements standard costing systems.

Beyond Budgeting and Benchmarking

Beyond Budgeting

- Moves away from fixed annual budgets to more flexible, decentralized approaches.
- Supports adaptation and innovation in dynamic environments.

Benchmarking

- Comparing processes and performance with best practices.
- Types include competitive, strategic, internal, external, and functional benchmarking.

Critical Success Factors and Performance Management Critical Success Factors (CSFs)

• Essential areas requiring focus for organizational success.

Performance Management

- Continuous dialogue, feedback, and development plans to improve individual and team performance.
- Addressing underperformance with clear expectations and support.
- Recognizing overperformance through consistent exceptional results.

Multiple Choice Questions (MCQs):

- 1. Which of the following best describes a fixed budget?
 - a) A budget that adjusts based on the actual level of activity achieved
 - b) A budget that remains unchanged regardless of the level of activity
 - c) A budget used only for seasonal businesses
 - d) A budget that classifies costs into fixed, variable, and semi-variable
- 2. In the context of Outcome Budgeting, 'Outcome' is best described as:
 - a) The amount that is provided for a given scheme in the budget (Outlay).
 - b) The direct and measurable product of program activities in physical terms (Output).

- c) The collective result or qualitative improvements brought about in service delivery.
- d) The financial dimension of the budget showing actual performance.
- 3. Performance Budget has been primarily defined as a budget based on:
 - a) Functions, activities, and projects.
 - b) Only short-term financial planning.
 - c) Fiscal deficit and government borrowing control.
 - d) Outlay, output, and outcome.
- 4. A key step in budgetary performance involves forecasting the expenditure required to meet the physical plan. This is listed as step number:
 - a) Establishment of well-defined centers of responsibilities.
 - b) Establishment for each responsibility center a programme of target performance.
 - c) Forecasting the amount of expenditure required to meet the physical plan laid down.
 - d) Comparison of the actual performance with the budgets.
- 5. The Planning, Programming, Budgeting System (PPBS) is an approach that seeks to separate:
 - a) Input costs from end results.
 - b) Policy planning aspects of budgeting from the short-term financial planning process.
 - c) Outlay from output.
 - d) Detailed monthly budgets from quarterly budgets.
- 6. A rolling budget is continuously updated by:
 - a) Preparing a new annual budget once a year.
 - b) Adding a further accounting period when the earlier accounting period has expired.
 - Focusing detailed planning only on the first three months.
 - d) Comparing the actual performance with the fixed annual budget.
- 7. The Chartered Institute of Management Accountants (CIMA) defines 'Budgetary Control' as a process involving the continuous comparison of actual with budgeted results for which primary purpose?
 - a) To solely focus on reducing expenses, ignoring revenue targets.
 - To ensure all management action is stopped if a variance is found.

- To provide a firm basis for its revision and/or secure by individual action the objectives of that policy.
- d) To only reward employees who achieve goals, without taking corrective measures for failures.
- 8. A limitation of budgetary control is that the quantitative expression of data can lead to a tendency to attach some sort of ______ to the estimates, which is considered harmful.
 - a) Flexibility
 - b) Profitability
 - c) Rigidity or finality
 - d) Motivation
- 9. One of the main advantages of a budgetary control system is that it focuses management attention on critical areas by using the principle of:
 - a) Management by Objectives (MBO).
 - b) Responsibility Accounting.
 - c) Maximum effective utilization.
 - d) Management by exception.
- 10. What is the overall financial plan produced by summarizing all the individual functional budgets?
 - a) Operating Budget
 - b) Capital Expenditure Budget
 - c) Master Budget
 - d) Cash Budget
- 11. Functional budgets are defined as a financial or quantitative statement prepared for:
 - a) The overall profitability target set by top management.
 - b) Each department or process within an organization.
 - c) Only the revenue-generating divisions of the business.
 - d) Only the assets and long-term financing of the company.
- 12. The Production Budget is the immediate basis for developing cost budgets related to:
 - a) Advertising costs.
 - b) Office & Administration Overheads.
 - c) Capital expenditure.
 - d) Raw materials and other consumables to be purchased.

Answer:

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

True and False

- 1. An advertising budget is a company's allocation of promotional expenditures over a specified time period.
- 2. Cash budgets are based on sales forecasts because these are directly related with sales.
- 3. A static budget adjusts dynamically based on changes in the level of business activity.
- 4. The capital expenditure budget represents the expected expenditure on fixed assets during the budget period.
- Factory overhead budget includes direct material and direct labor costs.

Answer:

1	2	3	4	5	
Т	F	F	T	F	

Fill in the blanks

- 1. A budget that is always available for a specified future period.
- 2. ____has been defined as a "budget based on functions, activities and projects."
- 3. A budgeting approach that focuses management's attention on activities with the goal of improving customer value, reducing costs, and increasing profit is known as _____.
- 4. _____represents the anticipated receipts and payment of cash during the budget period.
- 5. Under _____ cost and benefit estimates are built up from scratch, from the zero level, and must be justified.

Answer:

- Rolling Budget
- 2. Performance Budget
- 3. Activity-Based Budgeting (ABB)
- 4. Cash Budget
- 5. Zero-base budgeting

CMA FINAL COURSE

Syllabus 2022

Module 7: Laws and Regulations related to Banking Sector

FINAL

Group III - Paper-13

Corporate and **Economic Laws** (CEL)

VARIOUS LAWS RELATING TO BANKING

- The Bankers Book Evidence Act, 1891
- Interest Act
- Banking Regulation Act, 1949
- Reserve Bank of India Act, 1934

RECOVERY AND ENFORCEMENT LAWS

- THE RECOVERY OF DEBT DUE TO BANKS AND FINANCIAL INSTITUTIONS ACT, 1993
- SECURITISATION AND ENFORCEMENT OF SECURITY ACT, 2002

COMMON LAWS RELEVENT TO BANKING

- INDIAN CONTRACT ACT
- CONSUMER PROTECTION ACT, 1986
- NEGOTIABLE INSTRUMENTS ACT, 1881

BANKER CUSTOMER RELATIONS

- DEBTOR CREDITOR
- PRINCIPAL AGENT
- TRUSTEE BENEFICIARY
- BAILOR BAILEE
- CONSULTANT
- LEASOR LESSEE

LAW RELATING TO THE BANKERS BOOK EVIDENCE ACT, 1891

- A law to explain the procedure of taking bankers book as evidence
- Includes ledgers, day books, cash books, accounts books and all other books used in day to day operations
- Legal proceedings means any proceeding where evidence is required, including arbitration, and police investigation
- Certified copy is copy of any part of the bankers book certified as true copy by an officer authorised by the bank, where the book has been destroyed, a further certificate is required. Certified copy shall be taken as prima facie evidence of existence of such entry in the original books of the bank.
- Bank cannot be compelled to produce any evidence, if bank is not a party, unless by order of a court
- Inspection of books and taking copies can be allowed to any party with the order of the court...

BANKING REGULATION ACT, 1949

CONSTITUTION OF BANKS

- Body Corporate under Special Statute
- Company Regd. under Companies Act.
- Cooperative society-cooperative bank
- Public sector banks-taken over banks under bank Nationisation Act, 1970
- Foreign banks-regd. outside India and doing Business with permission of RBI
- Local area banks

LICENCING OF BANKING

- No Co. to carry any banking business without licence to be given by RBI on application after considering the following:
 - 1. Position to pay depositors
 - 2. Affairs not conducted which is detrimental to depositors
 - 3. Not prejudicial to public interest
 - 4. Adequate capital structure and earning prospects
- No company shall use as part of its name any word as bank, banker, banking, banking company and shall not do banking business unless such name is used.
- Can be cancelled on ceasing to do banking business or non-fulfilment of conditions. appeal to cg within 30 days.
- Permission is reqd. For opening branches/place
 of business in India/outside. temporary collection
 centres upto one month or shifting of premises do not
 require permission. Applications are to be made once
 in a year by each bank.
- RBI has made guidelines for establishment of new banks in the private sector

MAIN FUNCTIONS OF COMMERCIAL BANK: u/s 8(1) of BANKING REGULATION ACT, 1949

- Accepting deposits
- Granting advances
- Bill discounting
- Dealing in foreign exchange
- Granting and issuing of letter of credit, traveller's cheque and circular notes;
- Buying, selling and dealing in bullion and species;

- Buying and selling of foreign exchange including foreign bank notes;
- The acquiring, holding, issuing on commission, under – writing and dealing in stocks, funds, shares, debenture stock, bonds, obligations, securities and investment of all kinds;
- Purchasing and selling of bonds scripts or other forms of securities on behalf of the constituents or others, the negotiating of loans and advances;
- The receiving of all kinds of bonds or valuables, on deposit or for safe custody or otherwise; the providing of safe deposit vaults;
- The collecting and transmitting of money and securities;
- The borrowing, raising or taking up of money, the lending or advancing of money either with or without security;
- The drawing, making, accepting, discounting, buying, selling and dealing in bills of exchange, hundies, promissory notes, coupons, drafts, bills of lading, railway receipts, warrants, debentures, certificates, scrips and other instruments and securities whether transferable or negotiable or not.

ANCILLARY FUNCTIONS: u/s 6(1) of BANKING REGULATION ACT, 1949

- Acting as agent for any government or local authority or any other person or persons;
- The carrying on of agency business of any description including the clearing or forwarding of goods, giving of receipts and discharges and otherwise acting as an attorney on behalf of customers but excluding the business of a managing agent or secretary and treasurer of a company;
- Contracting for public or private loans and negotiating and issuing the same;
- Effecting, insuring, guaranting, underwriting, participating in managing and carrying out of any issues public or private of state, municipal or other loans or of shares, stock, debenture or debenture stock of any company, corporate or association and lending of money for the purpose of any such issue;
- Carrying on and transacting every kind of guarantee and indemnity business;
- Managing, selling and realising any property which may come into the possession of the company in satisfaction or part – satisfaction of any of its claims;
- Acquiring and holding and generally dealing with any title / property or any right, or interest in any such

- property which may form the security or part of the security for any loans or advances or which may be connected with any such security;
- Undertaking and executing trusts; and
- Undertaking the administ
- Ration of estates as executor, trustee.

TREASURY MANAGEMENT

RBI Guideline For Asset Liability Management (ALM)

RBI has issued broad guidelines for ALM system in banks.

Risks involved in ALM

- 1. Liquidity Risk
- 2. Interest Rate Risk
- 3. Currency Risk

LENDING POLICY

1. General Principle of lending:

- 1. Purpose
- 2. Safety
- 3. Security
- 4. Liqudity
- 5. Profitability
- 6. Diversification

2. Security

A Banker while financing any borrower ensures that he gets a proper & adequate security to fallback upon in case of an emergency.

Different types of securities, which may be acceptable to the bank, are as under:

- 1. Land & Building
- 2. Plant & Machinery
- 3. Goods
- 4. Document of Title of Goods
- 5. Book Debts
- 6. Govt. Securities
- 7. Share& Debenture
- 8. Insurance Policy
- 9. Govt. Supply Bills
- 10. Term Deposit Receipts

Importance of securities

The need of obtaining securities against any advance can be summarized as under:

- In case of default, bank can dispose off the security by private treaty or in public auction.
- 2. If specifically charged, it becomes difficult for the customer to dispose it off.
- 3. End-use of funds can be ensured in case of security like plant & machinery etc. by physical verification
- 4. It shows the borrower's financial stake in the business.

Requirement of acceptable securities:

- 1. Marketabiliy
- 2. Storability
- 3. Certainty of value
- 4. Stability of value
- 5. Easy transferability
- 6. Liquidity
- 7. Clear & Marketable Title

Various Charges in Lending Policy:

- 1. Pledge
- 2. Hypothecation
- 3. Mortgage
- 4. Set-off
- 5. Assignments
- 6. Lien

Minimization of risk in Lending:

With a view to minimize the risk involved in lending, banks follow the acceptable norms:

- 1. Ability
- 2. Security
- 3. Profitability
- 4. Liqudity
- 5. Purpose of the Loan
- 6. Spread
- 7. Control and Follow up

SOME IMPORTANT ASPECTS IN LENDING AREAS

- 1. Prime lending Rate (PLR)
- 2. Loan Syndication/consortium lending
- 3. Bridge Loan

- 4. Working Capital Demand Loan
- Factoring
- 6. Securitisation

3. DEVELOPMENT BANKING

Role of Various banks in this area:

- 1. IFCI
- ICICI
- 3. IDBI
- 4. SIDBI
- 5. IIBI
- 6. SFCs
- 7. EXIM BANK
- 8. UTI
- 9. NHB
- 10. NABARD
- 11. LIC
- 12. GIC
- A. Development Banking VS Commercial Banking
- B. Development Banking VS Universal Banking
- C. Venture Capital
- D. Securitisation

4. RBI --- IT'S FUNCTION & RELATIONSHIP WITH OTHER BANKS

- A. Supervisory control over other banks
- B. Inspection of Banks
- C. Power to issue Direction
- D. Control over top management
- E. Foreign Exchange Control
- F. Managing Govt. Treasury
- G. Licensing and Controlling Commercial Banks

Main Function of RBI:

- 1. Issue of Currency Notes
- Banker to the Govt.
- 3. Banker's Bank
- 4. Credit Control
- 5. Foreign Exchange Management

BANC-ASSURNCE

Banc-Assurance is a term which refers to the selling of insurance policies through a bank's established distribution channels.

Banks, which sell insurance product through their branches, the present law require that all directors and officials selling insurance under go training and pass the agent examination.

NARROW BANKING

Narrow Banking is one, which would only invest its deposit in very safe and liquid assets such as short term Government Securities or high quality commercial papers. As a result, risk of failure gets reduced, if not eliminated.

UNIVERSAL BANKING

Universal Banking conjures up, an image of modern banking specifically a financial supermarket wherein a customer will be provided with all types of financial services for which he has to visit many establishment for now.

New Banking Norms:

New Banking Norms announced by RBI on 3rd January 2001. The main features are:

- 1. Initial minimum paid up capital should be Rs.300 Crores, to be raised to Rs. 500 Crores within 3 years of business.
- 2. Promoter's contribution at any point of time should be minimum of 40% of paid up capital.
- 3. NRI participation in primary equity should be maximum 40%.
- 4. No Bank can be promoted by any large industrial house.
- 5. The new bank will not be allowed to set up a subsidiary or mutual fund for at least 3 years from commencing business

6. NBFCs having AAA rating can come into banking business with minimum CAR 12% and net NPA should not be more than 5%.

US GAAP

In order to provide greater transparency to the Bank's Balance Sheets and full disclosures and to confirm to the International standards, some of the Commercial Banks decided to adopt Generally Accepted Accounting Period in the United States or US GAAP.

