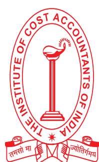
CMA STUDENT E-Bulletin

VOL 09 | NO. 04 | APRIL 2024

An Initiative of Directorate of Studies



ICMAI
THE INSTITUTE OF
COST ACCOUNTANTS OF INDIA
Statutory Body under an Act of Parliament
www.icmai.in

About the Institute

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

The Institute is headquartered in Kolkata having four Regional Councils at Kolkata, Delhi, Mumbai and Chennai, 117 Chapters in India and 11 Overseas Centres. The Institute is the largest Cost & Management Accounting body in the world with about 1,00,000 qualified CMAs and over 5,00,000 students pursuing the CMA Course. The Institute is a founder member of International Federation of Accountants (IFAC), Confederation of Asian and Pacific Accountants (CAPA) and South Asian Federation of Accountants (SAFA). The Institute is also an Associate Member of ASEAN Federation of Accountants (AFA) and member in the Council of International Integrated Reporting Council (IIRC), UK.

Vision Statement

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

Mission Statement

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

Institute Motto

असतोमा सद्गमय	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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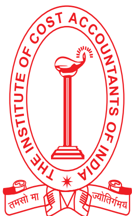

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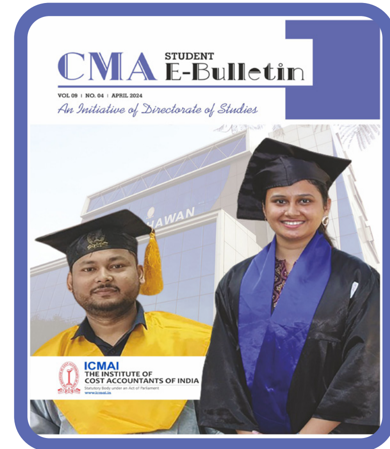

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CHAIRMAN'S COMMUNIQUE

Dear CMA Students,

As we navigate the ever-evolving landscape of the financial world, the role of management accountants becomes increasingly pivotal. It is with great pleasure that I extend my warmest greetings to you through this edition of the CMA Students E-Bulletin for April 2024.

At the heart of our profession lies a commitment to excellence, innovation, and continuous learning. In our pursuit of excellence, the Training & Educational Facilities Committee of ICMAI remains dedicated to providing you with the necessary tools, resources and opportunities to thrive in your educational journey and beyond.

Education is not merely the accumulation of knowledge but the cultivation of critical thinking, analytical prowess and ethical integrity. As future leaders in the realm of management accounting, it is imperative that you embrace a holistic approach to learning—one that transcends textbooks and classrooms to encompass real-world challenges and experiences.

In line with this ethos, our committee endeavors to foster a dynamic learning environment that fosters intellectual curiosity, professional growth and personal development. Through a diverse array of initiatives, we aim to equip you with the skills and insights needed to excel in today's competitive landscape.

Furthermore, in recognition of the transformative power of technology, we are committed to harnessing the latest advancements in digital learning to enhance accessibility, flexibility and engagement. From interactive online modules to virtual networking platforms, we are continuously exploring innovative ways to enrich your learning experience and prepare you for the demands of the digital age.

As you embark on your journey towards becoming a CMA, I encourage you to embrace every opportunity for growth, challenge the status quo, and strive for excellence in all your endeavors. Remember, the path to success is not always linear, but with dedication, perseverance and a thirst for knowledge, you can overcome any obstacle that stands in your way.

Together, let us continue to uphold the highest standards of professionalism, integrity, and ethical conduct, as we shape the future of our profession and make a positive impact on the world around us.

Wishing you all continued success and fulfilment in your academic and professional pursuits.

Warm regards,

CMA Vinayaranjan P

Chairman, Training & Educational Facilities Committee

ICMAI

30th April, 2024

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

MULTIPLE CHOICE QUESTIONS (MCQ)

1. A sale is complete when the following is transferred from one.

   a) Money

   b) Ownership

   c) Usage

   d) None of the above

2. The Consideration in contract of sale must be:

   a) Immovable

   b) Movable

   c) Price

   d) None of the above

3. The subject matter of the contract must be:

   a) Sale

   b) Product

   c) Service

   d) None of the above

4. On which date was the Sale of Goods enforced?

   a) 1948

   b) 1930

   c) 1932

   d) 1951

5. As per Sale of Goods Act, this is not included:

   a) Growing crop

   b) Money

   c) Table

   d) Goodwill

6. The goods which form the subject of a contract of sale may be either existing goods, owned or possessed by the seller, or _____ good

   a) future

   b) unknown

   c) identified

   d) branded

7. The _____ in a contract of sale may be fixed by the contract or may be left to be fixed in way thereby agreed or may be determined by the course of dealing between the parties.

   a) Price

   b) Product

   c) Service

   d) Rate

8. A contract of sale is made by an offer to buy or sell goods for a price and the______of such offer.

   a) Terms

   b) Product

   c) Service

   d) Acceptance

9. A contract of sale of goods is a contract whereby the seller transfers or agrees to transfer the property in goods to the buyer for a _____

   a) Price

   b) Rate

   c) Service

   d) Condition

10. A contract of sale may be ____ or conditional

    a) Terminal

    b) Abstract

    c) Variable

    d) Absolute

11. Condition is a stipulation which is essential to the ______ purpose of the contract.

    a) Derived

    b) Abstract

    c) Secondary

    d) Main

12. The sale of goods Act only deals only with goods that are immovable in nature. This Statement is –

    a) True

    b) Partly true

    c) False

    d) Right

13. ______ is a stipulation which is collateral to the purpose of the contract.

    a) Contract

    b) Caveat Emptor

    c) Condition

    d) Warranty

14. Caveat Emptor is the concept of "let the _____ beware".

    a) Seller

    b) Producer

    c) Buyer

    d) Vendor

15. The subject matter of the contract under Sale of Goods Act must be _____.

    a) Service

    b) Product

    c) Goods

    d) Merchant

16. Sale under Sale of Goods Act is an executory contract. This Statement is –

    a) True

    b) Partly true

    c) False

    d) Right

17. Delivery of the keys of a godown where goods are kept amounts to:

    (a) Actual delivery

    (b) Symbolic delivery

    (c) Constructive delivery

    (d) All of these

18. There are ______ modes of delivery

    (a) Three

    (b) Two

    (c) Four

    (d) Five

19. The term "Unpaid Seller" includes Agent of the ______

    (a) Buyer

    (b) Seller

    (c) Carrier/Transporter

    (d) All of the above

20. The term "Unpaid Seller" includes —

    (a) Buyer's agent to whom the Bill of Lading is endorsed

    (b) Buyer's agent to whom the goods have been delivered

    (c) Seller's agent to whom the Bill of Lading is endorsed

    (d) Seller's agent to whom the goods have been delivered

21. Unpaid Seller can exercise his right of lien —

    (a) even when property in goods has passed to the Buyer

    (b) only when property in goods has not passed to the Buyer

    (c) either (a) or (b)

    (d) neither (a) nor (b)

22. Unpaid Seller can exercise his right of re-sale of goods—

    (a) even when property in goods has passed to the Buyer

    (b) only when property in goods has not passed to the Buyer

    (c) either (a) or (b)

    (d) neither (a) nor (b)

23. Unpaid Seller can exercise his right of withholding delivery of goods —

    (a) even when property in goods has passed to the Buyer

    (b) only when property in goods has not passed to the Buyer

    (c) either (a) or (b)

    (d) neither (a) nor (b)

24. A Share Certificate is a —

    (a) Document of Title to Goods

    (b) Bill of Exchange

    (c) Document Showing Title to Goods

    (d) Instrument of Transfer

SECTION – B: BUSINESS COMMUNICATION

25. Feedback is needed in which way communication?

    a) One-way

    b) Two-way

    c) Both a and b

    d) None of the above

26. Communication happens when a person arbitrarily chooses some persons to pass on the information which is of little interest but not important.

    a) Gossip Chain

    b) Cluster Chain

    c) Probability Chain

    d) None of the above

27. The communication starts when a person tells something to a group of people, and then they pass on the information to some more people and in this way the information is passed on to everyone.

    a) Gossip Chain

    b) Probability Chain

    c) Either (a) or (b)

    d) None of the above

28. Which of the following is not an advantage of formal communication?

    a) Reliable

    b) Fast

    c) Secrecy

    d) None of the above

29. At which stage the communicator focuses on correcting the grammar, spellings and punctuations?

    a) Proof Reading

    b) Revising and editing

    c) Either (a) or (b)

    d) None of the above

30. Study of body language of a person is called __________.

    a) Kinesics

    b) Phonemics

    c) Paralanguage

    d) Economics

ANSWER:

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

25	26	27	28	29	30
b	c	a	c	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)

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

1. A Bill of Exchange amounting ₹1,00,000 was renewed. The Drawee pays ₹30,000 as part payment. ₹2000 charged as Interest. What is the value of new Bill of Exchange?

   a. ₹72,000;

   b. ₹1,32,000;

   c. ₹68,000;

   d. ₹1,02,000

2. A Bill of Exchange amounting ₹5,00,000 is discounted at Bank for ₹4,90,000.The Bill dishonoured on maturity. The Drawee pays 60% of his acceptance. Find the value of Bad Debt.

   a. ₹2,00,000;

   b. ₹2,94,000;

   c. ₹2,06,000;

   d. None of a, b, c

3. In 'Consignment business' no journal entry is passed for

   a. Normal loss;

   b. Abnormal loss;

   c. Unpacked items;

   d. Liquid items

4. Del credere commission is paid on

   a. Total sales;

   b. Cash sales;

   c. Credit sales;

   d. Agreed value of sales

5. Del credere commission is allowed to cover

   a. Bad Debts;

   b. Collection charges;

   c. Collection deficit;

   d. Remittance fees

6. Account sales is a statement, which shows the details about the

   a. Goods received;

   b. Goods sold;

   c. Unsold goods;

   d. Goods movement

7. Consignment Account is in the nature of

   a. Real Account;

   b. Nominal Account;

   c. Personal Account;

   d. Trading account

8. Consignee becomes a Debtor of the Consignor , when

   a. Goods are despatched;

   b. Goods are received;

   c. Goods are sold;

   d. Goods are returned

9. Joint venture accounting follows which concept?

   a. Accrual concept;

   b. Cash basis concept;

   c. Going concern concept;

   d. Cost concept

10. Joint venture is a...........account.

    a. Personal;

    b. Nominal;

    c. Real;

    d. Capital

11. When Memorandum Joint Venture method is followed in the Books of X, Joint Venture with Y A/C will be credited with ….. for amount received by X.

    a. Y;

    b. Cash;

    c. Sales;

    d. Debtor

12. Which of the following methods of valuation of closing stock is followed in Joint Venture Account?

    a. Net realisable value;

    b. Cost price;

    c. Least of cost or net realisable value;

    d. None of the above

13. The Drawer of a Bill of Exchange is a

    a. Debtor;

    b. Banker;

    c. Creditor;

    d. Holder

14. One , who draws the Bill is called
    a. Debtor;
    b. Drawee;
    c. Payee;
    d. Drawer
15. When Acceptor becomes insolvent, the drawer debits
    a. Bank account;
    b. Bill receivable account;
    c. Acceptor's account;
    d. Bill payable account
16. Relationship between Consignor and Consignee is
    a. Employer and employee;
    b. Business partners;
    c. Owner and servant;
    d. Principal and agent
17. Consignee becomes Consignor's Debtor when the goods are
    a. Sold by Consignee;
    b. Shipped to Consignor;
    c. Returned by consignee;
    d. Sale proceed received by Consignee
18. According to traditional classification, nature of Consignee account is
    a. Real;
    b. Nominal;
    c. Personal;
    d. Business
19. Which of the following expenses should not be taken into account while calculating the value of stock on consignment
    a. Freight paid by Consignor;
    b. Insurance paid by Consignor;
    c. Transportation cost to go-down;
    d. Selling expenses paid by consignee
20. Which one of the following is not credited to consignment account ?
    a. Abnormal loss;
    b. Closing stock;
    c. Stock in transit;
    d. Consignee's commission
21. The consignor does not keep a record of consignment related debtors when
    a. Del Credere commission is not given to consignee;
    b. Del Credere commission is given to consignee;
    c. Ordinary commission agreed upon ;
    d. Overriding commission is given to consignee
22. Factory Cost Plus Administrative overhead is known as ……
    a. Cost of Production;
    b. Cost of goods sold;
    c. Prime Cost;
    d. Works Cost
23. ………. Costs are partly fixed and partly variable in relation to output.
    a. Semi-variable cost;
    b. Under recovery;
    c. Opportunity;
    d. Notional
24. Secondary packing cost forms part of
    a. Overhead;
    b. Distribution cost;
    c. Product cost;
    d. replacement cost
25. Direct expenses are also known as
    a. Chargeable expenses;
    b. Prime cost;
    c. Fixed expenses;
    d. None of a, b, c
26. Director's remuneration to be considered as
    a. Reserve expenses;
    b. Administrative Expenses;
    c. Company expenses;
    d. Fixed expenses
27. Time office is related to
    a. Labour time booking;
    b. Overtime approval;
    c. Time and motion study;
    d. Production time keeping

28. Work in Progress is also termed as
    a. Semi-finished Goods;
    b. Incomplete goods;
    c. Goods under production;
    d. Incomplete process
29. Tyre is an ancillary to
    a. Motor car;
    b. Rubber;
    c. Wheel;
    d. Ship
30. 'Costing helps Management in decision making' , the statement is
    a. Incorrect;
    b. Not necessarily;
    c. Correct;
    d. Partially correct

ANSWER

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

Topic

Fundamentals of Business Mathematics -

Module 2: Algebra

Fundamentals of Business Statistics

Module 7: Probability

FOUNDATION

Paper-3

Fundamentals of Business Mathematics and Statistics (FBMS)

In this issue we will carry out MCQs on Algebras and Probability Module 2 and Module 7 of Study guide.

1. In Venn diagram, different sets (other than Universal Set) are represented by ______
   (a) Rectangle
   (b) Circles
   (c) Squares
   (d) Stars
2. If Set A = { Q, W, E, R, T, Y } and Set B = { B, G, R, E, O, K }, find the intersection of B and A.
   (a) Set (B ∩ A) = { Q, K }
   (b) Set (B ∩ A) = { E, R }
   (c) Set (B ∪ A) = { Q, E, R, K }
   (d) None of the Above
3. If Set B= {14, 16, 18, 20, 22} is a subset of Set A= {2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12}, find the number of elements of A and B.
   (a) Set A = 5, Set B = 11
   (b) Set A = 11, Set B = 5
   (c) Set A = Set B = 5
   (d) Set B = Set A = 11
4. Find the value of $23^{23}/23^{0}$
   (a) 23^{0}
   (b) 23^{1}
   (c) 1
   (d) 23^{23}
5. Simplify $2^{7/8} * 2^{1/8} * 2^{6/8} * 2^{-2} * 2^{-6/8}$
   (a) -2
   (b) 1/2
   (c) -1/2
   (d) None of the Above
6. What will be the value of $(9^{3} * 9^{4})/(9^{-4} * 9^{9})$?
   (a) 9^{4}
   (b) 9^{3}
   (c) 81
   (d) None of the above
7. If ${}^{n}P_{11} : {}^{n}P_{12} = 3:1$, find the value of n.
   (a) 11
   (b) 12
   (c) 13
   (d) 15
8. Find the value of $\frac{1}{19!} + \frac{1}{21!} + \frac{1}{20!}$
   (a) 442 / 21!
   (b) 441 / 21!
   (c) 419 / 21!
   (d) 439 / 21!
9. How many ways can 6 people get RT-PCR tested from 6 laboratories, assuming no laboratory is closed?
   (a) 120 ways.
   (b) 4320 ways.
   (c) 5040 ways.
   (d) 720 ways.
10. When 15 autos are running between Kolkata and Howrah. In how many ways can a passenger travel from Kolkata to Howrah and return by a different auto?
   a. 210 ways.
   b. 225 ways.
   c. 15 ways.
   d. 195 ways.
11. If sum of roots =8, value of k for x^{2}-(13/6)-(2k+3) x = 0.
   (a) k = 3.50
   (b) k = 9/2
   (c) k = 1.50
   (d) k = 5/2
12. Find the value of x in $x^{2}+54=15x$
   (a) x = -6 or - 9
   (b) x = -6 or 9
   (c) x = 6 or 9
   (d) x = 6 or -9
13. Facet of Statistics namely computing the chance that something will occur in the future is called
   (a) Statistical probability
   (b) Statistical Interpretation
   (c) Statistical Inference
   (d) Statistical measurement

14. Inferential Statistics deals with

(a) Conclusions about a population based on a sample taken from that population

(b) Conclusions about a sample taken from a population

(c) Conclusions about a population based on specified data taken from that population

