

ICMAI
भारतीय लागत लेखाकार संस्थान
THE INSTITUTE OF
COST ACCOUNTANTS OF INDIA
Statutory Body under an Act of Parliament
(Under the jurisdiction of Ministry of Corporate Affairs)
www.icmai.in

CMA STUDENT E-Bulletin

VOL 11 | NO. 10 | OCTOBER 2026

An Initiative of Directorate of Studies

Behind every successful business decision, there is always a CMA

About the Institute

The Institute of Cost Accountants of India is a statutory body established under an Act of Parliament in 1959. As part of its obligations, the Institute regulates the profession of Cost and Management Accountancy, enrols students for its courses, provides coaching facilities to the students, organises 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 are increasingly contributing toward the management of scarce resources and apply strategic decisions. This has opened up further scope and tremendous opportunities for cost accountants in India and abroad.

After an amendment passed by Parliament of India, the Institute is now renamed as ''The Institute of Cost Accountants of India'' from ''The Institute of Cost and Works Accountants of India''. This step is aimed towards synergising with the global management accounting bodies, sharing the best practices which will be useful to large number of trans-national Indian companies operating from India and abroad to remain competitive. With the current emphasis on management of resources, the specialized knowledge of evaluating operating efficiency and strategic management the professionals are known as ''Cost and Management Accountants (CMAs)''. The Institute is the largest Cost & Management Accounting body in the world, having approximately 6,00,000+ students and 1,00,000+ qualified professionals all over the globe. The Institute headquartered at Delhi operates through four regional councils at Mumbai, Chennai, Kolkata & Delhi and 113 Chapters situated across the country as well as 11 Overseas Centres. It functions under the jurisdiction of the Ministry of Corporate Affairs, Government of India.

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	From ignorance, lead me to truth
तमसोमा ज्योतिर् गमय	From darkness, lead me to light
मृत्योर्मामृतं गमय	From death, lead me to immortality
ॐ शान्ति शान्ति शान्तिः	Peace, Peace, Peace

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CHAIRMAN'S COMMUNIQUE

Dear CMA Students,

It gives me immense pleasure to connect with you through the October 2026 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 hands-on training sessions that bridge the gap between academic knowledge and practical implementation.

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

At 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

Topic

Fundamentals of Business Laws -

Module 3:
Sale 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

1. Under the Sale of Goods Act, 1930, when the price is not determined by the contract or by an agreed method, the buyer is required to pay:
   a) The price fixed by the seller
   b) The market price on the date of delivery
   c) A reasonable price
   d) The lowest price prevailing in the market
2. A agrees to sell goods to B at a price to be fixed by a third-party valuer. The valuer fails to make the valuation. What is the effect?
   a) B must pay the price decided by A
   b) The agreement is avoided
   c) The agreement automatically becomes a sale
   d) B must pay the market price
3. A contract provides that payment for goods will be made 30 days after delivery. Under the Sale of Goods Act, the time of payment is generally:
   a) Always treated as of the essence
   b) Never mentioned in the contract
   c) Not considered of the essence unless a different intention appears
   d) Treated as a condition in every case
4. A buyer has the right to waive a condition or elect to treat its breach as:
   a) A breach of warranty
   b) A breach of title
   c) An anticipatory breach only
   d) No breach at all
5. A agrees to sell a specific machine to B. Before the property in the machine can pass, A is required under the contract to carry out certain work to put the machine into a deliverable state. The property will pass only when:
   a) A agrees to sell the machine
   b) B makes full payment
   c) A completes the required work, and B has notice of it
   d) The machine is inspected by any third party
6. A agrees to sell 500 kg of a particular commodity to B. The goods are in a deliverable state, but A has to weigh them to determine the price. When will the property pass?
   a) Immediately on signing the contract
   b) Only after the weighing is completed and B has notice
   c) Only after B resells the goods
   d) After the expiry of the credit period
7. A buyer asks the seller to allow her to examine the goods before deciding whether to accept them. The seller should:
   a) Refuse examination once the contract is made
   b) Provide a reasonable opportunity to examine the goods
   c) Allow examination only after payment
   d) Allow examination only after delivery is completed
8. A buyer receives goods but does not expressly accept them. He uses the goods in a manner inconsistent with the ownership of the seller. This amounts to:
   a) Rejection of goods
   b) Acceptance of goods
   c) Cancellation of the contract
   d) Stoppage in transit
9. A buyer lawfully rejects goods and informs the seller of the rejection. Unless otherwise agreed, the buyer:
   a) Must always return the goods to the seller
   b) Must destroy the goods
   c) Is not bound to return the goods to the seller
   d) Becomes the owner of the goods
10. A buyer wrongfully refuses to take delivery of goods after the seller has requested him to take delivery. The buyer may be liable for:
    a) Loss caused to the seller and reasonable charges for care and custody
    b) Only the original contract price
    c) Criminal punishment under the Act
    d) No liability whatsoever
11. Goods are in the possession of a third party who acknowledges to the buyer that he holds them on the buyer's behalf. Under the Act, this may constitute:
    a) Delivery to the buyer
    b) Resale by the seller
    c) Stoppage in transit
    d) Acceptance by the seller

12. A seller agrees to send goods to a buyer but does not fix the time within which they are to be sent. The seller should send them:

    a) Immediately in every case

    b) Within a reasonable time

    c) Only after receiving full payment

    d) After one month

13. A seller is required to put goods into a deliverable state before delivery. Unless otherwise agreed, the expenses of doing so are generally borne by:

    a) The buyer

    b) The seller

    c) The carrier

    d) The auctioneer

14. A seller delivers goods to a carrier for transmission to the buyer but fails to make a reasonable contract with the carrier regarding the safe carriage of the goods. The buyer may:

    a) Have no remedy because delivery to the carrier is always final

    b) Decline to treat the delivery to the carrier as delivery to himself or hold the seller responsible for loss caused by the carrier's negligence

    c) Cancel all future contracts with the seller

    d) Claim ownership of other goods belonging to the seller

15. Where goods are sent by sea in circumstances in which it is usual to insure them, the seller should give the buyer:

    a) A copy of the seller's income-tax return

    b) Notice enabling the buyer to insure the goods during the sea transit

    c) Notice of the seller's bank balance

    d) A certificate of incorporation

16. A seller agrees to deliver goods to a distant place at his own risk. During transit, the goods deteriorate due to an inherent deterioration normally associated with the journey. Unless otherwise agreed, such deterioration is generally:

    a) Always the seller's responsibility

    b) The buyer's responsibility

    c) The carrier's responsibility

    d) The auctioneer's responsibility

17. A buyer refuses to accept goods after the seller has duly tendered them. The seller's right to claim damages for non-acceptance is:

    a) Automatically lost

    b) Available under the Act

    c) Available only if the buyer becomes insolvent

    d) Available only in an auction sale

18. Where the seller wrongfully refuses to deliver the goods, the buyer may:

    a) Sue for damages for non-delivery

    b) Only demand an apology

    c) Sue only if the seller is insolvent

    d) Never claim compensation

19. A contract concerns specific goods, and the seller wrongfully refuses to deliver them. The buyer seeks an order directing the seller to deliver those very goods. The court may grant:

    a) Specific performance, subject to the applicable law

    b) Only imprisonment of the seller

    c) Only a reduction in price

    d) No relief under any circumstances

20. A buyer discovers a breach of warranty and wants to reduce the amount payable because of the breach. The buyer may:

    a) Set up the breach in diminution or extinction of the price

    b) Only reject the goods in every case

    c) Claim ownership of the seller's other goods

    d) Exercise stoppage in transit against the seller

21. A buyer becomes entitled to interest on a refund of the price under circumstances recognised by the Sale of Goods Act. The rate of interest may be:

    a) Fixed at 24% in every case

    b) Determined by the court at such rate as it considers fit

    c) Fixed only by the seller

    d) Fixed only by the buyer

22. Under the Sale of Goods Act, an implied right or liability may be excluded or varied by:

    a) Express agreement, course of dealing, or binding usage

    b) Oral statement of any stranger

    c) Newspaper advertisement alone

    d) A buyer's unilateral decision

23. Whether a particular period constitutes a "reasonable time" under the Sale of Goods Act is:

    a) Always exactly 30 days

    b) Always exactly 90 days

    c) A question of fact

    d) Determined only by the seller

24. In an auction sale, the sale of goods is generally complete when:

    a) The first bid is made

    b) The highest bidder enters the auction hall

    c) The auctioneer announces the completion by the customary method, such as the fall of the hammer

    d) The seller receives the buyer's income-tax details

25. A company wants to communicate a detailed change in its employee reimbursement policy. The information contains several conditions, dates and procedures that employees may need to refer to later. Which medium would be most appropriate?

    a) Informal conversation during lunch

    b) Formal written communication

    c) Telephone conversation

    d) Verbal announcement without any written record

26. A manager is speaking to an employee about a sensitive performance issue. Instead of discussing it in front of the entire team, the manager arranges a private meeting. Which factor in choosing a communication medium is most clearly reflected?

    a) Confidentiality of the message

    b) Geographical distance

    c) Volume of information

    d) Speed of transmission

27. A company wants to explain a newly introduced product to potential customers. The communication contains product features, photographs, price information and details of how the product can be used. Which communication tool would be most suitable for presenting this information in an attractive and organised manner?

    a) Brochure

    b) Internal memo

    c) Notice of meeting

    d) Minutes of meeting

28. A company discovers that a statement about its product published in an earlier advertisement is factually incorrect. It issues a formal communication clarifying the error and providing the correct information to the public. This communication is primarily intended to:

    a) Correct previously communicated information

    b) Establish an informal communication network

    c) Replace internal employee communication

    d) Encourage employees to use the grapevine

29. During a negotiation, a salesperson deliberately leaves a short pause after making an important proposal. The other party also remains silent for a few seconds before responding. In this situation, silence can best be understood as:

    a) An absence of communication

    b) A possible communication cue whose meaning depends on the context

    c) A physical barrier to communication

    d) A form of written communication

30. A company has employees working in different cities. Management wants to conduct a training session where employees can see the trainer, hear the explanation, and ask questions without travelling to the company's head office. Which medium is most appropriate?

    a) Video conferencing

    b) Printed circular

    c) Notice board

    d) Postal correspondence

Answer:

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

Topic

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)

FUNDAMENTALS OF FINANCIAL AND COST ACCOUNTING

1. In consignment, ownership of goods remains with the:
   A) Consignee
   B) Consignor
   C) Customer
   D) Transporter
2. Goods sent on consignment are generally recorded in the books of the consignor as:
   A) Sales
   B) Purchases
   C) Consignment
   D) Fixed assets
3. Which of the following is normally debited to the Consignment Account?
   A) Sales
   B) Commission received
   C) Expenses incurred by consignor
   D) Profit transferred
4. If del-credere commission is allowed, bad debts arising from credit sales are generally borne by the:
   A) Consignor
   B) Consignee
   C) Customer
   D) Bank
5. Normal loss in consignment is:
   A) Valued separately
   B) Not valued separately
   C) Treated as abnormal loss
   D) Always insured
6. The unsold goods lying with the consignee at the end of the accounting period are called:
   A) Closing stock
   B) Consignment stock
   C) Finished goods
   D) Work-in-progress
7. Profit or loss on consignment is ultimately transferred to:
   A) Capital Account
   B) Profit and Loss Account
   C) Cash Account
   D) Consignee's Account
8. A joint venture is generally:
   A) Permanent
   B) Temporary
   C) Perpetual
   D) Incorporated
9. The relationship between co-venturers is similar to that between:
   A) Debtor and creditor
   B) Partners
   C) Employer and employee
   D) Banker and customer
10. Goods supplied by a co-venturer for the joint venture are generally:
    A) Credited to Joint Venture Account
    B) Debited to Joint Venture Account
    C) Ignored
    D) Credited to Sales Account
11. Expenses incurred by a co-venturer on behalf of the joint venture are:
    A) Debited to Joint Venture Account
    B) Credited to Joint Venture Account
    C) Debited to Capital Account only
    D) Ignored
12. Sales made by a co-venturer on behalf of the venture are generally:
    A) Debited to Joint Venture Account
    B) Credited to Joint Venture Account
    C) Debited to Purchases Account
    D) Ignored
13. If one co-venturer takes over unsold goods, the Joint Venture Account is generally:
    A) Debited
    B) Credited
    C) Closed without entry
    D) Transferred to Cash Account
14. If separate books are maintained for a joint venture, the account recording money received and paid is:
    A) Joint Bank Account
    B) Joint Venture Account
    C) Capital Account
    D) Sales Account
15. A joint venture differs from a partnership mainly because a joint venture is generally:
    A) For a specific and temporary purpose
    B) Always registered
    C) Always incorporated
    D) Without profit motive
16. Memorandum Joint Venture Account is prepared when:
    A) Separate books are maintained
    B) Each co-venturer records all transactions independently

C) No transactions occur
D) Only cash transactions occur

17. Under the memorandum method, each co-venturer generally records:
A) Only his own transactions
B) All transactions in full
C) No transactions
D) Only purchases

18. The person to whom the amount of the bill is payable is called the:
A) Payee
B) Drawer
C) Drawee
D) Acceptor

19. An accommodation bill is drawn primarily to:
A) Finance a genuine sale
B) Provide financial accommodation
C) Record cash sales
D) Pay wages

20. When a bill is endorsed, the rights in the bill are transferred to the:
A) Drawer
B) Drawee
C) Endorsee
D) Acceptor

21. When a bill is dishonoured, the liability to pay the bill generally falls back upon the:
A) Drawee only
B) Drawer/other liable parties according to the circumstances
C) Bank only
D) Notary only

22. The difference between sales and total cost is:
A) Contribution
B) Gross profit
C) Net profit
D) Prime cost

23. Under FIFO, materials issued are priced at:
A) Latest purchase price
B) Earliest purchase price
C) Average selling price
D) Standard price only

24. ABC analysis classifies inventory primarily according to:
A) Physical size
B) Annual consumption value
C) Weight
D) Colour

25. Time booking refers to:
A) Recording the time spent by workers on specific jobs or activities
B) Recording attendance only
C) Recording material purchases
D) Recording sales

26. The process of assigning overheads to cost centres is called:
A) Absorption
B) Allocation
C) Apportionment
D) Reconciliation

27. Overhead absorption means:
A) Distribution of overheads among cost centres
B) Charging overheads to units of production or cost units
C) Eliminating overheads
D) Calculating direct costs

28. Overhead is:
A) Direct cost of a product
B) Aggregate of indirect costs
C) Selling price
D) Profit

29. Overtime premium paid due to a specific customer's urgent order is generally treated as:
A) Direct labour cost
B) Direct material cost
C) Selling overhead
D) Administrative overhead

30. Cost of sales is calculated as:
A) Cost of production+Selling and distribution overhead
B) Prime cost + Profit
C) Factory cost – Administration cost
D) Sales – Gross profit

Answer:

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

Topic

Fundamentals of Business Mathematics and Statistics-

Module 2: Algebra

Module 7: Probability

FOUNDATION

Paper-3

Fundamentals of Business Mathematics and Statistics (FBMS)

FUNDAMENTALS OF BUSINESS MATHEMATICS AND STATISTICS

In this issue, we will carry out MCQs on Algebra and Probability--Refer to Module 2 and Module 7 of the study guide.

1. If $\log_2 x = 5$, then the value of x is:

(a) 10

(b) 25

(c) 32

(d) 64

2. If $\log_p 81 = 4$, where $p > 0$, $p \neq 1$, then p is:

(a) 3

(b) 9

(c) 27

(d) 81

3. The roots of the quadratic equation $x^2 - 11x + 18 = 0$ are

(a) 2 and 6

(b) 3 and 4

(c) -3 and -4

(d) 9 and 2

4. For the quadratic equation $2x^2 + 5x + 3 = 0$ The sum of its roots is:

(a) $-5/2$

(b) $5/2$

(c) $-3/2$

(d) $3/2$

5. The equation $x^2 - 6x + k = 0$ has equal roots when k is:

(a) 6

(b) 12

(c) 9

(d) 18

6. If one root of the equation $x^2 - 9x + 20 = 0$ is 4, the other root is:

(a) 3

(b) 5

(c) 6

(d) 8

7. The nature of the roots of $3x^2 - 4x + 5 = 0$ is:

(a) Two distinct real roots

(b) Two equal real roots

(c) One positive and one negative real root

(d) No real roots

8. If the roots of $x^2 - 10x + 21 = 0$ are α and β, then $\alpha^2 + \beta^2$ is

(a) 58

(b) 42

(c) 79

(d) 100

9. According to De Morgan's Law, the complement of $A \cup B$:

(a) $A' \cup B'$

(b) $A' \cap B'$

(c) $A \cap B$

(d) $A \cap B'$

10. Simplify: $(2^5 * 2^3)/2^4$

(a) 8

(b) 12

(c) 16

(d) 32

11. If $x^{2/3} = 16$, then x, assuming $x > 0$, is:

(a) 32

(b) 64

(c) 81

(d) 256

12. If $\log_3(x+1) + \log_3(x-1) = 2$, the value of x is

(a) $\sqrt{10}$

(b) 2

(c) 3

(d) 10

13. Two dice are thrown together. The probability that 'the event the difference of numbers shown is 2' is

(a) 2/9

(b) 5/9

(c) 4/9

(d) 7/9

14. Two dice are thrown together. The probability of the event that the sum of the numbers shown is greater than 5 is

(a) 13/18

(b) 15/18

(c) 1

(d) None

15. A card is drawn from a well-shuffled pack of playing cards. The probability that it is a king is

(a) 1/13

(b) 1/4

(c) 4/13

(d) None

16. If a card is drawn at random from a pack of 52 cards, what is the chance of getting a Spade or an ace?

(a) 4/13

(b) 5/13

(c) 0.25

(d) 0.20

17. The probability of drawing a black ball from a bag containing 8 white and 5 black balls –

(a) 5/13

(b) 8/13

(c) 1/2

(d) 1

18. A bag contains 10 red and 10 green balls. A ball is drawn from it. The probability that it will be green is

(a) 1/10

(b) 1/3

(c) 1/2

(d) None of these

19. The probability that A speaks the truth is 4/5, while the probability for B is 3/4. The probability that they contract each other when asked to speak on a fact is

(a) 3/20

(b) 1/5

(c) 7/20

(d) 4/5

20. A problem in probability was given to three CA students, A, B and C, whose chances of solving it are 1/3, 1/5 and 1/2, respectively. What is the probability that the problem would be solved?

(a) 4/15

(b) 7/8

(c) 8/15

(d) 11/15

21. If the overall percentage of success in an exam is 60, what is the probability that out of a group of 4 students, at least one has passed?

(a) 0.6525

(b) 0.9744

(c) 0.8704

(d) 0.0256

22. If the probability of a house A winning a race is 1/6 and the probability of a horse B winning the same race is 1/4, what is the probability that one of the horses will win

(a) 5/12

(b) 7/12

(c) 1/12

(d) None

23. A man can kill a bird once in five shots. The probability that a bird is not killed is

(a) 4/5

(b) 1/5

(c) 3/5

(d) 2/5

24. What is the probability that a leap year selected at random would contain 53 Saturdays?

(a) 1/7

(b) 2/7

(c) 1/12

(d) 1/4

25. What is the probability that 4 children selected at random would have different birthdays?

(a) $364^* 363^* 362/(365)^3$

(b) $6 *5^* 4/(7)^3$

(c) 1/365

(d) $1/7 \times 3$

26. Bayes' Theorem is useful in

(a) Revising probability estimates

(b) Computing conditional probabilities

(c) Computing Sequential probabilities

(d) None of these

27. Let A & B are two events with P (A) = 2/3, P (B) = 1/4 and P (A∩B) = 1/12 then P (A/B) is equal to

(a) 2/3

(b) 1/3

(c) 1/8

(d) 7/8

28. In connection with a random experiment, it is found that P (A) = 2/3, P (B) = 3/5 and P (A ∪ B) = 5/6. Find P (B/A).

(a) 13/18

(b) 1/2

(c) 13/20

(d) 5/18

29. If P (A∩B) = 0.10 and P ($\bar{B}$) = 0.80, then P (A/B) is

(a) 0.25

(b) 0.40

(c) 0.50

(d) 0.75

30. A and B are two events such that P (A) = 1/3, P (B) =1/4, P (A+B) =1/2, then P (B/A) is equal to

(a) 1/4

(b) 1/3

(c) 1/2

(d) None of these

Answer:

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

Suggestions:

The study guide is to be studied thoroughly. Supplementary readings could be made from other resources. In this issue, MCQs are based on basic concepts taught in the respective modules/submodules of the study guide. Students should try to solve individual questions with expertise developed after studying the guidebook to understand the correct answer to each question. Formulas used here are all covered in the study guide.

Best Wishes.

Topic

Fundamentals of Business Economics -

Module 2 : Money and Banking

Fundamentals of Management -

Module 5: Fundamentals of Management

FOUNDATION

Paper-4

Fundamentals of Business Economics and Management (FBEM)

FUNDAMENTALS OF BUSINESS ECONOMICS AND MANAGEMENT

Let us start our mock test.

I. Choose the correct answer:

1. Who was the proponent of the scarcity definition of economics?
   A. Samuelson
   B. Robbins
   C. Pigou
   D. Marshall
2. Who invented "Multiplier theory"?
   A. Schumpeter
   B. Samuelson
   C. Keynes
   D. None of the above
3. If the level of expenditure on a commodity remains the same, even if the price of it falls, the price elasticity of demand will be
   A. Greater than unity
   B. Less than unity
   C. Equal to unity
   D. None of the above
4. A point to the left of the midpoint of a linear demand curve will have a 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 the 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. The 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 the AVC curve is rising
    A. The SMC curve will also be rising
    B. SMC curve will be falling
    C. SMC curve will be parallel to the x-axis
    D. Nothing can be predicted
12. Profit will be maximum when
    A. AR=MR
    B. The MR curve cuts the AR curve from below
    C. Both A and B
    D. None of the above
13. Internal economies of scale occur 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 occur 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 maximisation
    B. Revenue maximisation
    C. Profit maximisation
    D. None of the above
16. Product differentiation is another name for
    A. Monopoly
    B. Discriminating monopoly
    C. Monopolistic competition
    D. None of the above
17. A 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 that 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. The bank rate is increased
    B. Govt. bond is sold in the open market
    C. CRR is increased
    D. All three of the 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 the decision-making process is
    A. Selection of an alternative
    B. Developing alternative
    C. Evaluation of alternative
    D. Implementation and follow-up of the 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. Classroom training
    B. Apprenticeship training
    C. Internship training
    D. Sensitivity training
26. The 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 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, and 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. The 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
B	C	C	A	B	C	B	A	C	A	D	C	A	A	C
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
C	A	B	C	D	C	D	A	B	D	A	A	B	D	B

So friends,

In the last month, I asked you to go through the "straight line" chapter of coordinate geometry. I hope all of you have followed my instructions. 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 solving the test paper. .

Wish you all the best!!!

CMA INTERMEDIATE COURSE

Syllabus 2022

Topic

Module 11: The Code on Wages, 2019

INTERMEDIATE

Group I - Paper-5

Business Laws and Ethics (BLE)

Industrial Relations and the Changing Employer – Employee Relationship in India

Industrial relations refers to the relationships between employers, employees, and their organisations in the workplace. A healthy relationship between employers and employees is important for the smooth functioning of an organisation. When employees feel that they are treated fairly and employers feel that their concerns are properly addressed, the workplace can function with greater cooperation and stability.

In India, industrial relations have developed through various labour laws. These laws provide a framework for trade unions, collective bargaining, settlement of disputes, working conditions and protection of employees. Important laws in this area include the Trade Unions Act, 1926, the Industrial Disputes Act, 1947, and the Industrial Employment (Standing Orders) Act, 1946.

Role of Trade Unions

A trade union is an organisation formed by workers to protect and promote their interests. Individual workers may find it difficult to negotiate with an employer on matters such as wages, working conditions, working hours and other employment-related issues. A trade union provides workers with a collective voice.

The Trade Unions Act, 1926, provides for the registration of trade unions and defines their legal position. Registration gives a trade union a recognised legal status and provides certain rights and protections under the Act.

Trade unions may raise issues relating to wages, working conditions, safety, leave, job security and other matters affecting employees. They may also represent workers before the employer in the event of a dispute.

For example, if workers believe that their working hours have been increased without proper consideration, they may approach their trade union. The union can discuss the matter with management and try to arrive at a mutually acceptable solution.

Collective Bargaining

Collective bargaining is an important part of industrial relations. It means negotiations between the employer and employees, generally represented by their trade union, regarding employment-related matters.

Instead of every employee negotiating separately, employees can negotiate collectively. Matters such as wages, working hours, leave, benefits, and working conditions may be discussed.

Collective bargaining does not mean that every demand made by employees has to be accepted. The purpose is to provide a structured process through which both sides can present their views and try to reach an agreement.

For example, if employees seek an increase in wages, the trade union may place the demand before management. Management may consider the financial position of the organisation, productivity and other relevant factors. The two sides may then negotiate and arrive at an agreement.

Collective bargaining can therefore reduce misunderstandings and provide a peaceful method of dealing with employment-related issues.

Industrial Disputes

Disputes may arise when employers and employees have different views on matters relating to employment. These may relate to wages, dismissal, retrenchment, working conditions, disciplinary action or other employment matters.

The Industrial Disputes Act, 1947, was enacted to provide a framework for the investigation and settlement of industrial disputes and to promote industrial peace.

The Act provides mechanisms for dealing with disputes through authorities such as conciliation officers, labour courts and industrial tribunals, depending on the nature of the matter.

Conciliation is particularly important because it aims to bring the parties together and help them reach a settlement. Instead of immediately moving towards prolonged conflict, the parties get an opportunity to discuss the matter and find a solution.

For example, if a group of employees has a dispute with management regarding service conditions, a conciliation process may help both sides discuss their concerns and arrive at a settlement.