Commercial Banks in to Insurance Business

To enter into Insurance Business by the Commercial Banks, the RBI stipulates the following guidelines:

- The Net Worth of the Commercial Bank should be Rs. 500Crores.
- 2. Capital Adequacy Ratio should not less than 10%
- Share of participation in JV not to exceed 10% of Net Worth.
- 4. Net NPAs should be 1% below than industry average.
- 5. Total mount invested in all subsidiaries and JVs not to exceed 20% of Net Worth
- 6. Participation in JV not to exceed 30% of Paid up Capital
- 7. Satisfactory track record as Commercial Bank

OFF - SHORE BANKING

Off — Shore Banking refers to wholesale International Banking Business involving non-resident foreign currency denominated assets and liabilities. It refers only to non-resident funds and does not mix with domestic banking. Off — Shore Banking comprises mainly wholesale banking services like project financing, syndication of large loans etc. Off — Shore Banking enjoys a regulatory climate in which control on tax enough to permit the unrestricted transfer of capital among non-residents, minimal taxation and relatively small reserve requirement.

Section D: International Financial Management

FINAL

Group III - Paper-14

Strategic Financial Management (SFM)

Topic: International Financial Management

• Multiple Choice Questions

- 1. A currency derivative is best described as:
 - A. A contract for the physical exchange of currencies only
 - B. A financial instrument whose value depends on the exchange rate of two currencies
 - C. A government-issued bond denominated in foreign currency
 - D. A money market instrument used for short-term borrowing

Answer: B. A financial instrument whose value depends on the exchange rate of two currencies

- 2. A forward exchange contract is:
 - A. Standardized and traded on an exchange
 - B. A customized contract between two parties to exchange currencies at a future date
 - C. Settled daily through margin accounts
 - D. A short-term loan between two banks

Answer: B. A customized contract between two parties to exchange currencies at a future date

- 3. Currency futures differ from forwards mainly because:
 - A. Futures are traded over-the-counter
 - B. Futures contracts are standardized and exchange-traded
 - C. Futures contracts cannot be used for hedging
 - D. Futures have no margin requirements

Answer: B. Futures contracts are standardized and exchange-traded

- 4. In a currency futures contract, the initial margin represents:
 - A. The full contract value payable upfront
 - B. A deposit made to cover potential daily losses
 - C. The brokerage commission paid to the exchange
 - D. The forward rate difference

Answer: B. A deposit made to cover potential daily losses

- 5. In a currency option, the buyer:
 - A. Must buy or sell the currency on the expiration date
 - B. Has the right but not the obligation to buy or sell the currency

- C. Faces unlimited loss potential
- D. Receives the premium from the seller

Answer: B. Has the right but not the obligation to buy or sell the currency

- 6. The price paid by the buyer of a currency option to the seller is known as:
 - A. Strike price
 - B. Spot rate
 - C. Premium
 - D. Exercise value

Answer: C. Premium

- 7. A currency call option gives the holder the right to:
 - A. Sell a currency at a specified exchange rate
 - B. Buy a currency at a specified exchange rate
 - C. Exchange currencies at the market rate
 - D. Enter into a swap agreement

Answer: B. Buy a currency at a specified exchange rate

- 8. A currency swap involves:
 - A. Exchanging interest payments in the same currency
 - B. Exchanging principal and interest payments in different currencies
 - C. Buying and selling futures contracts simultaneously
 - D. Exchanging only the notional principal amount

Answer: B. Exchanging principal and interest payments in different currencies

- 9. An exporter expecting to receive USD in three months may hedge currency risk by:
 - A. Buying USD forward
 - B. Selling USD forward
 - C. Buying a USD call option
 - D. Both B and C

Answer: D. Both B and C

- 10. Which of the following statements is true regarding speculation in the currency derivatives market?
 - A. Speculators always make profits
 - B. Speculators use derivatives to reduce exposure to exchange rate risk
 - C. Speculators take positions to benefit from expected currency movements

D. Speculation eliminates foreign exchange risk entirely

Answer: C. Speculators take positions to benefit from expected currency movements

- 11. According to the theory of Purchasing Power Parity, the exchange rate between two currencies should:
 - A. Equalize the nominal interest rates in both countries
 - B. Equalize the inflation rates in both countries
 - C. Equalize the price levels of identical goods in both countries
 - D. Remain constant over time

Answer: C. Equalize the price levels of identical goods in both countries

- 12. Interest Rate Parity ensures that:
 - A. The real interest rates are the same in all countries
 - B. Covered interest arbitrage opportunities do not exist
 - C. Investors always prefer domestic investments
 - D. Exchange rate fluctuations are eliminated

Answer: B. Covered interest arbitrage opportunities do not exist

- 13. The spot exchange rate between USD and INR is ₹84. If the 3-month forward rate is ₹85, the Indian rupee is said to be:
 - A. At a forward premium
 - B. At a forward discount
 - C. Stable in the forward market
 - D. Overvalued against the dollar

Answer: B. At a forward discount

- 14. Under which exchange rate system does the value of a currency fluctuate according to market forces without any direct intervention by the central bank?
 - A. Fixed exchange rate system
 - B. Managed float system
 - C. Freely floating exchange rate system
 - D. Pegged exchange rate system

Answer: C. Freely floating exchange rate system

• Comprehensive Practical Questions

Problem 1

The following information is given:

Spot rate for 1 US Dollar	₹64.0123
180 days' forward rate for 1 USD	₹64.9120
Annualised interest rate for 6 months-Rupee	12%
Annualised interest rate for 6 months - US Dollar	8%

Does any arbitrage opportunity exist? Discuss the sequence of activities for gain using 1000 units of currency and compute the gains, if any.

Solution:

Using the interest rate parity rule, there will be an arbitrage opportunity if:

(1 + home currency interest rate

$$\frac{\text{Forward Rate}}{\text{Spot Rate}} \neq \frac{\text{for the period})}{(1 + \text{foreign interest rate for the period})}$$
Here,
$$\frac{\text{Forward Rate}}{\text{Spot Rate}} = 64.9120/64.0123 = 1.01406$$
And the RHS
$$= (1+12\% / 2)/(1+8\% / 2)$$

$$= (1+0.06)/(1+0.04)$$

= 1.01923

Hence arbitrage opportunity exists in a small measure, where money invested in rupees will earn higher interest in India and can be converted to dollars after 6 months.

Arbitrage process: Borrow 1000\$, convert at spot rate into INR, invest at 12% for 6 months in India, convert total amount into \$ and get the gain.

Borrow 1000\$	1000
Interest @ 8% for 6 m	40
Repay amount \$ after 6 m	1040 (A)
Convert 1000\$ to INR at spot rate 64.0123	= INR 64012.3
Interest on this amount at 12% p.a. for 6 m	= INR 3840.74
Total amount available after 6 m	= INR 67853.04
Convert this amount at forward rate 64.9120	= \$1045.31 (B)
Gain due to arbitrage (B - A)	\$ 5.31

Gain per 1000\$ invested thus = 5.31\$

Verification: Parity theorem approximately gives 0.00517 per \$, which is 5.17 per 1000\$.

$$(1.01923 - 1.01406 = -0.00517)$$

Problem 2

The following two-way quotes appear in the foreign exchange market:

İ		Spot Rate	2-Months Forward
I	₹/US\$	₹ 66.00/₹ 66.25	₹67.00/ ₹67.50

- (i) How many US Dollars should a firm sell to get ₹50 Lakh after two months?
- (ii) How many Rupees is the firm required to pay to obtain US \$ 3,00,000 in the spot market?
- (iii) Assume that the firm has US \$ 1,19,000 earning no interest. ROI on Rupee Investment is 8% p.a. Should the firm encash the US \$ now or 2 months later?

Solution:

(i) US dollars for ₹50 Lakh in the forward Market

Action	Sell Foreign Currency in Forward Market
Relevant Rate	Forward Bid Rate = ₹67.00
US \$ Required to get ₹50 Lakh	₹50,00,000 ÷ ₹67.00 = US \$ 74,626.87

Required to obtain US dollars 3,00,000 in the spot market

Action	Buy	Foreign	Currency	in	Spot
	Mark	tet			

Relevant Rate	Spot Ask Rate = ₹66.25
Rupees Required	US \$3,00,000 × ₹66.25 =
to get \$3,00,000	₹19,875,000

(iii) Evaluation of investment in Rupee

Forward Premium (for Bid Rates) =

Forward Rate ₹67 - Spot rate ₹66
Spot Rate ₹66
$$= 9.09\%$$
× $\frac{12 \text{ months}}{2 \text{ months}} \times 100$

Comment: Annualized Forward Premium for Bid Rates (9.09%) is greater than the Annual Return on Investment in Rupees (8%). Therefore, the firm should not encash its US \$ balance now. It should sell the US \$ in the forward market and encash them two months later.

Alternative:

Alternatively, if it encashes now, ₹ receivable = 66 × 1,19,000 = 78,54,000

Interest at 8% p.a. 2 months = $8\% \times 2/12 \times 78,54,000 =$ 1,04,720

Amount at the end of two months = 79,58,720

Hold for 2 months, then ₹ receivable = 67 × 119000 = 79,73,000

Hence the amount should be encashed into Rupees two months later.

Module 2:
Tax Management,
Return and
Assessment
Procedure

FINAL

Group III - Paper-15

Direct Tax Laws and International Taxation (DIT)

Return of Income

Filing the return of income is not merely a procedural compliance under the Income-tax Act, 1961—it is a statutory declaration of a taxpayer's income, financial transactions, and tax liability. Whether for individuals, HUFs, companies, or charitable institutions, the return serves as a foundational document for assessment, refund claim, loss carry forward, and scrutiny under the tax laws. Section 139 of the Act provides a comprehensive framework for various types of returns—original, belated, revised, and updated—each with distinct timelines, conditions, and implications. With the growing emphasis on data transparency through AIS, TIS, and interlinked systems like PAN-Aadhaar-GST, return filing has become a critical responsibility with far-reaching consequences. Therefore, a sound grasp of the return provisions is vital for every tax professional, ensuring clients' compliance and optimizing their tax outcomes.

Filing of return

The following person need to file a return of income -

Assessee	Size of income	
A company or a firm or any University/College/ other institution referred to on Sec.35(1)(ii) or (iii)	Irrespective of the size of the income	
Any other person	Gross total income [without considering deduction u/s 54's] exceeds the maximum amount which is not chargeable to income tax.	
• An ordinarily resident person is mandatorily required to file a return of income if he has any asset located outside India or has signing authority in any account located outside India.		
• A person is also required to file a return if he has satisfied either of the prescribed economic conditions.		

Compulsory Filing by Resident Individuals (Other than Not Ordinarily Resident) - Foreign Assets

Even if total income is below the basic exemption limit, filing of return is mandatory for a resident individual (excluding RNOR) if during the previous year he:

Condition	Explanation	
(i) Holds any foreign asset	Includes financial interest or signing authority in any account located outside India.	
(ii) Is a beneficiary of a foreign asset	Where income from such asset is not taxed in the hands of the owner.	

Mandatory Filing due to High-Value Transactions [7th Proviso to Sec. 139(1)]

Return filing is mandatory for individuals (excluding firms and companies), even if income is below exemption limit, if any of the following criteria are met:

Transaction Type	Threshold (PY)	
Deposits in current account(s)	> ₹ 1 crore	
Foreign travel expenses	> ₹ 2 lakh	
Electricity consumption	> ₹ 1 lakh	
Business turnover	> ₹ 60 lakh	
Professional receipts	> ₹ 10 lakh	
TDS + TCS	≥ ₹ 25,000 (₹ 50,000 for senior citizens)	
Deposits in savings bank account(s)	≥ ₹ 50 lakh	

Time limit for filing return of income

Assessee	Due date
Assessee (or firm in which he is a partner) who required to furnish Audit Report u/s 92E	30 NOVEMBER

Assessee (or firm in which he is a partner) requires to get his accounts audited (other than referred above)

Assessee does not require to get his accounts audited

Fee for default in furnishing return of income [Sec. 234F]

Where a person required to furnish a return of income u/s 139, fails to do so within the due date, he shall pay fee of:

Case	Fee
Total income does not exceed ₹ 5 lakh	₹ 1,000
Total income exceeds ₹ 5 lakh	₹ 5,000

Mode of furnishing Income-tax Return

- a. Paper Return
- b. Electronic Return with Digital Signature
- c. Transmitting the data in the return electronically and thereafter submitting the verification of the return in Form ITR-V
- d. Transmitting the data electronically in the return under electronic verification code

Compulsory E-Return:

Person	Condition	Mode
Company	-	
Political Party	-	Electronically with digital sign
Firm or LLP	Audit u/s 44AB required	
Individual or	Audit u/s 44AB required	- Electronically with digital sign
HUF		- Transmitting the data electronically
		in the return under EVC
Individual	Where total income assessable during the previous year	Any of the given mode
	of a person, being an individual of the age of 80 years	
	or more at any time during the previous year, and who	
	furnishes the return in Form number SAHAJ (ITR-1) or	
	Form number SUGAM (ITR-4)	
Any other person		Any mode other than paper mode



Loss-Return

A company or firm must file its return of income even when there is loss to the company. Other assessee must file their loss-return within time if they want to claim the loss to be carried forward (other than loss under the head income from house property or unabsorbed depreciation.

Belated Return

A belated return can be filed within 31st Dec of the relevant assessment year or before the completion of the assessment, whichever is earlier.

Revised Return

If an assessee discovers any omission or wrong statement (*bonafide* in nature) in return originally filed, he can revise his return u/s 139(5), within 31st Dec. of the relevant assessment year or before completion of regular assessment, whichever is earlier. A belated return can also be revised. A loss return can also be revised.

^{1.} For A.Y. 2025-26, the date was extended upto 16th Sep 2025

Return of income of Charitable Trust

A charitable trust must file its return of income if Gross total income (before allowing exemption u/s 11 or 12) exceeds the maximum amount not chargeable to tax, before the due date as per sec. 139(1).