(d) Conclusions about a population based on a sample selected from a group of samples

15. Probability theory allows the decision maker to analyze the risks

(a) With only limited information

(b) With all influencing information

(c) With all information

(d) With perfect information

16. If the odds in favour of an event are X to Y, the probability of the event is

(a) $\frac{Y}{X+Y}$

(b) $\frac{X}{X+Y}$

(c) $\frac{Y}{X}$

(d) $\frac{X}{Y}$

17. In probability theory experiment is

(a) A process that leads to the occurrence of one and only one of several possible results

(b) A process that eliminates improbable from probable

(c) A process that leads to the occurrence of all desired results out of several results

(d) A process that leads to the occurrence of at least one probable result out of several possible results

18. A new type of dice is developed by a Gambler's association. Its authenticity is to be tested by 80 veteran Gamblers. The experiment is

(a) 75 gamblers found the dice as authentic

(b) Count the number of gamblers who think the new dice is authentic

(c) More than half of the gamblers testing the dice liked it

(d) 80 gamblers each put one observation

19. From a sample of manufactured parts, one item is selected. The mutually exclusive event is

(a) The event of selecting an unacceptable part

(b) The event of selecting an acceptable part

(c) The event of selecting an acceptable as well as an unacceptable part

(d) (a) & (b) above, not (c)

20. Empirical probability is based on

(a) The number of times an event occurs as a proportion of a known number of trials

(b) The number of times an event occurs as a proportion of possible outcomes

(c) The number of times an event occurs as a proportion of favourable outcomes

(d) The number of times an event occurs as a proportion of favourrable events

21. The empirical probability of getting a head in tossing a coin once is

(a) 0.5 or 1

(b) 0 or 1

(c) 0.5

(d) 0

22. Over a large number of trials - tossing a coin

(a) The empirical probability of an event will approach 0

(b) The empirical probability of an event will approach 1

(c) The empirical probability of an event will approach classical probability

(d) The classical probability of an event will approach empirical probability

23. On February 1, 2003 the space shuttle Columbia exploded. This was the second disaster in 113 space mission for NASA. On the basis of this information the probability that a future mission is successfully completed is

(a) 0.5

(b) 0.98

(c) 1

(d) 0.017

24. After appearing in CMA foundation examination if you said that there is 50% chance of passing then you are depending on

(a) Classical probability

(b) Empirical probability

(c) Subjective probability

(d) Biased probability

25. One card is randomly selected from a standard 52 card deck. The probability, as answered by you, of getting a queen is 1/13. You used the

(a) Classical approach to probability

(b) Empirical approach to probability

(c) Subjective approach to probability

(d) Biased approach to probability

26. The center for child care reports on 540 children and marital status of their parents. There are 334 married, 182 divorced, and 24 widowed parents. The probability of a particular child chosen at random will have a parent who is married is

(a) 0.62 by classical probability approach

(b) 0.5 by empirical probability approach

(c) 0.62 by empirical probability approach

(d) 0.62 by subjective probability approach

27. Addition rule for not mutually exclusive events A & B is

(a) P(A or B) = P(A)+P(B)

(b) P(A or B) = P(A+B)

(c) P(A or B) = P(A)+P(B)-P(AB)

(d) P(A or B) = P(A+B-AB)

28. Joint probabilities of events A & B under statistical independence is

(a) P(AB) = P(A)+P(B)

(b) P(AB) = P(A)*P(B)

(c) P(AB) = P(A)*P(B)-P(AB)

(d) P(AB) = 1-P(A)*P(B)

29. Conditional probability under statistical independence is

(a) P(B/A) = P(BA)

(b) P(B/A) = P(B)P(A)

(c) $P(B/A) = \frac{P(BA)}{P(A)}$

(d) P(B/A) = P(B)

30. Conditional probability under statistical dependence is

(a) P(B/A) = P(BA)

(b) P(B/A) = P(B)P(A)

(c) $P(B/A) = \frac{P(BA)}{P(A)}$

(d) P(B/A) = P(B)

Answer Keys:

1	b	
2	b	Set A = { Q, W, E, R, T, Y } and Set B = { B, G, R, E, O, K }, Intersection of B and A = Set (B∩A) = { E, R }
3	b	
4	d	$23^{23}/23^{0} = 23^{23/1} = 23^{23}$
5	b	$2^{7/8} * 2^{1/8} * 2^{6/8} * 2^{-2} * 2^{-6/8} = 2^{7/8 + 1/8 + 6/8 - 2 - 6/8} = 2^{-1} = {}^{1}/_{2}$
6	c	$(9^{3}*9^{4})/(9^{-4}*9^{9}) = (9^{3+4})/(9^{-4+9}) = (9^{7})/(9^{5}) = 9^{7-5} = 9^{2} = 81$
7	d	${}^{n}P_{11} : {}^{n}P_{12} = 3:1$ or, n!/(n-11)! : n! / (n-12)! = 3:1 or, n! /(n-11)! * {(n-12) * (n-11)!} / n! = 3/1 or, n-12 = 3 or, n = 3+12 = 15.
8	a	(21*20)/21!+21/21!+1/21! = (420+21+1)/21! = 442/21!

Answer Keys:

9	d	6 people and 6 RT-PCR laboratories Hence, possible ways = 6*5*4*3*2*1 = 720 ways
10	a	First event: Kolkata to Howrah – 15 ways. Second Event : Howrah to Kolkata – (15-1) ways So, 15*14 ways = 210 ways.
11	d	2k+3 = 8 or, 2k = 5 or, k = 5/2.
12	c	$x^2+54 = 15x$ or, $x^2-15x+54 = 0$ or, $x^2-9x-6x+54 = 0$ or, x(x-9)-6(x-9) = 0 (x-9)(x-6) = 0 Hence, x = 9 or 6
13	b	
14	c	
15	a	
16	c	
17	d	
18	c	
19	d	
20	a	
21	a	
22	a	
23	d	
24	c	
25	b	
26	d	
27	b	
28	a	
29	d	
30	a	

Suggestions:

The study guide needs to be read thoroughly. Supplementary readings could be made from other resources. In this issue MCQs are based on basic concepts developed in the respective modules/sub modules of the study guide. Students should try to solve individual questions with concepts developed from guide book to understand the correct answer of each question. For development of clear concept brief explanations are given in algebra portion. Formula used here are all covered in study guide.

Topic

Fundamentals of Business Economics -

Module 3: Money and Banking

Fundamentals of Management -

Module 5: Fundamentals of Management

FOUNDATION

Paper-4

Fundamentals of Business Economics and Management (FBEM)

TIPS ON BUSINESS ECONOMICS AND MANAGEMENT FOR THE MONTH OF APRIL 2024

The first basic idea to which the student of economics is introduced is that of relationships between economic variables. The quantity demanded of a commodity in a market is regarded as a function of its price, the costs of producing a product are assumed to be a function of the amount produced. These are all examples of two-variable relations, but more realistic formulations require the specification of several variables in each relation. Thus, quantity demanded may be regarded as a function of price, disposable income and prices of related commodities; production costs will depend on rate of production, factor prices and changes in production rate.

The next step in the development of economic theories is the grouping of relationships to form a model. The number of relationships included in an economic model depends on the objectives for which the model is constructed. For example, the traditional supply and demand model seeks to explain price- quantity combinations in a particular market. It consists of 3 equations, viz., a demand equation, a supply equation, and a market adjustment equation.

Once you are acquainted with the techniques of building an economic model of your own, you are at the top of the world. MNCs will hire your expertise for a handsome package. Let us move to our mock test.

Chose the correct answer:

1. Who was the proponent of the scarcity definition of economics?
   A. Marshall
   B. Robbins
   C. Samuelson
   D. Schumpeter
2. Production possibility curve is
   A. Concave to the origin
   B. Convex to the origin
   C. Both A and B
   D. None of the above
3. The slope of PPC at any given point is called
   A. Marginal rate of utility
   B. Marginal rate of productivity
   C. Marginal rate of transformation
   D. None of the above
4. If there is conspicuous consumption of a product, the demand curve will be
   A. Negatively sloped
   B. Positively sloped
   C. Horizontal
   D. Vertical
5. Movement along any demand curve shows
   A. Change in demand
   B. Change in quantity demanded
   C. Contraction in demand
   D. All of them
6. If the income of the consumer rises, other things remaining the same, how the equilibrium price (P) and quantity (Q) for the commodity should change?
   A. P and Q both will rise
   B. P rises and Q will fall
   C. P falls and Q will rise
   D. None of the above
7. If the price of a substitute good rises, the demand curve shifts
   A. To the left
   B. To the right
   C. Upward
   D. None of the above
8. An increase in the price of a commodity when demand is inelastic, causes the total expenditure of the consumers on that commodity
   A. To rise
   B. To fall
   C. To remain unchanged
   D. None of the above

9. The demand for a commodity which can be put to a variety of uses will be
   A. Unitary elastic
   B. Relatively inelastic
   C. Relatively elastic
   D. None of the above
10. The demand for durable goods usually remains
   A. Unitary elastic
   B. Perfectly elastic
   C. Relatively elastic
   D. Relatively inelastic
11. For an inferior good, the value of income elasticity of demand is
   A. Positive
   B. Negative
   C. Unity
   D. Zero
12. The mid-point of a linear demand curve shows a price elasticity of demand which is
   A. Relatively elastic
   B. Relatively inelastic
   C. Unit elastic
   D. Perfectly inelastic
13. When the seller sells the output at a given price per unit, then
   A. MR = AR
   B. MR > AR
   C. MR < AR
   D. None of the above
14. When AR is rising, the movement of the MR curve
   A. Will be upward
   B. Will be downward
   C. Will be nil
   D. Cannot be predicted
15. The principal goal of a monopoly firm is assumed to be
   A. Sales maximization
   B. Revenue maximization
   C. Profit maximization
   D. None of the above
16. At the profit maximizing level of output of a competitive firm
   A. P = AVC
   B. P > AVC
   C. P < AVC
   D. P >= AVC
17. The RBI increases the repo rate
   A. To control deflation
   B. To control inflationary pressure
   C. To control the rural banks
   D. None of the above
18. Monetary policy means
   A. Change in the tax rate of the economy
   B. Change in the money supply of the economy
   C. Change in the Govt. expenditure of the economy
   D. All of the above
19. Which industry flourished during Covid-19 pandemic riddled environment?
   A. IT based industries
   B. Food processing industries
   C. Machine tools industries
   D. None of the above
20. The term ‘T’ in SWOT Analysis is
   A. Toxicity
   B. Transport
   C. Threat
   D. None of the above
21. In a volatile situation, that organization will grow faster
   A. Which can adopt new technology faster
   B. Which can do market research
   C. Which will appoint efficient managers
   D. None of the above
22. The technique for observing the behavior of a system under several alternative conditions in an artificial setting is known as
   A. Game theory
   B. Probability Decision Theory
   C. Simulation
   D. Linear programming

23. "Decision making is the selection based on some criteria from two or more possible alternatives"— the proponent of this observation is
    A. Farland
    B. Mac Donald
    C. Terry
    D. M.C. Nites
24. The final step in decision making process is
    A. Selection of an alternative
    B. Developing alternative
    C. Evaluation of alternative
    D. Implementation and follow up of decision
25. Democratic leadership is also known as
    A. Authoritarian leadership
    B. Free-rein leadership
    C. Laissez Faire leadership
    D. Participative leadership
26. There can be no leadership without
    A. Managers
    B. Subordinates
    C. Followers
    D. Superiors
27. Control function is closely connected to
    A. Planning
    B. Organizing
    C. Co-ordination
    D. All of the above
28. A thirsty person may use body language in order to communicate that he needs a glass of water. This process is called
    A. Medium
    B. Encoding
    C. Decoding
    D. Feedback
29. Which is the primary function of management?
    A. Planning
    B. Organizing
    C. Directing
    D. Controlling
30. The theory which indicates that profit maximization as the main objective is known as
    A. Share holder theory
    B. Agency theory
    C. Stakeholder theory
    D. Stewardship theory

ANSWER

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

So friends!!

Hope you have enjoyed this mock test while solving the intricate problems in Business economics and Management. For Heaven's sake please do not try to consult the key without trying to find out the solution yourself first. Read the study material thoroughly. Because, all the questions will be based on your study material only. Hope these mock tests help you in having a good grasp of the subject.

Wish you all the best in the exam.

CMA INTERMEDIATE COURSE

Syllabus 2022

Topic

Module 11:
The Code on Wages, 2019

INTERMEDIATE

Group I - Paper-5

Business Laws and Ethics (BLE)

BUSINESS LAWS AND ETHICS

It is expected that you - the students prepare a time-table with time allotted for each subject and read, write, revise and recapitulate all that you keep on reading. The first important point is that you must read the *Bare Act* and the *Sections* and start asking questions to yourself and find your own answers. In this issue we shall deal with The Code on Wages, 2019, with special emphasis on the concept of wages in the present Code.

The Code on Wages, 2019

The Code on Wages, 2019 was enacted in 2020 which enlists the provisions relating to payment of wages, overtime, bonus, minimum wages and other provisions incidental to existing labour laws. This Code has subsumed four Central labour legislations, which has been mentioned in Section 69 of the Code which lays down that the Payment of Wages Act, 1936, the Minimum Wages Act, 1948, the Payment of Bonus Act, 1965 and the Equal Remuneration Act, 1976 are hereby repealed, with the enactment of this Code.

The Code not only regulates the wages of workmen but also the wages of employees performing managerial, supervisory functions. This Code therefore, brings uniformity in the definition of various terms overlapping in various pieces of legislation and eases the burden of documentation. Moreover, the Central Government under Section 68 of the Code says that in case of any difficulty, the Central Government shall notify provisions not inconsistent with the provisions of this Code, as may appear to be necessary for removing the difficulty within a period of three years from the commencement of this Code.

The Code on Social Security, 2020 [SS Code], the Industrial Relations Code, 2020 [IR Code] and the Occupational Safety, Health and Working Conditions Code, 2020 [OSH Code], have also been enacted by the Government at the same time. These codes also comprehensively lay down most provisions that used to exist in many scattered pieces of legislation.

This code is a welcome change to the existing labour law regime as it seeks to regulate wage and bonus payments in all sectors such as industry, trade, business, or manufacture, wherever employees are appointed. Through this Code the Central Government will get the power to regulate wages for sectors like railways, mines and oil fields among other sectors, whereas the State Governments will reserve the power to make decisions for all other employments.

Concept of Wages

According to Section 2 (y) of the Code, "wages" means:

All remuneration whether by way of salaries, allowances or otherwise, expressed in terms of money or capable of being so expressed which would, if the terms of employment, express or implied, were fulfilled, be payable to a person employed in respect of his employment or of work done in such employment, and includes:

i) basic pay;

ii) dearness allowance; and

iii) retaining allowance, if any, but does not include—

a) any bonus payable under any law for the time being in force, which does not form part of the remuneration payable under the terms of employment;

b) the value of any house-accommodation, or of the supply of light, water, medical attendance or other amenity or of any service excluded from the computation of wages by a general or special order of the appropriate government;

c) any contribution paid by the employer to any pension or provident fund, and the interest which may have accrued thereon;

d) any conveyance allowance or the value of any travelling concession;

e) any sum paid to the employed person to defray special expenses entailed on him by the nature of his employment;

f) house rent allowance;

g) Remuneration payable under any award or settlement between the parties or order of a court or Tribunal;

h) any overtime allowance;

i) any commission payable to the employee;

j) any gratuity payable on the termination of employment;

k) any retrenchment compensation or other retirement benefit payable to the employee or any exgratia payment made to him on the termination of employment:

Provided that, for calculating the wages under this clause, if payments made by the employer to the employee under clauses (a) to (i) exceeds one-half, or

such other percent as may be notified by the Central Government, of the all remuneration calculated under this clause, the amount which exceeds such one-half, or the per cent. So notified, shall be deemed as remuneration and shall be accordingly added in wages under this clause:

Provided further that for the purpose of equal wages to all genders and for the purpose of payment of wages, the emoluments specified in clauses (d), (f), (g) and (h) shall be taken for computation of wage.

Explanation: Where an employee is given in lieu of the whole or part of the wages payable to him, any remuneration in kind by his employer, the value of such remuneration in kind which does not exceed fifteen percent of the total wages payable to him, shall be deemed to form part of the wages of such employee; Wages include salary, allowance, or any other component expressed in monetary terms. This does not include bonus payable to employees or any travelling allowance, among others.

Example: In a factory, Anu is a female employee who operates a plant. Whereas Mahesh is a male worker who does the same work in the same factory. However, since Anu is married to Ramesh, who also works at the same plant, the employer pays Anu half of what he pays to Mahesh as Anu's husband also works for gains at the same plant. According to this Code, this practice of the employer shall be illegal and prohibited, as the law seeks to put an end to all gender based discriminations in the case of minimum wages.