Strikes and Lockouts

A strike is a collective stoppage of work by employees. A lockout, on the other hand, involves the temporary closing of a place of employment or suspension of work by the employer in the circumstances covered by law.

Strikes and lockouts can seriously affect production and employees' earnings. They can also affect customers and the overall functioning of an organisation. Therefore, labour law places conditions and restrictions on strikes and lockouts in specified situations.

The purpose of these provisions is not simply to prevent disagreement. It is to encourage the parties to use lawful and peaceful methods for resolving disputes.

Standing Orders and Discipline

Clear workplace rules are important for maintaining discipline and consistency. The Industrial Employment

(Standing Orders) Act, 1946, deals with the requirement of defining and making known the conditions of employment in certain industrial establishments.

Standing orders may deal with matters such as classification of workers, attendance, working hours, leave, termination, suspension, misconduct and disciplinary action.

When employees clearly know the rules applicable to them, there is less scope for confusion. At the same time, employers also have a clear framework within which disciplinary matters can be handled.

For example, if an employee is absent without permission, the applicable standing orders may specify the procedure to be followed. This provides greater clarity to both the employee and the employer.

Grievance Handling

Not every workplace problem becomes an industrial dispute. Employees may have smaller grievances relating to salary, leave, work allocation, supervision, workplace facilities or communication.

A good organisation should provide employees with a proper channel for raising such grievances. Early resolution of grievances can prevent a small problem from becoming a larger dispute.

For example, an employee who believes that leave has been incorrectly deducted should have an opportunity to approach the appropriate authority and explain the matter. If the mistake is genuine, it can be corrected without creating unnecessary conflict.

This shows that industrial relations are not limited to major disputes. Day-to-day communication between employees and management is equally important.

Changing Employer–Employee Relationship

The employer–employee relationship has changed considerably over time. Earlier, the relationship was often viewed mainly in terms of wages, working hours and discipline. Today, employees also expect opportunities for learning, career development, fair treatment, workplace safety and a respectful working environment.

Employers also expect employees to contribute through productivity, innovation, responsibility and adaptability.

Technology has further changed the workplace. Automation, digital systems and new methods of working have affected the nature of several jobs. Employees may need to acquire new skills, while employers may need to provide training and support during technological changes.

For example, when an organisation introduces new accounting software, employees may initially find it difficult to adjust. Providing proper training can help employees understand the new system and can also help the organisation achieve the expected benefits from the technology.

Importance of Communication

Communication is one of the most important factors in maintaining good industrial relations. Employees should know about important workplace policies and changes that affect them. At the same time, management should have an opportunity to understand employee concerns.

Poor communication can create rumours, misunderstandings, and distrust. Clear communication can help both sides understand the reasons behind workplace decisions.

Trade unions can also play an important role in communication by representing employees and communicating their concerns to management.

Employee Participation

Modern organisations increasingly recognise the importance of employee participation. Employees who are involved in discussions relating to their work may feel more responsible towards the organisation.

Participation does not necessarily mean that employees will take every management decision. It means that their views can be considered in matters that directly affect their work.

For example, before changing work schedules, management may discuss practical difficulties with employees. Such a discussion may help the organisation identify problems and find workable solutions.

Industrial Peace and Productivity

Industrial peace is important for both employees and employers. Frequent disputes, strikes and conflicts can affect production and business operations. Employees may also suffer loss of wages or uncertainty.

A peaceful workplace does not mean that employees should not raise their concerns. Employees have the right to raise genuine issues through lawful means. The objective should be to resolve disagreements through proper procedures and negotiations.

Good industrial relations can therefore support both employee welfare and organisational productivity.

Conclusion

Industrial relations are an important part of labour welfare and workplace management. Laws relating to trade unions, industrial disputes and standing orders provide a legal framework for dealing with the relationship between employers and employees.

However, good industrial relations depend on more than

legal provisions. Mutual respect, proper communication, collective bargaining, fair treatment and timely grievance handling are also important.

The employer–employee relationship is continuing to change because of technology, changing work practices and changing expectations of employees. Employers need employees who are skilled, responsible and adaptable. Employees, in turn, expect fair treatment, job security, opportunities to develop and a safe and respectful workplace.

Therefore, the future of industrial relations lies in maintaining a balance between the interests of employees and the legitimate needs of employers. A workplace where both sides communicate openly and use lawful mechanisms to resolve differences can contribute to industrial peace, employee welfare and sustainable organisational growth.

From Labour Protection to Social Security: The Changing Philosophy of Labour Welfare in India

Labour laws in India have developed with the changing needs of workers and industries. In the early stages of industrial development, the main concern was to protect workers from unsafe working conditions, excessive working hours and exploitation. With the growth of organised employment, the scope of labour welfare expanded. It came to include not only safe working conditions but also fair wages, medical care, protection during sickness or employment injury, retirement savings and financial support after long years of service.

The Factories Act, 1948, the Code on Wages, 2019, the Employees' Provident Funds and Miscellaneous Provisions Act, 1952, the Employees' State Insurance Act, 1948, and the Payment of Gratuity Act, 1972 show this gradual development of labour welfare in India. Each law deals with a different area, but all of them have a common purpose. They seek to provide workers with protection during different stages and situations of their working lives.

The importance of these laws can therefore be understood better when they are viewed together rather than only as separate pieces of legislation.

From Workplace Safety to Worker Welfare

The first important concern of labour legislation was the safety and health of workers.

Industrial work often involves machinery, physical labour, chemicals and other workplace risks. Workers may also be affected by poor ventilation, inadequate sanitation, long working hours and unsafe working conditions. The Factories Act, 1948, was enacted to regulate these conditions and to protect the health, safety and welfare of workers employed in factories.

The Act contains provisions relating to cleanliness, ventilation, lighting, drinking water, sanitation, safety of machinery, fire precautions, welfare facilities, working hours and annual leave. These provisions show that the law does not look at a worker only as a person who performs a particular job. It also recognises the worker's need for a safe and healthy working environment. The reference material describes the Act as an attempt to humanise industrial work and maintain a balance between industrial production and worker welfare.

This idea is still important. Production is necessary for economic growth, but production should not be achieved by ignoring the health and safety of workers.

The Importance of Wage Protection

A worker's immediate financial security depends mainly on receiving wages for the work performed.

The Code on Wages, 2019, brought together provisions relating to wages under a common legal framework. Its importance is not limited to the payment of wages. Wages affect the daily life of workers and their families. They are used for food, housing, education, healthcare and other household needs.

Regular and lawful payment of wages, therefore, forms an important part of labour welfare.

There is also a connection between wages and long-term financial security. A worker who receives proper wages has a greater ability to save and participate in social-security arrangements. On the other hand, irregular or inadequate payment can make a worker more vulnerable to financial difficulties.

Thus, wage protection forms the basic financial foundation upon which other forms of social security can operate.

Social Security Against Health and Employment Risks

Employment does not protect a worker from illness, injury or other personal difficulties. A worker may become sick and be unable to attend work. A woman employee may require protection during maternity. A worker may suffer an employment injury or permanent disability. In some cases, the death of a worker may affect the entire family.

The Employees' State Insurance Act, 1948, provides a system of social insurance for specified employment-related contingencies. It combines medical care with cash benefits for eligible insured persons and their dependents.

The importance of such a system can be understood from

a simple example. If a worker becomes ill and cannot work for a period of time, the worker may lose income at the very time when medical expenses increase. A social insurance system helps reduce this financial burden.

Similarly, an employment injury can affect a worker's ability to earn for a short period or for the rest of the worker's working life. The ESI framework provides protection in such situations according to the conditions prescribed under the Act and the applicable scheme.

Therefore, social insurance provides protection against risks that a worker may not be able to manage alone.

Long-Term Financial Security

Not all employment-related risks arise suddenly. Retirement is a predictable stage of working life, but it can create serious financial problems if a person has no savings.

The Employees' Provident Funds and Miscellaneous Provisions Act, 1952 provides a framework for provident fund, pension and deposit-linked insurance schemes. The basic idea is to build financial protection during employment so that the employee has support in later years and in other specified circumstances.

Provident fund savings are particularly important because they encourage employees to accumulate funds during their working years. The pension framework provides another form of long-term protection, while the insurance scheme provides support in cases covered by the scheme.

The EPF system, therefore, deals mainly with long-term financial security, whereas the ESI system deals with specified health and employment-related contingencies.

Security After Long Service

Another important aspect of labour welfare is recognition of long service.

The Payment of Gratuity Act, 1972, provides for gratuity to eligible employees on termination of employment after the required period of continuous service, subject to the conditions provided under the Act. The requirement of continuous service and the circumstances in which gratuity becomes payable show that the law gives importance to the employee's period of service.

Gratuity is therefore not simply an additional payment made voluntarily by an employer. It is a statutory benefit when the conditions under the Act are satisfied. The reference material also explains that the Act treats gratuity as a form of financial security after long service.

The Act also provides protection in cases where the employee dies or suffers disablement, because the usual five-year requirement does not apply in those cases. This shows that labour welfare legislation also considers the effect of employment on the employee's family.

Labour Welfare as a System of Protection

The different labour laws can therefore be understood as providing different forms of protection.

- The Factories Act deals mainly with the conditions in which work is performed.
- The Code on Wages deals with the legal framework relating to wages.
- The Employees' State Insurance Act provides protection against specified contingencies such as sickness, maternity, employment injury and related situations.
- The Employees' Provident Funds and Miscellaneous Provisions Act provides long-term financial protection through provident fund, pension and insurance schemes.
- The Payment of Gratuity Act provides a statutory terminal benefit to eligible employees who satisfy the conditions relating to continuous service.

These areas are different, but they are connected by one basic idea. A worker should not be left without protection when faced with a situation that affects the ability to earn or maintain financial security.

The Role of the Employer

Labour welfare cannot work effectively without proper compliance by employers.

Employers are responsible for following the applicable labour laws, maintaining proper records, making statutory payments or contributions where required, providing the required workplace facilities and complying with directions of the relevant authorities.

The responsibility is not limited to avoiding penalties. Proper compliance helps employees receive the benefits that the law intends to provide.

For example, the gratuity material points out that delayed payment and lack of awareness can create practical difficulties for employees. This shows the difference between having a legal right and being able to actually receive that right.

Employers, therefore, have an important role in making labour welfare effective at the workplace.

The Problem of Informal Employment

One of the major challenges for labour welfare in India is the large number of workers engaged in informal or less stable forms of employment.

Traditional employment was often based on a clear relationship between one employer and one employee. Today, workers may be engaged through contractors,

temporary arrangements or other forms of employment.

This can make it difficult to maintain continuous employment records and ensure that workers receive all applicable benefits.

Another problem is a lack of awareness. A worker who does not know about a statutory benefit may not know when or how to claim it. The reference material on gratuity identifies awareness gaps, non-compliance, disputes relating to continuity of service and delays in enforcement as practical challenges.

Therefore, effective labour welfare requires both legal protection and awareness about those rights.

Role of Technology

Technology can make labour administration easier.

Digital records can help employers and authorities maintain information about employees, wages, contributions and service periods. Online systems can make it easier to submit information, track claims and communicate with employees.

The EPF system, for example, has introduced digital facilities such as the Universal Account Number and online services. These developments can make it easier for employees to manage their Social Security records.

However, technology should not become a new difficulty for workers. Employees who are not comfortable with digital systems may still require assistance. A good digital system should therefore be simple, accessible and supported by proper grievance mechanisms.

Balancing Worker Welfare and Industrial Growth

Labour welfare and industrial growth should not be treated as completely opposite objectives.

Employers need productivity and efficiency to remain competitive. Workers need safe conditions, fair wages and financial protection. A stable workplace requires both.

A worker who is healthy, fairly treated and financially protected can contribute more effectively to the organisation. At the same time, employers need a clear and workable system of labour compliance.

The objective of labour legislation is therefore to create reasonable protection for workers while allowing industries to function effectively.

Labour Welfare throughout the Working Life

The different labour laws can also be understood from the point of view of a worker's working life.

At the beginning of employment, the worker needs proper wages and safe working conditions. During employment, the worker may require protection against sickness, maternity or employment injury. Over the years, workers have needed to build financial security for retirement. At the end of employment, the worker may become entitled to terminal benefits such as gratuity, subject to the applicable law.

This shows why labour welfare is not limited to one particular stage of employment.

It is a continuing process of protecting the worker against different risks and providing financial and social support when required.

Conclusion

The development of labour welfare legislation in India shows a gradual movement from basic protection at the workplace towards wider social and financial security.

These laws should not be seen only as rules that employers must follow. They represent an effort to protect workers from situations that can seriously affect their income, health and family security.

The future of labour welfare will require the existing principles to be applied effectively to changing forms of employment. Workers may change employers more frequently, technology may change the nature of work, and new employment arrangements may develop. The basic need for fair treatment, safe work, financial security and dignity, however, will remain.

The real success of labour welfare will therefore depend not only on the existence of laws but also on proper implementation, awareness among workers, responsible compliance by employers and easy access to the benefits provided by law.

Topic

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 categorised 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 capitalises the lease by recognising 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 capitalised).

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 and Instalment Sale Transactions

Hire Purchase and Instalment Sale Transactions are methods of purchasing goods or assets where the payment is made in instalments 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 instalment is paid. The ownership (title) of the asset transfers to the buyer only after the payment of all instalments. 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 instalment 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 instalment payment is split into two parts: principal repayment and interest.

Journal Entries:

1. **On Purchase of Asset (initial recognition):**
   - Debit: Asset Account
   - Credit: Hire Vendor Account (for the cost of the asset)
2. **For Interest Payment:**
   - Debit: Interest Expense Account
   - Credit: Hire Vendor Account
3. **For Instalment Payment:**
   - Debit: Hire Vendor Account
   - 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 instalments. 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 instalments.

Accounting Treatment in Instalment Sale:

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

Journal Entries:

1. **On Purchase of Asset:**
   - Debit: Asset Account
   - Credit: Instalment Vendor Account
2. **For Interest Payment:**
   - Debit: Interest Expense Account
   - Credit: Instalment Vendor Account
3. **For Instalment Payment:**
   - Debit: Instalment Vendor Account
   - Credit: Cash/Bank Account

Key Differences Between Hire Purchase and Instalment Sale

Aspect	Hire Purchase	Instalment Sale
Ownership Transfer	After the last instalment is paid.	Immediately upon signing the agreement.
Seller's Rights in Default	Can repossess the asset.	Cannot repossess; may sue for damages.
Interest Treatment	Interest on the outstanding balance.	Interest on the outstanding balance.
Legal Rights	Buyer has possession but not ownership.	The 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 recognised 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 recognises both the asset and liability on the balance sheet, whereas an operating lease only recognises 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 recognised 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 instalment 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 instalment 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 instalments
    d) Re-negotiating the contract

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

Topic

Module 2: Heads of Income

INTERMEDIATE

Group I - Paper-7A

Direct Taxation (DT)

Taxation of Capital Gains

Assessment Year 2026-27

Many students just memorise tax rates like 20%, 12.5%, or 0% without understanding the actual rules. This is where students usually make mistakes in examination problems. This article explains the tax on Short-Term Capital Gains (STCG) and Long-Term Capital Gains (LTCG) in simple words, along with key exceptions and examples.

Before checking the tax rates, you need to know one thing: all capital gains are not taxed the same way. The Income Tax Act divides them into different categories. This division mainly depends on two things:

1. Was the Securities Transaction Tax (STT) paid?
2. Is the asset an equity share or an equity fund?

Therefore, before applying any rate, first identify the relevant category of capital gain.

Short-Term Capital Gains (STCG)

1. Covered under Section 111A — Taxed at 20%

This is the STCG arising from the transfer of an equity share in a company, a unit of an equity-oriented fund, or a unit of a business trust, held for not more than 12 months, on which STT has been charged.

Two conditions must be simultaneously satisfied for Section 111A to apply:

- Nature of asset: A short-term capital asset being equity shares, units of an equity-oriented fund, or units of a business trust.
- STT paid: The transfer must be chargeable to STT.

Where these conditions are met, the gain is taxed at a flat 20%, plus surcharge (if applicable) and Health & Education Cess — regardless of the assessee's slab or the nature of the assessee (individual, firm, company, and so on all fall within "all assessees").

Taxpoint

A relaxation applies to transactions undertaken in foreign currency on a recognised stock exchange in an International Financial Services Centre (IFSC) — the concessional 20% rate applies even though STT is not levied there, since the policy intent is to make IFSC transactions attractive rather than penalise a technical STT mismatch.

Illustration 1

Ms Rekha, a resident individual aged 40, has other taxable income of ₹ 3,20,000 and STCG under Section 111A of ₹ 1,50,000 for A.Y. 2026-27 (new regime; basic exemption ₹ 4,00,000).

Particulars	Other Income (₹)	STCG u/s 111A (₹)
Income	3,20,000	1,50,000
Basic exemption absorbed (4,00,000 − 3,20,000)	3,20,000	80,000
Balance taxable	Nil	70,000
Rate	Slab (Nil)	20%
Tax	Nil	14,000

Here, the unabsorbed basic exemption of ₹ 80,000 is first set off against "other income," and the shortfall is then allowed against the STCG before applying the 20% rate — a benefit specifically extended to resident individuals and resident HUFs.

2. Any Other STCG — Taxed at the Applicable / Slab Rate

Where the asset sold is not equity shares/units on which STT has been paid — for instance, gold, a debt mutual fund unit, an unlisted share, or immovable property held for the short term — the resulting STCG receives no concessional treatment. It simply merges into the assessee's total income and is taxed at the otherwise applicable rate — slab rates for an individual or HUF, flat rate for a company or firm. Because it merges with normal income, the usual reliefs — Chapter VI-A deductions and rebate under Section 87A — remain fully available against it, unlike the special-rate STCG under Section 111A.

Long-Term Capital Gains (LTCG)

1. Covered under Section 112A — 0% up to ₹1,25,000, then 12.5%

Section 112A mirrors 111A but for the long-term holding of the same class of assets — equity shares (including bonus shares), units of an equity-oriented fund, and units of a business trust — where STT has been paid on acquisition and transfer of the share (subject to the few notified exceptions), or on transfer alone in the case of fund/business trust units.

The tax treatment is as follows:

LTCG under Section 112A	Rate
Up to ₹1,25,000 in aggregate during the year	Nil
Amount in excess of ₹ 1,25,000	12.5% (+ surcharge & cess)

Taxpoint

- Do not treat ₹ 1,25,000 as an additional basic exemption limit. It is the threshold applicable to LTCG covered by section 112A.
- Rebate under Section 87A is not available against tax under Section 112A, irrespective of the tax regime chosen

Grandfathering Rule

For shares/units acquired on or before 31 January 2018, the cost of acquisition is the higher of actual cost, or the lower of (a) fair market value as on 31-01-2018 and (b) full value of consideration on transfer. This "step-up with a cap" protects gains accrued before 2018, while blocking artificial losses.

Illustration 2

Mr Arjun, resident, aged 35, has other income of ₹ 2,50,000 and LTCG under Section 112A of ₹ 3,00,000.

Particulars	LTCG u/s 112A (₹)	Other Income (₹)	Total (₹)
Taxable income	3,00,000	2,50,000	5,50,000
Basic exemption absorbed (4,00,000−2,50,000)	1,50,000	2,50,000	4,00,000
Balance	1,50,000	Nil	1,50,000
Less: ₹1,25,000 exemption u/s 112A	1,25,000	—	—
Taxable LTCG	25,000	—	—
Tax @ 12.5%	3,125	Nil	3,125

2. Any Other LTCG — Taxed at 12.5% under Section 112

All long-term capital gains that do not fall within Section 112A (like sale of land, building, unlisted shares, gold, debt instruments, etc.) are taxed under the residuary Section 112 at a flat 12.5% (plus surcharge and cess), computed on the LTCG without any indexation benefit in the general case (the immovable property exception is discussed below).

For a resident individual or resident HUF, the same "shortfall against basic exemption" benefit available for 111A/112A extends here too: if total income minus the LTCG falls below the basic exemption limit, the LTCG is first reduced by that shortfall, and only the balance is taxed at 12.5%. This benefit is not available to non-residents — a non-resident pays 12.5% on the entire LTCG even if total income is otherwise below the exemption threshold.

Taxpoint

No deduction under Chapter VI-A (Sections 80C to 80U) is permissible against LTCG taxed under Section 112 or under Section 112A

The Immovable Property Exception: An Option, Not a Choice of Computation

Where:

- the transferor is a resident individual or resident HUF;
- the asset transferred is land, building, or both (residential, commercial or otherwise);
- the asset was acquired on or before 23 July 2024; and
- it is transferred on or after 23 July 2024,

The assessee gets a choice in computing the tax, not the gain. The long-term capital gain itself is always computed the same way (sale consideration less cost, without indexation). But for arriving at the tax payable, the assessee may choose:

Option	Basis	Rate
Option 1	LTCG computed without indexation	12.5%
Option 2	LTCG computed after allowing indexation benefit (using Cost Inflation Index)	20%

Taxpoint

If the indexed computation under Option 2 throws up a loss, that loss cannot be carried forward, because the "real" gain (computed without indexation) remains positive; the indexed figure is used only to test which option is cheaper, not to redefine the actual gain or loss.

This dual-option mechanism does not extend to gold, unlisted securities, or any asset other than land and building, and is unavailable to non-residents, companies, firms, or LLPs.

Putting It All Together

Students should note the following rules (for resident individuals under the new tax regime):

Nature of Income	Rate of Tax	Benefit of unexhausted Basic Exemption Limit	Availability of Rebate u/s 87A	Deduction u/ch VIA
Lottery income	30%	×	×	×
LTCG covered u/s 112A	Upto ₹ 1,25,000 – 0%, Balance – 12.5%	√	×	×
Other LTCG (Sec 112)	12.5%	√	×	×
STCG covered u/s 111A	20%	√	×	×
Other STCG	Slab	√	√	√
Other Income	Slab	√	√	√

Conclusion

For examination purposes, do not start with the rate. First, identify the asset, holding period, and applicable section. Once these three are clear, the computation becomes straightforward.

Topic

Module 5:
Goods and Services Tax (GST) Laws

INTERMEDIATE

Group I - Paper-7B

Indirect Taxation (IDT)

Input Tax Credit

ITC is what makes GST a value-added tax rather than a cascading one. In the old regime, the Central Government levied excise duty or service tax, and the State Government levied VAT, but the credit of excise duty could never be set off against VAT, and vice versa. The result was "tax on tax," quietly inflating the price of every good and service that changed hands more than once.

GST removed this barrier. Because CGST, SGST/UTGST and IGST all belong to one integrated chain, the tax paid at one stage becomes available as credit at the next. A registered person collects tax on outward supplies, reduces it by the tax already paid on inputs, and deposits only the balance. Input Tax Credit is one of the fundamental features of GST. It ensures that tax is effectively levied on value addition at each stage of the supply chain.

Section 16: Who Can Take Credit, and On What Conditions

Section 16(1) lays the foundation: every registered person is entitled to ITC on any inward supply of goods or services used, or intended to be used, in the course or furtherance of business, subject to conditions and the manner prescribed under Section 49.

The Four Non-Negotiable Conditions — Section 16(2)

A registered person cannot avail ITC unless all four conditions are satisfied simultaneously:

Clause	Condition	What It Means
(a)	Possession of a Document	A valid tax invoice/debit note from a registered supplier, or any other prescribed tax-paying document.
(b)	Receipt of Goods/ Services	Goods or services must actually be received, including the "bill-to-ship-to" situation and the last-lot rule for instalment deliveries.
(c)	Tax Actually Paid	The supplier must have actually paid the tax to the Government either in cash or through admissible ITC, subject to Sec 41.
(d)	Return Furnished	The recipient must have filed the return under Section 39 (GSTR-3B).

Taxpoint — Goods Received in Instalments

Where a consignment arrives in lots, credit can be claimed only after the last lot is received — not lot-by-lot.

Example: An invoice for a consignment sent via five trucks is dated 30 March 2026. Four trucks reach by 30 March, but the fifth arrives only on 2 April 2026. ITC on the entire consignment can be availed only in April 2026, i.e., the month the last truck arrives.

Taxpoint — The 180-Day Payment Rule

If the recipient does not pay the supplier (value plus tax) within 180 days of the invoice date, the ITC already claimed gets added back to the output tax liability along with interest.

The credit is not lost forever. The moment payment is actually made to the supplier, the recipient is entitled to re-avail that very credit.

Taxpoint — Bill-to-Ship-to Transactions

Goods are deemed 'received' by the buyer even though they are physically delivered to a third party on the buyer's instruction, so ITC is not denied merely because the buyer never touched the goods.

Example: H Traders (Maharashtra) sells 50 tables to R Traders (Maharashtra), who instructs H Traders to ship them directly to P Hardwares in Kolkata. R Traders can claim ITC on this purchase, even though the tables never physically reached their premises; it is treated as a 'deemed receipt.'

Taxpoint — Depreciation -vs.- ITC [Pick One]

If depreciation under the Income-tax Act is claimed on the tax component of capital goods, ITC on that same tax component is forever lost.

Example: Mr Vikram buys a laptop for ₹ 1,00,000 + 18% GST (₹ 9,000 CGST + ₹ 9,000 SGST). If he claims depreciation on the full ₹ 1,18,000 (including GST), he forfeits ₹ 18,000 of ITC. Claiming depreciation only on ₹ 1,00,000 keeps the ₹ 18,000 credit intact.

Time Limit to Claim ITC

ITC on any invoice or debit note must be claimed before the earlier of two events:

- 30th November, following the end of the financial year to which the invoice or debit note pertains; or
- The actual date of filing the relevant annual return (GSTR-9) for that year.

Whichever of these two dates arrives first becomes the deadline. This limit, however, does not apply when a person is simply re-availing credit that was earlier reversed for non-payment within 180 days because that credit was always 'earned', only temporarily suspended.