Return of income of Political Party

The chief executive officer of any political party must file return of income, if the amount of gross total income (before allowing exemption u/s 13A) exceeds the maximum amount not chargeable to tax.

Return of research association, etc.

Every research association, etc. who are eligible for exemption u/s 10 are require to file their return of income, if the total income without giving exemption u/s 10, exceeds the maximum amount not chargeable to income-tax.

Verification of Return u/s 140

Assessee	Signed and verified by	
Individual	Individual himself, in general.	
HUF	Karta or in his absence, other adult member	
Company	Managing Director (MD) or in his absence, other director	
Firm	Managing partner or in his absence, other partner	
Local authority	Principal officer	
Political party	Chief Executive Officer	
Any other association	Any member or principal officer	
Any other person	Such person or any other person competent to act on its behalf.	

Updated return

Any person may furnish an updated return u/s 139(8A) of his income for the previous year relevant to such assessment year within 24 months from the end of the relevant assessment year on payment of additional tax being computed as per sec. 140B. In updated return, one cannot decrease his tax liability. Further, in case of search, etc. assessee is not allowed to file updated return.

Conclusion

The evolving tax regime in India demands not only punctual return filing but also accuracy, disclosure, and strategic foresight. Whether it's for claiming refunds, avoiding penal consequences, or carrying forward losses, every taxpayer must adhere to the procedural nuances under Section 139. With the introduction of the updated return mechanism and increased digitization of compliance through e-verification, AIS/TIS matching, and automated notices, return filing is no longer just an annual task—it is a vital compliance benchmark. For aspiring professionals, mastering these provisions is not only essential for examinations but also for advising clients confidently in real-life practice.

Module 3: Decision Making Techniques

FINAL

Group III - Paper-16

Strategic Cost Management (SCM)

Product Life Cycle Costing

Product Life Cycle is a pattern of expenditure, sale level, revenue and profit over the period beginning from new idea generation to the deletion of product from product range. Product Life Cycle spans the time from initial R&D on a product to when customer servicing and support is no longer offered for the product. For products like motor vehicles, this time-span may range from 5 to 7 years. For some basic pharmaceuticals, the time-span be 7 to 10 years.

1. Phases of Product Life Cycle

Most of the products possess a distinctive life cycle comprising six clearly defined phases, each phase having its own characteristics. Older, long-established products eventually become less popular, while in contrast, the demand for new, more modern goods usually increases quite rapidly after they are launched. The time line commencing from the innovation of a new product and ending with its degeneration into a common product and the eventual extinction is termed as the life cycle of a product. A product passes through various phases that are shown in figure 1.0 and explained below

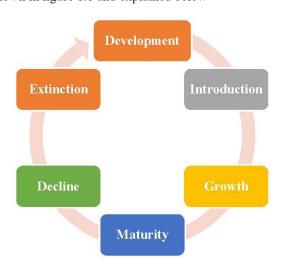


Figure 1.0: Phases of Product Life Cycle

- a. Development Phase: The cycle begins with the identification of a new consumer need and the invention of a new product. This is often followed by patent protection and further development to make it saleable. Research and engineering skills enable product development. The costs incurred are termed as 'developmental'. No revenues accrue during this phase.
- b. Introduction Phase: During this phase, the product is introduced to the market. Efforts are towards spreading awareness about the product, the target being achieving market acceptance. Promotional

- costs will be high, sales revenue low and profits probably negative. The skill that is exhibited in testing and launching the product will rank high in this phase as the critical factor in securing success and initial market acceptance. Sales of new products usually rise slowly at first.
- Growth Phase: As the product gains market acceptance a rapid expansion follows leading to the growth. This phase is characterized by product penetration into the market and increase in sales & profits. Benefits of economies of scale would start pouring in leading to cost reduction. It now becomes vital to secure wholesaler and retailer support as also to ensure consumer satisfaction. If the product is successful, growth usually accelerates at some point, often catching the innovator by surprise.
- Maturity phase: This stage begins after sales cease to rise exponentially indicating market saturation. Eventually most potential customers have tried the product and sales settle at a rate governed by population growth and the replacement rate of satisfied buyers. In addition, there were no new distribution channels to fill. This is usually the longest and the most competitive stage in the cycle. Most of the popular products are in this stage. The period over which sales are maintained depends upon the firm's ability to stretch the cycle by means of market segmentation and finding new uses for it.
- Decline phase: Eventually most products and brands enter a period of declining sales. This may be caused by: technical advances leading to product substitution, fashion and changing tastes, exogenous cost factors reducing profitability until it reaches zero at which point the product's life is commercially complete. The speed of degeneration differs from product to product.
- **Extinction Phase:** This is the tail end of the decline phase where after the product exits from the market.

2. Characteristic of PLCC

- Involves tracing of costs and revenues of each product over several calendar periods throughout their entire life cycle.
- Traces research, design and development costs and total magnitude of these costs for each individual product and compared with product revenue.
- Assists report generation for costs and revenues.

3. Importance of Product Life Cycle Costing

Product Life Cycle Costing is considered important due to the following reasons:

- a. Time based analysis: Life cycle costing involves tracing of costs and revenues of each product over several calendar periods throughout their life cycle. Costs and revenues can be analysed by time periods. The total magnitude of costs for each individual product can be reported and compared with product revenues generated in various time periods.
- b. **Overall Cost Analysis:** Production Costs are accounted and recognized by the routine accounting system. However non-production costs like R&D; design; marketing; distribution; customer service etc. are less visible on a product by product basis. Product Life Cycle Costing focuses on recognizing both production and non-production costs.
- c. Pre-production costs analysis: The development period of R&D and design is long and costly. A high percentage of total product costs maybe incurred before commercial production begin. Hence, the Company needs accurate information on such costs for deciding whether to continue with the R&D or not.
- d. Effective Pricing Decisions: Pricing Decisions in order to be effective should include market considerations on one hand and cost considerations on the other. Product Life Cycle Costing and Target Costing help analyze both these considerations and arrive at optimal price decisions.
- e. **Better Decision Making:** Based on a more accurate and realistic assessment of revenues and costs, at least within a particular life cycle stage, better decisions can be taken.
- f. Long Run Holistic view: Product Life Cycle Costing can promote long-term rewarding in contrast to short- term profitability rewarding. It provides an overall framework for considering total incremental costs over the entire life span of a product, which in turn facilitates analysis of parts of the whole where cost effectiveness might be improved.
- g. Life Cycle Budgeting: Life Cycle Budgeting with Target Costing principles, facilitates scope for cost reduction at the design stage itself. Since costs are avoided before they are committed or locked in the Company is benefited.
- h. **Review:** Life Cycle Costing provides scope for analysis of long-term picture of product line profitability, feedback on the effectiveness of life cycle planning and cost data to clarify the economic impact of alternatives chosen in the design, engineering phase etc.

4. Practical Problem

SRM Ltd. has developed a new product 'Kent' which is about to be launched into the market and anticipates to sell 80,000 of these units at a sale price of ₹300 over the product's life cycle of four years. Data pertaining to product 'Kent' are as follows:

Costs of Design and Development of Moulding Dies and Other tools	₹10,25,000
Manufacturing costs	₹125 per unit
Selling costs	₹12,500 per year + ₹100 per unit
Administration costs	₹50,000 per year
Warranty expenses	5 replacement parts per 25 units @ ₹10 per part, 1 visit per 500 units (cost ₹500 per visit)

Required:

- a. Compute the product Kent's Life Cycle Cost.
- b. Suppose SRM Ltd. can increase sales volume by 25% through 15% decrease in selling price, should SRM Ltd. choose the lower price?

Solution

a. Statement showing Kent's Life Cycle Cost (80,000 units)

Particulars	Amount (₹)
Costs of Design and Development of	10,25,000
Moulding Dies and Other tools	
Manufacturing costs (125 × 80,000	1,00,00,000
units)	
Selling costs (₹100 × 80,000 units +	80,50,000
₹12,500 × 4 years)	
Administration costs (₹50,000 × 4	2,00,000
years)	
Warranty expenses	
Replacement costs: {(80,000 units ÷	1,60,000
25 units) × 5 parts × ₹10)}	80,000
Visit costs: {(80,000 units ÷ 500 units	80,000
× 1 visit × ₹500)}	
Total Cost	1,95,15,000

b. Statement showing Kent's Life Cycle Cost (1,00,000 units)

Particulars Particulars	Amount (₹)
Costs of Design and Development of Moulding Dies and Other tools	10,25,000
Manufacturing costs (125 × 1,00,000 units)	1,25,00,000
Selling costs (₹100 × 1,00,000 units + ₹12,500 × 4 years)	1,00,50,000
Administration costs (₹50,000 × 4 years)	2,00,000
Warranty expenses	
Replacement costs: {(1,00,000 units ÷ 25 units) × 5 parts × ₹10))	2,00,000
Visit costs: {(1,00,000 units ÷ 500 units) × 1 visit × ₹500))	1,00,000
Total Cost	2,40,75,000

c. Statement showing Kent's Life Time Profit

Particulars	₹ at the level of 80,000 units	₹ at the level of 1,00,000 units
Sales	$(80,000 \times 300) = 2,40,00,000$	$(1,00,000 \times 255) = 2,55,00,000$
Total cost	1,95,15,000	2,40,75,000
Profit	44,85,000	14,25,000

Observation: Reducing the, price by 15% will decrease profit by ₹30,60,000/-. Therefore, SRM Ltd. should not cut the price.

5. Learning Take

Product life cycle costing technique is based on cradle to grave approach that helps immensely for decision making.

Module 5: Cost Auditing and Assurance Standards

Module 17: Forensic Audit

FINAL

Group IV - Paper-17

Cost and Management Audit (CMAD)

Forensic Audit and Cost Auditing and Assurance Standards

Forensic Audit: Definition and Purpose

A forensic audit (or forensic auditing) is a specialized examination of an organization's financial records, transactions, documents, and operations, carried out with the purpose of detecting, investigating, and documenting fraud, misappropriation, embezzlement or other financial misconduct. It goes beyond the scope of regular financial or statutory audits, with the aim of collecting evidence that is admissible in legal proceedings.

In many jurisdictions, forensic audit is triggered when there is suspicion of irregularities, by stakeholders (owners, board of directors, regulators), whistle-blowers, or as a result of detection of red flags in financial statements. Its outputs often include quantification of financial loss, identification of responsible parties, tracing of misappropriated assets, and providing support for litigation or regulatory action.

Key Features

- Objective: While normal audits focus on whether financial statements present a true and fair view and comply with reporting standards, forensic audits are investigative in nature, aiming to uncover intentional wrongdoing.
- Scope and depth: Forensic audits may cover long historical periods, examine individual transactions in detail, use interviews, document inspection, forensic data analytics. Regular audits often use sampling and are designed for reasonable assurance rather than proof beyond reasonable doubt.
- **Legal orientation**: The evidence collected must be admissible, chain of custody must be maintained; forensic auditors may act as expert witnesses.
- **Techniques**: Includes use of forensic accounting, data mining, fraud detection models, interviewing, corroborative evidence from non-financial sources.

Methodology / Phases of Forensic Audit

Typically, a forensic audit involves several phases:

1. Planning and scoping

- Define objectives (what to investigate: fraud, embezzlement, corruption)
- Determine period under investigation, resources required, legal/regulatory parameters.

2. Gathering evidence / data collection

- Collect financial documents (books, ledgers, bank statements, invoices)
- Non-financial information: emails, communications, physical evidence, interviews of staff, witnesses.

• Use forensic data analysis (e.g. anomaly detection) to detect irregularities.

3. Analysis / investigation

- Trace funds, identify transactions that are suspicious, establish modus operandi.
- Use tools/models, e.g. Beneish model for financial statement fraud detection.
- o Identify internal control weaknesses or collusion.

4. Reporting

- Prepare a detailed report with findings: what happened, who was involved, how much loss, times, modus, supporting documentation.
- The report should be structured to stand up in court, if needed.

5. Legal follow-up / action

- o Provide litigation support; expert testimony.
- Assist in asset recovery, regulatory or enforcement action.

Importance and Benefits

Forensic audits provide several benefits:

- Fraud detection & prevention: They uncover frauds that might stay undetected in regular audits, thus deterring would-be fraudsters.
- **Legal evidence**: Evidence gathered can be used to prosecute offenders, obtain judgments, restitution.
- Asset tracing and recovery: Helps locate misappropriated assets/funds.
- Strengthening internal controls: By revealing control weaknesses, processes can be improved to prevent recurrence.
- Stakeholder confidence and corporate governance: Helps restore trust among investors, customers, regulatory bodies.

Case Studies

Below are several case studies illustrating forensic audits being used to uncover fraud or misuse of funds:

1. Satyam Computers (India)

One of the most well-known corporate frauds in India. The promoters of Satyam inflated financial figures to show better financial performance and health than was real, misrepresenting revenue, profits, and assets to stakeholders. Forensic audit was key in revealing the extent of the fraud. The case prompted heightened

awareness of forensic audits and their role in detecting financial statement fraud in large companies.

Lessons from Satyam include: the necessity for independent audit oversight; stronger internal controls; regulatory enforcement; importance of forensic auditing in revelling complex schemes of fraud.

2. Beed Credit Co-operative Scam (India)

A forensic audit by Maharashtra State CID found that **Dnyanradha Multistate Co-operative Credit Society Limited** (DMCSL) duped about 10,000 investors of ~₹3,500 crore. The fraud involved misleading interest promises, fixed deposits, shares, etc. The audit led to provisional attachment of assets, multiple chargesheets, identification of board members, etc. This case shows forensic audit's role in consumer-investor protection, large scale fraud, and aiding law

This demonstrates how forensic audit and investigations can be used as part of enforcement, regulatory, and tax compliance activities on a large scale.

Challenges & Limitations

While the utility of forensic audits is high, there are several challenges:

- Cost and resource intensity: Forensic audits are more expensive and time-consuming than regular audits, because of depth, investigative work, legal coordination.
- Obtaining cooperation / access: Sometimes management or other parties may obstruct access to documents, deny cooperation, destroy evidence.
- **Complexity of schemes**: Fraud may be deliberately concealed; collusion among insiders; sophisticated financial engineering.
- **Legal constraints**: Evidence may be challenged; statutes of limitation; jurisdictional issues.
- **Expectation management**: Stakeholders may expect full recovery or certain outcomes; reality may differ.