The definition of basic wage under the *Employees Provident Funds and Miscellaneous Provisions Act, 1952 is defined under Section 2(b)* as all emoluments which are earned by an employee while on duty or on leave or on holidays with wages in either case in accordance with the terms of the contract of employment and which are paid or payable in cash to him, but does not include:

i) the cash value of any food concession;

ii) any dearness allowance (that is to say, all cash payments by whatever name called paid to an employee on account of arise in the cost of living) , house-rent allowance, overtime allowance, bonus commission or any other similar allowance payable to the employee in respect of his employment or of work done in such employment;

iii) any presents made by the employer

The definition of basic wage was for a longtime used by dishonest employers to minimise their contributions payable towards the EPF, which in turn defeated the purpose of the Act. This issue was dealt by the Supreme Court in the case of *The Regional Provident Fund Commissioner (II) West Bengal Versus Vivekananda Vidyamandir and Others* where the Supreme Court held that all allowances which are universally, uniformly, necessarily and ordinarily paid to all employees would form a part of the basic wage, which shall be used for fund contribution to the provident fund. The exclusion of allowance from the basic wage can be permitted when the same is shown to be either a variable, or were linked to any incentive for production resulting in a greater output, or the allowance in question is not paid across the board, or paid especially to those who avail the opportunity.

The new definition of wage under the Code specifically excludes–

a) any bonus payable under any law for the time being in force;

b) the value of any house accommodation, or of the supply of light, water, medical attendance or other amenity;

c) contribution paid by the employer to any pension or provident fund, and the interest which may have accrued thereon;

d) any conveyance allowance or the value of any travelling concession;

e) any sum paid to the employed person to defray special expenses entailed on him by the nature of his employment;

f) house rent allowance;

g) remuneration payable under any award or settlement between the parties or order of a court or Tribunal;

h) any overtime allowance;

i) any commission payable to the employee;

j) any gratuity payable on the termination of employment;

k) any retrenchment compensation or other retirement benefit payable to the employee or any exgratia payment made to him on the termination of employment.

This change will impact the basis to calculate wage for the purpose of contribution towards certain benefits like EPF and Gratuity as now the same will have to be calculated on 50% of the total remuneration of an employee.

Topic

Module 5:
Lease Accounts

Module 8 :
Hire Purchase and Instalment Sale Transactionsunts

INTERMEDIATE

Group I - Paper-6

Financial Accounting (FA)

Lease Accounting and Hire Purchase and Instalment Sale Transactions

Lease Accounting

A lease is a contract between two parties for the temporary use of an asset in return for payment. Businesses use many types of leases, tailoring them to include details specific to each agreement. Leases can involve all kinds of assets, from property, such as office buildings, to equipment, such as computers, cars, trucks and factory machinery. A lease contract documents key terms for each lease and is signed by both parties: the lessor and the lessee.

Lessor: The lessor is the entity that owns the asset being leased. Lessors receive payment in return for giving up their right to use the asset during the lease term, although they maintain ownership.

Lessee: The lessee is the entity that pays the lessor for use and day-to-day control over a leased asset during the lease term, in accordance with the lease agreement.

Lessor vs. Lessee: The lease agreement describes the obligations of both lessor and lessee. Breaching these terms can cause early termination by either party.

What is Lease Accounting?

Lease accounting refers to the treatment of lease-related revenues and expenses for financial record keeping and reporting. Accounting standards from several rule-setting organizations, including the Financial Accounting Standards Board (FASB) and Government Accounting Standards Board (GASB) in the U.S., and the International Accounting Standards Board (IASB), govern how leases are classified for accounting purposes.

Lease accounting aims to properly reflect the true nature of the underlying lease agreement for key considerations, including:

1. Proper recognition of lease liability on a lessee's balance sheet.
2. Recording and properly valuing the asset at inception and as that value changes throughout the duration of the lease.
3. Recognizing and valuing lease liability at inception and as that liability changes throughout the duration of the lease.
4. Proper recognition of income statement aspects, such as lease revenue and expenses and profits and losses on leased assets.

Advantages of Lease Accounting

Lease accounting offers several advantages for both lessors (the entity that grants the lease) and lessees (the entity that receives the lease), as well as for financial statement users and stakeholders. Here are some key advantages:

Improved Transparency: One of the primary advantages of lease accounting standards like IFRS 16 and ASC 842 is the increased transparency they bring to financial statements. By requiring lessees to recognize lease assets and liabilities on the balance sheet, users of financial statements gain a clearer understanding of an organization's financial position and obligations related to leases.

Enhanced Comparability: Standardizing lease accounting treatment across organizations improves the comparability of financial statements. Previously, companies had the option to structure leases in ways that kept them off the balance sheet, making it difficult to compare financial performance and leverage ratios across companies. With lease liabilities and assets now recognized, financial statement users can make more meaningful comparisons.

Better Decision-Making: Recognizing leases on the balance sheet provides stakeholders with more accurate information for decision-making. Investors, creditors, and analysts can better assess an organization's financial health, risk exposure, and liquidity position when lease obligations are transparently presented on the balance sheet.

Reduced Off-Balance Sheet Financing: Lease accounting standards reduce the use of off-balance sheet financing, where lease obligations were not previously recognized. This helps to provide a more accurate representation of an organization's financial commitments, reducing the risk of hidden liabilities.

Efficiency in Lease Management: Standardizing lease accounting practices can lead to greater efficiency in lease management for both lessors and lessees. By having clearer accounting rules and requirements, organizations can streamline lease administration processes, improve lease negotiation strategies, and optimize lease portfolio management.

Compliance and Accountability: Lease accounting standards promote compliance with accounting regulations and increase accountability for lease-related transactions. By adhering to recognized accounting principles, organizations demonstrate their commitment to transparency and accountability, which can enhance trust among stakeholders.

Improved Risk Management: Recognizing lease liabilities on the balance sheet facilitates better risk management practices. Organizations have a clearer understanding of their financial obligations related to leases, allowing them to assess and mitigate risks associated with lease terms, lease renewals, and potential lease defaults.

Facilitates Capital Allocation: With lease obligations reflected on the balance sheet, investors and creditors have a more accurate picture of an organization's capital structure. This transparency can lead to more informed capital allocation decisions and potentially lower borrowing costs for companies with healthier balance sheets.

Hire Purchase and Instalment Sale Transactions

Hire Purchase

Hire purchase is a financial arrangement that allows a buyer to acquire an asset by paying for it in installments over time. Unlike a traditional loan where the buyer borrows money to purchase the asset outright, in a hire purchase agreement, the buyer pays for the asset in installments while using it. The ownership of the asset typically transfers to the buyer once all the installment payments, including any final balloon payment (if applicable), are made.

Special features of Hire Purchase Agreement

- **Possession:** The hire vendor transfers only possession of the goods to the hire purchaser immediately after the contract for hire purchase is made.
- **Installments:** The goods are delivered by the hire vendor on the condition that a hire purchaser should pay the amount in periodical instalments.
- **Down Payment:** The hire purchaser generally makes a down payment, i.e., an amount on signing the agreement.
- **Constituents of Hire purchase instalments:** Each instalment consists of two elements- finance charge (interest on unpaid amount) and capital payment.
- **Ownership:** The property in goods is to pass to the hire purchaser on the payment of the last instalment and exercising the option conferred upon him under the agreement.
- **Repossession:** In case of default in respect of payment of even the last instalment, the hire vendor has the right to take the goods back without making any compensation.

Instalment Sale Transactions

An installment sale transaction, also known as a deferred payment sale or a credit sale, is a financial arrangement where a seller allows a buyer to purchase goods or services and pay for them over time in multiple installments. Unlike a traditional cash sale where the buyer pays the entire purchase price upfront, in an installment sale, the buyer spreads the payments out over an agreed-upon period.

Features of Instalment Sale Transactions

Installment sale transactions have several distinctive features that distinguish them from traditional cash sales or other forms of financing. Here are the key features of installment sale transactions:

- **Payment in Installments:** In an installment sale, the buyer agrees to make payments to the seller over time, typically in equal installments. These payments may cover both the principal amount (the original purchase price) and, in some cases, interest charges.

- **Deferred Payment:** Unlike a cash sale where the buyer pays the entire purchase price upfront, in an installment sale, the buyer defers payment of a portion of the purchase price over the installment period.
- **Ownership and Possession:** Depending on the terms of the agreement, ownership and possession of the goods or services may transfer to the buyer either immediately upon the initial payment or upon completion of all installment payments.
- **Title Retention:** In some installment sale transactions, particularly those involving high-value goods or where there is a risk of non-payment, the seller may retain legal ownership (title) of the goods until the buyer completes all installment payments.
- **Interest Charges:** The seller may charge the buyer interest on the outstanding balance of the purchase price as part of the installment payments. The interest rate may be fixed or variable and is typically specified in the installment sale agreement.
- **Flexible Terms:** Installment sale transactions offer flexibility in terms of payment schedules, interest rates, and duration of the installment period. Sellers and buyers can negotiate terms that suit their respective needs and preferences.
- **Default and Remedies:** The installment sale agreement should outline the consequences of default by the buyer, such as late payment fees, repossession of goods, or legal action to recover outstanding amounts. Sellers may also have the option to terminate the agreement and reclaim the goods if the buyer fails to make payments as agreed.
- **Regulatory Compliance:** Depending on the jurisdiction and the nature of the transaction, installment sale agreements may be subject to various regulatory requirements, such as consumer protection laws and disclosure requirements.
- **Use Across Industries:** Installment sale transactions are commonly used in various industries for the sale of consumer goods, such as appliances, furniture, electronics, vehicles, as well as for certain types of business equipment and real estate.
- **Financial Reporting:** Sellers in installment sale transactions may recognize revenue over the installment period, reflecting the pattern of economic benefits transferred to the buyer, in accordance with relevant accounting standards such as the International Financial Reporting Standards (IFRS) or the Generally Accepted Accounting Principles (GAAP).

Questions:

1. Under lease accounting standards such as IFRS 16 and ASC 842, lessees are required to recognize most leases on their:

   a) Cash flow statement

   b) Income statement

   c) Balance sheet

   d) Statement of changes in equity

2. How are lease liabilities initially measured under lease accounting standards?

   a) At the present value of lease payments

   b) At historical cost

   c) At fair value

   d) At the carrying value of the leased asset

3. Which of the following is a key criteria used to determine whether a lease is classified as a finance lease or an operating lease under lease accounting standards?

   a) Length of the lease term

   b) Present value of lease payments relative to the fair value of the asset

   c) Nature of the leased asset

   d) Credit rating of the lessee

4. Which financial statement is directly affected by the recognition of a right-of-use asset under lease accounting standards?

   a) Income statement

   b) Balance sheet

   c) Cash flow statement

   d) Statement of changes in equity

5. What is the primary characteristic of a hire purchase agreement?

   a) Payment of the full purchase price upfront

   b) Payment of the purchase price after the term of the agreement ends

   c) Payment of interest only on the purchase price

   d) Payment of the purchase price in installments over time

6. In a hire purchase agreement, when does ownership of the asset typically transfer to the buyer?

   a) Immediately upon signing the agreement

   b) After the first installment payment is made

   c) After all installment payments, including any final balloon payment, are completed

   d) Ownership does not transfer to the buyer in a hire purchase agreement

7. What is the primary reason for a company to enter into a hire purchase agreement?

   a) To transfer ownership of an asset to another party

   b) To provide financing for the purchase of an asset

   c) To lease an asset without recognizing it on the balance sheet

   d) To generate revenue from the sale of an asset

8. How are lease payments typically classified in a hire purchase agreement?

   a) Capital expenditures

   b) Operating expenses

   c) Interest expenses

   d) Dividend payments

9. In an installment sale transaction, how are payments typically made by the buyer?

   a) Lump sum payment upfront

   b) Payment in installments over time

   c) Payment after the goods are returned

   d) Payment upon completion of the service

10. How does an installment sale transaction impact the seller's revenue recognition?

    a) Revenue is recognized immediately upon delivery of goods or services

    b) Revenue is recognized at the end of the installment period

    c) Revenue is recognized proportionally over the installment period

    d) Revenue is recognized only after all installments are paid in full

ANSWER

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

Topic

Module 3: Set off and Carry Forward of Losses

INTERMEDIATE

Group I - Paper-7A

Direct Taxation (DT)

Set off and Carry Forward of Losses

In the world of taxation, businesses and individuals often encounter situations where their expenses exceed their income, resulting in financial losses. However, tax laws provide mechanisms to mitigate the impact of these losses through provisions known as set-off and carry forward. Understanding the nuances of set-off and carry forward of losses is crucial for taxpayers aiming to optimize their tax positions and navigate the complexities of the tax system effectively. In this comprehensive guide, we delve into the meaning, provisions of set off and carry forward of loss.

Defining Set-off and Carry Forward of Losses

Set-off and carry forward of losses are provisions within tax laws that allow taxpayers to utilize their losses from one source of income to offset their income from another source. When a taxpayer incurs a loss in a particular previous year, they can set off or deduct that loss against income earned from other sources in the same year. If the loss exceeds the income in a given year, the taxpayer may carry forward the unabsorbed portion of the loss to subsequent years for set-off against future income. These provisions aim to provide relief to taxpayers experiencing temporary setbacks and promote fairness in the tax system.

Set-off provisions

The table given below highlights the rule of set off of losses –

Head or Source of Income	Intra Head Adjustment u/s 70	Inter Head Adjustment u/s 71	Carry Forward
Income from House Property	With any income under the same head	• Under default regime, no adjustment • Under old regime, with any income under other head subject to cap of ₹ 2,00,000/-.	Yes
Profit & Gains of Business or Profession (Speculative)	With Speculative income only	No Adjustment	Yes
Profit & Gains of Business or Profession (Non-Speculative)	Any income under the head	With any income under other head except salary	Yes
Unabsorbed Depreciation	Any income under the head	With any income under other head except salary	Yes
Unabsorbed expenditure u/s 35AD [only under old regime]	Specified business	No Adjustment	Yes
Long Term Capital Loss	With Long Term Capital Gain	No Adjustment	Yes
Short Term Capital Loss	Any Capital Gain	No Adjustment	Yes
Owning and Maintaining Race Horse	Income from such activity	No Adjustment	Yes
Other loss under the head Income from Other Sources	With any income under the same head	With any income under other head	No

Taxpoint

- No loss can be set off against winning from lotteries, crossword puzzles, races, card games, gambling or betting, etc. [Sec. 58(4) & 115BB]
- Wherever reference is given for unabsorbed depreciation, it includes reference to unabsorbed capital expenditure on scientific research and unabsorbed capital expenditure on promotion of family planning among employees

Carry Forward provisions

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

Sec.	Type of loss to be carried forward & set off	Income against which carried forward loss can be set off in next year(s)	For how many years loss can be carried forward	Is it necessary to submit return of loss in time
71B	House property loss	Income under the head "Income from house property"	8 years	No
72	Non-speculation business loss (other than depreciation etc.)	Any income under the head 'Profits & gains of business or profession' (whether from speculation or otherwise)	8 years	Yes
32(2)	Unabsorbed depreciation, capital expenditure on scientific research and family planning	Any income other than Income under the head Salaries and winning from lotteries, etc.	Indefinite years	No
73	Speculation business loss	Income from speculation transaction.	4 years	Yes
73A	Loss of specified business covered u/s 35AD	Income from any specified business.	Indefinite years	Yes
74	Short term Capital Loss	Income under the head "Capital gains"	8 years	Yes
74	Long term Capital Loss	Long term capital gain	8 years	Yes
74A	Loss from activity of owing and maintaining race horses	Income from the activity of owing and maintaining race horses	4 years	Yes

Conclusion

Set-off and carry forward of losses are powerful tools for taxpayers seeking to optimize their tax positions and minimize tax liabilities. By leveraging these provisions effectively and adopting strategic tax planning strategies, businesses and individuals can mitigate the impact of financial losses and maximize tax efficiency. However, navigating the complexities of set-off and carry forward requires careful consideration of tax laws, regulations, and individual circumstances.