Taxpoint

⊙ Where registration is cancelled and later revoked, the taxpayer still gets a window to claim ITC through the

return filed either by the usual 30 November/annual-return deadline, or within 30 days of the revocation order, whichever is later.

- No ITC can be claimed unless the supplier's invoice details flow through GSTR-1/IFF and get communicated to the recipient in Form GSTR-2B; credit not reflected in GSTR-2B simply cannot be taken.

Section 17: Apportionment When Use Is Mixed Section 17: Apportionment When Use Is Mixed

Not every purchase is used 100% for taxable business purposes. Sections 17(1) and 17(2) deal precisely with this reality by splitting credit rather than allowing or denying it outright.

- Business -vs.- non-business use: Where goods or services are used partly for business and partly for personal or other purposes, ITC is restricted to the portion attributable to business.
- Taxable -vs.- exempt supply: Where goods or services are used partly for taxable supplies (including zero-rated supplies) and partly for exempt supplies, ITC is restricted to the portion attributable to taxable supplies.

Section 17(5): Blocked Credit

Even when all four conditions of Section 16(2) are met, ITC is expressly denied on certain items listed under Section 17(5), commonly called 'blocked credits'. These are typically goods or services with a personal-consumption flavour, or ones the law wants to keep outside the credit chain.

Blocked Item [Sec. 17(5)]	Key Rule & Exceptions
Motor vehicles	For transport of persons (seating ≤ 13, incl. driver) — unless used for further supply, passenger transport, or driver training.
Vessels & aircraft	Blocked unless used for further supply, passenger/goods transport, or navigation/flying training.
Related services	General insurance, servicing, repair & maintenance of the above vehicles/ vessels/aircraft (with matching exceptions).
Employee-benefit supplies	Food & beverages, outdoor catering, beauty treatment, cosmetic/plastic surgery, health & life insurance, club/ fitness membership, leave/home-travel concession — blocked unless it is an obligatory statutory benefit or used to make an identical outward taxable supply.
Works contract services	Blocked for the construction of immovable property (other than plant & machinery), except when it is an input service for further supply of works contract service.
Self-construction	Goods/services received for the construction of immovable property (other than plant & machinery) on one's own account, even if used in business.
Composition levy	Tax paid by a supplier under Section 10 (composition scheme)
Non-resident taxable person	Blocked, except for goods imported by such person.
CSR expenditure	Goods/services used for Corporate Social Responsibility obligations under Section 135, Companies Act, 2013.
Personal consumption	Any goods or services used for personal, non-business consumption.
Loss/theft/ write-off/gifts	Goods lost, stolen, destroyed, written off, or disposed of as gifts or free samples.
Fraud/ suppression tax (Sec. 74)	Tax paid under Section 74 for any period up to FY 2023-24.

Taxpoint — Worked Exception

An event manager hires a caterer and a rent-a-cab operator to run a corporate party for a client. Food and cab services normally fall under blocked credit, but because the event manager is using these inward supplies to make an identical outward taxable supply (event management services that include catering and cab arrangements), ITC becomes available to the event manager.

Conclusion

Input Tax Credit is a fundamental mechanism of GST. For a CMA Inter student, the provisions can be understood through three layers:

- the entitlement under Section 16(1),
- the four conditions under Section 16(2), and
- the exclusion under Section 17.

The students who score well are the ones who treat ITC not as a list to memorise, but as a chain of logic: is the person registered, is the supply for business, are all four conditions met, is any part of it blocked, and has the time limit run out?

Topic

Module 6: Cost Accounting Techniques

INTERMEDIATE

Group I - Paper-8

Cost Accounting (CA)

Standard Costing And Variance Analysis

This Chapter is most important for you, especially for the Intermediate students. All problems on standard cost for working out different Variances, such as material cost variances, labour cost variances, overhead cost variances, sales variances, and sales margin variances, can be solved using a standard format applicable to all variance analysis. Most of you are afraid of this important chapter only because of different formulae for different analyses. But the standard format introduced in this chapter tries to eliminate such difficulties. The calculation of Mix variances is necessary only when there is more than one type of component for producing an article. Standard cost means the standard cost for actual production. Sometimes variances are given, and actual costs or rates are to be found out.

We are aware that it is very difficult to compare and determine the reasons for cost fluctuations through Historical Costing, as it ascertains costs only after they have been incurred. Apart from variations in output or units produced, the reasons for cost fluctuations may be detected through the introduction of standard costing.

Now, we shall know what is Standard, Standard Cost and Standard costing ?

The ward "Standard" is a predetermined measurable quantity set in defined conditions against which actual Standard performance can be compared .

"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 a basis for control through variance accounting for the valuation of stock and work-in-progress, and in some cases for setting prices.

"Standard Costing" is the technique by which Standard Costs are used. 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 main objectives of Standard Costing are:--

a) To provide an accepted basis for assessing performance and efficiency.

b) To control costs by introducing a standard and an analysis of variances.

c) To assist in setting budgets.

d) To motivate staff and management.

e) To help in assessing responsibility for non-standard performance in order to correct deficiencies or to capitalise on the benefits.

f) To provide a basis for estimation.

g) To provide guidance on possible ways for improving performance.

The Problems related to setting standard costs:

a) Deciding how to deal with inflation in the planned unit cost.

b) Deciding on the quality of materials to be used.

c) Estimating material prices where seasonal price variations or bulk purchase discounts 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:

It is very interesting that both the Standard costing and Budgetary control are used for controlling the business operations by establishing predetermined standards and comparing the standards with actual. Budgetary Control is usually operated without standard costing, but it is difficult to implement standard costing without budgetary control. A system of budgetary control in conjunction with standard costing is more helpful. Thus, although both are helpful to management in controlling costs, they differ in respect of scope and technique.

Standard costing is mainly related to manufacturing departments, whereas Budgetary control deals with the departments or business as a whole. Standards are based on technical assessments, while budgets are based on past actuals with necessary adjustments. Standards are minimum targets, which are to be attained. On the other hand, Budgets are the maximum limits of expenses about which expenditure should not be incurred. Analysis of variances is necessary whether they are favourable or adverse. But in case of costs within the budget, no further analysis is necessary. Further, standards are expressed per unit of production. Whereas budgets are expressed in total and not per unit.

Standard Cost and Estimated Cost:

The term Standard costs aims at what the cost should be, and these costs are planned costs determined on a scientific basis and are based on certain assumed conditions of production. Estimated costs aim at what the cost will be. Estimated costs are based on the average of past actual figures adjusted for future and are used for price quotations.

a) Use of Standard Costing may have the following advantages:

b) Standard costing provides guidelines that help management perform its managerial functions, such as formulating policies and determining prices.

c) It serves as a yardstick against which actual costs are compared. Thus, it facilitates effective cost control and provides the necessary information for cost reduction.

d) Standard costing highlights areas of strength and weakness.

e) It acts as a form of feed-forward control that allows an organisation to plan the manufacturing inputs required for different levels of output.

f) It helps in the prompt preparation of the profit and loss account for short periods.

g) It assists in tracing or allocating manufacturing costs to each individual unit produced.

Variances under each element of cost are analysed as follows:

a) Material cost variances,

b) Labour cost variances,

c) Overhead cost variances and

d) Sales variances.

In this discussion, I like to discuss only material cost variances and sales variances, which are further analysed and discussed below:

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

Material Price Variance is that portion of cost variance which is due to the difference in the rate of material between standard and actual, per unit of material, applied to the actual quantity of material purchased and used.

Material Usage Variance 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 the standard price as was fixed beforehand. Material Usage Variance can be further analysed under two heads, Material Mix Variance and Material Yield Variance.

Material Mix Variance is the difference between the actual composition of the mix and the standard composition of mixing of the total quantity of input production used.

Material Yield Variance is the difference between the standard cost of production achieved and the actual total quantity of material used at the standard ratio/composition at the standard price.

Sales Variances are the difference between the actual value of Sales achieved in a given period and the 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.

Sales variances are analyesd by using two methods :

1) Sales Variances based on turnover

2) Sales Variances based on Margin.

1) Sales Variances Based On Turnover can be expressed as:

   a) Sales Price Variance (SPV),

   b) Sales Volume Variance (SVV),

   c) Sales Mix. Variance (SMV),

   d) Sales Quantity Variance (SQV).

2) Sales Variances based on Margin can be expressed as:

   a) Sales Margin Price Variance (SMPV),

   b) Sales Margin Volume Variance (SMVV),

   c) Sales Margin Mix Variance (SMMV),

   d) Sales Margin Quantity Variance (SMQV).

In order to clear the ideas a Problem is being solved based on Sales Variance

PROBLEM:

Compute the following Variances from the data given below:-

a) Total Sales Variance, b) Sales Price Variance, c) Sales Volume Variance, d) Sales Mix Variance, e) Sales Quantity Variance.

	Budgeted units	S.R.	₹	Actual units.	A.R.	₹
A	5000	5.	25000	6000	6.	36000
B.	4000	6.	24000	5000	5.	25000
C	3000.	7.	21000	4000	8.	32000
	12000		**70000**	**15000**		**93000**

Solution:

Budgeted / Std. Sales	Standard Sales Value of Actual Quantity		Actual Sales
	At Standard Mix.	At Actual Mix.	₹ As (given)
₹ 70,000 (Given)	A 6250 × 5 = 31250	A 6000 × 5 = 30000	93000
	B 5000 × 6 = 30000	B 5000 × 6 = 30000	
	C 3750 × 7 = 26250	C 4000 × 7 = 28000	
	(Standard Ratio: 5:4:3) 15000	15000	
₹ 70,000	31250 + 30000 + 26250 = 87500	30000 + 30000 + 30000 = 88000	₹ 93000
SV-4 = 70000	SV-3 = 87500	SV-2 = 88000	SV-1 = 93000

Sales Price Variance (SPV) = SV-1. -- SV-2. =. 93000 – 88000 = ₹ 5000 (F)

Sales Mix. Variance.(SMV) =. SV-2 -- SV-3. = 88000 -- 87500 = ₹ 500 (F)

Sales Quantity Variance (SQV) = SV-3 – SV-4 = 87500 – 70000 = ₹ 17500(F)

Sales Volume Variance (SVV) =. SV_2. -- SV-4. = 88000 – 70000 = ₹ 18000 (F)

Sales Value Variance. (SV) =. SV-1. -- SV-4 = 93000 – 70000 = ₹ 23000 (F)

Topic

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, we will discuss Line Balancing under Production Planning and Control

1. Meaning of Line Balancing

Line balancing is the process of allocating different production tasks or work elements among several workstations so that the workload is distributed as evenly as possible,

- the required production quantity is achieved,
- idle time is minimised,
- bottlenecks are reduced, and
- Available labour, machines and equipment are used efficiently.

It is particularly important in assembly-line production, where a product passes sequentially through several workstations.

Simple example:

Suppose a company manufactures electric fans. The assembly process may consist of:

1. Motor assembly
2. Blade assembly
3. Wiring
4. Body assembly
5. Testing
6. Packing

If one workstation takes 10 minutes while another takes only 3 minutes, the 3-minute station may remain idle while waiting for components from the 10-minute station. Line balancing attempts to distribute the work more effectively among the stations.

2. Line Balancing in Production Planning and Control

Production Planning and Control (PPC) is concerned with deciding:

What to produce → How much to produce → When to produce → How to produce → Where to produce → Who will produce

Line balancing mainly contributes to the how, where, and when aspects of production.

A production plan may determine that a factory must produce 480 units per day. Line balancing determines how the individual activities required to manufacture those 480 units should be assigned to workstations.

Thus:

Production Plan → Required Output → Cycle Time → Workstation Allocation → Balanced Production Line

3. Objectives of Line Balancing

The major objectives are:

3.1 Achieve the required production rate

The production line should be capable of producing the required quantity within the available production time.

3.2 Minimise workstation idle time

If workers or machines are waiting because the preceding operation has not been completed, capacity is wasted.

3.3 Reduce bottlenecks

A workstation that takes substantially longer than others can restrict the output of the entire line. 3.4 Improve utilization of resources

Line balancing improves the utilization of:

- labour,
- machines,
- equipment,
- floor space, and
- Production facilities.

3.5 Reduce work-in-process inventory

An unbalanced line can cause excessive accumulation of semi-finished products between workstations.

3.6 Improve production flow

The objective is to obtain a smooth and continuous flow of materials and products.

3.7 Reduce production cost

Better utilization of resources and reduced idle time can lower the cost per unit.

3.8 Meet delivery schedules

A balanced line helps the organization maintain the planned production rate and meet customer delivery commitments.

4. Factors Affecting Line Balancing

- Production volume
- Product design
- Task times
- Precedence restrictions
- Worker skills
- Machine capacity
- Product variety

- Absenteeism
- Quality problems
- Changeover requirements

5. Line Balancing and Capacity Planning: Line balancing and capacity planning are closely related but not identical.

Capacity planning asks:

- How much production capacity is required?

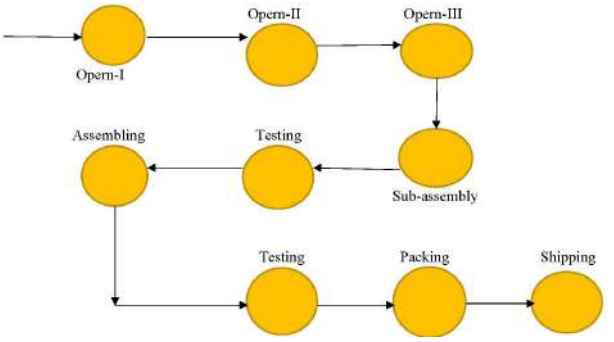
Line balancing asks:

- How should the required work be distributed among available workstations?

For example, if demand requires 1,000 units per day, capacity planning determines whether the factory has sufficient overall capacity. Line balancing then determines how the activities should be distributed to produce those 1,000 units efficiently.

6. Line Balancing in Different Production Systems

Also called the straight-line layout or layout for serialised manufacture.



Best Example: Buffet system in a marriage ceremony

Line balancing is the assignment of work to work centers in a line process so as to attain the desired output rate with the smallest number of work stations.

Thus, the line that produces at the desired pace with the fewest workers is the most efficient one.

Line balancing creates workstations with workloads as evenly balanced as possible. It aims to create workstations so that the capacity utilisation for the bottleneck is not much higher than for the other workstations in the line.

Line balancing must be performed when a line is set up initially, when a line is rebalanced to change its hourly output rate or when a product or process changes.

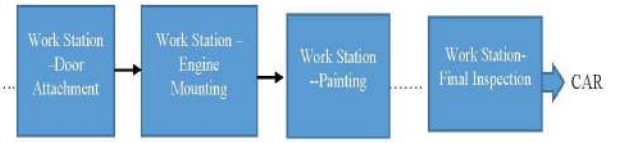
Steps in line balancing:

- Separating the work into Work Elements;
- Obtain the time standards for each element;
- Identify the work element called immediate predecessors, which must be done before the next element can begin;
- Construct the Precedence Diagram;

Line Balancing in detail:

In manufacturing engineering, a ***Product layout*** refers to a production system where the work stations and equipment are located along the line of production.

The product layout is the opposite of the process layout. Rather than have a specific section for each group of tools and supplies, the product layout is an assembly line. The required tools and supplies are located at each section of the assembly line, based on where the product is in production. This is common in auto manufacturing, where the car being made is moved down the line and stops at stations where different things are assembled. One section might be where doors are attached, whereas another section inserts the engine.



Usually, work stations are moved along a line (not necessarily a geometric line, but a set of interconnected work stations.

This is an efficient system when the same product is being made without variation. Workers don't need to search for or collect tools or supplies to perform their job. Giving workers one job to perform repeatedly reduces potential mistakes in the product assembly.

The process of deciding how to assign tasks to work stations is referred to as ***Line Balancing.*** This is a process of assigning tasks to workstations in such a way that the workstations have approximately equal time requirements.

Say a manufacturing unit starts work every day at 0800 AM. Suppose the work station 1 requires completing a task in 30 minutes, whereas the following work station 2 completes the work in 20 minutes. So if all the work stations start work at 08.00 AM in a day, work station 2 has to wait from 0820 AM to 0830AM for receiving the next job. This creates idle time.

If task times are not equal among workstations ---some workstations are capable of finishing jobs at higher rates than others, and these fast stations will be forced to wait for the output from preceding slower stations or to enjoy idleness in order to avoid the buildup of work between stations. These sorts of situations create unbalanced work lines --- i) a source of inefficient utilisation of labour and equipment; ii) a source of moral problems at the slower

stations because the workers have to work continuously to remove idle time in the line.

Therefore, the goal of line balancing is to obtain task groupings that represent approximately equal time requirements. This minimises the idle time along the line and results in a high utilisation of labour and equipment.

In a perfectly balanced line flow of work activities along the line are synchronised to achieve maximum utilisation of labour and equipment.

But a major problem in making a perfectly balanced line is the difficulty of forming task bundles that have the same duration. In the above depicted line of a car manufacturing unit, the time required for door fitting, engine mounting, painting and/or inspection is very different, and therefore it would be a difficult proposition to make out a perfectly balanced line by making perfect bundles of tasks of the same duration.

Reasons behind difficulties in making perfectly balanced lines are:

- Differences in Equipment requirements by different activities;
- Activities are not compatible;
- Grouping tasks cannot always overcome differences among elemental task lengths;
- *Required Technological sequence may prohibit otherwise desirable task combination;

* Say before rolling steel, quenching in oil is required. Now, quenching activity is being done in workstation 5, whereas rolling is done in workstations 6 and 7. To get a perfectly balanced line by bundling tasks, suppose we need to bundle the activities of quenching and the activities of rolling of work station 7. But the technological sequence, i.e. rolling following quenching, prohibits the formation of a perfectly balanced line.

Line Balancing involves assigning tasks to workstations.

All tasks can be done in one workstation or in multiple workstations. Suppose there are 6 tasks. If there is one workstation, all tasks are to be done in that workstation. If 6 workstations are formed, then each workstation will get the responsibility of carrying out one task. Between 1 and 6 workstations, say with 2 workstations, some of the workstations are to carry more than one task.

In the above case, how does a manager decide the no of work station/s to perform all six tasks? Line balancing strategy answers this question.

The primary determinant of this question is:

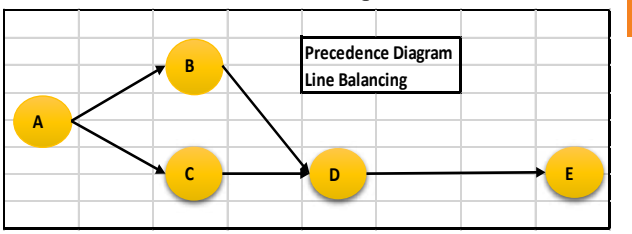
What will be the line's Cycle time?

The cycle time is the maximum time allowed to each workstation to perform assigned tasks before the work moves on to the succeeding workstation.

The cycle time establishes the output rate of a line. If the cycle time is 5 minutes, then after every 5 minutes, one product will come out of the line. Hence, we could write:

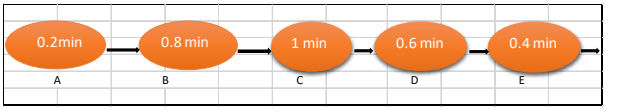
Capacity of a line is a function of cycle time

The line balancing is done with the help of a Precedence diagram. It visually portrays the tasks that are to be performed along with the sequential requirements, i.e., the order in which tasks are to be performed.



To complete a product, we have to complete tasks A, B, C, D and E, and we have to complete each task following the arrow from left to right. Task D, we have to start on the completion of tasks A, B and C. A, B, C, D, E may be individual tasks or may be individual work stations, each comprising a bundle of tasks.

In a manufacturing unit, a product needs to be completed through 5 workstations. The precedence diagram and respective cycle time of each work station are given below:



Note: A, B, C, D, E are workstations comprising either individual task A, B, C, D, E or a bundle of tasks A, B, C, D, E

The task times govern the range of possible cycle times.

The minimum cycle time = Longest task time……(1)

The maximum cycle time = Sum of respective task time ……..(2)

In the above illustration

The minimum cycle time = Longest task time = Task time of C = 1min

The maximum cycle time = Sum of respective task time =

The minimum and maximum cycle times establish the potential range of output for the line, which can be found by the following formula:

Output rate = Operating time per day/Cycle time …... (3)

If the manufacturing unit operates 8 hours, i.e. 480 minutes per day

Maximum output rate = Operating time per day/Minimum Cycle time = 480/1 = 480 units per day

Minmum output rate = Operating time per day/Maxmum Cycle time = 480/3 = 160 units per day

Maximum output rate = Operating time per day/Minimum Cycle time = 480/1 = 480 units per day

Minmum output rate = Operating time per day/Maxmum Cycle time = 480/3 = 160 units per day

Assuming that no parallel lines are to be employed, the output selected for the line must fall in the range of 160 units per day to 480 units per day.

As a general rule, the cycle time is determined by the desired output rate with the help of the following formula:

Cycle time = Operating time per day/Desired output rate……..(4)

& the desired output rate is first selected, and with the help of the above formula (4), the cycle time is determined. If the cycle time does not fall between the maximum and minimum bounds, the desired output rate needs to be revised.

The number of workstations that will be needed is a function of both the desired output rate and the managers' ability to combine elemental tasks into workstations.

Theoretical minimum number of stations = N_{min} = Σt/Cycle time……..(5)

Where, N_{min} = Theoretical Minimum number of stations

& Σt = Sum of task times

If cycle time as determined by formula (4) is 1 minute, then for our example, the minimum number of stations as per formula (5) will be = 3/1 = 3 stations. The actual number of stations used will equal or exceed, depending on how successfully the tasks can be grouped into workstations.

Now, how a line is balanced. This involves assigning tasks to workstations. Generally, no techniques are available that can result in a fully proof optimal set of assignments. Instead, managers employ intuitive rules. In reality, a number of line balancing heuristics are in use. The two most popular line balancing techniques are:

- Assign tasks in order to the following tasks…….(a)
- Assign tasks in order of greatest positional weight*……(b)

* Positional Weight = Time of a task + Time of all following task

In the line balancing problem, our main objective will be to find out the effectiveness of the line. The following two formulas are used for the purpose:

Percentage of idle time = (Idle time per cycle / N_{actual}* Cycle time)*100…….(6)

Where N_{actual} = Actual number of stations. The percentage of idle time of the line is also called the balance delay.

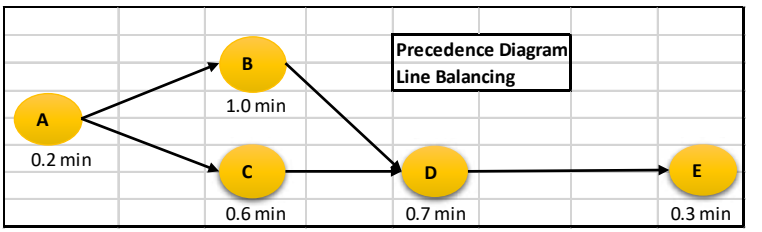
Efficiency of the line = (N_{Actual}* Cycle time - Idle time)/(N_{Actual}* Cycle time)*100……..(7)

Guidelines for Line Balancing:

- Tasks are to be assigned one at a time to the line, starting at the first station;
- At each step, unassigned tasks are checked to determine which are eligible for assignment;
- Eligible tasks are checked to select tasks that fit in the workstation being loaded;
- This process is repeated until there are no eligible tasks that will fit;
- Then the next workstation can be loaded;
- This process will continue until all tasks are assigned;

Illustration:

Arrange the tasks shown in the following figure into three workstations. Use a cycle time of 1.0 minutes. Assign tasks following the above guidelines and line balancing technique (a) mentioned earlier.



Ans:

Workstation	Time Remaining	Eligible	Assign Task	Revised Time Remaining	Station Idle Time
1	1	A	A	0.8	
	0.8	C	C	0.2	
	0.2				0.2
2	1	B	B	0	0
3	1	D	D	0.3	
	0.3	E	E	0	0
					0.2

Illustration: Consider the information given in the following table.

Task	Immediate Predecessor	Task Time (in minutes)
a	-	0.2
b	a	0.2
c	-	0.8
d	c	0.6
e	b	0.3
f	d, e	1
g	f	0.5
h	g	0.4
		$\Sigma t = 4$

(a) Draw a precedence diagram;

(b) Assuming a ten-hour workday, compute the cycle time needed to obtain an output of 500 units per day;

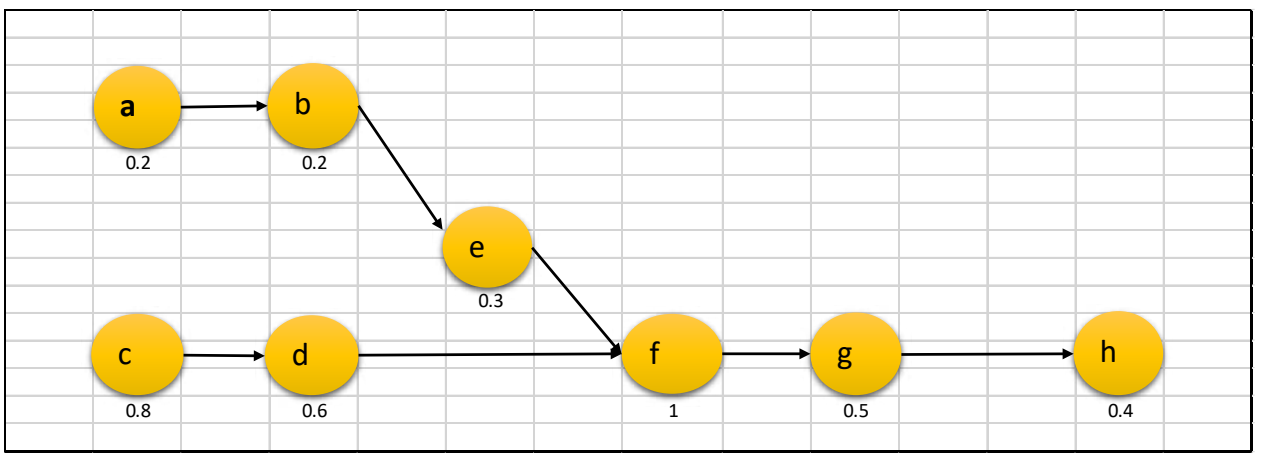
(c) Determine the minimum number of workstations required;

(d) Assign tasks to workstations using the rule: Assign tasks according to the greatest number of following tasks. In case of a tie, use the tiebreak of assigning the task with the longest processing time first.