Regulatory Framework / Legal Context (India)

In India, forensic audit has been increasingly important in legal and regulatory frameworks:

- The Directorate of Serious Fraud Investigation Office (SFIO) is empowered to order forensic investigations in certain cases.
- Courts and regulatory bodies have accepted forensic audit reports in corporate fraud cases, e.g. PNB fraud, Satyam.
- Legal acts, company law amendments, corporate governance norms are evolving to mandate greater transparency, accountability.

List of Cost Accounting Standards (CAS)

As per the Cost Accounting Standards Board (CASB) of the Institute of Cost Accountants of India (ICMAI), the following 24 Cost Accounting Standards (CAS) are currently in force. These standards ensure uniformity, consistency, and transparency in cost accounting practices across industries in India.

CAS No.	Title / Subject	
CAS-1	Classification of Cost	
CAS-2	Capacity Determination	
CAS-3	Production and Operation Overheads	
CAS-4	Cost of Production for Captive Consumption	
CAS-5*	Determination of Average (Equalized) Cost of Transportation	
CAS-6	Material Cost	
CAS-7	Employee Cost	
CAS-8	Cost of Utilities	
CAS-9	Packing Material Cost	
CAS-10*	Direct Expenses	
CAS-11	Administrative Overheads	
CAS-12	Repairs and Maintenance Cost	
CAS-13	Cost of Service Cost Centre	
CAS-14	Pollution Control Cost	
CAS-15	Selling and Distribution Overheads	
CAS-16	Depreciation and Amortization Cost	
CAS-17	Interest and Financing Charges	
CAS-18*	Research and Development Cost	
CAS-19*	Joint Costs	
CAS-20*	Royalty and Technical Know-How Fee	
CAS-21*	Quality Control	
CAS-22	Manufacturing Cost	
CAS-23*	Overburden Removal Cost	
CAS-24	Treatment of Revenue in Cost Statements	

The Cost Accounting Standards (CAS) have been developed to harmonize cost accounting principles and enhance the reliability of cost statements prepared by companies under the Companies (Cost Records and Audit) Rules, 2014.

As per the provisions of Cost Audit, every "element of cost" must be verified for:

- Measurement accuracy (CAS guidance),
- Proper allocation/absorption (per CAS framework), and
- Disclosure consistency **in** Cost Records and

Audit Reports as per Companies (Cost Records and Audit Rules, 2014).

*The marked ones are not directly assignable to any specific 'cost element' i.e cutting across multiple cost elements (materials, Labour, Overheads). Moreover, some elements not having general applicability as 'cost element', they are specialized functions or activities e.g Quality Control, Research and Development etc. 'Overburden removal' a cost element applicable to mining and allied Industries i.e lack of general applicability.

Sl. No.	Element of Cost	Relevant Cost Accounting Standard (CAS)	Brief Coverage / Explanation	
1	Audit of Production – Product-wise	CAS-22 (Manufacturing Cost)	Defines principles for determining manufacturing cost, including direct materials, labour, and overheads; ensures accurate cost per product.	
2	Audit of Raw Material Cost	CAS-6 (Material Cost)	Prescribes methods for determining material cost including procurement, storage, issue, losses, and valuation.	
3	Audit of Key RM Inventory Status	CAS-6 (Material Cost) + CAS-2 (Capacity Determination)	CAS-6 deals with valuation of inventories; CAS-2 ensures linkage of material usage with capacity utilization.	
4	Audit of Electricity Cost	CAS-8 (Cost of Utilities)	Governs costing of purchased or self-generated utilities like electricity, water, steam, etc.	
5	Audit of Electricity generated by DG (Diesel Generator)	CAS-8 (Cost of Utilities)	Specifically includes internally generated electricity; covers fuel cost, operating cost, maintenance, etc.	
6	Audit of Demineralised Water Cost	CAS-8 (Cost of Utilities)	Treated as a utility; principles of measurement and absorption covered under CAS-8.	
7	Audit of Steam Cost	CAS-8 (Cost of Utilities)	Defines cost determination for utilities like steam — fuel, Chemical, labour, depreciation, etc.	
8	Audit of Stores and Spares Cost	CAS-6 (Material Cost) + CAS- 12 (Repairs & Maintenance Cost)	Stores and spares used in maintenance covered under CAS-12; material handling under CAS-6.	
9	Audit of Repair and Maintenance Cost	CAS-12 (Repairs and Maintenance Cost)	Specifies identification, measurement, and assignment of repair and maintenance costs.	
10	Audit of Employee Cost	CAS-7 (Employee Cost)	Covers all forms of employee compensation, benefits, incentives, and costs of contract labour.	
11	Audit of Insurance Cost	· · · · · · · · · · · · · · · · · · ·	Insurance related to administration under CAS-11; risk coverage for assets treated as overheads.	
12	Audit of Depreciation Cost	CAS-16 (Depreciation and Amortization Cost)	Defines cost measurement, useful life, residual value, and accounting treatment for depreciation.	
13	Audit of Administrative Cost	CAS-11 (Administrative Details classification, measurement, are overheads) Details classification, measurement, are assignment of administrative overheads.		
14	Audit of Selling and Distribution Cost	CAS-15 (Selling and Distribution Overheads)	Specifies components like advertising, freight, marketing, after-sales service, etc.	

Sl. No.	Element of Cost	Relevant Cost Accounting Standard (CAS)	Brief Coverage / Explanation	
15	Audit of Packing Material Cost	CAS-9 (Packing Material Cost)	Prescribes classification into primary/secondary packing, valuation, and inclusion in cost statement.	
16	Audit of Sales Value	CAS-24 (Treatment of Revenue in Cost Statements)	Governs recognition of sales revenue, rebates, discounts, and inter-unit transfers for cost reporting.	

List of supporting ca standards –

CAS No.	Title	Relevance to Cost Audit	
CAS-1	Classification of Cost	Fundamental structure for grouping costs under material, labour, overheads, etc.	
CAS-3	AS-3 Production & Operation Overheads Supports allocation of indirect costs to cost centres /		
CAS-4 Cost of Production for Captive Used if products/services are transfer power, steam).		Used if products/services are transferred internally (e.g., power, steam).	
CAS-13	Cost of Service Cost Centre	Relevant where support services (e.g., workshop, transport) are used.	
CAS-14	Pollution Control Cost	For environmental costs linked to manufacturing.	

As evident from above discussion, the CAS framework provides the audit backbone—ensuring comparability, transparency, and compliance.

Module 6: Consolidated **Financial** Statements and Separate Financial **Statements**

FINAL

Group IV - Paper-18

Corporate Financial Reporting (CFR)

Topic: Consolidated Financial Statements and Separate Financial Statements

• Multiple Choice Questions:

- 1. Which of the following is not one of the three elements required to establish control under Ind AS 110?
 - a) Power over the investee
 - b) Exposure, or rights, to variable returns from involvement with the investee
 - c) Ability to use power to affect the investor's returns
 - d) Ownership of more than 50% voting rights

Answer: d) Ownership of more than 50% voting rights

Explanation: Control may exist even without majority ownership if other control indicators are present.

- 2. According to Ind AS 110, potential voting rights are considered in assessing control only when:
 - a) They are currently exercisable or convertible
 - b) They exist, irrespective of exercisability
 - c) The investor intends to exercise them in the future
 - d) The investee has declared dividends

Answer: a) They are currently exercisable or convertible

- 3. Which of the following entities is not required to prepare consolidated financial statements under Ind AS 110?
 - a) A parent company whose ultimate parent prepares consolidated financial statements in compliance with Ind AS
 - b) A listed parent company
 - c) A parent company having one subsidiary
 - d) A private company with foreign subsidiaries

Answer: a) A parent company whose ultimate parent prepares consolidated financial statements in compliance with Ind AS

4. P Ltd. acquires 80% of S Ltd. for ₹12,00,000. The fair value of identifiable net assets of S Ltd. is ₹13,00,000. The fair value of the non-controlling interest (NCI) is ₹3,00,000.

What is the goodwill arising on consolidation?

- a) ₹200,000
- b) ₹100,000

- c) ₹300,000
- d) ₹400,000

Answer: a) ₹200,000

Computation: FV of net assets = ₹13,00,000

$$PC + NCI = ₹12,00,000 + ₹3,00,000 = ₹1,500,000$$

Goodwill =
$$₹1,500,000 - ₹1,300,000 = ₹200,000$$

- 5. P Ltd. acquires 75% of S Ltd. for ₹9,00,000. The fair value of S Ltd.'s identifiable net assets is ₹10,00,000. If NCI is measured at the proportionate share of net assets, what is the amount of goodwill?
 - a) ₹150,000
 - b) ₹100,000
 - c) ₹250,000
 - d) ₹200,000

Answer: a) ₹150,000

FV of net assets = 10,00,000

$$NCI = 25\% \text{ of } 10,00,000 = 2,50,000$$

Goodwill =
$$(PC + NCI) - FVINA = (9,00,000 + 2,50,000) - 10,000,000 = ₹1,50,000$$

- 6. When preparing consolidated financial statements, which of the following is eliminated?
 - a) Intragroup balances and transactions
 - b) Goodwill on consolidation
 - c) Non-controlling interest
 - d) Deferred tax assets

Answer: a) Intragroup balances and transactions

- 7. If losses of a subsidiary exceed the equity attributable to the parent and NCI, as per Ind AS 110:
 - a) The excess is ignored
 - b) The parent's share of losses is limited to its investment
 - c) The parent continues to absorb the losses unless otherwise obligated
 - d) The subsidiary is deconsolidated automatically

Answer: c) The parent continues to absorb the losses unless otherwise obligated

- 8. When a parent's ownership interest in a subsidiary changes without loss of control, how is the transaction treated?
 - a) As a disposal and acquisition under Ind AS 103

- b) As an equity transaction within consolidated equity
- c) As a gain or loss in profit or loss
- d) As a revaluation adjustment

Answer: b) As an equity transaction within consolidated equity

- 9. When a parent company changes its ownership interest in a subsidiary without losing control, Ind AS 110 requires that the transaction be treated as:
 - a) A business combination under Ind AS 103
 - b) A disposal and reacquisition of subsidiary
 - c) An equity transaction within the consolidated financial statements
 - d) A gain or loss recognized in profit or loss

Answer: c) An equity transaction within the consolidated financial statements

Explanation: Such transactions are treated as movements within equity, as they do not affect control or profit and loss.

- 10. Under Ind AS 110, if a parent purchases additional shares in a subsidiary while retaining control, how is the difference between consideration paid and NCI adjusted?
 - a) It is added to goodwill
 - b) It is deducted from goodwill
 - c) It is adjusted directly in equity
 - d) It is recognized as profit or loss

Answer: c) It is adjusted directly in equity

Explanation: Since control is retained, goodwill is not re-measured and no gain/loss is recognized in

- P&L; the difference is taken directly to equity.
- 11. When a parent loses control over a subsidiary, which of the following steps is not required as per Ind AS 110?
 - a) Derecognize the assets and liabilities of the subsidiary
 - b) Recognize any investment retained at fair value
 - Recognize gain or loss in other comprehensive income
 - d) Recognize any resulting gain or loss in profit or loss

Answer: c) Recognize gain or loss in other comprehensive income

Explanation: Any gain or loss on loss of control is recognized in profit or loss, not OCI.

- 12. After losing control, if the parent retains an investment in the former subsidiary, Ind AS 110 requires that:
 - a) The retained investment continues to be measured at carrying amount
 - b) The retained investment is measured at fair value and reclassified under appropriate Ind AS
 - c) The retained investment is treated as goodwill
 - d) The retained investment is ignored for consolidation purposes

Answer: b) The retained investment is measured at fair value and reclassified under appropriate Ind AS

Explanation: The fair value of the retained interest is considered as its cost under Ind AS 109 (Financial Instruments) or Ind AS 28 (Associates), depending on the level of influence.

• Short Numerical Questions

Q1. Partial disposal without loss of control

P Ltd. owns **80%** of S Ltd. The balance of NCI is valued at ₹1,00,000 under proportionate fair value of net assets method and consolidated retained earnings (attributable to parent) is ₹5,00,000.

P Ltd. sells a 10% interest in S Ltd. to outsiders for ₹90,000 and continues to hold 70%.

Required: Determine the impact of the transaction on consolidated equity.

Answer:

- Carrying amount of NCI before sale = ₹1,00,000
- NCI proportion increases from $20\% \rightarrow 30\%$

 Increase in NCI = (30% – 20%) × (Net Assets of S Ltd.)

Since NCI (20%) under proportionate fair value of net assets = ₹100,000,

Increase in NCI = $10\% \times ₹500,000 = ₹50,000$

Proceeds from sale = ₹90,000

Increase in NCI = ₹50,000

Difference (₹90,000 - ₹50,000) = ₹40,000

Journal entry:

Bank A/cRs. 90,000

To NCI A/c 50,000

To Other Equity A/c 40,000

Effect: ₹40,000 credited to parent's other equity (reserves directly). No gain or loss is recognised in Retained Earnings as per Ind AS 110.

Q2. Purchase of additional interest without loss of control

P Ltd. owns 60% of S Ltd. whose net assets are ₹600,000 and NCI is ₹240,000.

P Ltd. purchases an additional 20% of S Ltd. for ₹300.000.

Required: Determine the accounting impact.

Answer:

- Carrying amount of NCI for 20% = 20% × ₹600,000 = ₹120,000
- Consideration paid = ₹300,000
- Excess of consideration over NCI share = ₹180,000

Journal entry:

NCI A/cDr. ₹120,000

Other Equity A/cDr. ₹180,000

To Cash₹300,000

Note: No goodwill or gain recognized because control is retained.

Q3. Disposal resulting in loss of control

P Ltd. owns **80%** of S Ltd. The carrying amount of S Ltd.'s net assets is ₹10,00,000 (including goodwill ₹100,000). NCI is valued at ₹2,00,000 under proportionate fair value of net assets.

P Ltd. sells its entire holding for ₹9,00,000.

At the date of sale, the **fair value of retained investment** = Nil.

Required: Compute gain or loss on disposal.

Answer:

Carrying amount of S Ltd. (net assets) = ₹10,00,000

Value of NCI = ₹ 2.00,000

Parent's carrying amount = ₹ 800,000 Sale proceeds = ₹ 900,000 Gain = ₹900,000 - ₹800,000 = ₹ 100,000

Treatment: The Gain on disposal ₹100,000 should be recognized in Retained Earnings.