MULTIPLE CHOICE QUESTIONS

Choose the correct alternative

1. Unabsorbed business losses cannot be carried for more than
   a. 7 assessment years
   b. 8 assessment years
   c. 10 assessment years
   d. 12 assessment years
2. Long term capital loss can be adjusted against
   a. Any income excluding winning from lottery
   b. Any capital gains
   c. Any long term capital gain
   d. Any speculative business income
3. Loss from Derivative trading is
   a. Short-term Capital Loss
   b. Speculative business loss
   c. Non-speculative business loss
   d. Loss u/h 'Income from Other Sources'
4. Loss from specified business covered u/s 35AD can be adjusted against
   a. Any other business income
   b. Any income other then salary
   c. Income from other specified business
   d. Cannot be adjusted
5. Unabsorbed depreciation can be carried forward for
   a. Any number of years
   b. 8 years
   c. 4 years
   d. 7 years

Answer:

1	b	2	c	3	c	4	c	5	a

Topic

Module 5:
Input Tax Credit

INTERMEDIATE

Group I - Paper-7B

Indirect Taxation (IDT)

Input Tax Credit

The introduction of the Goods and Services Tax (GST) revolutionized India's indirect tax system, ushering in a unified tax regime aimed at streamlining tax compliance and fostering economic growth. Central to the GST framework is the concept of Input Tax Credit (ITC), which allows businesses to offset tax paid on inputs against their tax liabilities. Understanding the intricacies of ITC is crucial for businesses to optimize their tax positions, enhance cash flow, and comply with GST regulations effectively. In this comprehensive guide, we explore the fundamentals of Input Tax Credit under GST, its mechanism, eligibility criteria, documentation requirements, and strategies for maximizing its benefits.

Understanding Input Tax Credit (ITC) under GST

Input Tax Credit (ITC) is a mechanism under GST that enables businesses to claim credit for taxes paid on inputs, input services, and capital goods used in the course of business. The fundamental principle behind ITC is to avoid tax cascading or the "tax on tax" effect, ensuring that taxes are levied only on the value addition at each stage of the supply chain. By allowing businesses to offset tax paid on purchases against their tax liabilities, ITC promotes efficiency, transparency, and fairness in the tax system.

Mechanism of Input Tax Credit (ITC)

The mechanism of Input Tax Credit (ITC) under GST operates through a seamless chain of tax credits across the supply chain. Key aspects of the ITC mechanism include:

- **Eligible Inputs**: Businesses can claim credit for taxes paid on inputs, which are goods or services used in the production or supply of goods or services.
- **Input Services**: Credit can also be claimed for taxes paid on input services, which are services used or intended to be used in the course of business.
- **Capital Goods**: Credit for taxes paid on capital goods, such as machinery, equipment, and furniture, is also available, subject to certain conditions.

Eligibility Criteria for Input Tax Credit (ITC)

While Input Tax Credit (ITC) offers significant benefits to businesses, certain eligibility criteria must be met to claim credit. Key considerations for eligibility include:

- **Registered Taxpayer**: Only registered taxpayers under GST are eligible to claim Input Tax Credit. Unregistered suppliers and composition scheme dealers are not entitled to ITC.
- **Taxpayer Compliance**: To claim ITC, taxpayers must comply with GST regulations, including filing timely returns, paying taxes due, and maintaining accurate records.
- **Tax Invoice**: Businesses must possess valid tax invoices or other prescribed documents evidencing the purchase of goods or services on which ITC is claimed.
- **Use in Business**: ITC can only be claimed for inputs, input services, and capital goods used or intended to be used in the course of business. Personal or non-business use is not eligible for credit.
- **Supplier Compliance**: To claim ITC, businesses must ensure that their suppliers have complied with GST regulations, including filing accurate returns and remitting taxes collected.

Block Credit

Block credit under GST refers to certain categories of goods or services for which input tax credit (ITC) is not allowed or restricted. These restrictions are put in place to prevent misuse, ensure tax compliance, and maintain the integrity of the GST system. Understanding the concept of block credit is crucial for businesses to accurately assess their tax liabilities and comply with

GST regulations. Here are some common scenarios where block credit applies under GST:

- **Motor Vehicles**: Input tax credit on the purchase, leasing, or renting of motor vehicles, except when they are used for specific purposes like transportation of passengers, goods, or for providing certain taxable services.
- **Food and Beverages**: Input tax credit is blocked for goods or services used for providing food and beverages, outdoor catering, beauty treatment, health services, cosmetic and plastic surgery, membership of a club, health and fitness center, and travel benefits extended to employees on vacation.
- **Works Contract Services**: Input tax credit is restricted on works contract services when they are used for construction of immovable property (other than plant and machinery) except where it is used for further supply of works contract service.
- **Goods and Services for Personal Use**: Input tax credit is blocked for goods or services acquired for personal consumption or used for non-business purposes.
- **Certain Goods and Services**: Input tax credit may be blocked for specific goods or services as determined by the government to prevent tax evasion or to align with policy objectives.

It's essential for businesses to review the list of blocked credits periodically as it may change based on updates to GST laws and regulations. Compliance with block credit provisions is critical to avoid penalties and ensure accurate tax reporting under GST.

Strategies for Maximizing Input Tax Credit (ITC) Benefits

To maximize the benefits of Input Tax Credit (ITC) under GST, businesses can adopt various strategies, including:

- **Timely Compliance**: Ensuring timely compliance with GST regulations, including filing accurate returns and remitting taxes, is essential for availing Input Tax Credit without disruptions.
- **Vendor Management**: Establishing robust vendor management processes to verify the GST compliance of suppliers, validate tax invoices, and address discrepancies promptly can help streamline ITC claims.
- **Input Classification**: Carefully classifying inputs, input services, and capital goods based on their use in business activities and maintaining proper documentation can facilitate accurate and efficient ITC claims.
- **Reverse Charge Mechanism**: Understanding the applicability of the reverse charge mechanism and complying with its requirements for certain specified supplies can enable businesses to claim ITC on reverse charge transactions.

Conclusion

Input Tax Credit (ITC) under GST is a powerful tool for businesses to offset tax paid on inputs and promote tax efficiency in the supply chain. By understanding the mechanism, eligibility criteria, documentation requirements, and strategies for maximizing ITC benefits, businesses can optimize their tax positions, enhance cash flow, and comply with GST regulations effectively. Overall, while input tax credit is a key feature of the GST regime that helps businesses reduce their tax burden, understanding and adhering to the rules regarding block credit is equally important to maintain compliance and avoid any potential issues with tax authorities. As businesses continue to adapt to the evolving GST landscape, leveraging Input Tax Credit intelligently will remain integral to achieving compliance, competitiveness, and sustainable growth in the dynamic Indian economy.

Topic

Module 6: Standard Costing and Variance Analysis

INTERMEDIATE

Group I - Paper-8

Cost Accounting (CA)

COST ACCOUNTING

The chapter Standard Costing is more important for the students of intermediate examinations. At least one theoretical/or practical question is expected from this chapter. Any problem on standard cost for working out different variances like Material Cost Variances, Labour Cost Variances, Overhead Cost Variances, Sales Variances, Sales Margin Variances can be worked out by using standard format applicable to all variance analysis. The calculation of Mix Variance is necessary only when there is more than one type of component for producing an article.

It is very difficult to compare and find out the reasons of cost fluctuations through Historical Costing, as it ascertains costs after they have been incurred. The reasons for cost fluctuation apart from variations in output may be detected through introductions of standard costing. It's utility are increasing day by day in advanced countries.

The term Standard is a predetermined measurable quantity set in defined conditions against which actual performance can be compared. In a ward we can say the standard refers to predetermined rate against which the performance is judged. Standard Cost is a predetermined calculation of how much cost should be used under specified working conditions. It is built up from assessment of the value of cost elements and correlates technical specification and qualification of material, labour and other costs to the price and/or usage rates expected to apply during the period in which the standard cost is intended to be used. The main purpose is to provide basis for control through variance accounting for the valuation of stock and work in progress and in some cases for setting prices. The technique by which standard costs are used is known as Standard Costing.

The main objects of Standard Costing are –

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

b) To control cost by introducing standards and analysis of variances.

c) To assists in setting budgets.

d) To motivate staff and management.

e) To help in assessing responsibility for nonstandard performance.

f) To provide basis for estimation.

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

The various types of standards are – Current Standard, Basic Standard, Ideal Standard and Attainable Standard.

Both Standard Costing and Budgetary Control are used for controlling the business operations by establishing predetermined standard and comparing and comparing the standard with actual. Budgetary control is usually operated without standard costing but it is difficult to implement the standard costing without budgetary control. A system of budgetary control in conjunction with standard costing is more helpful. Thus, although both are helpful to management in controlling costs, they differ in respect of scope and techniques. Standards are based on technical assessments, but Budgets are based on past actual with necessary adjustments. Standards are the minimum targets, which are to be attained and mainly related to manufacturing department, but Budgets are the maximum limits of expenses about which expenditure should not be incurred, and it deals with the departments or business as a whole.

The Standard costing have some following advantages -

a) Standard costing provides the guidance which helps the management in performing their managerial functions.

b) Standard costing highlights areas on strengths and weaknesses.

c) It acts as yardsticks against which actual costs are compared.

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

e) It will help prompt preparation of profit and loss account for short period.

But Standard costing is generally used in such organization whose processes or jobs are repetitive. Again a lot of input data is required which is expensive. This technique may not suitable to the non-standard jobs. Some variances may not have explained properly.

Computation of standard cost and actual cost and analysis of variances may be broadly classified in to Four Parts such as

a) Material Cost Variances,

b) Labour Cost Variances,

c) Overhead Cost Variances, and

d) Sales Variances.

All the Variances may be analyzed in details.

Material Cost Variances:

This variance is the difference between actual direct material cost incurred and the Standard direct material cost specified for the production achieved. Material Cost Variances are analysed under two heads. Viz. Material Price Variance and Material Usage Variance.

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

Material Usage Variance – this is the portion of material cost variance which is due to the difference between the actual quantity used and amount which should have been used, valued at standard price as was fixed beforehand.

This variance can be divided into two heads – Material Mix Variance and Material Yield variance.

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

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

Direct Labour Cost Variance is the difference between actual direct wages paid and the standard direct wages specified for the activity achieved. This Labour cost Variance may be analysed into two variances viz. Labour Rate Variance and Labour Efficiency Variance.

Now, Labour Rate Variance is due to the difference between actual and standard wages rate per hour applied to the total hour worked. And Labour Efficiency Variance is due to difference between the standard cost of labour of the actual output or the cost or the cost of standard hour which should have been worked for the output and the hour actually paid, valued at standard wages rate. The Labour Efficiency Variances are subdivided into three parts viz. Labour mix or Gang variance, Labour idle time variance and Labour mix variance.

Labour Mix Variance is that portion of Labour Efficiency Variance which is due to difference between actual composition of gang at standard rate and the actual labour or days in standard ratio of composition specified for a gang.

Idle time Variance which forms a portion of labour efficiency variance is represented by the standard cost of the actual hours for which the workers remain idle due to abnormal circumstances. It is the standard cost of difference between the actual hours paid and actual hours worked.

Labour Yield Variance is that part of the Labour efficiency variance which is due to difference between actual output at standard rate for each unit of finished product and the standard cost of the actual hours worked at standard composition.

Overhead Cost Variance is the difference between the actual overhead incurred and the overhead charged into the job or process at the standard overhead rate. Overhead cost variance and its component variance may be computed and analysed separately for fixed and variable overheads and for each cost centre again Variable overhead variance can be divided into two parts viz. Expenditure Variance and Efficiency Variance.

Variable Overhead Variance –

It represents the difference between actual overhead incurred and the standard overhead for actual production.

Variable Overhead Expenditure Variance –

This is the difference the actual variable overhead and standard variable overhead for the actual hours worked. and

Variable overhead Efficiency Variance –

This represents the difference between standard variable overhead for actual production and the cost of actual hours worked at standard rate.

Sales Variance –

It is the difference between the actual value of sales achieved in a given period and budgeted value of sales. Sales Variances are analysed by using two methods:

Sales Variances based on turnover and Sales Variance based on margin.

Sales Variance based on Turnover are analysed into two parts-viz. Sales Price Variance and Sales Volume Variance. Further the Sales Volume Variance may be analysed into Sales Mix Variance and sales Quantity Variance.

Sales Variance based on Margin:

This approach shows the difference in actual profit and budgeted profit. This margin variance are analysed into two parts –Sales Margin Volume Variance and Sales Margin Price Variance again, Sales Margin Volume Variance may be divided into two divisions, viz, Sales Margin Mix variance and Sales Margin Quantity Variance.

Students are requested to follow Texts, if necessary, for details of formula for solving individual problem.

Variance may be raised in respect of Labour Cost also. Now with the help of a problem based on Labour Cost, we can easily understand the technique of solving problem. A problem is selected to guide the Intermediate students.

Problem:

The following details are available from the record of ANI Ltd. Engaged in manufacturing Article – A for a week.

The standard labour hours and rates of payment per Article - A, were as follows:-

Particulars	Hours	Rate	Total
Skilled Labour	10 hrs	₹ 3.00	₹ 30.00
Semi-skilled	8 hrs	₹ 1.50	₹ 12.00
Unskilled Labour	16 hrs	₹ 1.00	₹ 16.00
			₹ 58.00

The actual production was 1000 units of Article –A for which the actual hours worked and rates are given below:

Particulars	Hours	Rate per hour	Total
Skilled Labour	9000 hrs	₹ 4.00	₹ 36,000.00
Semi-Skilled Labour	8400 hrs	₹ 1.50	₹ 12,600.00
Unskilled Labour	20000 hrs	₹ 0.90	₹ 18,000.00
			₹ 66,600.00

From the above set of data, you are to calculate:

a) Labour Cost Variance.

b) Labour Rate Variance.

c) Labour Efficiency Variance.

d) Labour Mix Variance.

Solution:

The above problem can be solved in the following manner -

Standard Cost	Standard cost of Actual hours		Actual Cost
	At std mix	At actual mix.	
SC × Output	Std mix × SR	Actual Hr × SR	Actual Hr × Actual Rate
₹ 58 × 1000 units	Sk 11000 hr × 3 = 33000	Sk 9000hr × 3 = 27000	Sk. ₹ 36,000
	S. Sk 8800 hr × 1.5 = 13200	S Sk . 8400hr × 1.5 = 12600	S Sk ₹ 12,600
	U Sk 17600 hr × 1 = 17600	U Sk 20000hr × 1 = 20000	U Sk. ₹ 18,000
58,000	63800	59,600	66,600
	(Std Ratio 10:8:16)		

Now, the required variances can be calculated in the following way -----

a) Labour Cost Variance = L4 – L1 = 58000 – 66600 = 8600 (A)

b) Labour Rate Variance = L2 – L1 = 59600 – 66600 = 7000 (A)

c) Labour Efficiency Variance = L4 – L2 = 58000 – 59600 = 1600 (A)

d) Labour Mix Variance = L3 – L2 = 63800 – 59600 = 4200 (F)

e) Labour Yield Variance = L4 – L3 = 58000 – 63800 = 5800 (A)

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 discussions are made on TRANSPORTATION problems. Refer module 4.5 of the guide book.