(e) Compute the resulting per cent idle time and efficiency of the system.

Ans:

(a)



(b) Cycle time = Operating time per day/Desired output rate = 60*10/500 = 1.2 minutes per cycle = 1.2 minutes per unit

(c) Theoretical minimum number of stations = N_{min} = Σt/Cycle time = 4/1.2 = 3.33 = rounded to 4 station

(d)

Station	Time Remaining	Eligible	Will fit	Assign (Task Time)	Revised time Remaining	Idle
1	1.2	a,c	a*	a(0.2)	1	
	1	c, b	c**	c(0.8)	0.2	
	0.2	b		b(0.2)	0	0
2	1.2	e,d	d***	d(0.6)	0.6	
	0.6	e		e(0.3)	0.3	
	0.3	Nil		Nil		0.3
3	1.2	f		f(1)	0.2	
	0.2	Nil		Nil		0.2
4	1.2	g		g(0.5)	0.7	
	0.7	h		h(0.4)	0.3	
	0.3					0.3
						0.8

(e) Percentage of idle time = Idle time per cycle/N_{actual}*Cycle time)*100 = 0.8/(4*1.2)*100 = 16.67%

Efficiency = 100% - Percentage of idle time = 100% - 16.67% = 83.33% or

Efficiency of the line = (N_{Actual}*Cycle time - Idle time)/(N_{Actual}*Cycle time)*100 = (4*1.2-0.8)/(4*1.2)*100 = 83.33%

Suggestions:

This lesson could be used as an aid to teaching online balancing in study notes. The concept of line balancing is vital for the analysis of product layout. These discussions are in addition to the knowledge imparted by the study guide. For Proper understanding, read supplementary readings by referring to Operations Management by R.S. Russell & B.W. Taylor, Operations Management by J Stevenson, & Quantitative Techniques in Management by N. D. Vora.

Best Wishes.

Topic

Module 4: Accounts of Banking, Electricity and Insurance Companies

Module 7: Povisions 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. Which of the following is the primary purpose of insurance?
   A. To eliminate all business risks
   B. To average risks among a large number of persons
   C. To increase the capital of the insured
   D. To provide interest-free loans
   Answer: B. To average risks among a large number of persons
2. Under Section 11 of the Insurance Act, 1938, an insurer is required to prepare which of the following in respect of its insurance business and shareholders' funds?
   A. Only a Balance Sheet and Cash Flow Statement
   B. Only a Revenue Account
   C. Balance Sheet, Profit and Loss Account, Receipts and Payments Account and Revenue Account
   D. Only a Profit and Loss Account and Fund Flow Statement
   Answer: C. Balance Sheet, Profit and Loss Account, Receipts and Payments Account and Revenue Account
3. An insurance company is required to maintain separate accounts for:
   A. Domestic and foreign customers only
   B. Shareholders' funds and policyholders' funds
   C. Current and non-current assets only
   D. Premium and commission only
   Answer: B. Shareholders' funds and policyholders' funds
4. Which statutory register contains details such as the name and address of the policyholder, the date on which the policy became effective and any assignment or nomination?
   A. Register of Claims
   B. Register of Investments
   C. Register of Policies
   D. Register of Shareholders
   Answer: C. Register of Policies
5. In the Register of Claims, which of the following is recorded in respect of a rejected claim?
   A. Only the amount of premium received
   B. The date of rejection and the grounds for rejection
   C. The market value of the policy
   D. The name of the insurance agent only
   Answer: B. The date of rejection and the grounds for rejection
6. In the general insurance business, the provision for unexpired risks is intended to cover:
   A. Risks relating to policies that have expired
   B. Future risks relating to policies that are still in force
   C. Losses arising from the sale of investments
   D. Unpaid dividends to shareholders
   Answer: B. Future risks relating to policies that are still in force
7. According to the treatment discussed in the module, the provision for unexpired risks in respect of marine insurance is generally made at:
   A. 25% of net premium
   B. 40% of net premium
   C. 50% of net premium
   D. 100% of net premium
   Answer: D. 100% of net premium
8. According to the treatment discussed in the module, the provision for unexpired risks for businesses such as fire, accident and theft is generally made at:
   A. 10% of net premium
   B. 25% of net premium
   C. 50% of net premium
   D. 100% of net premium
   Answer: C. 50% of net premium
9. In the Revenue Account of a general insurance company, the provision for unexpired risks made for the current year is generally shown:
   A. On the credit side of the Revenue Account
   B. On the debit side of the Revenue Account
   C. As a deduction from share capital
   D. Under contingent liabilities only
   Answer: B. On the debit side of the Revenue Account
10. The balance of the provision for unexpired risks relating to the previous year is transferred to:
    A. The debit side of the current year's Revenue Account
    B. The credit side of the current year's Revenue Account
    C. The shareholders' capital account
    D. The Reinsurance Account only
    Answer: B. The credit side of the current year's Revenue Account

Section B: Auditing

Topic: Provisions Relating to Audit under Companies Act, 2013

- **Comprehensive Caselets**

Caselet 1: Access to Books Kept Outside the Registered Office

Pragati Textiles Limited maintains its books of account at its registered office in Kolkata. However, its inventory records, purchase invoices and production registers are maintained at its manufacturing unit located in another district. During the audit, the statutory auditor asks the management to provide access to these records at the manufacturing unit. The finance director refuses, stating that the auditor's right of inspection is limited to the books kept at the registered office.

The auditor explains that the records maintained at the manufacturing unit are relevant to the verification of inventory, purchases and production costs.

Questions

1. **Can the auditor inspect books and vouchers kept at a place other than the registered office?**
2. **Is the finance director justified in restricting the auditor's access to the registered office?**

Answer

The auditor is legally entitled to have access at all times to the books of account and vouchers of the company, whether they are kept at the registered office or at any other place. Therefore, the auditor can inspect the records maintained at the manufacturing unit.

The finance director is not justified in restricting the auditor's access only to the registered office. The auditor's right extends to all books and vouchers relevant to the performance of audit duties, irrespective of their location.

Relevant provision: Section 143(1) of the Companies Act, 2013.

Caselet 2: Information Required from Company Officers

Eastern Renewable Energy Limited has entered into a long-term power purchase agreement with another company. During the audit, the statutory auditor asks the chief financial officer to provide the agreement, details of the financial commitments and correspondence relating to the contract.

The chief financial officer refuses to provide the documents, arguing that the agreement is commercially sensitive and that the auditor should rely only on the figures recorded in the books of account. The auditor states that the information is necessary to evaluate the company's liabilities and disclosures in the financial statements.

Questions

1. **Can the auditor require the company's officers to provide such information and explanations?**
2. **Is commercial sensitivity a valid reason for refusing information necessary for the audit?**

Answer

The auditor is entitled to require from the officers of the company such information and explanations as the auditor considers necessary for the performance of audit duties.

The power is not restricted to information already recorded in the books of account. Agreements, correspondence and explanations may be necessary for verifying transactions, assessing liabilities and determining whether appropriate disclosures have been made.

Therefore, the chief financial officer should provide the required information and explanations. The auditor must, of course, maintain the confidentiality of information obtained during the audit.

Relevant provision: Section 143(1) of the Companies Act, 2013.

Caselet 3: Audit of Branch Accounts

National Retail Products Limited operates 25 branches across India. The company appoints a separate branch auditor to audit the accounts of its Guwahati branch. During the statutory audit of the company, the principal auditor notices unusual differences between the branch's inventory records and the stock statements submitted to the head office.

The principal auditor asks to inspect the Guwahati branch's books and supporting documents. The branch manager refuses, stating that a separate branch auditor has already completed the audit. The branch auditor also delays sending the branch audit report to the principal auditor.

Questions

1. **Can the principal auditor inspect the books of the branch even though a separate branch auditor has been appointed?**
2. **Does the principal auditor have the right to receive the branch auditor's report?**

Answer

Yes. The company auditor has the right to inspect the accounts and records of a branch office if the auditor considers such inspection necessary for the performance of audit duties. The appointment of a separate branch auditor does not remove this right.

Further, where a separate branch auditor has been appointed, the principal auditor is entitled to receive the branch audit report. The report may be used in preparing the overall audit report of the company.

Therefore, both the branch manager and the branch auditor should cooperate with the principal auditor within the scope of the law.

Relevant provision: Section 143(8) of the Companies Act, 2013.

Topic

Module 5:
Capital Budgeting

Module 11:
Data Analysis and Modelling

INTERMEDIATE

Group II - Paper-11

Financial Management and Business Data Analytics (FMDA)

Subject: Financial Management and Business Data Analytics
Capital Budgeting

Illustration 1

PUNCHA Ltd. is considering a proposal to install drying equipment. The equipment would involve a Cash outlay of ₹ 6,00,000 and net Working Capital of ₹ 80,000. The expected life of the project is 5 years without any salvage value. The estimated before-tax cash inflows are given below:

	Before-tax Cash inflows (₹ '000)				
Year	1	2	3	4	5
	240	275	210	180	160

The applicable Income-tax rate to the Company is 35%.

The company's opportunity Cost of Capital is 12%.

The company follows the straight-line method of depreciation.

The PV factors at 12%, 14% and 15% are:

Year	1	2	3	4	5
PV factor at 12%	0.8929	0.7972	0.7118	0.6355	0.5674
PV factor at 14%	0.8772	0.7695	0.6750	0.5921	0.5194
PV factor at 15%	0.8696	0.7561	0.6575	0.5718	0.4972

Required:

(i) Compute net present value and

(ii) Internal rate of return.

Answer:

- Equipment's initial cost = ₹ 6,00,000 + 80,000 = ₹ 6,80,000
- Annual straight-line depreciation = ₹ 6,00,000/5 = ₹ 1,20,000.

Net cash flows can be calculated as follows: = Before tax CFs × (1 – Tc) + Tc × Depreciation

Computation of Net Present Value of the Equipment

		Cash Flows (₹ '000)					
	Year	0	1	2	3	4	5
1.	Initial cost	(680)					
2.	Before tax Cash Flows		240	275	210	180	160
3.	Tax @ 35%		84	96.25	73.5	63	56
4.	After tax-Cash Flows		156	178.75	136.5	117	104
5.	Depreciation tax shield (Depreciation×Tax Rate)		42	42	42	42	42
6.	Working capital released		–	–	–	–	80
7.	Net Cash Flow (4 + 5 + 6)		198	220.75	178.5	159	226
8.	PVF at 12%	1.00	0. 8929	0.7972	0.7118	0.6355	0.5674
9.	PV (7 × 8)	(680)	176.79	175.98	127.06	101.04	128.23
10.	NPV	29.12					

	PVF at 15%	1	0.8696	0.7561	0.6575	0.5718	0.4972
	PV	(680)	172.18	166.91	117.36	90.92	112.37
	NPV	−20.26					

Internal Rate of Return = 12% + [29.12/(29.12 - (- 20.36))] × (15% - 12%) = 13.77%

Illustration 2

TZ Ltd. is considering selecting a machine between the two machines, X and Y. The two machines have identical capacity, do exactly the same job, but are designed differently.

Machine 'X' costs ₹ 8,00,000, having a useful life of three years. It costs ₹ 1,30,000 per year to run. Machine 'Y' is an economy model costing ₹ 6,00,000, having a useful life of two years. It costs ₹ 2,50,000 per year to run.

The cash flows of machines 'X' and 'Y' are real cash flows. The costs are forecasted in rupees of constant purchasing power. Ignore taxes.

The opportunity cost of capital is 10%. The present value factors at 10% are:

Year	t1	t2	t3
PVIF0.10, t	0.9091	0.8264	0.7513
PVIFA0.10, 2 = 1.7355			
PVIFA0.10, 3 = 2.4868			

Required:

(i) Assess the Net Present Value of two Machines

(ii) Advice on which machine the company should buy?

Answer:

(i) Calculation of Net Present Value

Particulars	Machine X	Machine Y
Purchase Cost (₹): (i)	8,00,000	6,00,000
Life of Machines (in years)	3	2
Running Cost of Machine per year (₹): (ii)	1,30,000	2,50,000
Cumulative PVF for 1-3 years @ 10%: (iii)	2.4868	-
Cumulative PVF for 1-2 years @ 10%: (iv)	-	1.7355
Present Value of Running Cost of Machines (₹): (v) = [(ii) x (iii)]	3,23,284	4,33,875
Cash Outflow of Machines (₹) : (vi) = (i) + (v)	11,23,284	10,33,875
Equivalent Present Value of Annual Cash Outflow [(vi) - (iii)]	4,51,699	5,95,722

The Company should consider buying Machine X since its equivalent Cash outflow is less than that of Machine Y.

Multiple Choice Questions:

1. Multiple IRRs are obtained when:

   (a) Cash flows in the early stages of the project exceed cash flows during the later stages.

   (b) Cash flows reverse their signs during the project.

   (c) Cash flows are uneven.

   (d) None of the above.

Answer (b)

2. Capital rationing refers to a situation where:

   (a) Funds are restricted, and the management has to choose from among available alternative investments.

   (b) Funds are unlimited, and the management has to decide how to allocate them to suitable projects.

(c) Very few feasible investment proposals are available to the management.

(d) None of the above.

Answer (b)

3. In mutually exclusive projects, the project that is selected for comparison with others must have:

(a) Higher Net Present Value

(b) Lower Net Present Value

(c) Zero Net Present Value

(d) All of the above

Answer: (a)

4. PQR Ltd. estimated that a proposed project's 8-year net cash benefit will be ₹4,000 per year for 2 years, 1 to 8, with an additional terminal benefit of ₹8,000 at the end of the 8th year. Assuming that these cash inflows satisfy exactly the required rate of return of 8%, the project's initial cash inflow is closest to which of the following alternatives? [Given, PVIFA (1-8 years, 8% = 5.747; PVIF (Year 8, 8% = 0.540]

(a) ₹25,851

(b) ₹26,518

(c) ₹27,308

(d) ₹45,000

Answer: (c)

5. TEE Ltd. is considering an investment that will cost ₹80,000 and have a useful life of 4 years. During the past two years, the net incremental after-tax cash flows were ₹25,000 per year, and for the last two years, they were ₹20,000 per year. What will be the payback period of this investment?

(a) 3.2 years

(b) 3.5 years

(c) 3.0 years

(d) None of the above

Answer: (b)

Business Data Analytics

Cloud Computing Analytics

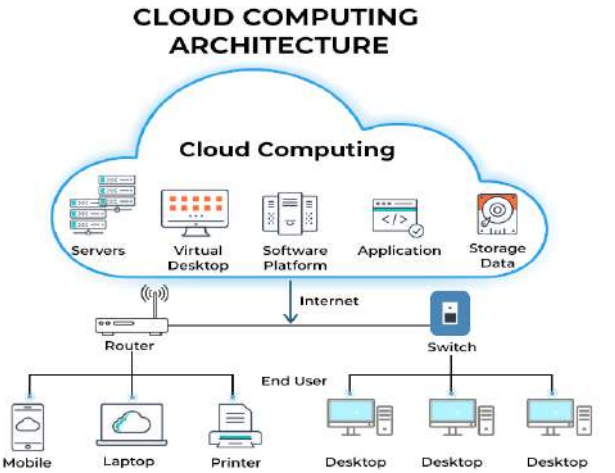
Meaning

Cloud computing is the on-demand delivery of IT resources over the Internet with pay-as-you-go pricing. Instead of buying, owning, and maintaining physical data centres and servers, you can access technology services, such as computing power, storage, and databases, on an as-needed basis from a cloud provider like Amazon Web Services (AWS).

Benefits of Cloud Computing

1. **Agility**: Cloud computing enables businesses to access computing resources quickly and deploy applications within minutes. This helps organisations innovate faster, test new ideas, and respond rapidly to changing customer needs.
2. **Elasticity:** Cloud resources can be increased or decreased automatically based on demand. Organisations do not need to invest in excess infrastructure to handle peak workloads, making resource utilisation more efficient.
3. **Cost Savings:** Cloud computing follows a pay-as-you-use model, allowing businesses to avoid large investments in data centres, servers, and hardware. It reduces both capital expenditure (CAPEX) and maintenance costs.
4. **Global Deployment:** Cloud service providers have data centres across the world. Businesses can deploy applications in different geographic regions within minutes, reducing latency and improving service availability for global users.
5. **Scalability:** Cloud platforms allow organisations to easily expand storage, computing power, and other resources as business requirements grow, without disrupting operations.
6. **Data Backup and Disaster Recovery:** Cloud providers offer automatic data backup and recovery services, ensuring business continuity in case of hardware failure, cyberattacks, or natural disasters.

Cloud Computing Architecture

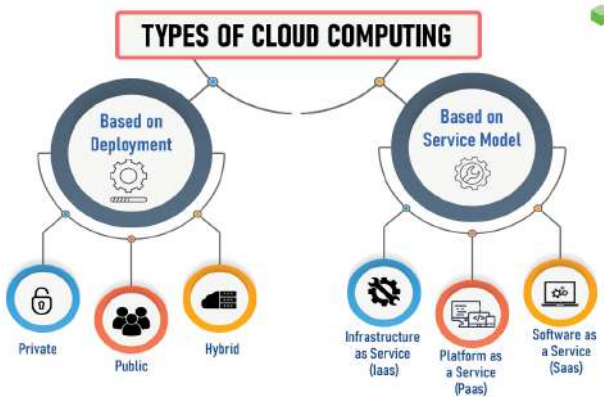


https://www.spiceworks.com/software/what-is-cloud-computing/

Types of Cloud Computing

The services hosted on the cloud can be broadly divided into infrastructure-as-a-service (IaaS), platform-as-a-service (PaaS), and software-as-a-service (SaaS). Based on the deployment model, cloud can also be classified as public, private, and hybrid clouds.

Further, cloud can be divided into two different layers, namely, front-end and back-end. The layer with which users interact is called the front-end layer. This layer enables a user to access the data that has been stored in the cloud through cloud computing software.



Based on Deployment

1. **Private Cloud**: A Private Cloud is used exclusively by a single organisation. It provides greater control, security, and customisation. Example: A bank's dedicated cloud infrastructure.
2. **Public Cloud**: A Public Cloud provides computing services over the internet to multiple users. It is generally offered on a pay-as-you-use basis. Examples: AWS, Microsoft Azure, Google Cloud.
3. **Hybrid Cloud**: A Hybrid Cloud combines private and public clouds. Organisations can keep sensitive information in a private cloud while using public cloud resources when required. Example: A company keeps customer data in its private cloud but uses a public cloud for additional computing capacity.

Based on the Service Model

1. **Infrastructure as a Service (IaaS)**: IaaS provides basic computing infrastructure such as virtual servers, storage, networking, and processing power through the internet. Examples: Amazon EC2, Microsoft Azure Virtual Machines.
2. **Platform as a Service (PaaS):** PaaS provides a ready-made platform and development environment for creating, testing, and deploying applications. Examples: Google App Engine, Heroku, Azure App Service.
3. **Software as a Service (SaaS):** SaaS provides ready-to-use software applications through the internet.

Topic

Module 7: Forecasting, Budgeting and Budgetary Control

INTERMEDIATE

Group II - Paper-12

Management Accounting (MA)

Forecasting, Budgeting and Budgetary Control

Introduction

Every firm makes decisions regarding future sales, output, costs, resources, and cash requirements in an uncertain environment. A methodical framework for pre-planning these tasks is provided by budgeting. It provides a foundation for comparing expected performance with actual outcomes and translates management plans into financial or quantitative terms. By spotting deviations and encouraging remedial action, budgetary control expands this process.

Concept of Forecasting

The methodical evaluation of likely future circumstances or events based on historical and current data is known as forecasting. Forecasting aids management in predicting future sales, demand, prices, expenses, material availability, pay rates, and other variables that could affect operations. Instead of focusing on what management wants the company to accomplish, forecasting focuses on what the company is likely to accomplish in the future. As a result, it offers a projection of future patterns and results under anticipated business circumstances. Since realistic budgets include predictions of significant future variables, forecasting typically comes before budget preparation.

For example, a business may predict that it will probably sell 50,000 units in the next year based on market circumstances and historical sales. After that, management can create a budget with a 2,000-unit sales goal. Therefore, budgeting converts management's ideas into measurable goals, whereas forecasting serves as the foundation for planning.

Concept of Budget

A budget is a financial and/or quantitative statement created and authorised ahead of time for a specified time frame in order to accomplish a particular goal. It describes management's intended actions in quantifiable terms and may involve capital, employment, income, and expenses. As a result, a budget converts an organisation's aims and policies into precise goals for the future.

Both monetary and material terms can be used to describe a budget. For instance, a company might create a production budget that indicates the quantity of units to be produced and a sales budget that displays projected sales revenue in monetary terms. Budgets may also outline manpower, material, and other resource requirements. A budget must be future-focused, goal-oriented, quantifiable, and created for a specific time frame. It gives management a present standard by which to measure actual performance later on.

Concept of Budgetary Control

Budgetary control is a system that uses the budget as a basis for planning and controlling business activities. It includes preparing budgets for planning and controlling business activities and establishing budgets for different areas of responsibility. Just like normal control processes in management, budgetary control also compares actual results with those of the budget and identifies deviations to take necessary actions. Thus, budgetary control links performance evaluation to planning. While budgetary control assesses whether actual performance complies with the predefined plan, the budget outlines the expected level of performance. When major deviations occur, management looks into the reasons behind them and may change the underlying plans or take corrective action.

For example, if a department spends ₹11.5 lakh instead of the ₹10 lakh that was planned, the budgetary control highlights the ₹1.5 lakh discrepancy and mandates that management look into the reasons before taking corrective action.

Forecasting, Budgeting and Budgetary Control: Relationship

Forecasting, budgeting and budgetary control are closely connected stages of the planning and control process. They should not be viewed as three independent activities. Forecasting provides an estimate of future conditions; budgeting converts these expectations and management objectives into quantified plans; and budgetary control monitors actual performance against those plans.

The relationship can be understood as follows:

Forecasting → Budgeting → Actual Performance → Comparison → Variance Analysis → Corrective Action

- **Forecasting answers:** What is likely to happen?
- **Budgeting answers:** What does management plan to achieve?
- **Budgetary Control answers:** How far has actual performance followed the plan, and what action is required?

Forecasting, therefore, provides an important foundation for budgeting. For example, forecasts of sales, selling prices, material availability and wage rates are required while preparing budgets. Once the budget is established, actual results are compared with budgeted results, deviations are analysed, and corrective measures or budget revisions may be undertaken where necessary.

Budget versus Forecast

Basis	Budget	Forecast
1. Meaning	A quantified plan prepared in advance for a defined period.	An estimate of future trends and outcomes based on available information.

Basis	Budget	Forecast
2. Purpose	Specifies what the business **plans or intends to achieve**.	Indicates what the business is **likely to achieve**.
3. Target	Sets predetermined targets for performance.	Does not necessarily set a target; it provides an estimate.
4. Comparison	Actual results are compared with budgeted results for variance analysis.	Normally, actual results are not compared with the forecast for budgetary control purposes.
5. Frequency	Generally prepared for a defined budget period, commonly an accounting or financial year.	May be prepared or updated at regular intervals as future conditions change.

Objectives and Importance of Budgeting

Objectives

The major objectives of budgeting are to:

1. **Translate organisational goals into specific targets** for departments and responsibility centres.
2. **Plan future operations** by determining expected sales, production, costs, resource requirements and financing needs.
3. **Coordinate different business functions** so that departmental plans work towards common organisational objectives.
4. **Allocate available resources efficiently** among competing activities and departments.
5. **Provide predetermined standards of performance** against which actual results can be evaluated.
6. **Facilitate managerial decision-making** by providing quantified plans for the budget period.

These objectives reflect the source's emphasis on defining goals, encouraging coordinated management action, efficient employment of people and capital, and establishing standards for comparison.

Importance

Budgeting is important because it:

1. **Promotes forward thinking:** It compels management to consider future conditions and plan actions in advance.
2. **Improves coordination:** It brings the activities of different departments within a common plan.
3. **Clarifies responsibility:** It establishes expected performance for executives and departmental heads.
4. **Facilitates performance evaluation:** Actual results can be compared with predetermined budget figures and deviations investigated.
5. **Supports optimum resource utilisation:** Scarce resources can be directed towards activities that contribute to organisational objectives.
6. **Provides a basis for corrective action:** Significant deviations can be identified promptly and appropriate remedial measures taken.
7. **Supports policy review:** Actual performance and changing conditions may indicate the need to revise existing policies and plans.

The source specifically identifies goal definition, responsibility assignment, performance evaluation, optimum resource use, coordination, planned action and policy revision as the rationale for budgets.

Types of Budget: Fixed and Flexible Budget

Budgets can be classified on the basis of their response to changes in the level of activity into Fixed Budget and Flexible Budget. A fixed budget is prepared for a particular level of activity and remains unchanged, whereas a flexible budget is designed to change with the level of activity actually attained.

Illustration 1: Fixed Budget

A company prepares a budget for the production of 10,000 units:

Particulars	Budget
Production	10,000 units
Variable Cost	₹5,00,000
Fixed Cost	₹2,00,000
Total Cost	**₹7,00,000**

Actual production is 12,000 units. Under a fixed budget, the budgeted cost remains ₹7,00,000, because the budget is not adjusted for the change in activity.