Q4. Partial disposal resulting in loss of control (retains investment)

P Ltd. owns **90%** of S Ltd. NCI is valued at ₹1,00,000. Carrying amount of net assets of S Ltd. = ₹10,00,000 (including goodwill ₹50,000).

P Ltd. sells 80% interest for ₹9,00,000 and retains 10% interest whose fair value is ₹1,20,000.

Required: Compute gain or loss on loss of control.

Answer:

- 1. Carrying amount of parent's investment = $90\% \times 10,00,000 = \$9,00,000$
- 2. Consideration received = ₹9,00,000
- 3. FV of retained interest = \$1,20,000
- 4. Total of (2) and (3) above = ₹10,20,000

Gain/Loss = (₹10,20,000 - ₹9,00,000) = ₹1,20,000 (gain)

The treatment is as follows:

Journal entry:

Cash A/c.....Dr. ₹900,000 Investment A/c Dr. ₹120,000

(in associate/financial asset)

To Net assets A/c ₹10,00,000

To Gain on disposal A/c ₹120,000
(Retained Earnings)

Result:

Gain of ₹120,000 recognized in Retained Earnings, and control is lost.

Module 10: **GST Returns**

FINAL

Group IV - Paper-19

Indirect Tax Laws and Practice (ITLP)

GST Returns

The Goods and Services Tax (GST) regime, considered one of India's most significant indirect tax reforms, continues to evolve in scope, compliance frameworks, and digital architecture. For CMA Final students, understanding the GST return mechanism is crucial—both for academic success and practical application in advisory and compliance roles. This article aims to provide a detailed overview of return filing under GST, highlighting the rationale, types, and technological ecosystem supporting the return structure.

GST return filing is built upon several core features:

- Electronic filing of returns;
- Invoice-wise data reporting;
- Auto-population of Input Tax Credit (ITC) from supplier returns;
- Matching of invoice data between supplier and recipient;
- Auto-reversal of ITC in case of mismatches.

These features ensure transparency, minimize evasion, and promote seamless credit flow across the supply chain.

- The objectives of filing GST returns include:
- Communicating transactional data to tax authorities;
- ⚠ Establishing tax compliance;
- Determining taxpayer liability within statutory timelines;
- Enabling data-driven policy formulation and audits.

Returns under GST are tailored to taxpayer profiles. Regular taxpayers must file monthly GSTR-1 and GSTR-3B along with an annual GSTR-9. Other returns are specific to composite dealers, non-resident taxable persons, Input Service Distributors (ISD), and entities liable for TDS/TCS or holding Unique Identification Numbers (UINs). The GST Council has also introduced quarterly GSTR-1 filing for small taxpayers to ease compliance burdens.

All returns are to be filed online using:

- 1. GSTN Portal (www.gst.gov.in),
- 2. Offline Utilities by GSTN, or
- 3. GST Suvidha Providers (GSPs).

Returns under GST Laws

Form	Particulars	Due Date	Applicable to
Form GSTR- 3B	Particulars Monthly/ Quarterly summary return As per sec. 2(92), "quarter" shall mean a period comprising three consecutive calendar months, ending on the last day of March, June, September	Due Date To be filed as under: Registered persons, who are not under QRMP Scheme – 20th of the next month. Registered persons, who have opted for QRMP Scheme - a. Aggregate turnover up to ₹5 Cr. in the previous financial year and registered in category 1¹ States – 22nd of the next month following the quarter.	All registered persons other than: 1. Input service distributor (ISD), 2. Non-resident taxable person,
	and December of a calendar year;	b. Aggregate turnover up to ₹5 Cr. in the previous financial year and registered in category 2 ² States – 24th of the next month following the quarter	b. 51 – Tax deduction at source

¹ Category – 1: States of Chhattisgarh, Madhya Pradesh, Gujarat, Maharashtra, Karnataka, Goa, Kerala, Tamil Nadu, Telangana, Andhra Pradesh, the Union Territories of Daman and Diu and Dadra and Nagar Haveli, Puducherry, Andaman and Nicobar Islands or Lakshadweep

² Category – 2: States of Himachal Pradesh, Punjab, Uttarakhand, Haryana, Rajasthan, Uttar Pradesh, Bihar, Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, Meghalaya, West Bengal, Jharkhand or Odisha, the Union territories of Jammu and Kashmir, Ladakh, Chandigarh or Delhi

Form	Particulars	Due Date	Applicable to
		pay the tax due in each of the first two months of the quarter by depositing the due amount in Form GST PMT-06, by 25th day of the month succeeding such month under the head "Monthly payment for quarterly taxpayer"	c. 52 - Collection of tax at source
GSTR-1 / IFF	Statement for furnishing details of	To be filed by either of the following persons on or before the below given dates:	Normal / regular taxpayer
	outward supplies	Registered person, who are not under QRMP Scheme - 11th of the next month	
		Registered persons, who have opted for QRMP Scheme - 13th of the subsequent quarter	
		However, such persons can furnish details of outward supplies using IFF for the first 2 months of the quarter as under:	
		- 1st month of the quarter – on or before 13th of the subsequent month (max value = ₹ 50 Lakhs)	
		- 2nd month of the quarter - on or before 13th of the subsequent month (max value = ₹ 50 Lakhs)	
		Invoices furnished using the said facility in the first two months are not required to be furnished again in Form GSTR-1.	
GSTR-4	Return by composition tax payers	CMP-08 by 18th of the month succeeding the quarter.	Composition taxpayer
		GSTR-4 Annually by 30^{th} June following the end of a financial year.	
GSTR-5	Return by non-resident tax payers	13th of the next month or within 7 days after expiry of registration, whichever is earlier	Non-resident taxpayer
GSTR- 5A	Monthly return by online information and database access or retrieval services (supply to a person other than a registered person i.e., online non-taxable recipient)	20th of the next month	Online information and database access or retrieval services
GSTR-6	Monthly return by input service distributors	13th of the next month	Input service distributors
GSTR-7	Monthly return for TDS	10th of the next month	Tax Deductor
GSTR-8	Monthly return (statement) for collection of tax at source	10th of the next month	E-commerce operator
GSTR- 9/9A/9C	Annual return	31st December of the next financial year	Various person (Covered in Final)

Form	Particulars	Due Date	Applicable to
GSTR- 10	Final Return	Within 3 months of the date of cancellation or date of receipt of order of cancellation, whichever is later	
GSTR- 11	Return to be filed by a person having UIN (Unique Identity Number) w.r.t inward supplies received by him to file refund of the taxes paid by him on inward supplies.		Person having UIN

In conclusion, GST return filing is a critical aspect of GST compliance, requiring diligent record-keeping, accurate reporting, and timely submission of returns. By understanding the purpose, types, filing requirements, and compliance challenges associated with GST returns, taxpayers can navigate the complexities of the GST regime more effectively. Embracing best practices, leveraging technology solutions, and seeking professional guidance can enhance the accuracy, efficiency, and compliance integrity of GST return filing, ultimately contributing to a robust and transparent indirect tax ecosystem. As GST laws continue to evolve and adapt to changing business dynamics, staying proactive and vigilant in GST compliance will remain essential for businesses to thrive in the GST era.

Strategic Performance Management and **Business Valuation**

ELECTIVES

Paper-20A

Strategic Performance Management and Business Valuation (SPMBV)

Dynamic Budgeting

Introduction

Budgeting, at its core, is an exercise in anticipation — an attempt to predict and control the future through disciplined allocation of resources. Yet, in an era marked by volatility, uncertainty, complexity, and ambiguity (VUCA), the notion of a fixed budget is fast becoming obsolete. Static budgets, rooted in assumptions of stability, often falter when confronted with unpredictable shifts in market conditions, inflationary shocks, regulatory changes, or technological disruption.

Enter dynamic budgeting — a modern evolution of financial planning that replaces rigidity with responsiveness. Unlike traditional budgets that set targets and allocations once a year, dynamic budgets are living instruments, designed to evolve continuously as new information emerges. They allow organisations to pivot swiftly, realign resources, and maintain strategic coherence in the face of flux.

This essay examines the concept of dynamic budgets within the context of enterprise risk and volatility, exploring how they differ from conventional models, the practical challenges they address, the governance mechanisms they require, and how technology underpins their success. A real-world case study is provided to illustrate how dynamic budgeting has enabled leading firms to sustain performance in uncertain times.

1. The Limitations of Static Budgets in Volatile Contexts

For decades, the annual budget cycle has served as the backbone of corporate planning. Its virtues — discipline, predictability, and accountability — made it a staple of managerial control. However, those same virtues now constitute its weaknesses in a turbulent environment.

a) Time-Lag and Obsolescence

A conventional budget can take months to prepare, review, and approve. By the time it is sanctioned, the assumptions upon which it was built may already be outdated. Exchange rate fluctuations, interest rate hikes, or supply chain breakdowns can render a once-viable plan obsolete almost overnight.

b) False Sense of Precision

Traditional budgets create an illusion of certainty. Managers spend considerable effort fine-tuning numerical targets down to decimal points, when in reality, external volatility may render such accuracy meaningless.

c) Rigidity and Misallocation

Once approved, budgets often become rigid instruments of control rather than adaptive tools of guidance. Departments cling to their allocated figures to preserve territory, even when strategic priorities shift. This rigidity discourages innovation and responsiveness — traits essential in volatile times.

d) Behavioural Distortion

Fixed budgets can lead to dysfunctional behaviour. Managers might rush to spend remaining funds at the end of the financial year ("use it or lose it") or delay necessary investments to "meet the numbers", resulting in inefficiency and short-termism.

These flaws expose the need for a budgeting paradigm that mirrors the dynamism of modern markets — one that is flexible, iterative, and inherently responsive.

2. The Essence of Dynamic Budgeting

A dynamic budget is not merely a frequently revised budget; it represents a philosophical shift. It treats budgeting as a continuous process of learning and adaptation, integrating real-time data, predictive analytics, and strategic feedback loops.

Core Principles of Dynamic Budgeting:

Continuous Updating: Instead of being fixed annually, dynamic budgets are revisited periodically — monthly or quarterly — based on actual performance and updated forecasts.

Scenario Planning: Multiple budget scenarios are maintained concurrently, each linked to key risk indicators and environmental triggers.

Agility in Resource Allocation: Funds can be reallocated swiftly in response to emerging priorities or unforeseen disruptions.

Integration with Strategic Objectives: Dynamic budgets remain anchored to long-term goals, ensuring that agility does not descend into opportunism.

Data-Driven Decision-Making: Advanced analytics and real-time dashboards enable quick interpretation of performance trends and risk exposure.

In essence, dynamic budgeting transforms budgeting from a backward-looking exercise of control to a forwardlooking process of navigation.

3. Why Dynamic Budgets Matter in Volatile Times

Volatile environments compress decision cycles and demand agility. Organisations that persist with static budgeting risk being overtaken by those capable of course-correcting in real time. Dynamic budgeting directly addresses several pain points that arise during uncertainty.

a) Navigating Economic Volatility

Dynamic budgets enable firms to recalibrate projections as inflation rates, interest costs, or currency values fluctuate. For instance, if input costs rise sharply, budgets can be adjusted to protect margins without awaiting a new financial year.

b) Responding to Market Shifts

Customer behaviour and market demand often shift unexpectedly during volatile times. Dynamic budgets allow marketing and production teams to adjust spending or output to match emerging patterns — reducing wastage and missed opportunities.

c) Managing Risk in Real Time

Integrating risk indicators into the budgeting process allows organisations to treat financial planning as a risk management exercise. Early-warning signals (e.g., declining sales in a key region or supplier delays) can trigger budgetary adjustments before the impact deepens.

d) Enhancing Strategic Agility

In volatile contexts, opportunities often appear suddenly — new partnerships, acquisitions, or market openings. A dynamic budget, with built-in flexibility, ensures that capital is available to seize such opportunities swiftly.

4. Implementing Dynamic Budgeting: Process and Practice

Transitioning from a traditional to a dynamic budgeting model involves structural, cultural, and technological transformation.

a) Establishing Continuous Forecasting Cycles

The organisation must adopt a rolling forecasting approach, where projections are extended periodically (say, every month) based on updated performance data. This requires seamless integration between operational reporting systems and financial planning platforms.

b) Linking Budgets to Key Drivers

Dynamic budgets are not line-item extrapolations; they are built around drivers — variables that have the greatest

influence on outcomes. For instance, in a retail business, these may include footfall, conversion rates, and average transaction size.

c) Decentralising Decision-Making

Dynamic budgeting thrives in decentralised environments where local managers can adjust plans quickly within approved boundaries. This contrasts with centralised models, where every budget amendment requires head-office approval — a fatal delay in volatile markets.

d) Governance Through Principles, Not Rules

Rather than enforcing rigid numerical targets, dynamic budgeting relies on principle-based governance. Managers are guided by broad thresholds (e.g., maintain operating margin above 15%) and are trusted to act within those parameters.

e) Embedding Real-Time Data Systems

The success of dynamic budgeting hinges on timely, reliable data. Cloud-based ERP systems, AI-enabled analytics, and integrated dashboards are vital for providing continuous visibility into performance metrics.

5. Challenges and Pitfalls in Adopting Dynamic Budgets

While conceptually appealing, dynamic budgeting presents practical challenges that must be managed carefully.

a) Information Overload

Continuous data flows can overwhelm managers. Without effective data curation, the system risks devolving into noise rather than insight.

b) Cultural Resistance

Many organisations equate frequent budget changes with instability or poor planning. Convincing stakeholders that flexibility signifies strength, not weakness, requires cultural change and leadership endorsement.

c) Resource Intensity

Dynamic budgeting demands sustained analytical effort and advanced systems. Smaller firms may struggle to afford the technology or talent required to maintain rolling updates.

d) Risk of Short-Termism

If not properly anchored to long-term strategy, dynamic budgeting can lead to reactive behaviour — focusing excessively on near-term adjustments at the expense of broader strategic continuity.