Illustration 1:

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

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

Find the monthly production and distribution schedule which will maximise profits

Answer:

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

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

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

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

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

Modi:

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

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

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

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

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

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

U4 + V4 = 11, V4 = 4

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

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

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

Solution is not optimal as B1 is 0

Illustration 2:

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

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

(i) Is the solution optimal? If not find out the optimal solution

(ii) Does the problem have multiple optimal solution? Give reasons. If so find one more optimal solution

Answer:

(i) The solution is not optimal. To arrive optimality we have to proceed further as follows:

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

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

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

Optimal but not unique as BY is zero

(ii)

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

Illustration 3:

ABC limited has three production shops supplying a product to five warehouses. The cost of production varies from shop to shop and cost of transportation from one shop to a warehouse also varies. Each shop has a specific production capacity and each warehouse has certain amount of requirement. The costs of transportation are as given:

	I	II	III	IV	V	Supply
A	6	4	4	7	5	100
B	5	6	7	4	8	125
C	3	4	6	3	4	175
Demand	60	80	85	105	70	

The cost of manufacturing the product at different production shops is:

Shop A R14 per unit, Shop B R16 per unit, Shop C R15 per unit

(i) Find the optimum distribution pattern so as to minimise cost

(ii) Identify alternate solution if any

Answer:

	I	II	III	IV	V	Supply
A	20	18	18	21	19	100
B	21	22	23	20	24	125
C	18	19	21	18	19	175
Demand	60	80	85	105	70	

Adding respective cost of production with transportation costs

	I	II	III	IV	V	Supply				
A	20	18	18 85	21	19 15	100	0	1	1	1
B	21	22 80	23	20	24 45	125	1	1	1	2
C	18 60	19	21	18 105	19 10	175	0	0	1	0
Demand	60	80	85	105	70					
	2	1	3	2	0					
	2	1		2	0					
	2	1			0					
		1			0					

	I	II	III	IV	V	Supply	U
A	20 -2	18 -1	18 85	21 -3	19 15	100	0
B	21 2	22 80	23 0	20 3	24 45	125	5
C	18 60	19 -2	21 -3	18 105	19 10	175	0
Demand	60	80	85	105	70		
V	18	17	18	18	19		

Closed loop BIV- BV- CV- CIV-BIV

	I	II	III	IV	V	Supply	U
A	20 -2	18 2	18 85	21 -3	19 15	100	0
B	21 -1	22 80	23 -1	20 45	24 -3	125	2
C	18 60	19 1	21 -3	18 60	19 55	175	0
Demand	60	80	85	105	70		
V	18	20	18	18	19		

Closed loop AII-BII-BIV-CIV-CV-AV-AII

	I	II	III	IV	V	Supply	U
A	20 -4	18 15	18 85	21 -5	19 -2	100	0
B	21 -1	22 65	23 -1	20 60	24	125	4
C	18 60	19 1	21 -1	18 45	19 70	175	2
Demand	60	80	85	105	70		
V	16	18	18	16	17		

(i) Closed Loop CII-CIV-BIV-BII-CII

	I	II	III	IV	V	Supply	U
A	20 -3	18 15	18 85	21 -5	19 -1	100	0
B	21 0	22 20	23 -1	20 105	24 -2	125	4
C	18 60	19 45	21 -2	18 -1	19 70	175	1
Demand	60	80	85	105	70		
V	17	18	18	16	18		

(ii)

	I	II	III	IV	V	Supply	U
A	20 -3	18 15	18 85	21 -5	19 -1	100	0
B	21 20	22 0	23 -1	20 105	24 -2	125	4
C	18 40	19 65	21 -2	18 -1	19 70	175	1
Demand	60	80	85	105	70		
V	17	18	18	16	18		

Illustration 4:

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

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

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

Answer:

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

	200	400	100	100					
	300	300	50	700					
	300	300	50						
	400	300							

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

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

U1+ V3 = 150, V3 = 150

U2 + V1 = 200, U2 = -150

U2 + V4 = 100, V4 = 250

U3+ V1 = 600, V1 = 350

U3 + V2 = 400, U3 = 250

U4 + V2 = 0, V2 = 150

U4 + V3 = 0, U4 = -150

U1+V1-500 = 0 + 350-500 = -150

U1 + V2-1000 = 0 +150-1000 = -850

U1+ V4-800 = 0 + 250 -800 = -550

U2+V2-700 = -150+150-700 = -700

U2 + V3-500 = -150+150-500 = -500

U3+V3 -100 = 250+150-100 = 300

U3+ V4-900 = 250 +250-900 = -400

U4+V1-0 = -150-150-0 = -300

U4+ V4-0 = -150+250-0 = 100

Not optimal. Maximum positive we take

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

U1+ V3 = 150, V3 = 150 U1+V1-500 = 0 + 350-500 = -150

U2 + V1 = 200, U2 = -250 U1 + V2-1000 = 0 +150-1000 = -850

U2 + V4 = 100, V4 = 350 U1+ V4-800 = 0 + 250 -800 = -550

U3+ V1= 600, V1 = 650 U2+V2-700 = -150+150-700 = -700

U3 + V2 = 400, V2 = 450

U3 + V3 = 100, U3 = -50 U2 + V3-500 = -150+150-500 = -500

U4 + V2 = 0, U4 = -450 U3+V1-0 = -50+650-0 = 600

U3+V3-0 = -50+150 -0 = 100

U3 + V4 -0 = -50 +350-0 = 300

Not optimal. Taken maximum positive cell

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

U1+ V3 = 150, V3 = 150 U1+ V1-500 = 0 + 450 -500 = - 50

U2 + V1 = 200, U2 = -250 U1+ V2 -1000 = 0 + 450 -1000 = -550

U2 + V4 = 100, V4 = 350 U1 +V4-800 = 0 + 350 -800 = -450

U3 + V2 = 400, V2 = 450 U2 + V2 – 700 = -250 + 450 – 700 = -500

U3 + V3 = 100, U3 = -50 U2 + V3 – 500 = -250 +150 -500 = -600

U4 + V1 = 0, V1 = 450 U3 +V1 -600 = -50 + 450 – 600 = -250

U4 + V2 = 0, U4 = -450 U3 + V4-900 = -50 + 350 -900 = -600

U4+ V3 – 0 = -450+150 = -300

U4 + V4 – 0 = -450 +350 -0 = -100

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

Suggestions:

The study guide needs to be read thoroughly. Supplementary readings could be made from other resources. Numerical illustrations on transportations are made here as an extended aid to the topic discussed in guide book. The problem is just indicative type from which maximum benefits could be reached once Guide book on the paper 9- Operations Management & Strategic Management written and issued by Institute on New Syllabus along with reference books are to be thoroughly consulted. All concepts/formula used in the problems are taken from guided book and so no detailing on concepts are made here.

Topic

Module 4:
Accounts of Banking, Electricity and Insurance Companies

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

INTERMEDIATE

Group II - Paper-10

Corporate Accounting and Auditing (CAA)

Section A: Corporate Accounting

Topic: Accounts of Banking, Electricity and Insurance Companies

I. Accounts of Banking Company

- **Multiple Choice Questions**

(i) Which of the following is/are a part of General Ledger of a Banking Company?

A. Control Accounts of all personal ledgers.

B. Profit and Loss Account.

C. Assets' Accounts.

D. All of the above.

(ii) Rate of provision on unsecured portion of doubtful assets

A. 100%

B. 40%

C. 25%

D. 15%

(iii) Rate of provision on advances doubtful up to 1 year is

A. 30%

B. 25%

C. 20%

D. 15%

(iv) Rate of provisioning by a Bank for Advances doubtful for more than 1 year but less than 3 years is

A. 25%

B. 40%

C. 60%

D. 100%

(v) A Banking Company needs to transfer a minimum of ________ of its profit to reserve fund.

A. 10%

B. 15%

C. 20%

D. 25%

Answer:

(i)-D; (ii)-A; (iii)-B; (iv)-B; (v)-D

- **Rates of Provisioning for Non-Performing Assets and Restructured Advances**

Category of Advances	Rate (%)
Standard Advances	
(a) Direct advances to agricultural and SME	0.25
(b) Advances to Commercial Real Estate (CRE) Sector	1.00
(c) All other loans	0.40
Sub-standard Advances	
Secured Exposures	15
Unsecured Exposures in respect of Infrastructure loan accounts where certain safeguards such as escrow accounts are available.	20
Unsecured other loans	25
Doubtful Advances – Unsecured Portion	100
Doubtful Advances – Secured Portion	
For Doubtful up to 1 year	25
For Doubtful > 1 year and up to 3 years	40
For Doubtful > 3 years	100

Comprehensive Problem

Illustration 1

The following information of advances has been provided by PQR Bank Ltd. as on 31.03.2021.

Asset classification	₹ in lakhs
Standard	3,000
Sub-standard	2,200
Doubtful:	
For one year	900
For two years	600
For three years	400
For more than three years	300
Loss assets	800

Calculate the amount of provision to be made in for the year ended 31.3.2021.

Solution:

The amount of provision to be made in for the year ended 31.3.2021 = ₹ 2,067 lakhs

Workings:

Asset Classification	Amount (₹ in lakhs)	Provision (%)	Amount of Provision (₹ in lakhs)
Standard	3,000	0.40	12
Sub-standard	2,200	15	330
Doubtful:			
For one year	900	25	225
For two years	600	40	240
For three years	400	40	160
For more than three years	300	100	300
Loss assets	800	100	800
Total			2,067

II. Accounts of Electricity Company

(i) In case of an electricity company, depreciation on assets is calculated based on the rates notified by ______________.

A. Companies Act 2013

B. State Electricity Commission

C. Central Electricity Regulatory Commission

D. Income Tax Act 1961

(ii) In the context of accounting for electricity company, as per Appendix III depreciation on IT equipment is ______________.

A. 15%

B. 20%

C. 25%

D. 30%

(iii) The abbreviation CERC in respect of electricity company stands for ____________.

A. Central Electricity Regulatory Commission

B. Central Electronic Regulatory Commission

C. Central Electrical Regulatory Commission

D. Central Equipment Regulatory Commission

(iv) Balance of Interest Accrued on Security Deposit A/c of an Electricity company should be shown ______________.

A. under Current Liability.

B. under Non-current Liability.

C. under Current Asset.

D. under Non-current Asset.

(v) Which of the following Acts has not been replaced by The Electricity Act, 2003.

A. The Indian Electricity Act, 1910,

B. The Electricity (Supply) Act, 1948 and

C. The Electricity Regulatory Commissions Act, 1998

D. Companies Act 1956

Answer: (i)-C; (ii)-A; (iii)-A; (iv)-B; (v)-D

III. Accounts of Insurance Company

(i) Which of the following is not a mandatory financial statement of a General Insurance Company as per IRDA regulations?

A. Revenue Account

B. Profit and Loss Account

C. Balance Sheet

D. Cash Flow Statement

(ii) When insurer transfer a part of the risk to another insurer it is called ________.

A. Double insurance

B. Reversionary bonus

C. Reinsurance

D. Cash bonus

(iii) When the same risk and object is insured with more than one insurance it is called ________.

A. Double insurance

B. Reversionary bonus

C. Reinsurance

D. Cash bonus

(iv) The bonus which is paid to the policyholders in cash when the valuation balance sheet is prepared is called ____________.

A. Double insurance

B. Reversionary bonus

C. Reinsurance

D. Cash bonus

(v) The bonus which is added to the policy amount and is paid together with the policy amount when matured for payment is called ___________.

A. Double insurance

B. Reversionary bonus

C. Reinsurance

D. Cash bonus

Answer: (i)-D; (ii)-C; (iii)-A; (iv)-D; (v)-B

Section B: Auditing

Topic: Provisions Relating to Audit under Companies Act, 2013

- **Duties of a Company Auditor**

  The duties of a company auditor can broadly be classified into five categories as follows:

  (a) Statutory duties:

  1. **Duty to report:** It is the duty of the company auditor to make a report to the members of the company on the accounts examined by him and on balance sheet and profit and loss account laid before the company in its general meeting. [Section 143(1)]

  2. **Duty to comply with the Auditing Standards:** Every auditor has to comply with the auditing standards. [Section 143(9)]

  3. **Duty to follow CARO:** In case the concerned company is covered under Companies (Auditor's Report) Order, the auditor's report shall include a statement on such matters as may be specified in its order. [Section 143(11)]

  5. **Other duties under the Companies Act:** The auditor has the following other duties under the Companies Act—

     (i) Duty of the auditor or a partner of a firm of chartered accountants practising in India to sign audit report. [Section 145]

     (ii) Duty of the auditor to report on prospectus on the accounting part. [Section 26]

     (iii) Duty to assist the inspector appointed by the Central Government to investigate the affairs of the company. [Section 217]

     (iv) Duty to report on profit and loss account for the period from the last closing date to the date of declaration of insolvency by the directors and also on balance sheet. [Section 305]

  (b) Contractual duties: A professional accountant may be hired by a company for purposes other than the statutory audit. In all such cases, the duty of the auditor will be decided based on the terms and conditions of his engagement.

  (c) Duty to apply reasonable care and skill: An auditor of a company must be honest and must exercise reasonable care and skill in performing his audit task; If he fails to do so, he may be sued for damages. It was observed in Kingston Cotton Mills Case (1896) that the auditor should perform his audit work with such care, skill and caution that is reasonably competent, careful and cautious auditor will use.

  (d) Duty regarding mandatory accounting standards: Companies are required to comply with accounting standards. It is the duty of the auditors who are the members of the Institute, to ensure that the mandatory accounting standards are followed in the presentation of the financial statements covered by their audit report. In case of any deviation from the applicable standards, it is also be the duty of the auditor to make adequate qualification in their reports so that the users of such statements may be aware of such deviations.

  Section 143(2) of the Companies Act also states that the auditor's report shall state whether the company's balance sheet and profit and loss account comply with the Accounting Standards referred to in Section 133.

  (e) Duty to the profession itself: Every profession has its own code of conduct and professional ethics. Similar code of conduct has been in place for ICAI also. Such code of conduct must be adhered to by the members of the ICAI. So, it is the duty of the company auditor to follow code of conduct and his professional ethics.

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

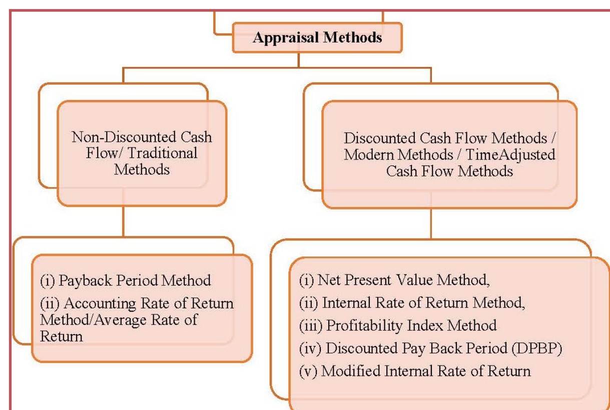
Financial Management

Capital Budgeting

The methods of appraising capital expenditure proposals can be classified into two broad categories:

(i) Traditional or Non-discounted methods and

(ii) Time-adjusted o discounted. It is shown in the figure below:



The accept/reject criterion under the NPV method is as follows:

If, NPV > Zero **then,** Accept

If, NPV < Zero **then,** Reject

If, NPV = 0 **then, may** accept or reject

Example 1

An Engineering Company P Ltd. is considering to replace or repair a particular machine, which has just broken down. Last year ₹100,000 incurred towards run and maintenance of machine. These costs have been increasing in real terms in recent years with the age of machine. A further useful life of 5 years is expected, if immediate repairs of ₹95,000 are carried out. If the machine is not repaired it can be sold immediately to realize about ₹25,000 (Ignore loss/gain on such disposal).

Alternatively, the company can buy a new machine for ₹245,000 with an expected life of 10 years with no salvage value after providing depreciation on straight line basis. In this case, running and maintenance costs will reduce to ₹70,000 each year and are not expected to increase much in real term for a few years at least. The company estimates a normal return of 10% p.a. after tax as a minimum requirement on any new investment. Consider corporate tax rate of 50% and assume that depreciation on straight line basis will be accepted for tax purposes only.

Which alternative company will choose?
[Given, Cumulative present value of ₹1 p.a. at 10% for 5 years ₹3.791 and 10 years ₹6.145]

Solution:

Evaluation of alternative proposals

Alternative 1: Repairs to Existing Machine

Present value of after-tax cash flows		₹
Cost of Repairs immediately net of tax	(₹95,000*50/100 = 47,500)	
Equivalent annual cost for 5 years	₹47,500/3.791	12,530
Add: Running and Maintenance Cost p.a. net of tax	₹100,000*50%	50,000
Total Net Equivalent Cash outflows p.a.		62,530

Alternative 2: To buy new machine

Present value of after-tax cash flows		₹
Purchase cost of new machine		245,000
Less: Sale Proceeds of Old machine		25,000
		220,000
Equivalent annual cost for 10 years	₹220,000/6.145	35,801
Tax Saving of Depreciation	₹ (245,000/10) *50%	(12,250)
Add: Running and Maintenance Cost p.a. net of tax	₹70,000*50%	35,000
Total Net Equivalent Cash outflows p.a.		58,552

Decision: Since, Net Equivalent Cash outflows p.a. for buying a new machine ₹ 58,552 is less than net Equivalent Cash outflows p.a. of ₹ 62,530 for repairing an existing machine. Therefore, it is advisable that the company should go for buying a new machine.

Example 2

Dox Ltd. has just installed Machine A at a cost of ₹4,00,000. The machine has a five-year life with no residual value. The annual volume of production is estimated at 1,50,000 units, which can be sold at ₹10 per unit. Annual operating costs are estimated at ₹4,00,000 (excluding depreciation) at this output level. Fixed costs are estimated at ₹5 per unit for the same level of production.

Dox Ltd. has just come across another model called Machine B capable of giving the same output at an annual operating cost of ₹3,60,000 (exclusive of depreciation). There will be no change in fixed costs. Capital cost of this machine is ₹5,00,000 and the estimated life is for five years will no residual value.

The company has an offer for sale of Machine A at ₹2,00,000. But the cost of dismantling and removal will amount to ₹60,000. As the company has not yet commenced operations, it wants to sell Machine A and purchase Machine B.

Dox Ltd. will be zero tax company for seven years in view of several incentives and allowances available. The cost of capital may be assumed 15%. P.V. factors are as follows:

Year	1	2	3	4	5
P.V. Factors	0.8696	0.7561	0.6575	0.5717	0.4972

(ii) You are required to advise whether the company should opt for the replacement.

(iii) Will there be any change in your view, if machine A has not been installed but the company is in the process of selecting one or the other machine? Support your view with necessary workings.

Answer:

(i) Replacement of Machine A

Incremental cash outflow		
Cash outflow on Machine B		5,00,000.00
Less: Sale value of Machine - A	2,00,000.00	
Less: Cost of dismantling and removal	60,000.00	1,40,000.00
Net Outflow		3,60,000.00

Incremental cash flow from Machine B			
Annual Cash Flow from Machine B	(150,000*10) - (150,000*5) - 360000		3,90,000.00
Annual Cash Flow from Machine A	(150,000*10) - (150,000*5) - 400000		3,50,000.00
Net incremental cash flow			40,000.00
Present value of incremental cash inflows		40,000*3.3521	1,34,084.00
PV Factor	3.3521		
NPV of Machine B	(134084-360000)	-2,25,916.00	

₹4,00,000 spent on Machine A is a sunk cost and hence it is not relevant for deciding the replacement.