Flexible Budget

A Flexible Budget is designed to adjust according to the actual level of activity achieved. Unlike a fixed budget, which is prepared for a single activity level, a flexible budget provides budgeted costs for different levels of activity. It takes into consideration fixed, variable and semi-variable costs, thereby making it suitable for situations where the level of business activity may change.

Under this approach, separate budget estimates are developed for different activity levels. The budget, therefore, shows the expected cost of each item

corresponding to the relevant level of activity. This facilitates a meaningful comparison between budgeted and actual costs when the actual level of activity differs from the originally planned level. Flexible budgeting was developed primarily to overcome the limitations of the fixed-budget approach in changing business conditions.

Illustration 2: Flexible Budget

From the following information, prepare a flexible budget for overhead expenses at 70%, 80% and 90% levels of capacity and determine the overhead rate per direct labour hour at each level of activity.

Particulars	At 80% Capacity (₹)
Variable Overheads:	
Indirect Labour	15,000
Stores including Spares	5,000
Semi-Variable Overheads:	
Power (40% Fixed; 60% Variable)	25,000
Repairs (50% Fixed; 50% Variable)	4,000
Fixed Overheads:	
Depreciation	12,000
Insurance	4,000
Salaries	11,000
Total Overheads	**76,000**
Estimated Direct Labour Hours	**1,50,000 hours**

1. Prepare a Flexible Budget for overhead expenses at 70%, 80% and 90% capacity.
2. Calculate the overhead rate per direct labour hour at each level of activity.
3. Show separate calculations for the variable and fixed components of semi-variable overheads.

Solution

Flexible Budget at Different Capacities and Determination of Overhead Rates

Particulars	70% (₹)	80% (₹)	90% (₹)
(A) Variable Overheads:			
Indirect Labour	13,125	15,000	16,875
Stores including Spares	4,375	5,000	5,625
Total (A)	**17,500**	**20,000**	**22,500**
(B) Semi-Variable Overheads:			
Power	23,125	25,000	26,875
Repairs	3,750	4,000	4,250
Total (B)	**26,875**	**29,000**	**31,125**
(C) Fixed Overheads:			
Depreciation	12,000	12,000	12,000
Insurance	4,000	4,000	4,000
Salaries	11,000	11,000	11,000
Total (C)	**27,000**	**27,000**	**27,000**
Grand Total (A+B+C)	**71,375**	**76,000**	**80,625**

Labour Hours

At 70% capacity: 1,50,000 × 70/80 = 1,31,250 hours

At 80% capacity: 1,50,000 × 80/80 = 1,50,000 hours

At 90% capacity: 1,50,000 × 90/80 = 1,68,750 hours

Overhead Rate per Hour

Capacity	Total Overheads (₹) (a)	Direct Labour Hours (b)	Overhead Rate per Hour (₹) (c)=(a)/(b)
70%	71,375	1,31,250	0.544
80%	76,000	1,50,000	0.507
90%	80,625	1,68,750	0.478

Working Notes: Semi-Variable Overheads

1. Power

At 80% capacity, Power = ₹25,000

Variable Component = 60% [₹25,000×60%=₹15,000]

Fixed Component = 40% [₹25,000×40%=₹10,000]

Power	70%	90%
Variable	₹15,000 × 70/80 = **₹13,125**	₹15,000 × 90/80 = **₹16,875**
Fixed	₹10,000	₹10,000
Total	**₹23,125**	**₹26,875**

2. Repairs

At 80% capacity, Repairs = ₹4,000

Variable Component = 50% [₹4,000×50%=₹2,000]

Fixed Component = 50% [₹4,000×50%=₹2,000]

Repairs	70%	90%
Variable	₹2,000 × 70/80 = ₹1,750	₹2,000 × 90/80 = ₹2,250
Fixed	₹2,000	₹2,000
Total	**₹3,750**	**₹4,250**

The flexible budgeted overheads at 70%, 80% and 90% capacity are ₹71,375, ₹76,000 and ₹80,625, respectively, and the corresponding overhead rates are approximately ₹0.544, ₹0.507 and ₹0.478 per direct labour hour.

Multiple Choice Questions (MCQs):

1. Forecasting is primarily concerned with:
   A. What management wants to achieve
   B. What the business is likely to achieve
   C. What the business has already achieved
   D. How actual results should be controlled
2. Forecasting is generally carried out on the basis of:
   A. Only future assumptions
   B. Historical and current data
   C. Budgeted results only
   D. Actual results only
3. Which of the following generally precedes the preparation of a budget?
   A. Variance analysis
   B. Budgetary control
   C. Forecasting
   D. Corrective action
4. A budget is best described as:
   A. An estimate of future events without any target
   B. A financial and/or quantitative statement prepared in advance for a defined period
   C. A comparison between actual and expected results
   D. A statement of past performance
5. Which of the following may be included in a budget?
   A. Income
   B. Expenditure
   C. Employment of capital
   D. All of the above
6. Budgetary control primarily involves:
   A. Preparing financial statements
   B. Comparing actual results with budgeted results
   C. Forecasting future sales only
   D. Fixing selling prices
7. Which sequence correctly represents the relationship among forecasting, budgeting and budgetary control?
   A. Budgeting → Forecasting → Corrective Action
   B. Forecasting → Budgeting → Comparison → Corrective Action
   C. Budgetary Control → Forecasting → Budgeting
   D. Comparison → Forecasting → Budgeting
8. Which of the following is a major objective of budgeting?
   A. To eliminate uncertainty completely
   B. To translate organisational goals into specific targets
   C. To avoid performance evaluation
   D. To replace managerial decision-making
9. Budgeting helps in the efficient allocation of:
   A. Only labour
   B. Only cash
   C. Available resources
   D. Only materials
10. Which of the following distinguishes a forecast from a budget?
    A. A forecast sets predetermined targets
    B. A budget indicates only probable future events
    C. A forecast estimates what is likely to happen
    D. A budget is never compared with actual results
11. A factory prepares a budget for 10,000 units at the following costs:
    - Direct Material: ₹30 per unit
    - Direct Labour: ₹20 per unit
    - Variable Overheads: ₹10 per unit
    - Fixed Overheads: ₹1,50,000

    What will be the total budgeted cost under a Fixed Budget if actual production increases to 12,000 units?
    A. ₹6,00,000
    B. ₹6,50,000
    C. ₹7,50,000
    D. ₹7,70,000
12. A factory has a production capacity of 20,000 units. At 80% capacity, the variable cost is ₹6,40,000, and the fixed cost is ₹2,00,000. If the actual level of activity is 90% of capacity, what will be the total cost according to the Flexible Budget?
    A. ₹9,00,000
    B. ₹9,20,000
    C. ₹10,00,000
    D. ₹10,50,000

Answer Key:

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

Fill in the Blanks

1. A budget prepared for a single level of activity and remaining unchanged despite changes in actual activity is known as a _____ budget.
2. A budget designed to change according to the level of activity actually attained is known as a _____ budget.
3. A budget is prepared and approved _____ to a defined period.
4. A budget may be expressed in _____ as well as physical terms.
5. Budgetary control involves continuous comparison of actual results with _____ results.

Answer Key

1. fixed
2. flexible
3. in advance
4. monetary
5. budgeted

State True or False

1. Forecasting focuses on what management wants the business to achieve.
2. Forecasting provides an important foundation for preparing a budget.
3. A Fixed Budget remains unchanged irrespective of the actual level of activity achieved.
4. A Flexible Budget is designed to change according to the level of activity actually attained.
5. Actual results are compared with budgeted results to identify deviations.

Answer Key

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

CMA FINAL COURSE

Syllabus 2022

Topic

Module 1 : The Companies Act, 2013

FINAL

Group III - Paper-13

Corporate and Economic Laws (CEL)

Banking Ombudsman Scheme (2006): Purpose and Features

1. Purpose of the Banking Ombudsman Scheme

The **Banking Ombudsman Scheme, 2006,** was introduced by the Reserve Bank of India as a **quasi-judicial grievance redressal mechanism** for bank customers. The purpose is to provide an **expeditious, cost-free and effective system** for resolving complaints relating to banking services. It aims to enhance **consumer protection and trust in the banking system.**

The scheme applies when:

- A customer's complaint is **not resolved by the bank**, or
- The bank **fails to reply within 30 days**.

Thus, it acts as an **alternative dispute resolution mechanism**, avoiding lengthy court procedures.

2. Basic Features of the Banking Ombudsman Scheme (2006)

(a) Quasi-Judicial Authority

The Banking Ombudsman is a **senior official appointed by the Reserve Bank of India (RBI)** who functions as a **quasi-judicial authority**. The Ombudsman acts as an **independent authority** between the bank and the customer, ensuring that disputes are resolved without bias and in a just way.

(b) Free and Accessible Mechanism

The scheme is that it is **completely free of cost** for customers. A person does not have to pay any fees to file a complaint. The procedure is also **simple, informal, and customer-friendly**, so that even ordinary people without legal knowledge can easily approach the Ombudsman. This makes the system **accessible and convenient** for the general public.

(c) Wide Scope of Complaints

The scheme covers a **wide range of banking-related complaints**, making it very comprehensive. Issues such can be **delay or non-payment of cheques, drafts, or remittances**, problems related to **ATM transactions or debit/credit cards**, and **unfair or excessive bank charges**. It also includes complaints regarding **refusal to open or close bank accounts**, **non-compliance with RBI directions**, and even **delays in pension payments**. The scheme addresses various kinds of **deficiencies in banking services**.

(d) Coverage of Banks

It includes **scheduled commercial banks**, **regional rural banks**, and **scheduled primary cooperative banks**. This wide inclusion ensures that most banking institutions operating in India come under the scope of the scheme, thereby protecting a large number of customers.

(e) Precondition for Filing Complaint

Before approaching the Ombudsman, a customer must first **file a complaint with the concerned bank**. Only if the bank **fails to respond within 30 days**, or if the customer is **not satisfied with the reply**, can the complaint be taken to the Ombudsman. Banks to get an opportunity to resolve issues internally before external intervention.

(f) Powers of the Ombudsman

. It primarily acts as a **mediator and conciliator**, trying to settle the issue through mutual agreement between the bank and the customer, failing which, the Ombudsman can pass a formal **award (decision)**. It can also direct the bank to provide **compensation to the customer**, subject to certain limits. The appeal can be made to the **Appellate Authority, which is usually the Deputy Governor of the RBI**. This ensures that there is an additional level of review and helps maintain **fairness and accountability** in the system.

(h) Time-bound and Summary Procedure

The scheme follows a **time-bound and simplified procedure** for resolving complaints. It aims at the **quick disposal of cases** without unnecessary delays. The process is **less formal and does not involve complex legal procedures**, which helps in avoiding lengthy court processes.

(i) Jurisdiction-based System

Under the 2006 scheme, complaints had to be filed with the Ombudsman office having **territorial jurisdiction over the concerned bank branch**.

3. Limitations

(a) Limited Compensation Amount

Limited amount of compensation that could be awarded to customers. The Ombudsman could grant compensation only **up to a prescribed limit**. This restriction sometimes prevented full relief to the aggrieved customer and reduced the overall effectiveness of the scheme in serious cases.

(b) Jurisdictional Constraints

Another important drawback was the existence of **territorial or jurisdictional constraints**. A complaint had to be filed with the Ombudsman office that had authority over the specific bank branch involved. This **location-based system** often caused inconvenience to customers, especially when they were residing in a different area.

(c) Separate Schemes for Different Financial Entities

Before 2021, there were **multiple separate ombudsman schemes** for different types of financial institutions, such as banks, **Non-Banking Financial Companies (NBFCs)**, and digital payment service providers. This created **confusion among customers**, as they had to identify the correct scheme before filing a complaint. The lack of a unified system made the grievance redressal process more complicated and less user-friendly.

Reserve Bank–Integrated Ombudsman Scheme, 2021

The **Reserve Bank – Integrated Ombudsman Scheme, 2021,** was introduced to overcome the shortcomings of the earlier ombudsman systems. Previously, there were **separate schemes for banks, NBFCs, and digital transactions**, and **territorial jurisdiction restrictions**. To address these problems, the RBI introduced the 2021 scheme to create a **single, simplified, and efficient grievance redress mechanism** that is more accessible, transparent, and customer-friendly.

1. Purpose of the 2021 Scheme

(a) Creation of a Unified Grievance Redress System

The **Reserve Bank – Integrated Ombudsman Scheme, 2021,** was introduced to create a **unified grievance redress system** for customers. Earlier, different schemes existed for different financial services, which made the process confusing. This scheme brings everything under a **single, integrated framework**, making it easier for customers to file complaints.

(b) Improvement of Efficiency, Transparency, and Accessibility

The scheme aims to ensure **better efficiency, transparency, and accessibility** in handling complaints. It provides a **faster and more organised process**, keeps customers informed about their complaint status, and allows easy filing through simple methods.

(c) Provision of a Single Platform for Financial Complaints

Another key objective is to provide a **single platform for all financial complaints**. Customers no longer need to identify the correct scheme, as all complaints—whether related to banks, NBFCs, or digital transactions—are handled under one system, following a **"one nation, one ombudsman" approach**.

(d) Integration of Earlier Ombudsman Schemes

The scheme integrates the **Banking Ombudsman Scheme, 2006**, the **NBFC Ombudsman Scheme, 2018**, and the **Digital Transactions Ombudsman Scheme, 2019** into a single system. This integration makes the grievance redress mechanism simpler, more efficient, and more **convenient** for customers.

2. Key Features of the Integrated Ombudsman Scheme, 2021

(a) "One Nation, One Ombudsman" Approach

A major feature of the **Reserve Bank – Integrated Ombudsman Scheme, 2021** is the **"one nation, one ombudsman" approach**. and an established **centralised mechanism** is introduced. This means that complaints are handled in a **location-neutral manner**, making it more convenient for customers across the country.

(b) Single Window System

The scheme provides a **single window system** for filing complaints. Customers can submit their complaints through an **online portal (CMS), email, or even in physical mode**. This ensures **ease of access, uniformity, and convenience**, to choose the method that suits them best.

(c) Centralised Receipt and Processing Centre (CRPC)

The scheme has established a **Centralised Receipt and Processing Centre (CRPC)** at Chandigarh, which is responsible for the **receipt and initial processing of complaints from across the country**. This centralisation helps in better organisation, faster handling, and consistency in processing complaints.

(d) Wider Coverage

Another important feature is its **wider coverage**. The scheme is not limited to banks but also includes **Non-Banking Financial Companies (NBFCs)** and **payment system participants**. This expands the scope beyond traditional banking and ensures protection for customers using various financial services.

(e) Uniform Definition of "Deficiency in Service"

The scheme introduces a **uniform definition of "deficiency in service"**, which includes any **shortcoming or inadequacy in financial services**, whether or not it results in financial loss. This broad definition makes it easier for customers to raise complaints and seek redress.

(f) No Need to Identify Scheme

Under this scheme, customers **do not need to identify the correct ombudsman scheme** before filing a complaint. The system itself **automatically routes the complaint** to the appropriate authority, thereby reducing confusion and simplifying the process.

(g) Real-time Tracking and Acknowledgement

The scheme provides **automatic acknowledgement of complaints** and allows customers to **track the status of their complaints in real time**. This increases transparency and keeps customers informed throughout the process.

(h) Time-bound Resolution

There is a strong emphasis on **time-bound resolution of complaints**. The scheme ensures **quick disposal and efficient handling** through **standardised procedures**, which helps in reducing delays and improving effectiveness.

(i) Grounds for Non-Maintainability

The scheme also clearly specifies the **grounds for non-maintainability of complaints**. Complaints are not entertained if they relate to **commercial decisions of banks**, matters **outside the jurisdiction of the RBI**, or issues that are **already pending before courts or tribunals**. This helps in avoiding misuse of the mechanism.

(j) Appellate Mechanism

An **appellate mechanism** is also provided under the scheme. If a customer is not satisfied with the decision, they can appeal to an **Appellate Authority within the RBI**, which ensures **fairness and proper review of decisions**.

(k) Cost-free Mechanism

The entire process remains **completely cost-free for customers**. This ensures that all individuals, regardless of their financial position, can easily access the grievance redress system.

Conclusion

The **Banking Ombudsman Scheme, 2006,** laid the foundation for a **simple, low-cost and effective grievance redress system** in the banking sector. However, its limitations—especially fragmentation and jurisdictional issues—led to the introduction of the **Integrated Ombudsman Scheme, 2021**.

Topic

Module 14: The International Financial Environment

FINAL

Group III - Paper-14

Strategic Financial Management (SFM)

Topic: International Financial Management

- **Multiple Choice Questions**

1. Which of the following institutions is primarily concerned with maintaining international monetary and financial stability?
   a) World Bank
   b) International Monetary Fund
   c) Asian Development Bank
   d) International Finance Corporation

   Answer: b) International Monetary Fund

2. Which of the following is associated with the World Bank's initiative relating to making economic and development data available to the public?
   a) Open Data Initiative
   b) Clean Air Initiative
   c) Food Security Programme
   d) Global Partnership Initiative

   Answer: a) Open Data Initiative

3. The International Finance Corporation (IFC) is primarily associated with:
   a) Financing private-sector development
   b) Managing exchange rates among member countries
   c) Issuing international reserve currencies
   d) Regulating international stock exchanges

   Answer: a) Financing private-sector development

4. Which of the following correctly describes an American Depositary Receipt (ADR)?
   a) A foreign currency loan issued by an American bank
   b) A certificate representing shares of a foreign company and traded in the US market
   c) A US government bond denominated in foreign currency
   d) A derivative contract on foreign shares

   Answer: b) A certificate representing shares of a foreign company and traded in the US market

5. A major advantage of ADRs to a foreign company is:
   a) Elimination of all compliance requirements
   b) Access to a larger international capital market
   c) Guaranteed appreciation of its shares
   d) Complete elimination of business risk

   Answer: b) Access to a larger international capital market

6. Which of the following is a limitation associated with ADRs?
   a) They cannot provide access to foreign investors
   b) They necessarily alter the voting pattern of the company
   c) They may involve high issue costs and stringent compliance requirements
   d) They can only be issued by governments

   Answer: c) They may involve high issue costs and stringent compliance requirements

7. A Global Depositary Receipt (GDR) generally represents:
   a) A deposit with a foreign commercial bank
   b) Shares of a company held by a custodian and represented by a negotiable certificate
   c) A foreign exchange forward contract
   d) A sovereign debt instrument

   Answer: b) Shares of a company held by a custodian and represented by a negotiable certificate

8. In the case of a GDR, the underlying shares are generally held by:
   a) The individual GDR holder directly
   b) A custodian appointed by the depositary bank
   c) The stock exchange
   d) The central bank of the issuing country

   Answer: b) A custodian appointed by the depositary bank

9. Which feature distinguishes GDRs from instruments restricted to a single domestic market?
   a) GDRs are globally marketed and may be traded in more than one country
   b) GDRs cannot be transferred
   c) GDRs do not represent underlying shares
   d) GDRs are always denominated in Indian rupees

   Answer: a) GDRs are globally marketed and may be traded in more than one country

10. In a GDR arrangement, dividends received by the depositary are generally:
    a) Retained permanently by the depositary
    b) Converted into the relevant currency and distributed to GDR holders

c) Paid directly by the company to every GDR holder in the company's domestic currency

d) Converted into gold

Answer: b) Converted into the relevant currency and distributed to GDR holders

11. Which of the following best describes a Participatory Note (P-Note)?

a) A domestic government security

b) An offshore derivative instrument providing exposure to Indian securities

c) A foreign currency deposit account

d) A certificate of deposit issued by RBI

Answer: b) An offshore derivative instrument providing exposure to Indian securities

12. Which type of investor is generally associated with investment through Participatory Notes?

a) Only individual Indian investors

b) Eligible foreign investors seeking exposure to Indian securities without directly registering for each underlying security transaction

c) Only RBI

d) Only Indian commercial banks

Answer: b) Eligible foreign investors seeking exposure to Indian securities without directly registering for each underlying security transaction

13. Which of the following is an important characteristic of international financial markets?

a) They facilitate the movement of funds across national boundaries

b) They deal exclusively in domestic currencies

c) They are restricted to government borrowing

d) They eliminate foreign exchange risk automatically

Answer: a) They facilitate the movement of funds across national boundaries

14. Which of the following World Bank initiatives is specifically associated with improving air quality in cities through partnerships and sharing of knowledge?

a) Global Food Security Programme

b) Clean Air Initiative

c) Open Knowledge Repository

d) International Health Partnership

Answer: b) Clean Air Initiative

15. The Open Knowledge Repository (OKR) of the World Bank is primarily associated with:

a) Trading government securities

b) Providing open access to the World Bank's research outputs and knowledge products

c) Providing foreign exchange quotations

d) Issuing GDRs

Answer: b) Providing open access to the World Bank's research outputs and knowledge products

16. Which of the following is a major objective of the World Bank's poverty-reduction initiatives?

a) To increase foreign exchange speculation

b) To support development by addressing poverty and country-specific economic conditions

c) To regulate international stock exchanges

d) To determine global interest rates

Answer: b) To support development by addressing poverty and country-specific economic conditions

17. Which of the following statements correctly distinguishes an ADR from a GDR?

a) ADRs represent debt whereas GDRs represent equity only

b) ADRs are associated with the US market, whereas GDRs are designed for international markets

c) ADRs can only be issued by governments whereas GDRs are issued by companies

d) ADRs are non-negotiable whereas GDRs are negotiable

Answer: b) ADRs are associated with the US market, whereas GDRs are designed for international markets

18. A foreign company wants to raise capital from investors in the United States without requiring those investors to directly purchase its shares in the company's domestic market. Which instrument would be particularly appropriate?

a) ADR

b) Treasury Bill

c) Commercial Paper

d) Interest Rate Swap

Answer: a) ADR

19. An Indian company wants its securities to be represented by negotiable certificates that can be marketed internationally. Which instrument would most directly serve this purpose?

    a) GDR

    b) ADR only

    c) Certificate of Deposit

    d) Commercial Bill

    Answer: a) GDR

20. Which of the following combinations is correctly matched?

    a) ADR — International representation of foreign shares in the US market

    b) GDR — Domestic currency bank deposit

    c) P-Note — Government expenditure instrument

    d) Open Data Initiative - Foreign exchange derivative

    Answer: a) ADR — International representation of foreign shares in the US market

- **Comprehensive Numerical Problems**

1. The following information is available:

Spot rate for 1 US Dollar	₹94.0123
180 days' forward rate for 1 USD	₹94.9120
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:

Forward rate/Spot rate ≠ 1+Home Currency interest rate for the period / 1+Foreign inteest rate for the period

Here, Forward rate/Spot rate = 94.9120/94.0123 = 1.00957

and (1 + Home Currency interest rate for the period)/(1 + Foreign inteest rate for the period)

= (1+0.12/2)/(1+0.08/2)

= 1.06 / 1.04

= 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 94.0123	= INR 94012.3
Interest on this amount at 12% p.a. for 6 m	= INR 5640.738
Total amount available after 6 m	= INR 99653.038
Convert this amount at forward rate 94.9120	= $1049.95 (B)
Gain due to arbitrage (B - A)	$ 9.95

Gain per 1000$ invested thus = 9.95$

Topic

Module 2: Tax Management, Return and Assessment Procedure

FINAL

Group III - Paper-15

Direct Tax Laws and International Taxation (DIT)

RETURN OF INCOME

The provisions relating to the filing of a Return of Income form an important part of the compliance framework. Their application involves determining the obligation to file, selecting the appropriate ITR form, complying with the prescribed due dates and verification requirements, and understanding the consequences of belated, revised, defective and loss returns. This article provides an overview of these provisions, highlighting the key principles and practical aspects.

1. Who Must File

The starting point, Section 139(1), is simple: every company and every firm must file a return regardless of profit or loss, and every other person like individual, HUF, etc. must file if total income computed before allowing exemptions under Sections 54, 54B, 54D, 54EC, 54F, 54G and 54GA, and before Chapter VIA deductions (80C to 80U) exceeds the basic exemption limit. Students frequently forget the "before deductions" qualifier and wrongly conclude that a person who has brought income below the threshold through 80C investments is exempt from filing. The law tests income before such reliefs (i.e., Gross total income without considering deductions under 54 series), not after.

However, two categories of persons must file even if their income is nil or below the exemption limit:

☉ Compulsory Filing — Even Below the Exemption Limit

- Foreign asset holders: A resident (other than "not ordinarily resident") who holds (as beneficial owner or otherwise) any asset (including a financial interest in any entity) located outside India, or who has signing authority in a foreign account, must file compulsorily.
- High-value transactions (7th proviso to Sec. 139(1)): Current account deposits above ₹ 1 crore; foreign travel expenditure above ₹ 2 lakh; electricity consumption above ₹ 1 lakh; or business turnover above ₹ 60 lakh, professional receipts above ₹ 10 lakh, TDS/TCS of ₹ 25,000 or more (₹50,000 for senior citizens), or savings bank deposits of ₹ 50 lakh or more.

This provision may require filing of the return even where the person's income is otherwise below the basic exemption limit.

2. Picking the Right Form

Rule 12 prescribes seven forms. ITR-1 (Sahaj) suits a resident individual with salary, two house properties, and limited other-source income up to ₹ 50 lakh total income, but it is instantly disqualified the moment the person is a company director, holds unlisted shares, has foreign assets, has agricultural income more than ₹ 5,000, or has capital gains beyond the small LTCG-112A carve-out. ITR-4 (Sugam) extends similar simplicity to individuals, HUFs and firms (other than LLPs) opting for presumptive taxation under Sections 44AD, 44ADA or 44AE.

Form	Applicable To
ITR-1 (Sahaj)	Resident individual: salary, two house properties, other sources, LTCG u/s 112A upto ₹ 1,25,000, total income up to ₹ 50 lakh.
ITR-2	Individuals / HUFs without business or professional income
ITR-3	Individuals / HUFs with proprietary business or professional income
ITR-4 (Sugam)	Individuals, HUFs & firms (not LLP) with presumptive income u/s 44AD, 44ADA, 44AE
ITR-5	Firms, LLPs, AOPs, BOIs (other than those filing ITR-7)
ITR-6	Companies not claiming exemption u/s 11
ITR-7	Trusts, political parties & others filing.