6. Technology as the Enabler

Dynamic budgeting would be unfeasible without the technological advances that support it.

a) Cloud-Based Financial Platforms

Modern budgeting platforms such as Anaplan, Adaptive Insights, and Oracle EPM Cloud facilitate continuous collaboration across functions and geographies. They allow budgets to be adjusted in real time, with immediate impact analysis.

b) Artificial Intelligence and Predictive Modelling

AI can analyse complex interdependencies among variables — such as commodity prices, consumer sentiment, and geopolitical risk — to generate more accurate forecasts. Machine learning models continuously refine themselves as fresh data becomes available.

c) Data Visualisation and Dashboards

Interactive dashboards convert raw data into actionable insight, allowing decision-makers to monitor variances, track KPIs, and make immediate adjustments.

d) Integration with Risk Management Systems

Dynamic budgets can be linked to enterprise risk management frameworks, ensuring that financial plans automatically reflect emerging risks — for example, a cyber-attack or supply chain disruption.

7. Case Study: Dynamic Budgeting at Microsoft Context

In the mid-2010s, Microsoft faced heightened volatility in the technology sector. Rapid shifts in cloud adoption, competitive pricing pressures, and geopolitical uncertainties made traditional budgeting untenable.

Response

Under the leadership of Satya Nadella, Microsoft transitioned to a dynamic, driver-based budgeting model anchored in rolling forecasts and data integration.

Key Features:

Monthly Rolling Forecasts: Each business unit updated forecasts every month, extending the horizon by another quarter.

Scenario Simulation: Financial teams used predictive analytics to model best-case, expected, and worst-case outcomes for each revenue stream.

Cross-Functional Collaboration: Finance worked closely with sales and engineering teams to align resource allocation with real-time product performance.

Data-Driven Decisions: Dashboards integrated operational metrics (such as cloud usage rates) with financial performance indicators.

Outcome:

The transition allowed Microsoft to reduce forecast error margins by over 30%, improve capital allocation speed, and align spending with fast-moving market trends. During the pandemic years, the system proved invaluable — enabling rapid reallocation of funds to cloud infrastructure and remote work solutions, which surged in demand.

Insight:

Microsoft's experience demonstrates that dynamic budgeting is not merely a financial innovation; it is a strategic enabler of resilience.

8. Governance and Human Factors

No dynamic budgeting model can succeed without the right governance and mindset.

a) Leadership Commitment

Executives must champion adaptability as a virtue. Regular reviews should not be seen as "budget resets" but as integral to responsible management in an unpredictable world.

b) Trust and Empowerment

Dynamic budgeting depends on decentralised control. Empowering managers to make budgetary decisions within transparent parameters builds accountability and responsiveness.

c) Transparent Communication

As budgets evolve, so must internal communication. Stakeholders at all levels need clarity on why changes are made and how they align with overarching goals.

d) Continuous Learning Culture

Dynamic budgeting thrives in learning organisations — those that treat each cycle as an opportunity to refine assumptions and improve foresight.

9. The Future of Dynamic Budgeting

As volatility becomes the defining feature of global business, dynamic budgeting is likely to evolve further. The next frontier lies in autonomous budgeting systems — AI-driven frameworks that automatically adjust forecasts and allocations based on real-time signals.

Additionally, sustainability metrics are increasingly being integrated into dynamic budgets. Rather than focusing

solely on financial outcomes, companies are embedding environmental and social indicators into their budgeting process — a practice aligned with ESG principles.

Moreover, cross-enterprise collaboration is emerging as a hallmark of dynamic budgeting. Rather than finance acting as a gatekeeper, it becomes a strategic partner, guiding the enterprise through uncertainty with insight rather than control.

Dynamic budgeting represents the maturation of financial planning in a world where volatility is no longer the exception but the norm. It replaces rigidity with responsiveness, precision with adaptability, and control with confidence. Unlike traditional budgets that seek to predict the future, dynamic budgets seek to live within

it — adjusting, learning, and evolving in tandem with reality.

The journey toward dynamic budgeting is not without its challenges. It demands new technology, new governance frameworks, and above all, a new mindset — one that embraces change as a constant. Yet, as the case of Microsoft illustrates, those who master this approach gain a decisive edge: the ability to act swiftly and intelligently, even amid chaos.

In the final reckoning, dynamic budgeting is not a mere financial tool; it is a philosophy of enterprise agility — the art of steering with flexibility, foresight, and resilience in an unpredictable world.

Valuation in Dynamic Environment

Introduction

Valuation has long been viewed as both an art and a science — an intricate balance between quantitative rigour and qualitative judgment. Traditionally, valuation models rested upon assumptions of relative stability: predictable cash flows, steady discount rates, and consistent market behaviour. However, in an age of volatility — defined by economic shocks, technological disruption, fluctuating capital markets, and evolving consumer dynamics — these assumptions have begun to unravel.

The result has been a growing recognition that static valuation models, however mathematically elegant, often fail to capture the shifting realities of modern enterprises. In their place, dynamic valuation techniques have emerged — approaches that integrate real-time data, scenario-based analysis, and adaptive forecasting to reflect how corporate value evolves in response to uncertainty.

This essay explores the conceptual foundations, methodologies, and practical applications of dynamic valuation. It contrasts these techniques with traditional static models, identifies their advantages and limitations, and illustrates their relevance through a case study of how dynamic valuation has transformed decision-making in high-volatility sectors such as technology and energy.

1. The Case Against Static Valuation Models

Conventional valuation techniques — Discounted Cash Flow (DCF), comparable company analysis, and precedent transactions — have served as the bedrock of corporate finance for decades. Each provides a snapshot of value based on fixed assumptions. Yet in volatile markets, these assumptions rarely hold.

a) The Illusion of Precision

Static valuations often yield precise numbers that

disguise the fragility of their inputs. For example, a single percentage change in discount rate or terminal growth assumption can alter valuations by millions. Such models, while appearing rigorous, provide an illusion of certainty rather than a reflection of reality.

b) The Problem of Static Forecasts

Traditional DCF models rely on a single forecast of future cash flows. In uncertain environments, this linear projection becomes speculative. Market disruptions — such as technological displacement, supply chain shocks, or sudden shifts in regulation — render such forecasts obsolete almost immediately.

c) Ignoring Path Dependency

Static models treat value as a point estimate rather than as a distribution that evolves over time. In truth, value is dynamic: it fluctuates with changes in capital markets, competitive positioning, and operational performance. A model that ignores this dynamism risks misinforming both investors and managers.

d) Disconnection from Real-Time Data

Most static valuations are based on periodic financial statements and historical data. Yet, in the modern digital enterprise, value drivers — such as user engagement, network effects, or brand sentiment — change daily. Traditional models fail to capture these fluid variables.

2. Defining Dynamic Valuation

Dynamic valuation refers to an adaptive, iterative process of estimating value that accounts for uncertainty, time-variance, and feedback loops. It treats valuation not as a one-time calculation, but as a living system that evolves in tandem with new data, shifting assumptions, and changing external conditions.

Core Principles of Dynamic Valuation:

Continuous Reassessment: Value is recalculated periodically as new data becomes available.

Scenario Integration: Multiple potential futures are modelled simultaneously, incorporating varying assumptions about growth, risk, and cost of capital.

Real-Time Data Application: Live operational and market data feed directly into valuation frameworks.

Probabilistic Modelling: Rather than offering a single valuation number, dynamic valuation produces a range of potential outcomes with associated probabilities.

Feedback and Learning: Models are refined continuously as actual performance diverges from forecasted performance, improving predictive accuracy over time.

In essence, dynamic valuation transforms the question of "What is the company worth today?" into "How does the company's value evolve under varying conditions and over time?"

3. Key Dynamic Valuation Techniques

A variety of methods have emerged to operationalise the dynamic approach. While differing in mechanics, they share a commitment to flexibility, realism, and forward sensitivity.

a) Scenario-Based DCF Models

Unlike static DCF models that assume a single trajectory, scenario-based DCFs model multiple outcomes — optimistic, base, and pessimistic — each reflecting distinct assumptions about revenue growth, margins, or capital costs.

Advantage:

This approach reveals not just expected value but also downside risk and potential upside. It is particularly useful in industries exposed to macroeconomic or regulatory volatility.

Example:

An energy firm may build scenarios around oil price fluctuations: \$60, \$80, and \$100 per barrel. Each scenario generates a different valuation, and management decisions can be aligned with probabilistic expectations rather than fixed forecasts.

b) Monte Carlo Simulation

The Monte Carlo method introduces statistical randomness to valuation by running thousands of simulations with variable inputs — such as cost of capital, revenue growth, and market demand.

Advantage:

It generates a probability distribution of potential

outcomes, offering richer insight into risk and uncertainty than any single-point estimate.

Application:

Investment banks often use Monte Carlo simulations to value high-volatility assets, such as start-ups or derivatives-linked companies, where input uncertainty is significant.

c) Real Options Valuation (ROV)

Real Options Theory treats investment decisions as options — the right, but not the obligation, to pursue future opportunities. Dynamic valuation incorporates these optionalities, acknowledging that managers can adapt strategy as conditions evolve.

Advantage:

ROV captures the value of managerial flexibility — for instance, the ability to delay, expand, or abandon a project. This is particularly relevant in sectors characterised by rapid innovation or high uncertainty, such as biotechnology or renewable energy.

Illustration:

A pharmaceutical company valuing a new drug pipeline can apply option theory to account for the decision to halt development if clinical trials fail, or to scale production if trials succeed.

d) Dynamic Multiples Valuation

While traditional comparable analysis uses static multiples (e.g., EV/EBITDA), dynamic multiples adjust valuation parameters over time based on shifting industry conditions.

Approach:

Dynamic multiples integrate time-series data and regression-based projections to anticipate how peer valuations may evolve under changing macroeconomic factors.

Use Case:

Technology firms often employ this approach to capture valuation sensitivity to market cycles and innovation diffusion rates.

e) Machine Learning-Based Valuation Models

Emerging techniques leverage artificial intelligence and machine learning to build adaptive valuation systems. These models learn from historical patterns, continuously recalibrating valuation drivers as new data flows in.

Advantage:

They can integrate alternative data — such as web traffic, social media sentiment, or satellite imagery — alongside financial indicators to capture intangible drivers of value.

Limitation:

While powerful, these models risk opacity: the "black box" nature of algorithmic decision-making can obscure causal relationships between inputs and valuation outcomes.

4. Integrating Volatility and Risk into Dynamic Valuation

Volatility is no longer a peripheral consideration — it is central to valuation. Dynamic valuation techniques embed risk directly into the valuation framework rather than treating it as an external adjustment.

a) Time-Varying Discount Rates

Traditional models use a static discount rate (e.g., Weighted Average Cost of Capital). Dynamic models allow the discount rate to evolve with macroeconomic variables such as interest rates, inflation, or market risk premium.

b) Bayesian Updating

In a Bayesian framework, prior assumptions about valuation inputs are continuously updated as new evidence emerges. This probabilistic approach mirrors how investors revise expectations in response to new market information.

c) Risk-Adjusted Cash Flows

Instead of adjusting the discount rate, some dynamic models adjust the cash flows themselves, reducing projections based on assessed risk levels for each time period or project component.

5. The Role of Technology and Real-Time Data

Dynamic valuation depends fundamentally on access to timely and granular data. Technological advances have revolutionised how such data is gathered, processed, and integrated.

a) Big Data Analytics

Modern firms capture enormous datasets — customer interactions, supply chain metrics, and sentiment analytics — which can inform forward-looking valuations.

b) Cloud-Based Valuation Platforms

Cloud systems enable collaborative valuation processes across geographies, integrating live operational data with financial modelling in real time.

c) Artificial Intelligence

AI models can detect non-linear relationships between variables — for instance, how user retention rates interact with marketing spend to influence long-term enterprise value.

d) Blockchain and Transparency

For financial institutions, blockchain-based ledgers are beginning to offer verifiable transaction-level data, reducing information asymmetry in valuation exercises.

6. Case Study: Dynamic Valuation at Tesla, Inc.

Context

Tesla represents an archetype of volatility — exposed to technological innovation, regulatory shifts, commodity price fluctuations, and market speculation. Traditional DCF or multiple-based models have struggled to capture its evolving value.

Approach

Investment analysts increasingly employ dynamic valuation frameworks combining scenario-based DCF, Monte Carlo simulations, and real options analysis.

Scenario Modelling: Three scenarios were built — optimistic (rapid EV adoption and margin expansion), base (steady growth with competitive pressure), and pessimistic (regulatory setbacks or raw material shortages).

Monte Carlo Simulation: Thousands of simulations were run on variables such as production growth rate, cost of capital, and average selling price.

Real Options Valuation: Analysts included the potential option value of future business lines — such as autonomous driving software and energy storage solutions.

Outcome

Rather than offering a single valuation figure, analysts produced a value distribution ranging from \$450 to \$1,200 per share, with corresponding probabilities. This approach reframed Tesla's valuation debate — from "Is it overvalued?" to "What probability do we assign to each scenario?"

Insight

Dynamic valuation provided a framework to understand volatility as information rather than as noise. It also acknowledged that a firm's value is not merely its current operations, but its evolving potential in response to future opportunities and risks.

7. Governance, Ethics, and Interpretation

While dynamic valuation enhances realism, it introduces new governance challenges.

a) Complexity and Interpretability

Dynamic models are inherently complex, and stakeholders — from boards to investors — must understand not just the outputs but the assumptions and sensitivities behind them.

b) Transparency of Algorithms

In AI-driven valuations, maintaining audit trails of how models generate outcomes is critical for credibility and compliance.

c) Ethical Use of Data

Incorporating alternative data, such as behavioural or geolocation information, raises ethical and privacy concerns that must be managed responsibly.

8. The Future of Dynamic Valuation

The next evolution of dynamic valuation lies in autonomous valuation systems — continuous, AI-driven models that automatically adjust firm value in real time as new data becomes available.

Integration with ESG Metrics:

Future valuations will not only adjust for financial variables but also for sustainability indicators — carbon footprint, governance quality, and social impact — thereby embedding ethical considerations into enterprise worth.

Blockchain-Enabled Verification:

Dynamic valuation may increasingly draw on blockchain systems to verify inputs and ensure transparency in assumptions, particularly in asset-heavy industries.

Digital Twin Valuations:

Emerging research explores creating "digital twins" of firms — virtual replicas that simulate the financial, operational, and risk dynamics of a company in real time.

Conclusion

Dynamic valuation marks a decisive shift in how we perceive and measure enterprise worth. It acknowledges that value is not a static construct captured at a moment in time, but a dynamic continuum shaped by uncertainty, decision-making, and external forces.