Decision: Since NPV of Machine B is the negative, replacement is not advised.

If the company is in process of selecting one of the two machines, the decision is to be made on the basis of independent evaluation of two machines by comparing their NPVs.

(ii) Independent evaluation of Machine A and Machine B

	Machine –A (₹)	Machine –B (₹)
Units produced	1,50,000	1,50,000
Selling price per unit (₹)	10	10
Sale Value	15,00,000	15,00,000
Less: Operating Cost (Exclusive of Depreciation)	4,00,000	3,60,000
Contribution	11,00,000	11,40,000
Less: Fixed Cost (1,50,000*₹5)	7,50,000	7,50,000
Annual cash flow	3,50,000	3,90,000
Present value of cash flows for 5 years	11,73,235	13,07,319
Cash out flow	4,00,000	5,00,000
Net present value	7,73,235	8,07,319

As the NPV of cash inflow of Machine B is higher than that of Machine A, the company should choice Machine B.

Note: As the company is a zero-tax company for seven years (Machine life in both cases is only for five years), depreciation and the tax effect on the same are not relevant for consideration.

Multiple Choice Questions:

1. A project has an equity beta 1.2 and is going to be finances by 30% debt and 70% equity. Assume debt beta = 0, Rf = 10% and Rm = 18%. What is the required rate of return?

   (a) 15.12%

   (b) 16.72%

   (c) 17.54%

   (d) 17.82%

   Answer (b)

2. Which of the following capital budgeting techniques uses a method of adjusting future cash flows for evaluating an investment project?

   (a) Capital Rationing

   (b) Risk – adjusted Discount Rate

   (c) Certainty Equivalent Approach

   (d) Decision Tree Analysis

   Answer (c)

3. Consider a project with the following expected NPV in three situations:

Situation	Probability	NPV (₹ in Lakh)
Worse	0.3	-108
Bad	0.5	234
Good	0.2	504

   The expected NPV of the project is

   (a) ₹195.4 lakh

   (b) ₹185.4 lakh

   (c) ₹200.4 lakh

   (d) ₹210.6 lakh

   Answer (b)

4. A project with an initial investment of ₹ 50 Lakh and life of 10 years generates Cash Flow After Tax (CFAT) of ₹10 Lakh per annum. What is the Payback Reciprocal of the project?

   (a) 10%

   (b) 15%

   (c) 18%

   (d) 20%

   Answer: (d)

5. Initial investment ₹20 Lakh. Expected annual cash flows ₹6 Lakh for 10 years. Cost of capital @15%. Profitability Index (PI) is [Cumulative discounting factor @15% for 10 years=5.019)

   (a) 1.51

   (b) 1.71

   (c) 2.51

   (d) 2.91

   Answer (a)

Data Analytics
(Data Analysis and Modelling)

Data Analytics: Meaning

Data analytics is the collection, transformation, and organization of data in order to draw conclusions, make predictions, and drive informed decision making.

Steps of Data Analytics

Step 1: Criteria for grouping data: Data may be segmented by a variety of parameters, including age, population, income, and sex. The data values might be either numeric or category.

Step 2: Collecting the data: Data may be gathered from several sources, including internet sources, computers, personnel, and community sources.

Step 3: Organizing the data: After collecting the data, it must be arranged so that it can be analysed. Statistical data can be organised on a spreadsheet or other programme capable of handling statistical data.

Step 4: Cleaning the data: The data is initially cleansed to verify that there are no duplicates or errors. The document is then examined to ensure that it is comprehensive. Before data is sent to a data analyst for analysis, it is beneficial to rectify or eliminate any errors by cleaning the data.

Step 5: Adopt the right type of data analytics process:

There are four types of data analytics process:

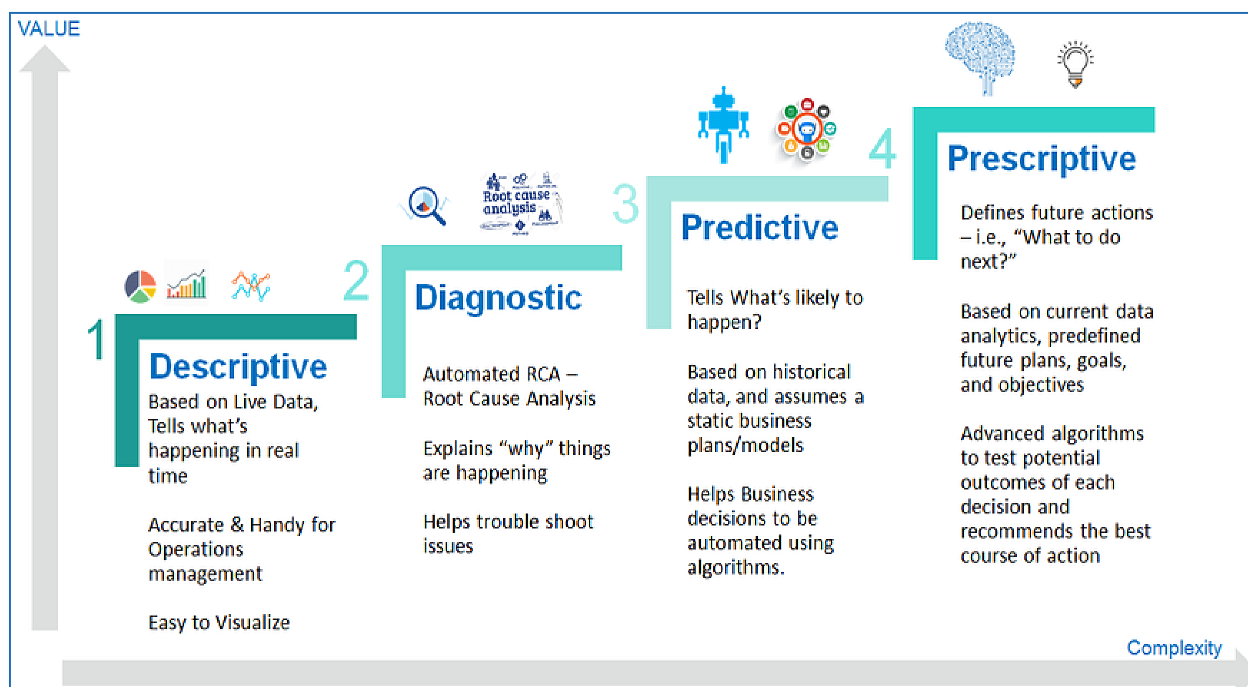
(i) Descriptive analytics

(ii) Diagnostics analytics

(iii) Predictive analytics

(iv) Prescriptive analytics

Types of Data Analytics at a Glance



Source: https://medium.com/co-learning-lounge/types-of-data-analytics-descriptive-diagnostic-predictive-prescriptive-922654ce8f8f

Business intelligence (BI)

Business intelligence is a technology-driven process for analyzing data and delivering actionable information that helps executives, managers and workers make informed business decisions. It includes business analytics, data mining, data visualisation, data tools and infrastructure, and best practises to assist businesses in making choices that are more data-driven.

BI Methods/Procedures

BI procedures consist of the following:

1. **Data mining:** Large datasets may be mined for patterns using databases, analytics, and machine learning (ML).
2. **Reporting:** The dissemination of data analysis to stakeholders in order for them to form conclusions and make decisions.
3. **Performance metrics and benchmarking:** Comparing current performance data to previous performance data in order to measure performance versus objectives, generally utilising customised dashboards.
4. **Descriptive analytics:** Utilizing basic data analysis to determine what transpired.
5. **Querying:** BI extracts responses from data sets in response to data-specific queries.
6. **Statistical analysis:** Taking the results of descriptive analytics and use statistics to further explore the data, such as how and why this pattern occurred.
7. **Data Visualization:** Data consumption is facilitated by transforming data analysis into visual representations such as charts, graphs, and histograms.
8. **Visual Analysis:** Exploring data using visual storytelling to share findings in real-time and maintain the flow of analysis.
9. **Data Preparation:** Multiple data source compilation, dimension and measurement identification, and data analysis preparation.

Topic

Module 7: Forecasting, Budgeting and Budgetary Control

INTERMEDIATE

Group II - Paper-12

Management Accounting (MA)

Module 7.2: Forecasting and Budgeting

Budgeting has become widely accepted as an effective method for short-term planning and control in businesses of all sizes. Through budgets, a business lays out its specific financial and operational plans for an upcoming period, typically an accounting period.

Budgeting is considered an important application of management accounting principles. It is viewed as one of the most valuable tools available to managers, helping them deal with issues like inflation and other challenges.

A budget is essentially a quantitative plan, approved in advance, that outlines the policies and objectives the company aims to achieve during a defined future period. Budgets can cover elements like projected income, expenditures, and capital deployment.

Budgeting allows businesses to clearly define their proposed actions and financial goals for the upcoming budgeted time frame. When utilized effectively, it serves as a versatile management tool for steering the company toward its targets.

Forecast Vs Budget

Forecast predicts future events, while a budget outline planned financial operations. Forecasting precedes budget preparation and is crucial for it. Forecasts focus on growth and development, projecting revenue, customer reach, and profitability over a specific time frame. Budgets detail financial plans to meet revenue goals and control costs. Both require accurate reporting and analysis, but serve different purposes: forecasting for prediction, and budgeting for profit planning and cost control.

The main differences between a budget and a forecast can be summarised as follows:

A budget is a financial plan prepared by management in advance for a forthcoming period, expressed in quantitative terms. In contrast, a forecast involves estimating future trends and outcomes based on past and present data. The budget represents the financial expression of a business plan or target, while a forecast predicts upcoming events or trends in the business based on current conditions. Budgets set targets, whereas forecasts do not. Budgets are typically annual, while forecasts are conducted at regular intervals. Variance analysis is performed between budgets and actuals, but not in forecasts. The primary focus of a budget is what the business aims to achieve, while a forecast predicts what the business will achieve. Establishing a budget requires forecasting various important variables such as sales, selling prices, material availability, material prices, and wage rates.

Use of Budgets

Budgets have primary, secondary, and tertiary uses in management accounting.

Primary uses include quantifying planned resource usage such as materials and labour, income generation, and resource procurement like materials and subcontractors.

Secondary uses involve quantifying payments for resources through cash budgeting and tracking cash collections from debtors.

Tertiary uses encompass informing individuals of their objectives, serving as a basis for negotiation, facilitating communication, and forming components of reward or payment systems.

Features of Budget:

1. Financial and/or Quantitative statement
2. Futuristic – prepared and approved prior to a defined period of time
3. Goal Oriented – for the purpose of attaining a given objective
4. Components – income, expenditure and employment of capital

The Objectives of Budgeting

The Objectives of Budgeting are:

1. Encouraging self-study across all aspects of a company's operations.
2. Engaging all members of management in determining how the business should be run to foster a coordinated team working towards clearly defined objectives.
3. Defining and crystallising company policies and aims.
4. Enhancing the effectiveness of utilising both people and capital.
5. Identifying areas for potential improvement in the company's operations.
6. Promoting the examination of the company's relationship with its external economic environment to enhance its direction effectiveness.

Some questions to be asked when preparing a manufacturing firm's annual budget:

When preparing the annual budget for a manufacturing firm, consider the following questions:

Product Sales:

- What products are we selling?
- How much of each product will we sell?
- When will these products be sold?
- Where will the products be sold?

Product Procurement:

- If buying products for resale:
- When will we make purchases?
- Who will be our suppliers?
- How much will we pay for the products?

Manufacturing Process: Materials:

- How much of each material will we need?
- Where and when will we source the materials?
- How much will we pay for the materials and when?
- What will be our purchasing and stocking strategy?

Labour:

- How much labour will be required?
- How many people of each type will we need?
- When will we hire them?
- When will we pay them?

Other Costs:

- For each cost category (salaries, insurance, rent, administrative expenses, stationery, phone, heating, lighting, etc.):
- How much will be needed?
- When will it be required?
- Who will be the suppliers?
- When will payments be made?

Multiple Choice Question:

1. Which one of the following statements is ***not*** true about fixed budgeting?
    a) It is suitable for the short-term purpose.
    b) It is suitable when the actual results are not anticipated to differ from the budget estimates.
    c) It is suitable when the nature of the business is seasonal.
    d) It remains unchanged regardless of activity levels.
2. What is the main purpose of budgeting?
    a) To publish financial statements
    b) To control inflation
    c) To set clear objectives for a defined period
    d) To forecast market trends
3. How is budgetary control defined?
    a) Establishing budgets without comparison
    b) Establishing budgets for individual action only
    c) Continuous comparison of actual with budgeted results
    d) Continuous comparison of actual with forecasted results
4. What is the main focus of a forecast?
    a) Estimation of past events
    b) Prediction of future trends
    c) Assessment of current financial status
    d) Analysis of historical data
5. What is the main purpose of conducting variance analysis?
    a) Comparing budgeted and actual results
    b) Forecasting future trends
    c) Assessing current market conditions
    d) Estimating past performance
6. What is the primary difference between a budget and a forecast?
    a) Budget sets targets, forecast does not
    b) Budget is done on regular intervals, forecast is annual
    c) Forecasting focuses on cost control, budgeting on profit planning
    d) Variance analysis is conducted for forecast, not for budget

7. Which one of the following is not true about the budgets?
   a) budget is a planned result that an enterprise aims to attain
   b) budgetary process is more a test of forecasting skill than anything else
   c) a budget is both a mechanism for profit planning and technique of operating cost control
   d) budget is mainly concerned with an assessment of probable future events
8. Which one of the following is not the feature of the budgets?
   a) It is a financial and/or quantitative statement
   b) Is it done for the purpose of attaining a given objective
   c) The components of budgets are income, expenditure and employment of capital
   d) It answers the question what business will achieve
9. What is an essential for effective budget?
   a) Support of top management
   b) Team work
   c) Excellence reporting system
   d) All of the above
10. How should budgeting be approached in terms of time?
    a) Occasional exercise
    b) One-time event
    c) Continuous exercise
    d) Irregular practice
11. What should the budgeting system be based on?
    a) Intuition and guesswork
    b) Silence and isolation
    c) Information, communication, and participation
    d) Secrecy and exclusion
12. Charting method is a part of
    a) Fixed budgeting
    b) Flexible budgeting
    c) both
    d) Forecasting

Answer:

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

Fill in the blanks

1. Variance analysis is done between ______and Actuals.
2. The period covered by a budget is known as ____________.
3. Multi-Activity Method is a method to prepare ________budgets.
4. Fixed budget are established only for ________ periods.
5. A firm having seasonal fluctuation in sales will follow ___________budgets.

Answer

1. budgets
2. budget period
3. flexible
4. short term
5. flexible

State True or False

1. In case of fixed budgets there is a trend of price stability.
2. In case of flexible budgets there is a seasonal fluctuation.
3. Fixed budgets are adequate for control purposes
4. Flexible Budget is possible only when there is a proper accounting system maintained
5. Fixed Budget is more appropriate and suitable for business decisions than flexible budgets.

Answer

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

Module 7.2: Budgetary Control

Meaning

Budgetary control is a crucial aspect of financial management that involves the systematic planning, coordination, and monitoring of financial resources within an organization.Budgetary control is defined as "the establishment of budgets relating the responsibilities of executives to the requirements of a policy and the continuous comparison of actual with budgeted results, either to secure by individual action the objective of that policy or to provide a basis for its revision."

The key components of budgetary control are as follows:

1. Establishment of Budgets
2. Relating Responsibilities of Executives to Policy Requirements
3. Continuous Comparison of Actual with Budgeted Results
4. Securing Objectives or Providing Basis for Revision

Therefore, budgetary control is a dynamic process that enables organizations to effectively manage their financial resources, align actions with objectives, and adapt to changing circumstances to ensure long-term success.

Features of budgetary control

The main features of budgetary control are:

- Establishing budgets for all business purposes
- Revising budgets to accommodate changes in conditions
- Continuously comparing actual performance with budgeted targets
- Taking necessary corrective actions when deviations occur
- Analyzing variations between actual and budgeted performance to identify reasons

Objectives of Budgetary Control

The objectives of budgeting may be summarized as follows:

- Designing future positions and detailed plans
- Foreseeing and preparing for anticipated conditions
- Constant revision with changing conditions
- Establishing harmony in solving business problems
- Ensuring efficient planning contributes to achieving targets
- Informs managers of performance in meeting targets
- Rewards employees based on budget success
- Comparing current performance with past periods
- Keeping management informed of performance through systematic effort

Advantages of Budgetary control

The principal advantages of a budgetary control system are enumerated below:

- Encourages responsible resource allocation and spending habits.
- Ensures that organizational objectives are reflected in budget targets.
- Provides a basis for evaluating performance against predetermined targets.
- Helps in identifying areas needing attention and guides decision-making.
- Can motivate employees by providing clear targets and rewards for achievement.
- Coordination: Facilitates coordination among different departments and units.