3. Mode of Furnishing

Companies and political parties must always file electronically with a digital signature. Firms/LLPs and individuals/HUFs must do the same only if their accounts require a tax audit under Section 44AB; otherwise, electronic filing with an Electronic Verification Code (EVC) suffices. A narrow window remains for paper filing: a super-senior citizen (80 years or above) filing ITR-1 or ITR-4 may use any mode, including paper. Every other person must file in a mode other than paper.

☉ Taxpoint

- If an electronically transmitted return is e-verified or its ITR-V is submitted within 30 days of transmission, the transmission date itself is treated as the date of furnishing the return.
- If verification happens beyond 30 days, the verification date becomes the date of furnishing — and all late-filing consequences apply from that later date.
- Paper return is (almost) extinct.

4. Due Dates and the Cost of Delay

The due-date ladder runs from 30th November down to 31st July, depending on the nature of the assessee and whether a transfer-pricing report or a tax audit is involved:

Category of Assessee	Due Date
Assessee (or a partner in a firm) required to furnish Form 3CEB u/s 92E	30th November
Company not liable to furnish Form 3CEB u/s 92E	31st October
Any assessee (or a partner in a firm) whose accounts require audit under any law	31st October

Category of Assessee	Due Date
Business/professional income not requiring audit under any law (or a partner in such a firm)	31st August
Any other case	31st July

Missing this date does not merely delay filing; Section 234F imposes a flat late fee, regardless of whether any tax remains unpaid:

Total Income	Fee under Section 234F
Does not exceed ₹ 5 lakh	₹ 1,000
Exceeds ₹ 5 lakh	₹ 5,000

5. Return of Loss — File It, or Lose the Right to Carry It Forward

Section 139(3) does not compel most assessees to file a loss return, but skipping it carries a price. Business loss, capital loss, loss from owning and maintaining race horses, and loss under Section 35AD cannot be carried forward unless the loss return is filed within the Section 139(1) time limit.

⊙ Two Exceptions

- Unabsorbed depreciation under Section 32 can still be carried forward even if the return is filed late.
- Loss under the head "Income from House Property" can also be carried forward despite a late filing.
- A late filing does not stop current-year losses from being set off against current-year income. The restriction applies only to carrying the loss forward.

6. Belated, Revised and Defective Returns

Belated Return [Sec. 139(4)]: Simply a late return, filed on or before 31st December of the assessment year or before completion of assessment, whichever is earlier. It attracts the Section 234F fee, Section 234A interest, denial of certain profit-linked Chapter VIA deductions, and the loss-carry-forward restriction discussed above.

Revised Return [Sec. 139(5)]: Corrects a bona fide omission or wrong statement, within the same 31st December (or completion-of-assessment) window. A revised return completely replaces the original — it must be self-contained, not a mere addendum.

⊙ Notes on Revision

- A revised return can itself be revised again. A second revised return is permitted within the specified time.
- A belated return u/s 139(4) can also be revised.
- A loss return can also be revised.
- A return filed in response to a notice under Section 142(1) cannot be revised.

Defective Return [Sec. 139(9)]: It is not about being late, but about being incomplete (missing schedules, unfilled computation columns, or absence of tax-payment proof). The Assessing Officer intimates the defect and gives the assessee 15 days (extendable on request) to fix it. If the assessee corrects the defect even after the extended window, but before assessment is completed, the AO may condone the delay and treat the return as valid; otherwise, the return is treated as if it was never filed at all.

7. Verification

Section 140 assigns verification responsibility by assessee type: an individual verifies his own return (or, if abroad, incapacitated, or otherwise unable, an authorised person, guardian or competent person does so, with a power of attorney attached where relevant); the karta verifies for an HUF; the managing partner for a firm; the designated partner for an LLP; and the managing director for a company, falling back to any director, an insolvency professional in a corporate insolvency process, or a liquidator where the company is winding up.

Conclusion

⊙ Three Checkpoints

- Applicability: Does a compulsory-filing trigger apply — basic exemption, foreign assets, or high-value transactions?
- Form & Due Date: Which ITR form and which due-date slab fit the facts?
- Nature of Return: Is it a belated, revised, or defective return — and what follows from that label?

The provisions governing the return of income establish a comprehensive framework for ensuring timely and accurate compliance under the Income-tax Act, 1961. A proper understanding of the filing requirements, applicable forms, due dates, verification procedures and the consequences of different types of returns enables taxpayers to fulfil their statutory obligations effectively. The provisions of Sections 139 and 140, therefore, play an important role in maintaining an orderly and compliant income-tax filing process.

Topic

Module 3: Decision Making Technique

FINAL

Group III - Paper-16

Strategic Cost Management (SCM)

Relevant Cost

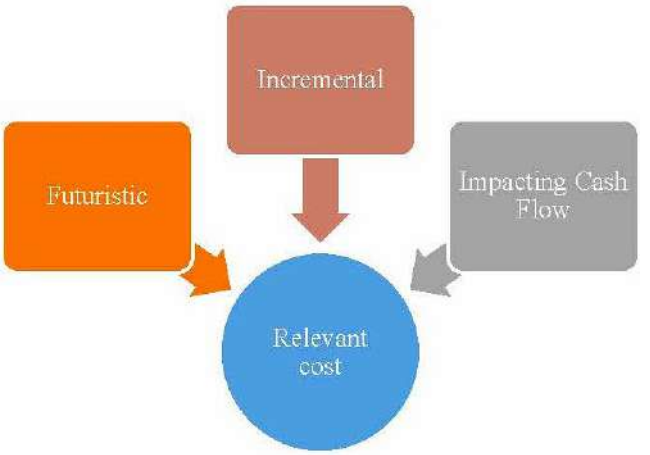
1. **Introduction**

Relevant cost is a combination of two words, i.e. relevant and cost. Relevant means something directly related, connected or pertinent, and Cost is defined as the expenditure (actual or notional) incurred on or attributable to a given product or service. Cost can also be described as the resources that have been sacrificed or must be sacrificed to attain a particular objective.

Relevant cost is a management accounting term that refers to costs that are specific to management's decisions. CIMA defines 'costs appropriate to aiding the making of specific management decisions'. In simple terms, it can be understood as costs that are relevant for a specific purpose or situation for decision-making.

2. **Features of Relevant Cost**

Any cost to be considered as relevant needs to satisfy the 3-way test. It can be understood by the following diagram



(a) **Futuristic:** To be relevant, any expenditure needs to be futuristic, as costs already incurred cannot impact the current decision.

(b) **Incremental:** Expenditure that can be incurred or avoided as a result of decision are relevant. In other words, an expenditure to be relevant needs to be incremental.

(c) **Cash Flow:** Items impacting cash flow are relevant and vice versa. E.g. Depreciation is not relevant but disposal value of equipment is relevant.

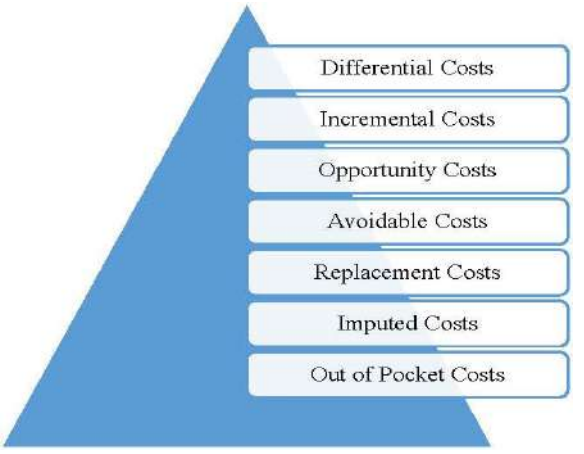
3. **Relevance of Relevant Cost**

Relevant Cost Analysis enables the decision makers to choose between alternative choices available in situations such as:

i. Accept or reject an order when there is excess capacity
ii. Accept or reject an order when there is no excess capacity
iii. Outsource a product or service
iv. Add or drop a product, service or department
v. Sell or process further
vi. Optimisation of limited resources or working under constraints.

4. **Relevant Costs**

The categories of costs, as shown in Diagram 02, are considered relevant for the purpose of decision-making.



a. Differential Costs: Differential Cost is the change in the cost due to change in activity from one level to another.

b. Incremental Costs: Incremental cost is also known as marginal cost, that is a cost associated with producing an additional unit of output. Incremental costs must be compared with incremental revenues to arrive at a decision.

c. **Opportunity Costs:** These refer to the cost of opportunity foregone and represent the potential benefits an individual, investor, or business misses out on while choosing one alternative over another. For example, if fixed deposits in the bank are proposed to be withdrawn for financing an expansion project, the opportunity cost would be the loss of interest on the deposits. Similarly, when a building leased out on rent to an outsider is vacated to be used for own purpose to open a factory outlet, the rent so forgone is the opportunity cost

d. **Avoidable Costs:** The Costs that could have been avoided under given conditions of performance efficiency or should not have been incurred at all are called Avoidable costs. These costs can be eliminated in whole or in part by choosing one alternative over another.

e. **Replacements Costs**: Replacement cost is the cost of a material or an asset in the current market for the purpose of replacement. This is the cost in the current market for replacing an asset. When the replacement cost of a material or an asset is being considered, it refers to the cost that would be incurred if the material or the asset were to be purchased at the current market price. The cost at which the material or asset was actually purchased earlier is not the relevant cost to be considered.

f. **Imputed Costs:** Imputed costs are hypothetical or notional costs, not involving cash outlay. These are similar to opportunity costs and are computed only for the purpose of decision making. For example, when alternative capital investment projects are being considered, out of which one or more are to be financed from internal funds, it is necessary to take into account the imputed interest on own funds before a decision is arrived at.

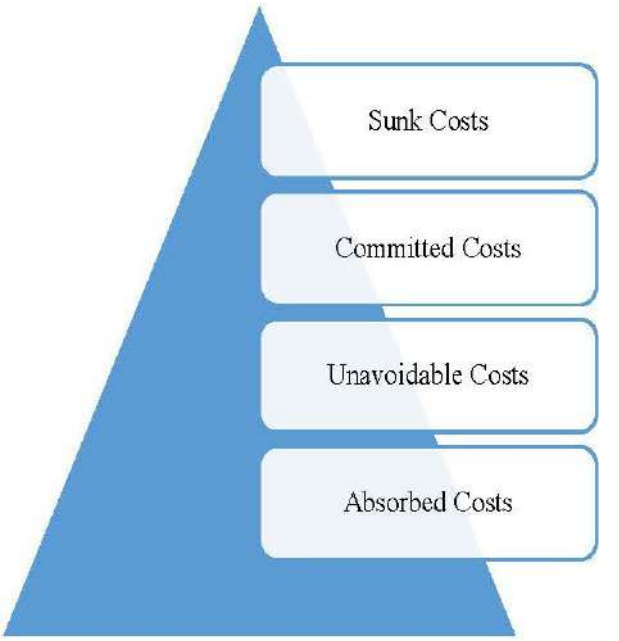
g. **Out-of-Pocket Costs**: This portion of cost is associated with an activity that involves cash payment to other parties in the near future. Out-of-Pocket Costs are highly relevant in determining price fixation during a trade recession or when a make-or-buy decision is to be made. Out-of-Pocket costs can be avoided or saved if a particular proposal under consideration is not accepted.

5. Irrelevant Costs

The costs that are not relevant for a specific purpose or situation are called irrelevant costs. The categories of costs, as shown in Diagram 03, are considered irrelevant for the purpose of decision making:

a. **Sunk Costs:** Sunk costs are historical costs that are incurred in the past and are not relevant to the decision in a particular situation. Sunk costs are costs that have been incurred for a project and will not be recovered if the project is terminated. E.g., at the time of considering the replacement of a plant, its depreciated book value is irrelevant as the amount is sunk cost and that is to be written-off at the time of replacement.

b. Committed Costs: Committed Costs are costs that will be paid in the future, and cannot be changed. Sometimes, the terms "Committed Costs" and "Sunk Costs" are used interchangeably; that is not correct. Sunk cost is already incurred, whereas committed cost is not yet incurred but is committed to be incurred. A committed cost is an obligation already made that the business cannot get out of. It is also an investment that a business entity has already made and cannot recover by any means.



c. **Unavoidable Costs**: Unavoidable Costs are costs that are inescapable, hence irrelevant for any decision to be made. These costs are generally fixed in nature, essentially to be incurred, within the limits or norms provided for.

d. Absorbed Costs: Absorbed costs are indirect costs that are absorbed by the product or service. Absorbed fixed costs that do not change due to an increase or decrease in the level of activity are irrelevant to the decision-making. However, if Fixed Costs are specific, they become relevant for decision-making.

6. Problem

A Company assembles bicycles. This year's expected production is 10,000 units. The Company also makes the Chains for its bicycles. Its Accountant reports the following costs for making 10,000 Bicycle Chains -

Particulars	Costs per unit (₹)	Total for 10,000 units (₹)
Direct Materials	4.00	40,000
Direct Manufacturing Labour	2.00	20,000
Power and Utilities (variable)	1.50	15,000
Inspection, Set-Up and Materials Handling		2,000
Machine Rent		3,000
Allocated Fixed Costs of Plant Administration, Insurance, etc.		30,000
Total Costs	1,10,000	

The Company received an offer from an outside vendor for the supply of any number of chains at ₹8.20 per Chain. The following additional information is available:

- Inspection, Set-up and Materials Handling Costs vary with the number of batches in which the Chains are produced. Current batch size is 1000 units.
- The Company hires a machine used to make the Chains. If it chooses to outsource the Chains, machine rent can be avoided.

Required:

(a) Should Vendor's offer of 10,000 units be accepted? What is the net gain/ (loss)? What is the maximum price payable to the Vendor?

(b) Suppose the Chains were purchased outside, the facilities where the Chains are currently made will be used to upgrade the bicycles by adding Mud Flaps and Reflectors. As a result, the Selling Price of the Bicycles can be increased marginally by ₹20. The Variable Costs of the upgraded version would be ₹18, and additional Tooling Costs of ₹16,000 would be incurred. Help Management in make or buy decision for the Chains, at the anticipated production level of 10,000 units? What is the maximum price payable to the Vendor in this situation?

7. Solution:

(a) Computation of Relevant Costs of Own Production

Particulars	**Nature and Computation**	**Rupees**
Direct Materials	Variable and Relevant = ₹ 4 x 10,000	40,000
Direct Manufacturing labour, Power, and Utilities	Variable and Relevant = ₹2 × 10,000	20,000
	Variable and Relevant = ₹1.50 × 10,000	15,000
Inspection, Set up, etc.	Batch Related Production Costs (given)	2,000
Machine Rent	Specific and Relevant (given) Specifically	3,000
Fixed Costs	incurred = relevant Allocated and Irrelevant	Nil
Total Relevant Costs for own production		80,000

Average Relevant Cost per unit for own production = (₹ 80,000/10,000) = ₹8 per unit

Since the cost of buying ₹ 8.20 p.u. is higher than the average relevant cost of ₹ 8, own production is preferable. Hence, the Company should not accept the Vendor's offer.

Maximum Price Payable = Relevant Cost = ₹ 8.00 per unit.

(b) Effect of Alternative use of facilities:

Additional Benefit from upgradation = 10,000 units x (₹20 - 18)	= ₹ 20,000
Less: Fixed Costs specific to decision	= ₹ 16,000
Net Additional Benefit	= ₹ 4,000

Since this benefit will be foregone due to own production of Chains, the relevant cost of own production will then be ₹80,000 (as per (a)) + ₹4,000 (Opportunity Cost) = ₹84,000.

Average Relevant Cost per unit for own production=₹84,000/10,000 units = ₹8.40 p u

Since Cost of Buying @ ₹8.20 p.u. is less than Average Relevant Cost of ₹8.40, buying the chains is preferable now.

Maximum Price Payable = Relevant Cost = ₹8.40 per unit.

Topic

Module 4: Overview of Cost Accounting Standards and GACAP

FINAL

Group IV - Paper-17

Cost and Management Audit (CMAD)

Cost Auditing and Assurance Standards

The **Cost Accounting Standards (CAS 1–24)** issued by the **Institute of Cost Accountants of India (ICMAI)** provide a uniform framework for measurement, classification, assignment, presentation and disclosure of costs in cost statements. CASB's objective is to **integrate, harmonise and standardise cost-accounting principles and practices**, enabling management decision-making and more effective regulatory functioning. The broad areas revolve around :

1. **Classification** → What type of cost is it?
2. **Measurement** → How much is the cost?
3. **Assignment** → To which cost centre/cost object should it go?
4. **Presentation** → How should it appear in the cost statement?
5. **Disclosure** → What additional information should be disclosed?

A brief description of each CAS in tabular format is reproduced hereunder.

No.	Description	Key Points
CAS 1	**Classification of Cost**	Classification by nature, traceability, function, behaviour and production/operation process. Every cost item should be appropriately classified.
CAS 2	**Capacity Determination**	Deals with installed capacity, normal capacity and actual capacity; important for determining capacity utilisation and allocation of overheads.
CAS 3	**Production & Operation Overheads**	Covers identification, measurement, assignment and absorption of production/operation overheads; abnormal costs are generally treated separately.
CAS 4	**Cost of Production / Acquisition / Supply / Services**	Important for determining the cost of production, acquisition, supply of goods and provision of services.
CAS 5	**Cost of Transportation**	Transportation cost is determined on an average/equalised basis, where appropriate, to ensure uniformity.
CAS 6	**Material Cost**	Covers purchase price, duties, freight, handling, storage and other material-related costs; normal losses included, abnormal losses excluded.
CAS 7	**Employee Cost**	Covers wages, salaries, benefits, bonuses, incentives, employer contributions, etc. Focus on measurement and assignment to cost objects.
CAS 8	**Cost of Utilities**	Covers the cost of utilities such as power, steam, water, gas, electricity, etc.; important for measurement and allocation to cost centres.
CAS 9	**Packing Material Cost**	Deals with the cost of packing materials. Primary/essential packing and secondary/transport packing need appropriate treatment based on their purpose.
CAS 10	**Direct Expenses**	Expenses directly identifiable with a cost object, other than direct material and direct employee costs, are treated as direct expenses.
CAS 11	**Administrative Overheads**	Covers overheads relating to general administration. Costs unrelated to production/service activity should not be indiscriminately included.

No.	Description	Key Points
CAS 12	**Repairs & Maintenance Cost**	Covers expenditure for maintaining assets in working condition; the assignment should reflect the benefit received by cost centres/cost objects.
CAS 13	**Cost of Service Cost Centre**	Deals with the measurement and assignment of costs of service departments such as maintenance, canteen, stores, HR, etc.
CAS 14	**Pollution Control Cost**	Covers costs incurred for prevention, control and treatment of pollution; costs should be properly measured and assigned.
CAS 15	**Selling & Distribution Overheads**	Covers costs after production relating to selling, marketing, warehousing, transportation and distribution.
CAS 16	**Depreciation & Amortisation**	Deals with systematic allocation of depreciable/amortisable cost over useful life; assignment should be consistent with asset utilisation.
CAS 17	**Interest & Financing Charges**	Deals with interest and financing costs and their appropriate treatment/assignment in cost statements.
CAS 18	**Research & Development Costs**	Covers R&D expenditure and its classification/assignment. Costs should be related to the relevant product, service, project or activity where identifiable.
CAS 19	**Joint Costs**	Deals with costs incurred for producing two or more joint products/ services. Joint cost must be apportioned using an appropriate rational method.
CAS 20	**Royalty & Technical Know-how Fee**	Covers royalty and technical know-how fees; treatment depends on whether the cost is related to production, sales, technology or other activities.
CAS 21	**Quality Control**	Covers costs associated with quality assurance, inspection, testing and quality control. Important distinction between prevention/ appraisal and other quality-related costs.
CAS 22	**Manufacturing Cost**	Determines the manufacturing cost of excisable goods; brings together relevant manufacturing costs in a consistent manner.
CAS 23	**Overburden Removal Cost**	Particularly relevant to mining. Deals with the measurement and assignment of overburden removal cost.
CAS 24	**Treatment of Revenue in Cost Statements**	Covers classification, measurement, treatment, assignment, presentation and disclosure of revenue in cost statements.
CAS 25	**Valuation of Inventory w.e f 12th February 2026**	To bring uniformity, consistency, and standardisation in the principles and methods of determining the value of inventory with reasonable accuracy

Evaluation of Corporate Image

Corporate image is the overall perception, feelings, and reputation of a company as felt by the public, stakeholders, customers and in the eyes of society. It is the "face" of an organisation—how it is seen, understood, and remembered, encompassing both internal and external views.

In a competitive business environment, corporate image has become an important **strategic intangible asset**. A company may possess strong financial resources and advanced technology, but a weak corporate image can adversely affect customer loyalty, employee morale, investor confidence and business relationships. Conversely, a positive corporate image can strengthen trust, enhance competitiveness and support long-term value creation.

The major reasons for the evaluation of Corporate Image include:

- **Building stakeholder confidence**

  Investors, customers, employees, suppliers, regulators and communities are more likely to engage with an organisation they perceive as trustworthy and responsible.

- **Strengthening customer loyalty**

  Corporate image influences customer attitudes beyond the functional characteristics of a product. A company perceived as reliable, ethical and socially responsible may enjoy stronger customer loyalty.

- **Attracting and retaining employees**

  Employees increasingly consider organisational culture, values, ethics, sustainability and social impact when choosing employers. A positive image can therefore contribute to employee attraction and retention.

- **Supporting investor confidence**

  Investors increasingly consider governance, ESG performance, transparency and risk management alongside traditional financial indicators. Corporate image can influence perceptions of organisational quality and risk.

- **Managing crises**

  A strong corporate image provides a degree of reputational resilience. Organisations with established stakeholder trust may recover more effectively from adverse events, provided they respond transparently and responsibly.

- **Enhancing competitive advantage**

  Corporate image can differentiate an organisation where competing products and services are otherwise similar.

Key components of Corporate Image include logos, branding, employee behaviour, and company values. A positive corporate image enhances the overall accessibility of the organisation in all spheres of society. To build a positive image, many methods are used: I

- Advertising in various media (Print, TV, Radio) and forums (Clubs, NGOs). Television is available in the remotest parts of the country, and the use of this platform reaches the stakeholders in a visual form.
- Product quality and price, Post-sale customer service develops loyalty to the product and entity.
- Provision of social amenities like CSR activities, community support, and social bonding is helpful in building Corporate Image.
- Event sponsorship.
- In situations of disaster, the support given to society is immensely helpful in building an image.

Corporate image has evolved from being primarily a marketing concept into a strategic governance, risk-management and sustainability issue. It represents the collective perception of stakeholders regarding an organisation's competence, integrity, responsibility and performance. An effective evaluation of Corporate Image should not depend upon a single indicator. It should integrate corporate governance, financial performance, product quality, customer orientation, employee relations, CSR, environmental sustainability, ethics, transparency and risk management.

For contemporary organisations, particularly listed and environmentally sensitive companies, corporate image evaluation can help management to identify reputational strengths and weaknesses, improve stakeholder relationships, strengthen risk management and support long-term sustainable value creation.

Topic

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. In determining whether an investor controls an investee, which factor is particularly relevant in addition to the investor's voting rights?

   A. The profitability of the investee

   B. The investor's ability to direct relevant activities

   C. The dividend rate declared by the investee

   D. The age of the investee

   Answer: B

2. An investor may have control over an investee even when it does not hold a majority of the voting rights if:

   A. It has the practical ability to direct the relevant activities of the investee

   B. The investee has incurred losses

   C. The investor has provided a loan to the investee

   D. The investor receives dividends from the investee

   Answer: A

3. Which of the following is not one of the three elements of control under Ind AS 110?

   A. Power over the investee

   B. Exposure, or rights, to variable returns

   C. Ability to use power to affect returns

   D. Ownership of at least 51% of the equity shares

   Answer: D

4. An entity has significant influence over another entity. Which statement is most appropriate?

   A. The investee automatically becomes a subsidiary

   B. The investor necessarily has control over the investee

   C. The investor participates in relevant financial and operating policy decisions without controlling them

   D. The investor must consolidate all assets and liabilities of the investee line by line

   Answer: C

5. Under the equity method, an investor's share of the other comprehensive income of an associate is generally:

   A. Ignored in accounting for the investment

   B. Recognised in the investor's share of OCI with a corresponding adjustment to the carrying amount of the investment

   C. Recognised as revenue

   D. Recognised as goodwill

   Answer: B

6. When an investor's share of the losses of an associate equals or exceeds its interest in the associate, the investor generally:

   A. Continues recognising losses indefinitely regardless of circumstances

   B. Discontinues recognising further losses, subject to applicable requirements relating to additional interests or obligations

   C. Transfers all losses to goodwill

   D. Recognises the losses as a liability in every case

   Answer: B

7. For consolidation purposes, the financial statements of a parent and its subsidiary should generally have:

   A. Different reporting periods

   B. The same reporting date, subject to permitted adjustments where necessary

   C. Different accounting policies

   D. Different functional currencies

   Answer: B

8. If a subsidiary uses accounting policies different from those used in the consolidated financial statements, the subsidiary's financial information should generally be:

   A. Excluded from consolidation

   B. Adjusted to conform to the group's accounting policies

   C. Consolidated without any adjustment

   D. Converted into cash basis accounting

   Answer: B

9. Which of the following would normally be eliminated on consolidation?

   A. Dividend received by the parent from an unrelated company

   B. Trade receivable of the parent from an external customer

C. Inter-company receivable and corresponding payable between group entities

D. Bank balance of the subsidiary with an external bank

Answer: C

10. P Ltd. holds 75% of S Ltd. During the year, S Ltd. pays a dividend of ₹8 lakh to P Ltd. In preparing consolidated financial statements, the dividend received by P Ltd. from S Ltd. is:

A. Recognised as group income

B. Eliminated as an intra-group transaction

C. Recognised as other comprehensive income

D. Recognised as goodwill

Answer: B

11. In a group structure involving chain holding, an entity generally has an interest in another entity:

A. Only through direct ownership

B. Through one or more entities within the group structure

C. Only through preference shares

D. Only through debt instruments

Answer: B

12. Cross-holding in a group structure refers to a situation where:

A. Two or more entities within the group hold interests in each other

B. The parent holds shares in only one subsidiary

C. A subsidiary has no outside shareholders

D. An associate holds only government securities

Answer: A

13. Which statement correctly distinguishes a joint operation from a joint venture?

A. A joint operation involves rights to the net assets only

B. A joint operation involves rights to assets and obligations for liabilities relating to the arrangement

C. A joint operation is always a subsidiary

D. A joint operation is accounted for only by the equity method

Answer: B

14. A joint operator in a joint operation generally recognises in its financial statements:

A. Only its investment at cost

B. Its share of the jointly controlled entity's goodwill only

C. Its assets, liabilities, revenue and expenses relating to its interest in the joint operation

D. Only dividends received from the arrangement

Answer: C

15. Which of the following is primarily intended to help users understand the nature of an entity's interests in subsidiaries, associates, joint arrangements and their associated risks?