Unlike traditional valuation models that seek stability through simplification, dynamic valuation embraces complexity as a reflection of reality. It moves valuation from the realm of deterministic precision to probabilistic insight — from numbers that pretend to be certain to models that accept uncertainty as fundamental.

The integration of real-time data, advanced analytics, and scenario-based reasoning allows organisations to perceive value as a living narrative, one that evolves as strategy, markets, and risks evolve.

In volatile times, dynamic valuation is not merely a technical advancement; it is a philosophical one. It transforms valuation from a backward-looking audit of performance into a forward-looking compass for strategy — guiding firms to navigate uncertainty with agility, intelligence, and foresight.pathways for sustainable growth.

Topic

Module 4: Sovereign Risk and Insolvency Risk

Module 7: Insurance Intermediaries, General Insurance, Health Insurance and Life Insurance

ELECTIVES

Paper-20B

Risk Management In Banking and Insurance (RMBI)

Sovereign Risk and Insolvency Risk

Sovereign risk is very important for Indian banks that invest overseas because it assesses the potential for a foreign government to default on its debt or disrupt financial markets through policy changes. This directly impacts the safety and profitability of international assets held by Indian banks.

How sovereign risk affects Indian banks:

- Default on sovereign debt: When a government defaults on its bonds, it devalues the asset for any bank holding that country's debt. This directly impacts the bank's balance sheet, potentially causing significant financial losses and requiring substantial provisioning.
- Currency devaluation: In the case of a sovereign crisis, a country's currency often loses value. If an Indian bank has foreign currency loans or investments in that country, the devaluation reduces the value of the bank's assets when converted back to Indian Rupees. This also makes it more difficult for local borrowers to repay foreign currency-denominated loans.
- Political and regulatory instability: Sovereign risk includes the possibility of a foreign government implementing adverse policies that can seize assets, impose capital controls, or change financial regulations. These actions can block an Indian bank from repatriating funds or managing its assets in that country.
- Country contagion: A sovereign default in one country can trigger a crisis of confidence and capital flight in other emerging markets, including India. This phenomenon can affect an Indian bank's operations even if it does not have direct investments in the defaulting country.
- Reduced market access and higher funding costs: A
 sovereign credit rating downgrade in a country where
 an Indian bank has operations can increase the bank's
 own cost of borrowing. It can also reduce the bank's
 access to international debt and capital markets,
 affecting its ability to raise funds and expand globally.

Factors considered in sovereign risk assessment: Indian banks assess several factors to determine the sovereign risk of a potential investment destination, including:

Economic indicators:

- *GDP growth*: Higher and more stable growth indicates a greater ability to meet financial obligations.
- *External debt*: A high debt-to-GDP ratio, particularly in foreign currency, signals higher default risk.

- Foreign exchange reserves: Substantial reserves provide a buffer for a country to manage its external debt payments and currency stability.
- *Inflation rate*: High and persistent inflation can devalue a currency and indicate underlying economic instability.

Political factors:

- *Political stability*: A stable government is less likely to make erratic policy decisions or default due to a change in leadership.
- *Governance and corruption*: Sound governance and low corruption levels increase a bank's confidence in the rule of law and the security of its investments.
- *Credit ratings*: Sovereign credit ratings from agencies like Moody's, S&P, and Fitch are a key indicator of a country's risk profile. Indian banks use these ratings to benchmark a country's creditworthiness.

Mitigation strategies for Indian banks: Indian banks use several measures to mitigate the risk associated with foreign investments:

- Diversification: Spreading international investments across various countries, sectors, and asset classes to reduce the impact of a single country's economic crisis.
- Hedging: Using financial instruments like credit default swaps or other derivatives to protect against potential losses from currency fluctuations and defaults.
- Regulatory guidelines: The Reserve Bank of India (RBI) issues strict regulations that guide Indian banks' foreign investments and risk management. This includes stress tests to assess the impact of adverse economic scenarios on their balance sheets.
- Enhanced due diligence: Conducting thorough research and analysis on a host country's economic and political environment beyond official credit ratings.
- Contingency planning: Developing robust strategies to handle adverse situations, including capital repatriation and liquidity management, in the event of a foreign crisis.

Insolvency Risk: Insolvency risk is of paramount importance to Indian banks during the lending and investment process because it directly impacts their financial health, profitability, and stability. This is particularly relevant in India, where the Insolvency and Bankruptcy Code (IBC) has significantly restructured the credit market and empowered creditors.

Insolvency risk refers to the likelihood that a borrower will be unable to meet its debt obligations, potentially leading to bankruptcy. For a bank, the failure of a single large borrower can result in a significant non-performing asset (NPA), causing losses and eroding its capital base.

Role of insolvency risk in Indian banks:

During the lending process:

- Credit appraisal: Banks assess a borrower's insolvency risk by analysing its financial statements for warning signs like dwindling cash flow, high leverage, or declining profitability. This diligence helps identify potentially problematic loans before they are sanctioned.
- Risk-based pricing: Higher perceived insolvency risk leads to higher interest rates and more stringent loan conditions for the borrower. This compensates the bank for the potential losses it may incur if the loan defaults.
- Collateral requirements: Banks may demand more collateral or personal guarantees from borrowers with a high insolvency risk to minimize potential losses in case of default.
- Diversification: To mitigate portfolio-wide risk, banks are cautious about over-exposing themselves to any single industry. A high number of insolvencies in one sector can trigger a domino effect across other linked businesses and banks.

During the investment process:

- Impact on bond holdings: When banks invest in corporate bonds, a borrower's insolvency can render the bonds worthless, causing capital losses for the
- Interconnectedness of the financial system: The Indian financial system is highly interconnected. The failure of a large Non-Banking Financial Company (NBFC) or corporate group due to insolvency can have a cascading effect across banks that have lent to or invested in it.

Impact of the Insolvency and Bankruptcy Code (IBC): The introduction of the IBC in 2016 has had a profound effect on how Indian banks handle insolvency risk.

- Improved credit culture: The IBC created a timebound and effective process for resolving corporate insolvencies. The credible "threat of insolvency" has increased the accountability of borrowers and strengthened the negotiating power of creditors, prompting better credit discipline.
- Decline in NPAs: The IBC has contributed to a significant reduction in the gross NPA ratio for Indian banks, bolstering their financial health.
- Shift in lending behaviour: Post-IBC, banks have become more risk-averse toward large-scale corporate lending, which was historically prone to default. This has led to a "consumerization" of bank credit, with an increase in lending to safer personal loan segments.
- Efficient resolution mechanism: The IBC, overseen by the National Company Law Tribunal (NCLT), offers banks a unified framework for quicker and more efficient debt recovery compared to previous, slow legal processes.
- Increased investor confidence: The improved resolution process has boosted investor confidence in India's credit market, attracting more investment.

Challenges for Indian banks: Despite the progress, Indian banks still face challenges in managing insolvency risk:

- Regulatory environment: Banks must continually adapt to changing regulations from the Reserve Bank of India (RBI) concerning capital adequacy and risk management.
- Information asymmetry: Banks may lack comprehensive data for credit evaluation, particularly for smaller and newer firms, making accurate insolvency risk assessment difficult.
- Judicial bottlenecks: Despite the IBC, procedural delays and vacancies at the NCLT and NCLAT can still slow down insolvency proceedings and impact timely asset resolution.

-oOo-

Insurance Intermediaries

General Insurance, Health Insurance and Life Insurance

In India, insurance intermediaries are crucial for bridging the gap between insurance companies and consumers, helping to increase insurance penetration and density. The following are the various types of intermediaries in the general insurance business, as regulated by the Insurance Regulatory and Development Authority of India (IRDAI).

a) General Insurance:

Insurance agents: Insurance agents are licensed individuals or entities who sell and service insurance policies on behalf of one or more insurance companies.

- *Individual agents*: Represent an insurance company to solicit and procure business.
- Corporate agents: Are entities, such as companies or banks, that sell policies for an insurer. A corporate agent can partner with up to nine insurers across the life, health, and general insurance segments.
- Point of Sales Persons (PoSPs): Are specifically licensed individuals who can sell simple, pre-underwritten insurance products.

Insurance brokers: Insurance brokers are independent firms that represent their clients—the policyholders, rather than a specific insurance company. They help clients select the most suitable policy by comparing options from multiple insurers and offer a range of risk management services.

- *Direct brokers*: Solicit and arrange insurance business with insurers for their clients. They can be licensed for life, general, or both.
- Reinsurance brokers: Act as intermediaries between primary insurers and reinsurers to arrange reinsurance policies.
- *Composite brokers*: Can solicit both direct insurance business and reinsurance business.

Web aggregators: These are online platforms that operate websites to provide consumers with information and comparison tools for different insurance products offered by various insurers. They simplify the comparison process and help customers make informed decisions. Examples include Policybazaar and Bimahub.

Insurance marketing firms (IMFs): An IMF is a corporate entity that is licensed to market and service insurance policies and other specified financial products. An IMF can represent a limited number of insurers (two life, two general, and two health) and market other financial products like mutual funds and pension schemes.

Third-party administrators (TPAs): TPAs are specialized intermediaries that provide health services to insurance companies. While not involved in selling policies, they manage tasks such as cashless claims processing and network hospitalization for health insurance policyholders.

Surveyors and loss assessors: Licensed by the IRDAI, these intermediaries are appointed to inspect and assess the losses caused by a contingency to determine the payable claim amount. Their report helps ensure fair claim settlements.

b) Health Insurance:

Insurance intermediaries for health insurance in India include individuals, corporate agents, and brokers who act as a link between customers and insurance companies. Third Party Administrators (TPAs) also play a crucial role, handling services for insurance companies, such as claim settlement, while surveyors assess losses. All these intermediaries are regulated by the Insurance Regulatory and Development Authority of India (IRDAI).

Types of health insurance intermediaries:

Insurance Agents (Individual and Corporate):

- *Individual Agent*: A single person licensed to sell insurance policies on behalf of an insurance company.
- Corporate Agent: A non-individual entity (like a bank) that acts as an intermediary for an insurance company.

Insurance Brokers:

- These are intermediaries who, unlike agents, can represent the customer's interests and often deal with multiple insurance companies to find the best policy at a competitive price.
- They are registered with and governed by the IRDAI Insurance Brokers Regulations, 2018.

Third Party Administrators (TPAs):

- These are companies that provide administrative and claim settlement services for health insurance policies on behalf of the insurance company.
- They handle cashless hospital access, claim processing, and other services related to health insurance claims.

Surveyors and Loss Assessors:

- These are professionals who assess the extent of losses for insurance companies, although they are not involved in procuring business.

Role and function:

- Facilitation: They bridge the gap between customers and insurance companies, making the process of purchasing insurance easier and more transparent.
- *Guidance*: They help customers understand their needs and recommend suitable policies with comprehensive coverage at competitive prices.

Policy Servicing: They assist with all aspects of the policy, from the point of sale through to policy servicing and claim settlement.

c) Life Insurance:

Insurance intermediaries in the life insurance business in India include insurance agents, insurance brokers, corporate agents, surveyors and loss assessors, and web aggregators. Specific entities that act as intermediaries include Mahindra Insurance Brokers Limited (MIBL), Aditya Birla Insurance Brokers Ltd. (now Edme Insurance Brokers), and ACME Insurance Broking Services.

Types of insurance intermediaries in India:

- *Insurance Agents*: Individuals who act on behalf of a single insurance company.
- Insurance Brokers: Entities that act on behalf of the customer to find a suitable insurance policy from various companies.
- Corporate Agents: Entities that are authorized to sell insurance policies of one or more insurance companies.
- *Surveyors and Loss Assessors*: Individuals who are appointed to investigate insurance claims.
- Web Aggregators: Online platforms that allow users to compare insurance policies from different providers.

Examples of prominent insurance intermediaries in India:

- Mahindra Insurance Brokers Limited (MIBL):
 A subsidiary of Mahindra & Mahindra Financial Services, offering both life and non-life insurance solutions.
- Aditya Birla Insurance Brokers Ltd. (now Edme Insurance Brokers): A composite insurance broker offering comprehensive insurance and risk advisory services.
- ACME Insurance Broking Services Pvt. Ltd.: A company that acts as an insurance broker for various

- types of insurance.
- Bharat Re-Insurance Brokers Pvt. Ltd.: A reinsurance broker with a composite license for both life and general insurance.
- Helios Insurance Broking Services Pvt. Ltd.: A composite broker dealing in both life and general insurance.
- *First Policy Insurance Brokers Pvt. Ltd.*: A composite broker dealing in both life and general insurance.
- *Unicorn Insurance Brokers Pvt. Ltd.*: An insurance broker that deals with various types of insurance.

Without intermediaries, it would be significantly more difficult to sell and service insurance products in India, especially given the country's low insurance penetration and diverse, complex market. Intermediaries like agents and brokers act as a vital bridge between insurance companies and customers, particularly in rural and semi-urban areas where digital literacy may be low.

Key reasons why intermediaries are crucial in the Indian insurance market:

- **Building trust and awareness**. For many Indians, insurance is "sold, not bought". Intermediaries are crucial for educating prospective customers on the importance of insurance, helping to overcome distrust and a lack of awareness that contributes to low penetration rates.
- Expert advice for complex products. Insurance policies can be complex and confusing for the average consumer. Intermediaries simplify the process by explaining complicated terms and conditions, helping customers choose the most suitable plan for their specific needs, income, and budget.
- Expanding market reach. Given India's vast geography and diverse population, insurers cannot effectively reach all potential customers directly. Intermediaries, through their established networks and local presence, can expand an insurer's reach into semi-urban and rural areas.
- Post-sales and claims support. An intermediary's role extends beyond the initial sale to providing essential after-sales services, including assistance with renewals, endorsements, and, most importantly, the claims process. For customers, having a dedicated agent or broker can significantly reduce the stress and hassle of filing a claim.
- Customized solutions. Insurance brokers, who

represent the customer rather than a specific insurer, can compare various products to find policies that are specifically tailored to a client's needs. This is particularly important for individuals or businesses with complex or unique risk profiles.

- Reducing fraud. Intermediaries help prevent fraud and misrepresentation, which can plague direct sales channels like telemarketing and e-commerce. They help ensure that paperwork is filled out correctly and that the policy's terms are fully understood.
- Adapting to customer expectations. While digital channels are growing, many Indian consumers still

prefer face-to-face interactions when purchasing and servicing a product as significant as insurance. Intermediaries provide that personal connection and build the long-term relationships that foster customer retention.