Limitationsof Budgetary control

The limitations of budgetary control are as follows:

- Budgets may become inflexible and fail to adapt to changing circumstances.
- Creating and monitoring budgets can be resource-intensive.
- Setting overly ambitious targets may lead to demotivation and disengagement.
- May prioritize short-term gains over long-term strategic objectives.
- Employees may resist budgetary constraints or changes to established processes.
- Budgets are based on estimates and assumptions, which may not always align with reality.

Linkage of Budgetary Control with Standard Costing and Profit Reconciliation

Budgetary control and standard costing share common principles and objectives aimed at managerial control and performance evaluation. Both systems involve the establishment of targets or standards, measurement of actual performance against these standards, and analysis of variances.

In many organizations, the terms "budgeted performance" and "standard performance" are used interchangeably, highlighting the conceptual similarity between the two approaches. While budgets are typically based on past costs adjusted for anticipated changes, standard costs play a crucial role in the preparation of production cost budgets. Standards are often indispensable in setting targets for budgets.

Similarly, budgets framed for overhead costs may be utilized, with modifications, if necessary, in establishing standard overhead rates for standard costing purposes. Despite their interrelation and complementary nature, standard costs and budgets are not entirely dependent on each other. They serve distinct purposes within the management framework of an organization, but their integration can enhance managerial control and decision-making processes.

Multiple Choice Question:

1. How does budgetary control contribute to decision-making?
   a) By eliminating the need for decision-making
   b) By providing a basis for informed decision-making
   c) By imposing strict guidelines on decision-making
   d) By restricting access to budget information
2. Which of the following is NOT a limitation of budgetary control?
   a) Rigidity
   b) Unrealistic targets
   c) Lack of coordination
   d) Enhancing employee motivation
3. What role does budgetary control play in organizational coordination?
   a) It hinders coordination efforts
   b) It has no impact on coordination
   c) It facilitates coordination by aligning efforts with organizational objectives
   d) It replaces the need for coordination
4. Which of the following is a feature of budgetary control?
   a) Reactive decision-making
   b) Continuous comparison of actual performance with budgeted targets
   c) Setting arbitrary financial targets
   d) Ad hoc resource allocation
5. What is the primary difference between budgetary control and standard costing?
   a) Budgetary control focuses on financial planning, while standard costing focuses on cost estimation.
   b) Budgetary control involves continuous comparison of actual performance with budgeted targets, while standard costing primarily deals with setting cost standards.
   c) Budgetary control is used for short-term planning, while standard costing is used for long-term planning.
   d) Budgetary control is a top-down approach, while standard costing is a bottom-up approach.
6. Assertion: Budgetary control is primarily concerned with future performance prediction.

   Reason: Budgetary control helps organizations to set financial targets for each department.
   a) Both the assertion and reason are true, and the reason is a correct explanation of the assertion.
   b) Both the assertion and reason are true, but the reason is NOT a correct explanation of the assertion.
   c) The assertion is true, but the reason is false.
   d) The assertion is false, but the reason is true.
7. Assertion: Budgetary control contributes to organizational coordination by aligning departmental efforts with organizational objectives.

   Reason: Budgetary control promotes competition among departments, leading to better coordination.
   a) Both the assertion and reason are true, and the reason is a correct explanation of the assertion.
   b) Both the assertion and reason are true, but the reason is NOT a correct explanation of the assertion.
   c) The assertion is true, but the reason is false.
   d) The assertion is false, but the reason is true.

8. Production at 70% activity is C ₹700 units, if flexible budget needs to be calculated at 80% activity whatwill be units produced?
   a) ₹ 800
   b) ₹ 600
   c) ₹1,200
   d) ₹ 1,000
9. Budgeted sales for the next year is 5,00,000 units. Desired ending finished goodsinventory is 1,50,000 units and equivalent units in ending WIP inventory is 60,000 units.The opening finished goods inventory for the next year is 80,000 units, with 50,000equivalent units in beginning WIP inventory. How many equivalent units should beproduced?
   a) 5,80,000
   b) 5,50,000
   c) 5,00,000
   d) 5,75,000
10. When preparing a production budget, the quantity to be produced equals
    a) sales quantity + opening inventory of finished goods + closing inventory of finishedgoods
    b) sales quantity – opening inventory of finished goods + closing inventory of finishedgoods
    c) sales quantity – opening inventory of finished goods – closing inventory of finishedgoods
    d) sales quantity + opening inventory of finished goods – closing inventory of finishedgoods
11. In comparing a fixed budget with a flexible budget, what is the reason for thedifference between the profit figures in the two budgets?
    a) Different levels of activity
    b) Different levels of spending
    c) Different levels of efficiency
    d) The difference between actual and budgeted performance
12. When budget allowances are set without the involvement of the budget owner, thebudgeting process can be described as:
    a) top-down budgeting
    b) negotiated budgeting
    c) zero based budgeting
    d) participative budgeting

Answer:

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

True and False

1. A budgetary control system secures control over performance and costs.
2. The budget is not a blue-print of the projected plan of action expressed in quantitative terms and for a specified period of time.
3. Budgetary control is achieved by comparing the forecasted results with the budget.
4. Budgeting is a forward planning.
5. The task of managerial co-ordination is hindered through budgetary control.

Answer

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

Fill in the blanks

1. _______________ means the acceptable range of performance for a Performance Indicator.
2. ____________ is the process of identifying and learning from the best practices anywhere in the world.
3. A budgetary control system assists delegation of authority and is a powerful tool of______________.
4. _______________ aims at maximization of profits through effective planning and control of income and expenditure.
5. Budgetary control is the act of adhering to the____________ .

Answer

1. Performance Standard
2. Benchmarking
3. responsibility accounting
4. Budgetary control
5. plan

CMA FINAL COURSE

Syllabus 2022

Topic

Module 1:
The Companies Act, 2013

FINAL

Group III - Paper-13

Corporate and Economic Laws (CEL)

ABC Structural Ltd., a mid-cap public limited unlisted company having manufacturing unit at Rohtak, Haryana and corporate office at New Delhi. The company has four directors. Mr. P K Nath and K K Nath are brothers and hold the position of MD and Director (commercial) respectively. Together, they hold 86 % of equity shares. Balance are with some 200 shareholders. The turnover of the company will touch 300 crores shortly. Mr. Rajesh Misra is a non-executive director and Mr Kumar is an independent director. The promoters have come in contact with a lady named Ms. Nayana Bose, who is qualified and having domain experience. They want her to be appointed as director. Mr Misra has tendered resignation which has been received 3 days back. The Board meeting is scheduled after 7 days from now. In the meantime. Mr. Kumar has given a notice that he will be in USA for four months from now. Promoters has many options on appointment of directors but are not able to decide. As an expert, please help the promoters to choose correct or near to correct options from the option given in the MCQ.

1. The resignation by Rajesh Misra:
   (i) cannot be accepted by Board.
   (ii) has to be specifically accepted in writing by the Board
   (iii) effective on receipt by the company; not required to be accepted.
   (iv) Mr. Misra will require release order by the Company.

2. An alternate director:
   (i) has to be appointed in place of Mr Kumar.
   (ii) may be appointed if Directors so decide.
   (iii) the alternate director shall be nominated by Mr. Kumar only.
   (iv) Board has to get approval of shareholders for appointment of alternate director.

3. Mrs. Nayana Bose:
   (i) may be appointed in place of Mr. Rajesh.
   (ii) her appointment will comply requirement of women director as the turnover is touching the threshold.
   (iii) she can also be appointed as independent director.
   (iv) all above options are ok.

4. If Mrs Bose is appointed as director in place of Mr. Misra, this will:
   (i) comply with the provisions of appointing independent director.
   (ii) comply with the provisions of appointing woman director.
   (iii) comply with the provisions of appointing non-executive director.
   (iv) none of the above statement are correct.

Answers:

QTN.	CORRECT OPTION
1	(III)
2	(II)
3	(IV)
4	(II)

Topic

Module 15: Foreign Exchange Management

FINAL

Group III - Paper-14

Strategic Financial Management (SFM)

Section: International financial Management
Topic: Foreign Exchange Market

- **Multiple Choice Questions:**

1. From the following quotes of a bank, determine the rate at which Yen can be purchased with Rupees.

   ₹/£ Sterling 75.31 – 33

   £ Sterling/Dollar ($) 1.563 – 65

   Dollar ($)/Yen (¥) 1.048/52 [per 100 Yen]

   (A) ₹ 124.02

   (B) ₹ 142.02

   (C) ₹ 412.02

   (D) ₹ 214.02

   Answer: (A)

   Explanation:

   Yen to be purchased with ₹

   75.33 ₹ to purchase 1£

   1.565 £ for 1 $

   1.052 $ for 100 Yen

   So, ₹/100 Yen = 75.33/1£ x 1.565 £/1$ x 1.052 $/100 Yen

   = 124.02

2. The spot and 6 months forward rates of US dollar in relation to the rupee (₹/$) are ₹74.532/75.4143 and ₹75.1278/76.2538 respectively. What will be the annualized forward margin (with respect to Ask price)?

   (A) 2.42%

   (B) 1.60%

   (C) 2.23%

   (D) 2.31%

   Answer: (C)

   Explanation:

   Ask price diff = 76.2538 – 75.4143 = 0.8395

   6 m margin = (0.8395/75.4143)× 100%

   Annualised = (0.8395/75.4143)× 100% × 12/6

   = 2.23%

3. MS Ltd. is planning to invest in USA. The annual rates of inflation are 8% in India and 3% in USA. If spot rate is currently ₹ 75-50/$, what spot rate can the company expect after 3 years?

   (A) ₹ 65.49

   (B) ₹ 79.16

   (C) ₹ 87.09

   (D) ₹ 72.00

   Answer: (C)

   Explanation:

   75.50 will become (75.50) (1.08)3 = 75.50 ×1.26 = 95.10

   1 $ will become (1.03)3 = 1.09

   So, Expected rate = 95.10/1.092 = 87.09

4. You are given the following information of a stock:

   Strike Price ₹ 400

   Current stock price ₹ 370

   Risk free rate of interest 5%

   Theoretical minimum price of a European 6 months' put option after six months is

   (A) ₹ 9.37

   (B) ₹ 20.12

   (C) ₹ 30.76

   (D) ₹ 20.63

   Answer: (B)

   Explanation:

   Spot price today = 370; Strike price = 400

   = 400 × $e^{-0.05 \times 6/12}$

   = 400x $e^{-0.025}$

   = 400/1.02532

   = 390.12

   Put option value = 390.12 – 370 = 20.12

Topic: Foreign Exchange Risk Management - Various Types of Exposures

Foreign currency fluctuations are one of the key sources of risk in multinational operations. The general concept of exposure relating to foreign exchange risk refers to the degree to which a company is affected by exchange rate changes.

The three basic types of exposure are translation exposure, transaction exposure, and operating exposure. Transaction exposure and operating exposure combine to form economic exposure.

1. **Translation Exposure**

   Translation exposure, also known as accounting exposure or balance-sheet exposure, arises from the need, for purposes of reporting and consolidation, to convert the financial statements of foreign operations from the local currencies (LC) involved to the home currency (HC). exchange rates have changed since the previous reporting period, this translation, or restatement, of those assets, liabilities, revenues, expenses, gains, and losses that are denominated in foreign currencies will result in foreign exchange gains or losses. The possible extent of these gains or losses is measured by the translation exposure figures.

2. **Transaction Exposure**

   Transaction exposure results from transactions that give rise to known, contractually binding future foreign-currency-denominated cash inflows or outflows. As exchange rates change between now and when these transactions settle, so does the value of their associated foreign currency cash flows, leading to currency gains and losses. Examples of transaction exposure for a U.S. company would be the account receivable associated with a sale denominated in euros or the obligation to repay a Japanese yen debt. Although transaction exposure is rightly part of economic exposure, it is usually included under accounting exposure. In reality, transaction exposure overlaps with both accounting and operating exposure. Some elements of transaction exposure, such as foreign-currency-denominated accounts receivable and debts, are included in a firm's accounting exposure because they already appear on the firm's balance sheet. Other elements of transaction exposure, such as foreign currency sales contracts that have been entered into but where the goods have not yet been delivered (and so receivables have not yet been created), do not appear on the firm's current financial statements and instead are part of the firm's operating exposure.

3. **Operating Exposure**

   Operating exposure measures the extent to which currency fluctuations can alter a company's future operating cash flows—that is, its future revenues and costs. Any company whose revenues or costs are affected by currency changes has operating exposure, even if it is a purely domestic corporation and has all its cash flows denominated in home currency.

- **Foreign Exchange Risk Management Strategies – Management of Transaction Exposure by Money Market Hedge vs. Forward Contract Hedge**

Illustration 1

IP, an importer in India has imported a machine from USA for US $ 20,000 for which the payment is due in three months. The following information is given:

Foreign Exchange Rates (₹/US $)			Money Market Rates (p.a.) (Compounded annually)		
	Bid	Ask		Deposit	Borrowing
Spot	74.60	74.90	US $	6%	9%
3 Month Forward	75.50	75.90	Rupee	7%	11%

(i) Show with appropriate supporting calculations whether a money market hedge is possible or not.

(ii) Compute the cost (in annualized percentage) of a Forward Contract Hedge.

(iii) Present rupee outflows under (i) and (ii) and advise the importer on the best course of action to minimize rupee outflow.

(Exchange rate and values should be shown up to two decimal places)

Solution:

(i) After 3 months, the importer will purchase US$, i.e. it is a payable. For money market hedge, he should create a US$ asset by borrowing ₹, investing in $ @ $ Deposit rate and receiving $ at the end of three months.

= Spot Ask Rate × (1+ borrowing rate for 3 months)/(1+ $ deposit rate for 3 months)

$$= 74.9 \times \frac{(1 + 0.11 \times \frac{3}{12})}{(1 + 0.06 \times \frac{3}{12})}$$

= ₹75.82

This value ₹75.82 is less than the three months' forward ask rate of ₹ 75.90. Hence money market hedge is possible.

(ii) Effective rate of money market hedge

$$= [\frac{(1 + 0.11 \times \frac{3}{12})}{(1 + 0.06 \times \frac{3}{12})} - 1] \times 100 \times 12/3 = 4.926\%$$

Under forward contract hedge, effective rate annualized

$$= \frac{(\text{Forward Ask -Spot Ask})}{\text{Spot Ask}} \times 100 \times 12/3$$

$$= \frac{(75.90 - 74.90)}{74.90} \times 100 \times 12/3 = 5.34\%$$

(iii) Money market hedge:

Amount to be borrowed

$$= [\frac{(20000)}{(1 + 0.06 \times \frac{3}{12})}] \times 74.90$$

= 20000/1.015 × 74.90

= ₹14,75,861.81

Rupee needed today = 74.90 × 19704.43 = ₹14,75,861.81

Interest on this sum if borrowed today at 2.75% for 3 m (i.e. 11% p.a.) = ₹ 40586.20

Rupee outflow after 3 m = ₹ 15,16,448

Forward Contract Hedge:

Book a forward contract to purchase $ at 75.90 after 3 months.

Outflow after 3 m = 20,000 × 75.90 = ₹ 15,18,000

No initial outflow is required.

Equivalent outflow today = 15,18,000/1.0275

= ₹ 14,77,372.26

	Money Market	Forward Market	Difference
Today's rupee outflow	14,75,861.81	14,77,372.26	1510.45
Rupee outflow after 3m	15,16,448	15,18,000	1552.00

₹1510.45 today will become 1510.45 x 1.0275 = ₹1552 after 3 m.

Cash outflow under Money Market hedge is lowest, therefore it should be preferred.

Illustration 2

GLOBAL Limited, an Indian company will need $5,00,000 in 90 days. The following information is given: Spot Rate $ 1 = ₹ 69-50 90 days forward rate of $ 1 as of today = ₹ 71.50 Interest Rates are as follows:

	US	India
90days deposit rate	1.25%	2%
90 days borrowing rate	2%	3%

Compare the strategies of money market hedge vs. no hedging and compute the net advantage. Present calculations up to two decimal places.

Solution:

Spot Rate = 69.50 ; Theoretical forward rate = 69.50 (1 + 2%) = 69.50 × 1.02 = ₹70.90,

Which is < ₹71.50, the forward rate.

Therefore, cannot invest in India.

Money Market Hedge:

Invest in US at 1.25%,

Borrow in India at 3%, convert at ₹ 69.50, Invest in USA at 1.25%.