A. Consolidation-related disclosures

B. Cash-flow classification

C. Inventory ageing schedule

D. Earnings-per-share calculation

Answer: A

Topic: Recent Developments in Financial Reporting

- **Short Essay Type Questions**

1. What is GRI? What does it cover?

Answer: The term GRI stands for Global Reporting Initiative. It is an independent international organization that develops Global Reporting Standards (GRI Standards) for sustainability reporting. The standards help organizations report their economic, environmental, and social impacts in a structured and comparable manner.

GRI broadly helps an organization disclose its impacts in areas such as:

(a) Economic – economic performance, procurement practices, anti-corruption, taxation, etc.

(b) Environmental – energy, emissions, water, biodiversity, waste and environmental compliance.

(c) Social – labour practices, human rights, occupational health and safety, diversity, communities, customer privacy, etc.

2. Discuss the benefits offered by GRI.

Answer: GRI provides several important benefits to organizations that use the GRI Standards for sustainability reporting:

a. Improved transparency – GRI provides a structured way to disclose an organization's significant economic, environmental and social impacts.

b. Better stakeholder communication – It helps organizations communicate relevant sustainability information to investors, employees, customers, regulators, communities and other stakeholders.

c. Identification of material impacts – The GRI approach helps an organization identify and report the sustainability topics that are most significant in terms of its impacts.

d. Comparability of information – Using a common set of reporting standards makes sustainability information more systematic and easier to compare across organizations and reporting periods.

e. Greater accountability – Public disclosure of sustainability impacts can encourage organizations to take greater responsibility for their economic, environmental and social performance.

f. Improved decision-making – The process of collecting and reporting GRI information can help management identify risks, opportunities and areas requiring improvement.

g. Enhanced credibility – Reporting according to a recognized international sustainability-reporting framework can make sustainability disclosures more structured and credible.

h. Support for sustainability strategy – GRI reporting can help an organization connect its sustainability impacts with its policies, targets and management practices.

i. Risk and opportunity identification – Reporting on areas such as climate, labour, human rights, resource use and communities can help organizations identify sustainability-related risks and opportunities.

j. Contribution to sustainable development – By focusing on an organization's actual impacts on the economy, environment and people, GRI reporting can help organizations understand and manage their contribution to sustainable development.

3. What are GRI Standards?

Answer: GRI Standards are the Global Reporting Initiative (GRI) Standards, a widely used framework for organisations to report their economic, environmental and social impacts in a structured and comparable manner. They are designed primarily for sustainability reporting, rather than being financial accounting standards.

The GRI Standards are organised into **three main categories**:

Category	Purpose
GRI Universal Standards	Apply to all organisations and provide the basic reporting framework.
GRI Sector Standards	Provide guidance on impacts that are particularly relevant to specific sectors.
GRI Topic Standards	Provide detailed disclosures for particular topics such as climate change, waste, tax, occupational health and safety, etc.

Topic

Module 10: GST Returns

FINAL

Group IV - Paper-19

Indirect Tax Laws and Practice (ITLP)

GST RETURNS

GST law requires registered persons to furnish various returns, statements and reconciliation documents, depending upon their nature of registration and the applicable scheme. The applicable return and its periodicity depend upon the status, turnover and scheme applicable to the registered person. This article discusses the principal GST returns applicable to regular, QRMP and composition taxpayers, together with the annual return, reconciliation statement, due dates and consequences of delayed compliance

1. Major GST Returns and Their Applicability

For a regular taxpayer, GSTR-1 and GSTR-3B are the principal periodic returns. GSTR-1 captures invoice-level details of every outward supply for the period, and GSTR-3B is the summary return through which output tax is declared, input tax credit is claimed, and the net liability is actually paid. Monthly filers submit GSTR-1 by the 11th of the following month and GSTR-3B typically by the 20th.

Taxpayers with an aggregate annual turnover of up to ₹ 5 crore may instead opt for the QRMP (Quarterly Return, Monthly Payment) Scheme. Under QRMP, GSTR-1 and GSTR-3B are filed quarterly — cutting the filing count from 24 returns a year to just 8 — while tax for the first two months of each quarter is still deposited monthly through a simplified challan, Form PMT-06, using either the fixed-sum or self-assessment method. The quarterly GSTR-1 is due by the 13th of the month after the quarter, and GSTR-3B by the 22nd or 24th, depending on the State.

Taxpayers opting for the composition scheme follow a separate return-filing mechanism instead of the regular GSTR-1 and GSTR-3B framework. A business with turnover up to ₹ 1.5 crore (₹ 75 lakh in specified special-category states) opting for the composition scheme instead files Form CMP-08, a quarterly statement-cum-challan declaring turnover and depositing tax at the flat composition rate, due by the 18th of the month following the quarter, and Form GSTR-4, an annual return due by 30th June of the next financial year.

⊙ Composition Scheme

- Composition dealers issue a Bill of Supply, not a tax invoice.
- They cannot charge GST separately from their customers.
- They cannot claim any input tax credit on their purchases.

A registered person is required to furnish a Nil GSTR-1 or GSTR-3B, where applicable, even when there are no outward supplies or tax liability for the relevant period; the facility for filing Nil returns through SMS is also available in specified cases. No return, moreover, can be filed until every earlier return in the sequence has been filed, which is why a single missed month can cascade into a compliance backlog.

2. Returns Applicable to Specific Persons

Apart from the regular and composition returns, GST law prescribes specific returns and statements for certain categories of registered persons:

Form	Filed By
GSTR-5	Non-resident taxable person, for the period of registration
GSTR-5A	Suppliers of OIDAR services from outside India
GSTR-6	Input Service Distributor, monthly, to pass on credit to branches
GSTR-7	Person required to deduct tax at source (TDS) under GST, monthly
GSTR-8	E-commerce operator, monthly, reporting TCS on behalf of sellers.
GSTR-10	Final Return — within 3 months of the date of cancellation/date of receipt of order of cancellation
GSTR-11	UIN holders (foreign embassies, UN bodies) claiming a refund on inward supplies
ITC-04	Principal manufacturer, reporting goods sent to / received from a job worker

3. GSTR-9 — The Annual Return

GSTR-9 contains a consolidated statement of the outward supplies, input tax credit availed and tax paid during the financial year, based on the information reported in the periodic returns. It comprises six parts covering nineteen tables. Filing GSTR-9 is mandatory for a regular taxpayer whose aggregate annual turnover exceeds ₹ 2 crore in the financial year; below that threshold, filing remains optional. Composition taxpayers, casual taxable persons, non-resident taxable persons, ISDs, and persons liable to deduct or collect tax at source are excluded from this requirement.

⊙ Taxpoint

- GSTR-9 due date: 31st December following the end of the relevant financial year, so GSTR-9 for FY 2025-26 falls due on 31st December 2026.

4. GSTR-9C — The Reconciliation Statement

GSTR-9C is a self-certified reconciliation statement comparing the figures reported in GSTR-9 with the corresponding figures in the financial statements and books of account, as applicable.

While GSTR-9 provides what the taxpayer reported, GSTR-9C indicates to the department whether that report matches the taxpayer's audited books. It is a self-certified reconciliation statement comparing the turnover, tax paid, and ITC figures in GSTR-9 with those in the audited profit and loss account and balance sheet, and it becomes mandatory when the aggregate turnover exceeds ₹ 5 crore in the financial year.

GSTR-9C shares its due date with GSTR-9, and a taxpayer who files GSTR-9 but delays GSTR-9C has not completed the annual filing obligation at all.

5. Consequences of Delay — Late Fees and Interest

Section 47 of the CGST Act provides for the levy of a late fee for the delayed furnishing of prescribed returns and statements. For delayed filing of GSTR-1 and GSTR-3B, the applicable late fee is generally ₹ 50 per day (₹ 20 per day for nil return), comprising ₹ 25 under CGST and ₹ 25 under SGST/UTGST, subject to the prescribed reductions and maximum limits.

Maximum Late Fee Caps (Total CGST + SGST)

- Nil Return: Maximum cap of ₹ 500.
- Turnover up to ₹ 1.5 Crore: Maximum cap of ₹ 2,000.
- Turnover between ₹ 1.5 Crore and ₹ 5 Crore: Maximum cap of ₹ 5,000.
- Turnover above ₹ 5 Crore: Maximum cap of ₹ 10,000

For the annual return, Section 47(2) applies a slab structure keyed to turnover:

Aggregate Turnover	Late Fee for GSTR-9 (per day)	Cap
Up to ₹ 5 crore	₹ 50 (₹ 25 CGST + ₹ 25 SGST)	0.04% of turnover in the State/UT
Above ₹ 5 crore, up to ₹ 20 crore	₹ 100 (₹ 50 + ₹ 50)	0.04% of turnover in the State/UT
Above ₹ 20 crore	₹ 200 (₹ 100 + ₹ 100)	0.50% of turnover in the State/UT

None of these late fees can be paid using input tax credit. It must be discharged in cash through the Electronic Cash Ledger. Separately, Section 50 charges interest at 18% per annum on any tax that remains unpaid after the due date, rising to 24% where credit has been wrongly availed or utilised.

Conclusion

☉ Taxpoint

- Return Regime: Is the assessee on the regular scheme, QRMP, or composition, and does a specialised form (non-resident, ISD, TDS deductor, e-commerce operator) apply instead?
- Annual Thresholds: Have the ₹ 2 crore (GSTR-9) and ₹ 5 crore (GSTR-9C) turnover limits been crossed?

GST return compliance requires taxpayers to identify the applicable return, follow the prescribed periodicity and adhere to the relevant due dates. The annual return and reconciliation statement further require the reported figures to be reviewed and reconciled with the underlying records. Timely and accurate compliance with these requirements helps ensure proper reporting of GST liability and input tax credit.

Topic

Module 3:
Economic Efficiency of the Firm – Performance Analysis

Module 8:
Valuation of Assets and Liabilities

ELECTIVES

Paper-20A

Strategic Performance Management and Business Valuation (SPMBV)

FINAL

Economic Efficiency of a Firm – Performance Analysis

The study of the economic efficiency of a Firm involves –

(a) Efficiency in the production of goods and services

(b) Efficiency in the distribution of services from producers to end users

The above fundamentals give rise to the following perspectives –

(1) Available resources to the Firm are optimally used

(2) The resources are optimally used so as to maximise the total social value of output.

(3) The Firm would minimise the opportunity cost of resources.

(4) The producers collectively produce the right quantity and right combination of output.

(5) Goods and services are carried from producers to end users through cost-effective distribution channels.

Economic Performance Indicators –

Among the various uses of economic indicators, the decision-making of the investor is most important. An investment strategy is built on the projections made by economic indicators which has the following attributes:

A. *Relation to Business Cycle / Key Economic Factors* – ***Indicators are*:**

a) procyclical economic indicators, signifying that the indicators move in the same direction as the economy

b) countercyclical economic indicators, signifying indicators that move in the opposite direction as the economy

c) acyclic economic indicators, which have no relation to the major economic factors and are of little use.

B. ***Frequency of Data***:

On the basis of the availability / frequency of relevant data, economic indicators differ and, hence, impacts investor decision.

C. ***Timing****:* On the basis of timing, an economic indicator is either leading, lagging or coincident on the basis of their changes relative to the changes in certain important economic factors.

- Leading economic indicators are indicators that change before certain economic factors change. For example, an upward / downward movement in the stock market index forecasts the movement of certain economic trends.
- Lagged economic indicators are the indicators that do not change direction until a few months after the economy does. For example, the unemployment rate is a lagged economic indicator. So, wages are sticky and do not rise or fall quickly.
- A coincident economic indicator is one that changes in tandem with certain factors of the economy, for example, the GDP.

For an economy, there may be different categories of economic indicators as :

- Total output, Income and Spending
- Employment, unemployment and wages
- Production and Business Activity index
- Prices
- Money, Credit and Security markets

Though the financial performance of a Firm is often used interchangeably with economic performance, in a broader sense, economic performance refers to the accomplishment of the financial as well as operational objectives of the Firm. Certain non- financial parameters, along with the financial parameters, are essential as they are linked to the overall mission and vision of a Firm. The financial parameters, along with the operational parameters, measure the Firm's overall financial health over a given period of time and are also used for comparison across industries and sectors over time.

Following is the comprehensive list of Economic Performance Indicators of a typical Firm –

A. *Financial Performance Indicator*: this mainly covers–

a) Profitability performance

b) Market value performance

c) Growth performance

B. Strategic Performance Indicator: this mainly covers –

a) Employee satisfaction

b) Customer satisfaction

c) Social performance

d) Environmental performance

Economic Performance of a Firm, thus, depends on the sum total of the Financial performances and Strategic performances.

Key Performance Indicator (KPI) –

In the functional domain of a Firm, the concept of Key Performance Indicator is recognised as the

identification of critical factors towards key performance accomplishment. KPIs are performance indicators that are critical to the success of a business. Thus, it is a subset of total performance indicators that are most critical to a business. The KPI are metrics that help measure the progress of the organisation towards its strategic goals. The KPIs are mostly selected with respect to four organisational perspectives, namely: financial, customer, process and people. Selection of the right KPIs is one of the most important requirements towards success of a Firm.

Critical Success Factors (CSFs) vis-à-vis KPIs

Though both are of critical importance and are complementary to each other, there are sharp differences between the two. KPIs are parameters that measure whether the CSFs are achievable or not. KPIs reflect the level of success, whilst CSFs point out the cause of success. KPIs are performance management instruments used to measure and monitor the achievement of key objectives, so as to determine the level of success and to indicate whether the Firm is moving in the right direction to achieve its CSFs, as expected.

An outline of the difference between KPIs and CSFs-

Points of difference	KPIs	CSFs
Main focus	Identify Success metrics	Identify factors resulting in success
Main role	Indicate what is being done	Specify requirement for success
Dependency	Depend on benchmark	Standalone
Measurement Insights	Quantitative Generate insights	Qualitative Use insights

For example, if market share is the CSF, % of business is the KPI; Again, if customer satisfaction is the CSF, % of satisfied customers is the KPI.

Following elements are to be considered while setting effective performance measure by a Firm-

1. Specific & Clear
2. Measurable
3. Attainable
4. Realistic
5. Tangible

The Pricing strategy –

It is not the economic efficiency of a Firm alone that results in optimal profitability under a given set of conditions, it is also the market structure, nature of competition and the pricing strategy a Firm adopts that results in profit optimality and satisfactory growth sustainability.

The possible market structures that a Firm may face during its life cycle are –

- Perfect Competition
- Imperfect Competition
- Monopoly
- Monopolistic competition
- Oligopoly

Depending upon specific market competition, the pricing strategies can be any one of the followings: -

(a) **Cost-based pricing:** Full cost pricing, Marginal cost pricing

(b) **Demand-based pricing:** Perceived value pricing, Differential pricing

(c) **Competition-based pricing:** Going rate pricing, Sealed-bid pricing, Customary pricing, Trade Association pricing

(d) **Strategy-based pricing:** Skimming pricing, Penetration pricing.

(e) **Discriminatory pricing:** Strategy driven & Competition driven; (generally applicable under monopoly / monopolistic market conditions)

Finally, the overall pricing decision and economic efficiency of a Firm in a given market under a given set of conditions and during a given point of time will depend on the following internal and external factors: -

Internal Factors:

1. The strategic goal of the Firm
2. Costs
3. Organisational considerations
4. Marketing -mix strategy

External Factors:

1. Demand in the market
2. Competitors
3. Govt. Policies
4. Economic conditions

Valuation of Assets and Liabilities: In the context of Business Valuation

Valuation of Assets

In the context of Business Valuation, different classes of assets require distinct and specialised valuation techniques.

The primary methods for valuing various corporate assets include –

1. *For Tangible and Physical Assets-*

These are physical, quantifiable components of a business and distinct methods of valuation are used in each case :

(a) Real Estate and Property: These are valued using the Market Approach method (comparing recent sales of similar properties) or the Cost Approach method (evaluating the cost to replace the property minus accrued depreciation). The income approach applies the income from the property and uses suitable discount factors to assess the value of the property at a given point in time.

(b) Plant, Property & Equipment: Assessed by valuers based on the replacement cost method or the liquidation value method (the net cash obtainable if the assets were sold off independently within a short time)

(c) Inventory: Typically, valuation is made by using accounting standards by way of FIFO or weighted average. In distressed valuation, valuers look at the net realisable value (expected selling price minus disposal costs).

From an accounting perspective, inventory is valued at the lower of cost or net realisable value. Inventory valuation involves the following major costs:-

- Cost of purchase
- Cost of conversion
- Other related costs incurred in bringing the inventories to their present location and condition.

2. *Financial and Liquid Assets –*

These are cash equivalents or legally binding claims on outside entities. Valuation methods used in each case are as follows:

(a) **Cash & Cash equivalents:** Valued at their face value on the valuation date.

(b) **Accounts receivable:** Valued at face value but adjusted downward after estimating a bad debt reserve to account for the amounts that are unlikely to be collected.

(c) **Investments & Marketable Securities:** Valued using the prevailing market price available on public exchanges.

(d) **Investment in unquoted securities:** In the absence of adequate information, valuers may consider valuing such unquoted investments at their net asset values under the cost approach.

3. *Intangible Assets –*

These are non-physical assets and valuation methods differ in each category as :

(a) **Patents, Copyrights and Trademarks:** Generally valued using the Relief from Royalty Method (estimating the royalties the company would have to pay to license the asset if they do not own it) or the Excess Earnings Method (isolating the cash flow generated by the intangible assets). Other methods used for intangible assets are: the premium profit method, the greenfield method, and the distributor method.

(b) **Goodwill:** Calculated as a Residual Value. It represents the premium paid for the company's reputation, brand and customer base, derived by taking the total purchase price of the business and subtracting the fair value of all identifiable tangible and intangible assets.

Basically, in valuing various categories of assets, the following four *Methods* are used –

(a) Cost Method

(b) Market value Method

(c) Base Stock Method

(d) Standard Cost Method

Considering the Approach to asset valuation, the following *Approache*s may be mentioned: -

(a) The Cost Approach

(b) The Direct Market Approach or Sales Comparison Approach

(c) The Income Approach

Two *methods* are often used to value machinery and equipment under the Income Approach –

1. The Direct Capitalisation Approach (DC)
2. DCF Approach

When applying the DC method, a projected income stream is divided by a capitalisation rate. The DCF approach projects quantum, variability, timing, period, residual value, and discounts them to present value using a suitable discount rate.

These approaches establish the value of an asset or collection of assets, assuming an ongoing business. This

implies that the subject assets will remain in place and in use as a continuing or ongoing business at their best use.

Valuation of Liabilities

The valuation of company liabilities is the process of determining the current fair value of a company's debts, obligations, claims, etc., against its assets. In business valuation, this involves identifying all current liabilities (due within a year) and non-current liabilities (due later) and adjusting them to reflect market realities. Valuation of liabilities is also governed by the principle of conservatism, which is one of the important principles of Generally Accepted Accounting Principles (GAAP).

Valuing Current Liabilities –

Debts or obligations due within one year (e.g. accounts payable, short-term debts, accrued expenses) are typically valued at their face value or the cash amount required to settle them.

Valuation of Non-current Liabilities-

Long term obligations beyond one year are valued at the present value of future payments discounted at a specific interest rate(s) to account for the time value of money.

Valuation of Contingent Liabilities-

Potential future obligations that depend on a specific event (e.g., pending lawsuits or product warranties) are valued based on the probability of occurrences and a reliable estimate of the payout if the event is likely to happen and the amount can be reasonably estimated.

To sum up:

- Face value method for standard short-term debt
- Present value method for long-term obligations
- Fair value-based method with regard to market pricing and probability weighted estimates for contingent liabilities.

Further categorisation:

(a) In respect of Pension and Post retirement obligations – Under the Actuarial Present Value approach, the Projected Unit Credit method is used.

(b) In respect of Deferred Tax Liabilities- Under the Nominal Tax method, valuation is done using the enacted tax rates

(c) In respect of financial liabilities (Debts & Borrowings) – The amortised cost approach is used for standard loans, bonds and notes payable and valuation is done using the Effective Interest Rate (EIR) method.

(d) In respect of Contingent claim: It is a derivative that gives the owner the right but no obligation to a payoff based on an underlying asset, rate or other derivative. Contingent claims include options.

Other valuation methods for valuing liabilities:

1. Book Value (Net Asset Value): This is the simplest baseline to determine the paper worth of a company.

   Book value = Total Assets – Total Liabilities

2. Liquidation Value: Considers the net cash value if assets are sold off and liabilities are paid off immediately.
3. Market capitalisation approach
4. Discounted Cash Flow Method

FINAL

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)

Risk Management in Banking

Sovereign Risk and Insolvency Risk

Risk management is central to the stability, profitability and sustainability of the banking sector. Banks operate with high financial leverage, maturity transformation and substantial exposure to borrowers, governments, financial markets and economic cycles. Among the various risks confronting banks, **sovereign risk and insolvency risk** assume particular importance because their consequences can extend beyond individual transactions and affect the entire financial system.

Sovereign risk arises from the possibility that a government may be unable or unwilling to honour its financial obligations or may impose measures that adversely affect creditors and financial institutions. Insolvency risk, on the other hand, relates to the possibility that a bank or its borrower may become unable to meet financial obligations as they fall due, resulting in financial distress or failure. These risks are interconnected and can reinforce each other through the banking-sovereign nexus.

Sovereign Risk in Banking: Sovereign risk refers to the risk of financial loss arising from adverse developments in the financial condition, economic position, political environment or creditworthiness of a sovereign government. Banks are exposed to sovereign risk not merely through investments in government securities but also through loans to government-related entities, foreign exchange transactions, cross-border operations and the overall impact of sovereign developments on domestic economic conditions.

Government securities are generally regarded as relatively low-risk assets, particularly in domestic currency. However, they are not entirely free from risk. Changes in interest rates, fiscal sustainability, inflation, exchange rates and government creditworthiness can materially affect their market value and liquidity. In the case of foreign sovereign exposures, additional currency and transfer risks may arise.

Sources of Sovereign Risk: A bank's sovereign exposure can arise through several channels. Direct exposure includes holdings of government securities, sovereign bonds, treasury bills and loans to governments or government-controlled entities. Indirect exposure may arise when the financial position of government-owned enterprises deteriorates because of fiscal stress or when government support to such entities becomes uncertain.

Macroeconomic deterioration is another important source. High fiscal deficits, increasing public debt, persistent current-account deficits, declining foreign exchange reserves and weak economic growth may adversely influence sovereign creditworthiness. Political instability, changes in government policy, sanctions, geopolitical conflicts and restrictions on capital movements can further aggravate sovereign risk.

For banks operating internationally, sovereign risk also includes **transfer risk**, whereby restrictions imposed by a foreign government prevent borrowers from transferring funds across borders to service their obligations.

Measurement and Assessment of Sovereign Risk: Effective sovereign risk management requires banks to evaluate both quantitative and qualitative indicators. Important quantitative indicators include the debt-to-GDP ratio, fiscal deficit, interest burden, foreign exchange reserves, external debt, current-account position, inflation and economic growth.

Credit-rating movements, sovereign credit spreads, bond yields and market-implied default probabilities provide additional information. However, reliance solely on external credit ratings is inadequate. Banks should undertake their own internal assessment based on forward-looking economic and political analysis.

Stress testing is particularly important. Banks should assess the impact of scenarios such as a sharp increase in sovereign yields, currency depreciation, sovereign rating downgrade, fiscal deterioration, restructuring of sovereign debt or restrictions on capital transfers.

Sovereign Risk and the Banking-Sovereign Nexus: Banks and governments are closely interconnected. Banks often hold substantial quantities of government securities, while governments may depend upon banks to finance fiscal requirements. During periods of economic stress, this relationship can become a source of systemic vulnerability.

A deterioration in sovereign creditworthiness can reduce the market value of government securities held by banks, weaken their capital position and increase funding costs. At the same time, sovereign financial stress can reduce the government's ability to provide support to distressed financial institutions.

Conversely, banking-sector distress may require government intervention, guarantees or recapitalisation. Such intervention can increase public debt and worsen sovereign creditworthiness. This creates a **feedback loop between sovereign risk and banking risk**, commonly described as the banking-sovereign nexus.

Management of Sovereign Risk: Banks should establish clearly defined sovereign exposure limits based on the credit quality, currency, maturity and jurisdiction of the exposure. Concentration limits are necessary to prevent excessive dependence on a single sovereign or group of related sovereigns.

Treasury and risk-management functions should

continuously monitor changes in sovereign yields, exchange rates, fiscal indicators and geopolitical developments. Investment decisions should consider not only expected return but also duration, liquidity, market-value sensitivity and concentration.