While the digital landscape and Insurtech solutions are growing and changing the role of intermediaries, they are more likely to transform rather than replace these roles entirely. Technology is empowering intermediaries with tools like digital onboarding and data analytics, but the need for human guidance remains a cornerstone of the Indian insurance market.

Topic

Module 5: Scalability, Scaling up and Stabilisation of Sustainable **Business**

ELECTIVES

Paper-20C

Entrepreneurship and Start Up (ENTS)

Scaling and Stabilisation of Business

Scalability for Startups

Scalability for a startup is the ability to grow rapidly and efficiently by handling increased demand without a proportional increase in costs or a drop in quality. A scalable business model allows for a significant expansion of operations, user base, or revenue, often by leveraging technology, automation, and streamlined processes. This is crucial for achieving profitability faster, attracting investors, and becoming a dominant player in a market.

Business Scalable Parameters

- Total Revenue
- Profit
- Number of Customers
- Growth Rate
- Funding Amount
- Round of Funding
- Market Share

Strategies for Scaling a Business

If an entrepreneur wants to take the organization from a startup to a scale-up and ultimately a successful business, he or she needs to understand how to nurture the start-up's growth. Every business strategy is unique, but startups that successfully scale often follow many of the same best practices or some strategies:

1. Strategize how to increase sales

Increasing sales is a top priority for any business looking to scale. Scaling sales can either adding new customers or growing the average revenue from current customers. While both options drive results, retention strategies with current customers are often more cost-effective than attracting new business.

Some best practices to increase sales include:

- Zoning in on a target market
- Understanding customer behavior
- Addressing customer feedback
- Building a team of skilled sales representatives
- Developing an effective marketing plan
- Managing leads and customer relationships with CRM software
- Refining your message

2. Invest in technology

Many growing startups bring in freelance automation

experts to help choose the right tools, implement systems, and document repeatable processes. Generative AI tools—like ChatGPT, Jasper, or Copy.ai—can support content creation, customer communications, and basic marketing tasks. These are used for accelerating first drafts or ideation, not replacing creative or strategic thinking.

Platforms like Upwork make it easy to find specialists in:

- Workflow automation
- CRM setup and optimization
- AI content tooling
- E-commerce integrations

3. Expand your team according to the market's needs

As the business grows, building the right team becomes a balancing act. So, the organisation needs skilled people, but not always full-time employees. That's why many scaling businesses combine in-house hires with freelance or contract professionals from different platforms. The tasks are:

- Identify skills gaps
- Review current team's capabilities
- Assess the hard skills and soft skills (e.g., communication, time management) needed for the organisation.
- Identify roles that are temporary or project-based ideal for freelance talent

4. Create a plan around realistic goal

Businesses that effectively scale strike the right balance between setting reasonable yet challenging goals. To achieve this, consider organizing a goal-setting workshop with different teams.

- Start with a discussion about the company's overall vision.
- Ensure all participants understand and align with it.
- Discuss and refine these goals as a group.
- Identify key milestones for each selected goal.
- For each milestone, identify specific actions needed. Assign responsibilities and deadlines for each action.
- Review the entire plan as a group. Make any necessary adjustments based on feedback.

5. Deploy a new marketing strategy

Creating a fresh, bold, and impactful marketing campaign can transform the startups. The viral nature of social media, one video can drastically impact the number of sales and orders one receive. Some popular options are:

- creating engaging and valuable content;
- paid advertisement;
- video blogs and guides;
- SEO;
- email marketing;
- direct marketing.

The entrepreneur should consult with a marketing specialist or an advertising agency to learn more about what strategy could be the best fit for their business.

6. Develop management skills

Managers at your organization are responsible for motivating team members, achieving independent team goals, and holding team members accountable for outcomes. Individual managers' effectiveness can directly impact your organization's likelihood of successfully scaling. Therefore, managers across departments need to have the right skills to drive positive business outcomes.

Management skills can include:

- 1. Critical thinking
- 2. Strategic planning
- 3. Time management
- 4. Change management
- 5. Leadership

7. Focus the company's offerings:

Businesses that scale successfully understand the importance of focusing their products, services, and target market.

- Consider customer size, industry, geography, or specific needs. Look for underserved segments within your broader market.
- Conduct market research through surveys, interviews, or focus groups. Use social listening tools to understand pain points.
- Continuously evaluate market trends, technology, and customer needs. Adapt your offerings to maintain relevance and competitive advantage.

8. Conduct a risk assessment

Identify potential risks:

- Financial risks (e.g., cash flow issues, market fluctuations)
- Operational risks (e.g., supply chain disruptions, technology failures)

- Strategic risks (e.g., changing customer preferences, new competitors)
- Compliance risks (e.g., regulatory changes, legal issue

Evaluate risk likelihood and impact:

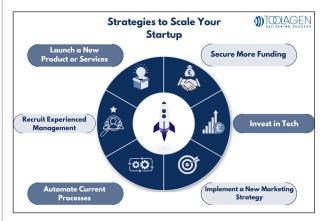
 Create a risk matrix to prioritize risks based on probability and potential consequences.

Develop risk mitigation strategies:

- Risk avoidance. Eliminate the risk by changing plans or processes.
- Risk reduction. Implement controls to minimize the likelihood or impact.
- Risk transfer. Share or offload the risk through insurance or partnerships.

Implement a risk monitoring system:

Regularly review and update your risk assessment.
 Establish key risk indicators (KRIs) to track potential issues.



Source: https://www.toolagen.com/6-key-strategies-to-scale-your-startup-successfully/

Stabilisation of Startups

Startup stabilization is the phase where a company transitions from initial high-growth and discovery to a more consistent and predictable operational model. It involves fixing inefficiencies, establishing steady revenue streams, and building a robust business model that is ready for scaling by achieving operational reliability, financial resilience, and consistent customer flow.

Importance of startups stabilsation

- Foundation for scaling: A stable business provides the foundation for successful expansion. Without it, a company may struggle when it grows too quickly.
- **2. Investor confidence:** Stability makes a startup more attractive to investors, who seek predictable returns and a lower risk profile.

3. Long-term sustainability: It is a critical step for any startup aiming for long-term success and sustainability beyond the initial startup phase.

Different Aspects of Stabilization of Startups

- 1. Fixing inefficiencies: This involves identifying and resolving issues that hinder scalability, such as unstable processes or an inconsistent product. It includes optimizing operations, streamlining costs, and developing clear systems and procedures.
- 2. Establishing consistency: The goal is to create a steady and predictable business that can withstand external pressures. This is achieved by building a consistent customer base, generating regular revenue, and securing a stable cash flow.
- 3. Achieving operational reliability: Stabilization requires creating a reliable and consistent experience for the customer, which builds trust and supports long-term growth. This means ensuring the product or service is dependable and high-quality.
- 4. Building financial resilience: A stable business has financial resilience, which is supported by consistent revenue, consistent cash flow, and optimized operations. This stability allows the company to attract investment without relying on inflated valuations.
- 5. Shifting focus from pure growth to optimization: Instead of chasing rapid expansion at all costs, the focus shifts to making the current business model as efficient and profitable as possible before expanding.
- **6. Diversifying offerings:** Diversification can be a key tactic to stabilize by expanding revenue streams and reducing dependence on a single product or service.

Effects Stabilisation on the Startups

- 1. Attracts strategic investment: As startups demonstrate solid business models and a clear path to profitability, they attract more discerning investors, including domestic and global venture capital firms.
- 2. Increases operational efficiency: A stabilized startup is more disciplined in its financial management and operational processes. This shift prevents issues like cash flow problems and high capital burn rates.
- **3. Fosters a culture of sustainability**: By prioritizing long-term stability over short-term "growth at

- all costs," a stabilized company creates a more responsible and sustainable business culture.
- 4. Diversifies market reach: Mature startups have the capacity and infrastructure to expand beyond major metropolitan areas, enabling them to serve Tier II and Tier III cities, tapping into a vast, underserved market.

Examples of stabilized Indian startups

Many of India's most prominent companies successfully navigated the stabilization phase to achieve sustainable, long-term success.

- 1. Flipkart: After its initial hyper-growth phase, Flipkart had to streamline its logistics, customer experience, and vendor management. The acquisition of other platforms like Myntra and the eventual acquisition by Walmart demonstrated a mature and stable strategic path. By focusing on scaling its operational capabilities, Flipkart cemented its position as a market leader in Indian e-commerce.
- 2. Zomato: After facing intense competition, Zomato stabilized its delivery operations by building its own logistics network. It refined its business model, expanded its service categories, and achieved profitability in key markets. Zomato successfully became a publicly traded company and a dominant force in India's food tech sector, showcasing a path from startup to mature enterprise.
- 3. Razorpay: Razorpay implemented a "Lean Startup" approach, using customer feedback and detailed "Concept Notes" to refine its products. This systematic process allowed it to expand its offerings, including business banking and payroll solutions, in a controlled manner. By focusing on efficient product management, Razorpay has become a stable and diversified fintech unicorn, attracting major investments and expanding its portfolio of services.
- 4. OYO: OYO's path to stabilization involved surviving a period of over-expansion and market challenges. It shifted its strategy to focus on profitability, costcutting, and building a more sustainable business model rather than unchecked growth. After a tumultuous period, OYO has focused on establishing a more stable operational footprint and a clearer path to profitability, demonstrating that the stabilization process can be a reactive measure to correct past mistakes.

NOTES:

Invitation to Contribute Articles for CMA Student E-Bulletin - Showcasing Your Expertise!

Dear CMA Student,

The are excited to extend an invitation to you to contribute an article for the CMA Student E-Bulletin, our esteemed monthly e-journal exclusively crafted for CMA students. This platform, managed by the Directorate of Studies at ICMAI, aims to provide a space for your insights, experiences and knowledge-sharing within the CMA community.

Submission Guidelines:

- Article Length: Please prepare articles ranging between 1200 to 1500 words.
- Topic: The articles can cover a wide spectrum of subjects, including but not limited to advancements in finance, industry insights, case studies, personal experiences and emerging trends in the field.
- Originality: We encourage you to share your unique perspectives and experiences. Ensure that your submission has not been published elsewhere.

Submission Deadline: We kindly request you to submit your article by 20th of the previous month of publication. This will allow us ample time to review and prepare the upcoming issues of the CMA Student E-Bulletin.

Submission Process: Please send your article to studies.ebulletin@icmai.in with the subject line "CMA Student E-Bulletin Submission - [Your Name, Registration No.]". Include a brief author bio and a high-resolution photograph to be featured alongside your article.

Recognition and Rewards: Selected articles will be featured prominently in the CMA Student E-Bulletin, providing you with a valuable platform to showcase your expertise. Additionally, authors of published articles will be acknowledged and the top contributors may be eligible for special recognition and rewards.

We believe that your unique insights and experiences will contribute significantly to the enrichment of the CMA Student E-Bulletin. Your participation will not only enhance your visibility within the CMA community but also foster a culture of knowledge-sharing and collaboration.

Best Regards,

Team DoS

The Institute of Cost Accountants of India

E-mail - studies.ebulletin@icmai.in





NEW

www.icmai.in

IT INITIATIVE

TO PROVIDE **ENHANCED FACILITIES TO**

JDEN



login feature has been integrated into the ONLINE REGISTRATION APPLICATION SYSTEM enabling students to access various services through their accounts.

To utilize this feature, students need to create a login account by verifying their email address through an OTP sent to their registered email ID. Once the email ID is verified, it becomes the user ID and students can set their password during the account creation process.

The introduced system enables students to:

Register online for Foundation. Intermediate & Final Courses

Check the status of their online applications

Request Conversion from Old Syllabus to New Syllabus

Request changes in Oral / Postal Coaching and opt for Chapter-to-Chapter Conversion

Convert from Provisional to Regular status

Additional services for students will be seamlessly incorporated in the near future.

Behind every successful business decision, there is always a CMA



CMA Leαds

4 Regional Councils

11 Overseas Centers

117 Chapters across India

61 CMA SC & 401 ROCC

1,00,000⁺ Alumni

5,00,000⁺ Students

the CMA Students Value Added Services for

- Study Materials
- Students E-Bulletin
- Knowledge Web Series
- E-Library
- • Webinars
- Model Question Papers
- • MCQ Portal
- Tutorial Workshops
- Coaching Oral/Postal (E-learning)
- • Skills Training
- **Practical Training**
- Programme **Industry Oriented Training**

•

Admission Deadlines

- For June Exam 31st January of same Calendar Year
- For December Exam 31st July of same Calendar Year

IA BODY

Under the administrative control of Ministry of Corporate Affairs (MCA), Government of India

Skills Training Partner

IVIA COURSE GOING GLOBAL

Mentoring Future-Ready Professionals

Eligibility

Admission in Foundation Course

- Passed Class 10 (Require to pass 10+2 before appearing in CMA Examination)
- 10+2 Pass or its equivalent (Students appearing for 10+2 also apply on provisional basis)

Prominent Recruiters in

https://eicmai.in/studentportal/Home

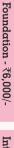
Online Admission

CMA Campus Placement Drives

Registration to Intermediate Course

- Passed CMA Foundation Examination
- Graduates of any discipline (Students awaiting final result also apply on provisional basis)
- Qualified CAT Level I of The Institute of Cost Accountants of India
- Qualified CA Intermediate **Qualified Engineers**

Course Fees



Intermediate - ₹23,100/-*

Final - ₹25,000/-*

*Installment facility available



PHILIPS आर ईसी REC GAIL (India) Limited O Mister to Reliano accenture **BNY MELLON ⊗** vsBr SZSI IREDA WCE MEDA ALWAYS INE

And many more..

Headquarters

Deloitte.

(2) LARSEN & TOUBRO

wedanta

BSE

P

CMA Bhawan, 12, Sudder Street, Kolkata - 700016 033-40364777/40364722/40364726

CMA Bhawan, 3, Institutional Area, Lodhi Road

011-24622156/24622157/24622158

🖂 placement@icmai.in

Behind every successful business decision, there is always a CMA



www.icmai.in

Headquarters

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi - 110003 Ph: 011-24622156

Kolkata Office

CMA Bhawan, 12, Sudder Street, Kolkata - 700016

Ph: 033-40364743/40364735

studies@icmai.in