Scenario analysis and stress testing should form an integral part of the risk framework. Where appropriate, banks may use hedging strategies to mitigate interest-rate or foreign-exchange components of sovereign risk.

Insolvency Risk in Banking: **Insolvency risk** is the possibility that an institution or borrower will be unable to meet its financial obligations because the value of its assets is insufficient to cover its liabilities or because it cannot generate sufficient cash flows to meet obligations when due.

In banking, insolvency risk is particularly significant because banks accept deposits and other short-term funds and deploy them into loans and investments having comparatively longer maturities. A bank can therefore face financial distress even when a substantial portion of its assets may ultimately be recoverable.

Insolvency risk should consequently be distinguished from **liquidity risk**. Liquidity risk concerns the inability to obtain funds when required, whereas insolvency fundamentally concerns the adequacy of capital and the economic value of assets relative to liabilities. Nevertheless, the two risks can interact and reinforce each other.

Causes of Insolvency Risk: The most significant source of insolvency risk for banks is deterioration in asset quality. Large-scale defaults, rising non-performing assets and inadequate provisioning can erode earnings and capital. Concentration in particular sectors, geographical areas or borrower groups can magnify the problem.

Rapid credit expansion without appropriate underwriting standards may also create future insolvency risk. Weak collateral valuation, inadequate due diligence, poor monitoring, fraud and governance failures can result in unexpected credit losses.

Market risk can contribute to insolvency where substantial losses arise from interest-rate, foreign-exchange or investment exposures. Operational failures, cyber incidents, legal liabilities and reputational damage may also create significant financial losses.

For borrowers, insolvency risk may arise from excessive leverage, inadequate cash flows, poor working-capital management, business-model failure, loss of markets, technological disruption or adverse economic conditions.

Early Warning Indicators: Banks should establish comprehensive early-warning systems to identify emerging insolvency risk. Deterioration in repayment behaviour, frequent overdrawing of accounts, declining turnover, delayed financial statements, declining profitability and increasing leverage may indicate financial stress in borrowers.

For banks themselves, indicators include deterioration in capital adequacy, increasing gross and net non-performing assets, declining profitability, high concentration risk, increasing cost of deposits, dependence on unstable funding sources and deterioration in liquidity buffers.

Early identification enables corrective action before financial distress becomes irreversible.

Capital Adequacy and Provisioning: Adequate capital is the primary financial buffer against unexpected losses. Banks must maintain capital commensurate with the risk profile of their assets and operations. Capital planning should consider both regulatory requirements and internal economic-risk assessments.

Provisioning is equally important because expected credit losses should be recognised appropriately rather than allowing losses to accumulate unnoticed. The transition towards forward-looking **Expected Credit Loss (ECL)** frameworks strengthens the ability of banks to recognise credit deterioration at an earlier stage.

Banks should regularly review the adequacy of provisions under normal and stressed conditions and ensure that assumptions underlying credit-risk models remain appropriate.

Insolvency Risk Management and Resolution: Effective insolvency-risk management requires strong governance, independent risk oversight and timely corrective action. The Board should establish risk appetite and ensure that management operates within approved limits.

Banks should maintain recovery and resolution strategies for situations involving severe financial stress. In India, the regulatory framework involving the Reserve Bank of India, the Insolvency and Bankruptcy Code, 2016, the Deposit Insurance and Credit Guarantee Corporation and other institutional mechanisms provides an important framework for addressing financial distress and protecting financial stability.

For corporate borrowers, banks should monitor the borrower's ability to generate sustainable cash flows rather than relying exclusively on collateral. Restructuring, resolution plans and insolvency proceedings may become necessary where recovery through ordinary banking channels is no longer viable.

Integrated Management of Sovereign and Insolvency Risks: Sovereign risk and insolvency risk should not be managed in isolation. A sovereign crisis can increase borrowing costs, weaken economic activity, depreciate the currency and adversely affect corporate borrowers.

This may increase defaults and consequently impair banks' asset quality.

Similarly, widespread banking-sector insolvency can impose fiscal costs on governments through recapitalisation, guarantees or resolution measures, thereby increasing sovereign risk.

Banks should therefore incorporate sovereign scenarios into enterprise-wide stress testing. Stress tests should examine the combined impact of sovereign deterioration, interest-rate increases, currency depreciation, credit losses, liquidity pressures and capital erosion.

Risk dashboards should provide senior management and the Board with an integrated view of these exposures, enabling timely corrective measures.

Regulatory and Governance Perspective: Risk management ultimately depends upon sound governance. The Board must establish an appropriate risk appetite, while senior management must implement systems for identifying, measuring, monitoring and controlling risks.

Internal audit, risk-based concurrent audit, compliance functions and independent model validation provide additional layers of assurance. Risk policies should be periodically reviewed to reflect changes in the economic environment, regulatory requirements and the bank's business strategy.

A robust risk culture should encourage early reporting of emerging problems rather than focusing solely on historical financial performance. Risk management should therefore be treated as an integral component of strategic decision-making rather than merely a regulatory compliance exercise.

Risk Management in Insurance

Insurance Intermediaries, General Insurance, Health Insurance and Life Insurance

Insurance is fundamentally a business of managing uncertainty. An insurer accepts risks from individuals, businesses and institutions in return for a premium and undertakes to compensate the policyholder when specified events occur. The sustainability of this arrangement depends upon the insurer's ability to identify, assess, price, monitor and control risks throughout the insurance cycle.

Risk management in insurance extends beyond underwriting and claims. It encompasses financial, operational, investment, technological, legal, regulatory, reputational and strategic risks. The nature of these risks varies considerably among insurance intermediaries, general insurance, health insurance and life insurance. An effective risk-management framework must therefore recognise the distinctive characteristics of each segment while maintaining an enterprise-wide perspective.

Risk Management in Insurance Intermediaries: Insurance intermediaries, including insurance brokers, corporate agents, individual agents and other distribution channels, occupy a critical position between insurers and customers. Their activities directly influence customer acquisition, product selection, policy servicing and claims communication. Consequently, weaknesses in intermediary operations can create significant risks for both insurers and policyholders.

The principal risks include mis-selling, inadequate disclosure, conflict of interest, inaccurate documentation, premium misappropriation, fraudulent transactions, data leakage and non-compliance with regulatory requirements. An intermediary may also expose an insurer to reputational risk where inappropriate advice or unfair sales practices result in customer complaints.

Effective intermediary risk management should begin with appropriate due diligence and selection of intermediaries. Insurers should evaluate their financial standing, competence, infrastructure, regulatory compliance record, internal controls and business practices. Agreements should clearly define responsibilities, service standards, remuneration arrangements and compliance obligations.

Continuous monitoring is equally important. Insurers should analyse cancellation ratios, complaint levels, persistency, unusual premium transactions, claims patterns and customer grievances associated with individual distribution channels. Technology-enabled monitoring can identify unusual behaviour and potential fraud at an early stage.

Training and certification of intermediaries are essential risk-control mechanisms. Customers must receive accurate information concerning policy benefits, exclusions, premiums, surrender conditions, waiting periods and claim procedures. A strong "customer suitability" culture can substantially reduce mis-selling and subsequent disputes.

Risk Management in General Insurance: General insurance covers diverse risks relating to property, motor vehicles, marine cargo, fire, engineering, liability, agriculture and other assets and activities. Unlike life insurance, the duration of many general insurance policies is relatively short, but the frequency and severity of claims can be highly uncertain.

Underwriting risk is one of the most significant risks. Incorrect assessment of the probability and potential severity of loss may result in premiums that are inadequate to cover claims and expenses. Insurers should therefore

use appropriate underwriting guidelines, historical claims data, risk inspection, geographic information and industry-specific risk parameters.

Catastrophe risk is particularly important in property, agriculture and certain liability portfolios. Natural disasters such as floods, cyclones, earthquakes and large-scale fires can generate claims far exceeding normal expectations. Insurers should undertake catastrophe modelling and stress testing and maintain adequate reinsurance arrangements.

Claims risk arises from inaccurate claims assessment, fraudulent claims, inflated losses and inadequate reserving. Strong claims-management systems should incorporate verification procedures, investigation mechanisms, analytics and segregation of duties.

Reinsurance is an important tool for managing accumulation and catastrophe risks. Appropriate retention levels and reinsurance structures enable insurers to transfer part of their exposure while maintaining financial stability. However, reinsurance itself creates counterparty risk, requiring careful assessment of reinsurer financial strength and contractual obligations.

Risk Management in Health Insurance: Health insurance presents distinctive risks because medical costs are influenced by inflation, medical technology, treatment patterns, demographic changes and behavioural factors. The rapid increase in healthcare expenditure can materially affect claims ratios and profitability.

Medical inflation risk is a major concern. The cost of hospitalisation, medicines, diagnostic procedures, implants and advanced treatments may increase significantly over time. Insurers must incorporate realistic medical-cost trends into pricing and product design.

Moral hazard and adverse selection are also significant. Individuals with a higher probability of requiring medical treatment may be more likely to purchase comprehensive insurance, while insured persons may sometimes utilise healthcare services more frequently because they are covered.

Fraudulent and unnecessary claims can substantially increase costs. Examples include inflated hospital bills, unnecessary procedures, duplicate claims, fabricated treatment records and collusion among policyholders, hospitals and intermediaries. Data analytics, digital claim processing, pre-authorisation controls and hospital-network monitoring can help identify suspicious patterns.

Health insurers should establish appropriate provider-management mechanisms. Hospitals and healthcare providers should be assessed on quality, cost, treatment protocols and billing practices. Standardised treatment packages and technology-driven claim verification can improve cost control without compromising legitimate patient care.

Risk management must also balance cost containment with customer protection. Excessive claim restrictions may create reputational and regulatory risks. The objective should be sustainable pricing combined with fair and timely settlement of genuine claims.

Risk Management in Life Insurance: Life insurance involves long-term contractual commitments and therefore has a fundamentally different risk profile. Policies may remain in force for decades, making assumptions regarding mortality, morbidity, persistency, expenses, interest rates and investment returns particularly important.

Mortality risk arises when actual deaths differ materially from assumptions used in pricing and reserving. Insurers should use reliable mortality data and periodically review assumptions in response to changes in life expectancy and demographic trends.

Longevity risk is especially important for annuity and pension products. If policyholders live longer than anticipated, insurers may have to make payments for a longer period, increasing their liabilities. Appropriate actuarial assumptions and asset-liability management are therefore essential.

Persistency or lapse risk is another important consideration. If policyholders surrender or discontinue policies at rates materially different from assumptions, the insurer's expected cash flows and profitability may be adversely affected. Distribution practices, product design, customer behaviour and economic conditions can influence persistency.

Life insurers also face significant **interest-rate and investment risks** because premiums collected today may have to support benefits payable many years later. Asset-liability management should ensure that investment portfolios are appropriately matched with the duration and characteristics of insurance liabilities.

Asset-Liability Management: Asset - Liability Management (ALM) is a fundamental component of insurance risk management, particularly for life insurers. Insurers must ensure that assets are sufficient in value, quality, liquidity and maturity to meet expected policyholder obligations.

Interest-rate movements can affect both assets and liabilities, sometimes differently. Duration mismatch can therefore create significant economic risk. Insurers should conduct duration-gap analysis, cash-flow projections and stress tests covering interest-rate movements, credit deterioration and liquidity pressures.

Investment risk management should also consider concentration limits, credit quality, market volatility and

counterparty exposure. Diversification of investments can reduce the impact of adverse developments affecting a particular asset class or issuer.

Enterprise Risk Management: Although the risks of intermediaries, general insurance, health insurance and life insurance differ, they should be brought together within an **Enterprise Risk Management (ERM)** framework. The Board and senior management should establish risk appetite and ensure that appropriate systems exist for identifying, measuring, monitoring and controlling material risks.

Risk registers, Key Risk Indicators, stress testing, scenario analysis, internal controls and periodic risk assessments should form part of the framework. Risk management should also be integrated with capital planning and business strategy.

The insurer should assess not only individual risks but also their correlation. For example, an economic downturn may simultaneously increase claims, reduce investment returns, affect policy persistency and increase customer complaints. An integrated approach is therefore superior to managing risks in isolated functional departments.

Technology, Cybersecurity and Data Risk: The growing digitalisation of insurance has created new dimensions of risk. Online policy issuance, digital payments, automated underwriting, artificial intelligence, electronic claims processing and customer portals improve efficiency but increase exposure to cyberattacks, data breaches and technology failures.

Insurers and intermediaries should implement strong access controls, encryption, authentication, backup systems, incident-response mechanisms and business-continuity arrangements. Third-party technology providers should also be subject to appropriate due diligence and ongoing monitoring.

Data quality is particularly important because pricing, underwriting, reserving and claims decisions increasingly depend upon analytical models. Poor-quality or biased data can produce incorrect decisions and expose insurers to financial and regulatory consequences.

Governance, Compliance and Risk Culture: Effective insurance risk management ultimately depends upon governance. The Board must ensure that risk-management policies are aligned with the insurer's business strategy and regulatory obligations. Independent risk, compliance, actuarial and internal-audit functions provide important safeguards.

A strong risk culture should encourage employees and intermediaries to report emerging risks promptly. Incentive structures should not encourage excessive sales, inappropriate underwriting or aggressive claims practices. Customer interests, financial sustainability and regulatory compliance should remain integral to decision-making.

The effectiveness of risk management should be assessed continuously rather than only after a loss occurs. In an increasingly digital, competitive and interconnected insurance environment, insurers that embed risk management into product design, pricing, distribution, investment and claims processes are better positioned to protect policyholders and maintain long-term financial stability.

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Topic

Module 4: Value Addition

ELECTIVES

Paper-20C

Entrepreneurship and Start Up (ENTS)

Idea to Action / Value Edition

Lean Startup and Customer Validation

Lean Startup

A Lean Startup is a business approach that focuses on building products based on proven customer demand rather than on complex upfront planning. A lean startup is a way to build a business by quickly testing ideas, spending as little as possible, and learning from real customers before investing heavily. The approach is commonly associated with entrepreneur Eric Ries and his book *The Lean Startup*.

What are the core principles of Lean Startup?

The core principles of Lean Startup are:

1. **Build-Measure-Learn Loop:** The core cycle of the lean startup methodology involves turning ideas into products, measuring how customers react, and learning whether to pivot or persevere.

   Continuously repeat the cycle: Build → Measure → Learn → Improve.

2. **Minimum Viable Product (MVP):** Launching the simplest version of a product that can test your key assumptions with real customers.

3. **Validated Learning:** Using real customer data and feedback—not assumptions—to guide future product updates or changes. Treat customer feedback and measurable results as evidence for deciding whether your assumptions are correct.

4. **Pivot or Persevere:** Change an important aspect of the business when evidence shows the current approach is not working. Continue developing the current approach when evidence supports it.

5. **Measure meaningful metrics**: Focus on metrics that demonstrate real customer and business progress rather than vanity metrics such as downloads or website visits alone.

6. **Reduce waste:** Avoid spending significant time and money developing features or processes before there is evidence that customers actually need them.

Lean Startup = Test assumptions quickly + learn from customers + adapt continuously + avoid unnecessary waste.

Customer Validation

Customer validation is the process of testing whether a product, service, or business idea actually solves a real customer problem and whether customers are willing to use or pay for it. It is an important part of the Lean Startup approach because entrepreneurs should test their assumptions with real customers before investing heavily in a business.

Importance of Customer Validation

In a **Lean Startup**, customer validation is important because it helps entrepreneurs test their business assumptions with real customers before investing significant time and money.

1. **Reduces Uncertainty:** Startups operate with many assumptions about customers, products, and markets. Customer validation helps determine which assumptions are supported by real evidence.

2. **Prevents Product Failure:** It helps ensure that the startup is solving a real customer problem rather than creating a product that nobody needs.

3. **Saves Time and Money:** Instead of developing a complete product first, the startup can test an **MVP (Minimum Viable Product)** with a small number of customers.

4. **Provides Real Customer Feedback:** Customers provide information about:

   - What they need
   - What they like or dislike
   - What features are useful
   - What improvements are required

5. **Tests Product–Market Fit:** Customer validation helps determine whether there is sufficient **customer demand** for the product or service.

6. **Supports the Build–Measure–Learn Cycle:** Customer validation is central to the Lean Startup cycle:

   Build → Measure → Learn → Improve

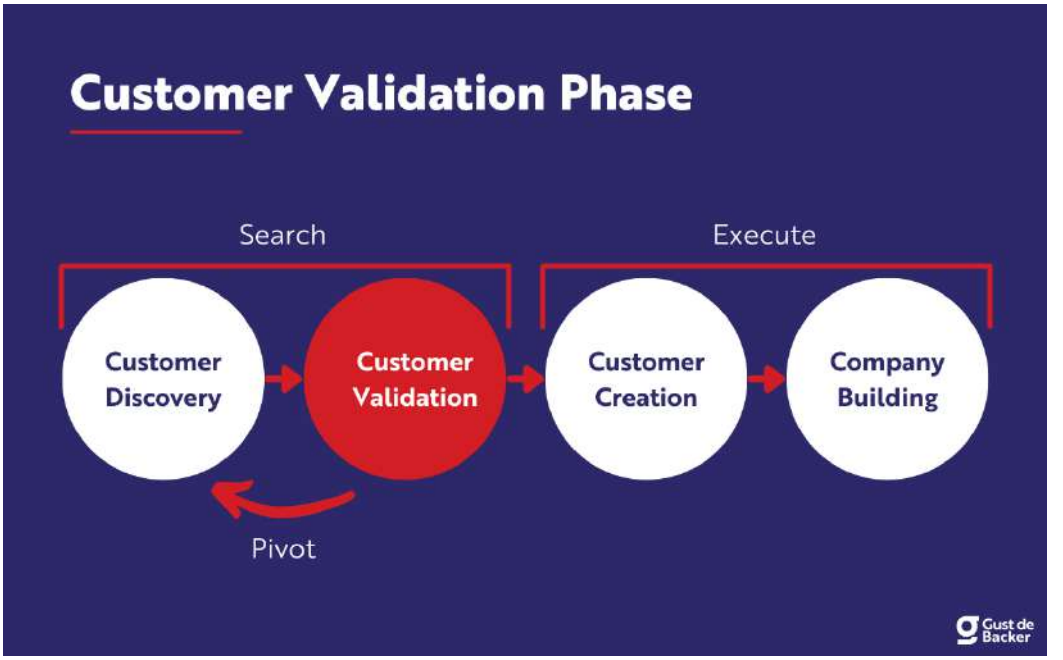
   The startup builds an MVP, measures customer responses, learns from the results, and then improves the product.

7. **Helps Decide: Pivot or Persevere:** If validation shows that the idea is not working, the startup can **pivot** by changing its approach. If the results are positive, it can **persevere** and continue developing the idea.

8. **Tests Willingness to Pay:** Validation can determine whether customers are willing to **pay for the product**, which is especially important for testing the viability of the business model.

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Customer Validation Phase

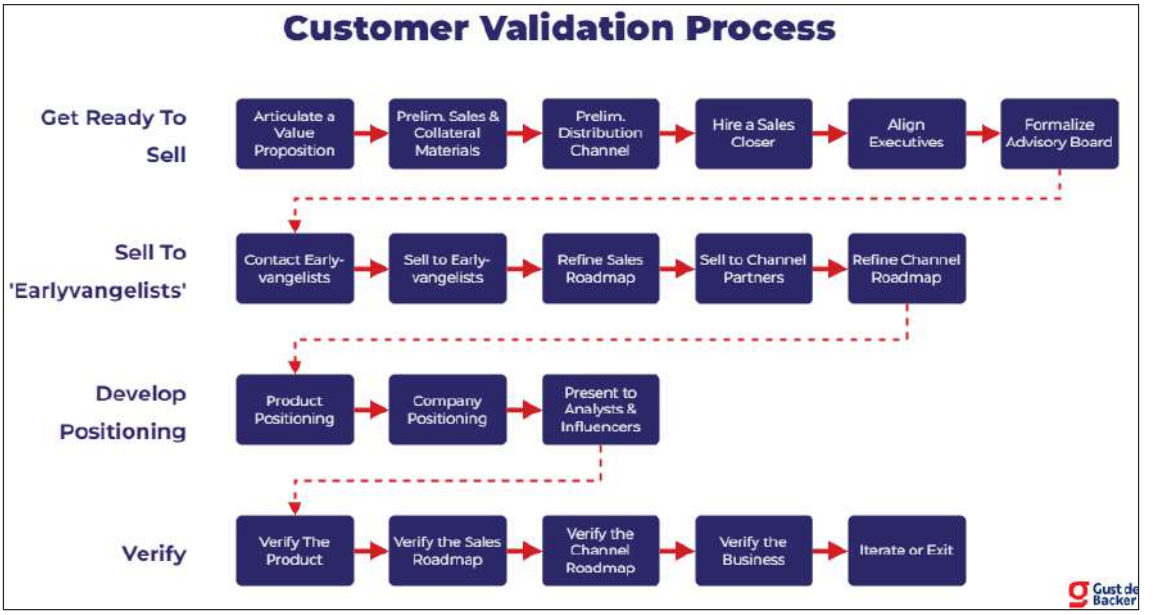


Source: https://gustdebacker.com/customer-validation/

Phase	Main Focus	Main Question
1. Customer Discovery	Understand customers and their problems	*Do customers have this problem?*
2. Customer Validation	Test the solution and business model	*Will customers use and pay for it?*
3. Customer Creation	Generate and expand demand	*How can we acquire more customers?*
4. Company Building	Build the organisation for growth	*How can we scale the business?*

Process of Customer Validation

In the **Lean Startup methodology**, customer validation is commonly divided into **four main phases**. These phases help determine whether a startup has identified the right customers, solved the right problem, and developed a viable business model.



Source: https://gustdebacker.com/customer-validation/

Phase 1: Get Ready To Sell

In this phase, you are prepared to start selling your product. You need to start by articulating a value proposition.

Articulate a Value Proposition with three questions:

1. What does your company stand for?
2. What does your product do?
3. And why should anyone care?

Before you start selling your product or service, it's important that you have materials to present your offering with. So, in this step, you are going to prepare presentations, data sheets, price lists and everything else you need to sell your product or service.

You need to develop a Preliminary Distribution Channel Plan based on customer demand for your product or service. Further, you need to develop a Preliminary Sales Roadmap to find out who your most potential customers are and how they would like to purchase your product or service.

Phase 2: Sell to Visionary Customers

Here, the startup begins selling to visionaries, also called early adopters. These customers are more willing than mainstream customers to try a new or innovative product. You need to:

- Contact potential early customers.
- Demonstrate the MVP/product.
- Explain its benefits.
- Obtain feedback and, ideally, initial sales.
- Learn from customers' objections and requirements.

Phase 3: Determining Your Positioning

Once the startup interacts with customers, it needs to determine how the product should be positioned in the market. Positioning means deciding how customers should understand the product and why they should choose it over alternatives.

The startup determines:

- Who its most important customer is.
- What specific problem does it solve?
- What makes it different from competitors.
- What major benefit does it provide?
- How it should communicate its value.

Hence, this phase creates a clear and attractive position for the product in the customer's mind.

Phase 4: Verifying Your Validation Process

In this phase, the startup checks whether it has actually validated its business assumptions.

The startup looks at evidence such as:

- Are customers buying the product?
- Are they using it regularly?
- Are they willing to pay?
- Are customers satisfied?
- Can the startup repeatedly find similar customers?
- Is the sales process becoming predictable?

Phase 1: Get Ready to Sell ↓ Prepare the product and sales strategy.
Phase 2: Sell to Visionaries ↓ Find early customers and collect feedback.
Phase 3: Determine Positioning ↓ Clearly define the product's market position.
Phase 4: Verify Validation ↓ Confirm that customers buy, use, and value the product.

4.3.4 Comparison between the Traditional Approach and the Lean Approach

In Traditional thinking, the traditional production system is driven by a sales forecast, which is referred to as the Push System. In Lean, lean thinking drives production by customer demand, and items are only produced when an order is placed, which is referred to as the Pull System. However, the differences between the traditional approach and the lean approach are as follows –

Table 4.1: Traditional Approach and Lean Approach

Traditional Approach	Lean Approach
Implementation-driven and works in tune with the Business Plan	Test-Driven – All situations are tested before executing
Product development relies on a step-by-step plan.	Customer opinions are emphasised for product development and to generate tests with idea optimisation for the product.
The product development process is iterative and specifies the product before creating it.	Creates the product iteratively and in a series.
Sprint Review is done to examine the addition and acclimate the product accumulation if needed.	The decision is dependent on the build-measure-learn response loop. Modification of the business model/product is based on the minimum viable product outcomes in the market.
This approach involves a high cost.	This approach is cost-effective.

NOTES:

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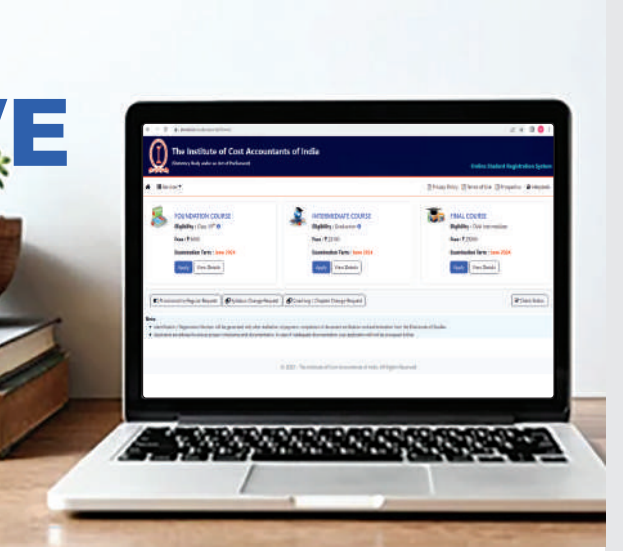
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