To get 1.25%, Investment = 5,00,000/ 1.0125 = $4,93,827.16

Equivalent INR = 493827.16 × 69.50 = ₹3,43,20,987.62

Interest at 3% = ₹10,29,629.63

Total Outflow INR = ₹3,53,50,617.25

No hedge option:

Outflow after 3 m INR = 71.50 × 5,00,000 = ₹3,57,50,000

Net advantage by hedging = ₹3,57,50,000 – ₹3,53,50,617 = ₹3,99,383

Alternative:

Money market hedge:

Borrow in ₹, convert to $, invest $, repay ₹ loan in 90 days.

Amount in $ to be invested = 5,00,000/1.0125 = $4,93,827

Amount of ₹ needed to convert into $ = 4,93,827 x 69.50 = ₹3,43,20,977

Interest and principal on ₹ loan after 90 days = ₹3,43,20,977 x 1.03 = ₹3,53,50,606

No hedge option:

Outflow after 3 months INR = 71.50 x 5,00,000 = ₹3,57,50,000

Net advantage by hedging = ₹3,57,50,000 – ₹3,53,50,606 = ₹3,99,394.

Topic

Module 8: E-commerce Transaction and Liability in Special Cases

FINAL

Group III - Paper-15

Direct Tax Laws and International Taxation (DIT)

Equalisation Levy

With the expansion of information and communication technology, the supply and procurement of digital goods and services have undergone exponential expansion everywhere, including India. The digital economy is growing at 10% per year, significantly faster than the global economy as a whole.

Currently in the digital domain, business may be conducted without regard to national boundaries and may dissolve the link between an income-producing activity and a specific location. From a certain perspective, business in digital domain doesn't seem to occur in any physical location but instead takes place in the nebulous world of "cyberspace." Persons carrying business in digital domain could be located anywhere in the world. Entrepreneurs across the world have been quick to evolve their business to take advantage of these changes. It has also made it possible for the businesses to conduct themselves in ways that did not exist earlier, and given rise to new business models that rely more on digital and telecommunication network, do not require physical presence, and derives substantial value from data collected and transmitted from such networks.

These new business models have created new tax challenges. The typical direct tax issues relating to e-commerce are the difficulties of characterizing the nature of payment and establishing a nexus or link between a taxable transaction, activity and a taxing jurisdiction, the difficulty of locating the transaction, activity and identifying the taxpayer for income tax purposes. The digital business fundamentally challenges physical presence-based permanent establishment rules. If permanent establishment (PE) principles are to remain effective in the new economy, the fundamental PE components developed for the old economy i.e. place of business, location, and permanency must be reconciled with the new digital reality.

The Organization for Economic Cooperation and Development (OECD) has recommended, in Base Erosion and Profit Shifting (BEPS) project under Action Plan 1, several options to tackle the direct tax challenges which include modifying the existing Permanent Establishment (PE) rule to include that where an enterprise engaged in fully de-materialized digital activities would constitute a PE if it maintained a significant digital presence in another country's economy. It further recommended a virtual fixed place of business PE in the concept of PE i.e., creation of a PE when the enterprise maintains a website on a server of another enterprise located in a jurisdiction and carries on business through that website. It also recommended to impose of a final withholding tax on certain payments for digital goods or services provided by a foreign e-commerce provider or imposition of a equalisation levy on consideration for certain digital transactions received by a non-resident from a resident or from a non-resident having permanent establishment in other contracting state.

The proliferation of digital transactions and the rise of multinational digital companies have posed significant challenges for traditional tax systems worldwide. In response to the growing concern over tax avoidance and profit shifting by digital giants, many countries have introduced measures such as the Equalisation Levy to ensure a fair and equitable taxation framework. The Equalisation Levy, often dubbed the "Google Tax" or "Digital Tax," is a novel tax mechanism aimed at taxing certain digital transactions.

In order to address these challenges, Chapter VIII of the Finance Act, 2016[1], titled "Equalisation Levy", provides for an equalisation levy. It is a tax levied on specified digital services provided by non-resident companies to Indian residents or entities. The levy aims to address the issue of tax avoidance by digital businesses that derive significant revenues from Indian users but may not have a physical presence or taxable presence (Permanent Establishment) in India. The scope of Equalisation Levy typically covers online advertising, digital platforms for sale of goods or services, and other specified digital services.

Different provisions thereof are discussed below:

A. *Charge of equilisation levy on specified services [Sec. 165]*

Equalisation levy shall be payable @ 6% of the consideration for any specified service received or receivable by a person, being a non-resident from:

1. The equalization levy would come into effect from 01-06-2016 [Notification dated 27-05-2016]

i. a person resident in India and carrying on business or profession; or

ii. a non-resident having a permanent establishment in India.

- Specified service means

a) online advertisement,

b) any provision for digital advertising space or any other facility or service for the purpose of online advertisement and

c) any other notified service – Sec. 164(i)

- Online means a facility or service or right or benefit or access that is obtained through the internet or any other form of digital or telecommunication network – Sec. 164(f)

Taxpoint

These provisions extend to the whole of India.

Exception

The equalisation levy shall not be charged, where:

a) the consideration received or receivable for specified services shall not include the consideration, which are taxable as royalty or fees for technical services in India, read with the agreement notified u/s 90 or 90A of the Income-Tax Act.

b) the non-resident providing the specified service has a permanent establishment in India and the specified service is effectively connected with such permanent establishment;

c) the aggregate amount of consideration for specified service received or receivable in a previous year from resident in India or from a non-resident having a permanent establishment in India, does not exceed ₹ 1,00,000; or

d) the payment for the specified service by the person resident in India, or the permanent establishment in India is not for the purposes of carrying out business or profession.

Examples

1. Vikash Mundhra has advertised on Facebook to expand his business. He has to pay ₹ 2,00,000 in the previous year 2023-24 to Facebook for the advertising services availed. In this case, Vikash will deduct 6% of ₹ 2,00,000 i.e., ₹ 12,000, and pay the balance ₹ 1,88,000 to Facebook.

2. Ashok has advertised on Facebook to promote his business of baking. He is required to pay ₹ 20,000 in the previous year 2023-24 to Facebook for the advertising services availed. In this case, since during the financial year annual payments did not exceed ₹ 1,000,00, Ashok is not liable to deduct equalisation levy.

Collection and recovery of equalisation levy on specified services [Sec. 166]

Who is liable to deduct equalisation levy:

Every person, being a resident and carrying on business or profession or a non-resident having a permanent establishment in India (hereafter in this Chapter referred to as assessee) shall deduct the equalisation levy u/s 165 from the amount paid or payable to a non-resident in respect of the specified service

Equalisation Levy u/s 165A @ 2% on consideration received or receivable by an e-commerce operator from e-commerce supply or services made or provided or facilitated to

- **a person resident in India**
- **a person who is non-resident and undertakes**
  - sale of advertisement, which targets a customer, who is resident in India or a customer who accesses the advertisement though internet protocol address located in India
  - sale of data, collected from a person who is resident in India or from a person who uses IP address located in India
- **a person who buys such goods/services/both using IP address in India**

Rate of levy: 6%

Threshold limit: Such deduction shall be made if the aggregate amount of consideration for specified service in a previous year exceeds ₹ 1,00,000.

Time limit for depositing the levy to the credit of the Central Government: The equalisation levy so deducted during any calendar month shall be paid by every assessee to the credit of the Central Government by the 7th day of the month immediately following the said calendar month.

Consequences of failure to deduct equalisation levy: Any assessee who fails to deduct the levy shall be (even though not deducted) liable to pay the levy to the credit of the Central Government in accordance with the aforesaid provisions

B. *Charge of equalisation levy on e-commerce supply of services [Sec. 165A]*

Equalisation levy shall be charged @ 2% of the amount of consideration received or receivable by an e-commerce operator from e-commerce supply or services made or provided or facilitated by it—

a. to a person resident in India; or

b. to a non-resident in the specified circumstances; or

- "Specified circumstances" mean—

  i. sale of advertisement, which targets a customer, who is resident in India or a customer who accesses the advertisement though internet protocol address located in India; and

  ii. sale of data, collected from a person who is resident in India or from a person who uses internet protocol address located in India

c. to a person who buys such goods or services or both using internet protocol address located in India.

Taxpoint

- *Consideration received or receivable* from e-commerce supply or services shall include:

  i. consideration for sale of goods irrespective of whether the e-commerce operator owns the goods, so, however, that it shall not include consideration for sale of such goods which are owned by a person resident in India or by a permanent establishment in India of a person non-resident in India, if sale of such goods is effectively connected with such permanent establishment.

  ii. consideration for provision of services irrespective of whether service is provided or facilitated by the e-commerce operator, so, however, that it shall not include consideration for provision of services which are provided by a person resident in India or by permanent establishment in India of a person non-resident in India, if provision of such services is effectively connected with such permanent establishment.

- *e-commerce operator* means a non-resident who owns, operates or manages digital or electronic facility or platform for online sale of goods or online provision of services or both;

- *e-commerce supply or services* means:

  i. online sale of goods owned by the e-commerce operator; or

  ii. online provision of services provided by the e-commerce operator; or

  iii. online sale of goods or provision of services or both, facilitated by the e-commerce operator; or

  iv. any combination of activities listed in clause (i), (ii) or clause (iii);

- *Online sale of goods* and *online provision of services* shall include one or more of the following online activities:

  a. acceptance of offer for sale; or

  b. placing of purchase order; or

  c. acceptance of the purchase order; or

  d. payment of consideration; or

  e. supply of goods or provision of services, partly or wholly

Exception

The equalisation levy shall not be charged:

a. the consideration received or receivable for e-commerce supply or services shall not include the consideration, which are taxable as royalty or fees for technical services in India, read with the agreement notified u/s 90 or 90A of the Income-Tax Act.

b. where the e-commerce operator making or providing or facilitating e-commerce supply or services has a permanent establishment in India and such e-commerce supply or services is effectively connected with such permanent establishment;

c. where the equalisation levy is leviable u/s 165 [i.e. A supra]; or

d. sales, turnover or gross receipts, as the case may be, of the e-commerce operator from the e-commerce supply or services made or provided or facilitated is less than ₹ 2 crore during the previous year.

Examples

1. ABC Inc. a non-resident is operating an electronic or digital platform, whereby services of enabling online meeting for various participants is being provided. The platform of ABC Inc. is being used for online webinars/meetings, etc. by Indian customers who are availing such services by paying annual/monthly charges. In this case, ABC Inc. is an e-commerce operator and online provision of services of enabling webinars/meetings by the said company will fall within the meaning of "e-commerce supply or services".

2. DEF, a UK-based company, approaches GHI which is a US-based company, targeting Indian customers at large, for placing advertisements of its food products on the digital platform of GHI. In this case, GHI will be liable to pay equalisation levy @ 2% of the consideration received by it from DEF.

3. XYZ, UK based Company, an e-commerce operator, collects data from an Indian resident person and further sells such data collected to KLM, a France-based company. In this case, XYZ selling the data collected from an Indian resident will be liable to pay equalisation levy @ 2% on the amount of consideration received by it from the KLM.

In conclusion, Equalisation Levy represents a significant development in the taxation of digital transactions, aimed at ensuring a level playing field and addressing tax challenges posed by the digital economy. While the levy has generated debate and controversy, its implementation underscores the need for innovative approaches to tax policy and administration in an increasingly digitalized world. By addressing compliance challenges, promoting international cooperation, and embracing technological solutions, governments can navigate the complexities of digital taxation and pave the way for a fair and sustainable tax environment for all stakeholders.

Topic

Module 3: Decision Making Techniques

Module 14: Business Forecasting Models – Time Series and Regression Analysis

FINAL

Group III - Paper-16

Strategic Cost Management (SCM)

Target Costing

01.00 Concept

Target Costing is considered as a philosophy in which product development is based on what the customer wants and is willing to pay for, and not what it costs to produce. Hence, it starts with the market determined price; then deducts the desired profit margin; and works back the target cost. Peter Drucker calls this "price-led costing"; and that is how the vibrant formulation:

"Target Cost = (Target Price – Target Profit)"

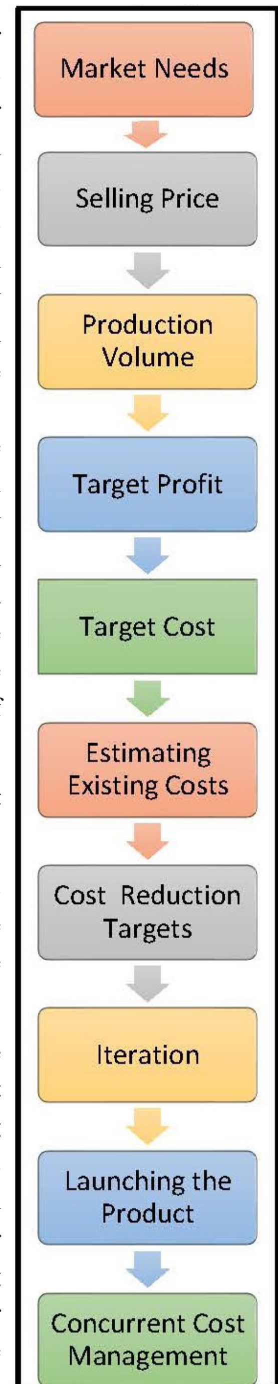
in place of the traditional approach of "(Cost + Profit) = Selling Price".

Target Costing is a strategic approach to pricing and designing products that aims to maximize profits and customer satisfaction. It involves setting a target cost based on the market price and the desired profit margin, and then reverse engineering the product to attain that level of cost. Target Costing may, thus, be perceived as a customer focussed cost management strategy.

CIMA defines target cost as "a product cost estimate derived from a competitive market price."

Target costing had originated in Japan and practiced in over eighty percent of Japanese assembly companies and by hundred percent of Japanese car manufacturers. The piquant dilemma for every manufacturer is to match the lower prices of the global competition with the highest quality products that customers' demand. Target Costing minimizes the costs through the optimal use of all resources along the entire supply chain, involving suppliers and manufacturers as contributors to the design process. Besides, target costing may serve as a solution when developing new products.

Target costing has been successfully applied by many companies in different industries and markets. Some of the most notable examples are Toyota, Nissan, Canon, and IKEA. These companies have used target costing to create products that meet or exceed the customer expectations, while achieving lower costs and higher profits than their competitors. For instance, Toyota has used target costing to develop its Prius hybrid car, which has become a market leader in the environmentally friendly segment. Canon has used target costing to produce its EOS digital cameras, which have gained a large share of the professional and amateur photography market. IKEA has used target costing to design and sell its furniture and home accessories, which have appealed to a wide range of customers across the world.



02.00 Process of Target Costing

The stages in the process of target costing may be enumerated by means of the following eleven vital steps.

Step1- Identification of the Market Needs: The first step consists of identifying the market requirements as regards design, utility and need for a new product or improvements of existing product. The customer requirements as to the functionality and quality of the product are of prime importance. The design specification of the new product is based on customer's tastes, expectations and requirements. Competitor's products and the need to have extra features over competitor's products are also considered.

Key Derivative: What are the needs of the Customer?

Step 2 – Establishment of Selling Price: The second step in target costing is the establishment of a selling price for the new product by adopting market driven approach. The Target Selling Price is determined using various sales forecasting techniques. The price is also influenced by the offers of competitors, product utility, prices, volumes, and margins. In view of competition and elasticity of demand, the firm has to forecast the price volume relationship with reasonable certainty. Hence the Target Selling Price is market driven and should encompass a realistic reflection of the competitive environment.

Key Derivative: What is the market compatible Selling Price?

Step 3 - Establishment of Target Production Volumes: Next comes the establishment of Target Production Volumes which is closely related to Target Selling price, given the relationship between price and volume. Target Volumes are also significant in computation of unit costs, in particular, Capacity Related Costs and Fixed Costs. Product Costs are dependent upon the production levels over the life cycle of the product.

Key Derivative: What is the targeted Quantity of Production?

Step 4 - Target Profit: The fourth step is that of visualising a target profit by means of investment driven considerations, i.e. expected Return on Investment (RoI). Since profitability is critical for survival, a Target Profit Margin is established for all new products. The Target Profit Margin is derived from the company's long term business plan, objectives, and strategies. Each product or product line is required to earn at least the Target Profit Margin.

Key Derivative: What is the Targeted Profit?

Step 5 -Target Cost: The fifth step relates to determining the target cost by subtracting the target profit from the established selling price. The difference between the Target Selling Price and Target Profit Margin indicates the "Allowable Cost" for the product. Ideally, the Allowable Cost becomes the "Target Cost for the product".

Key Derivative: What is the Targeted Cost?

Step 6 - Estimating Existing Costs: The sixth step relates to estimating the existing costs for the product on the basis of functional cost analysis and value engineering of individual components and processes. The estimation of Existing Costs is based on existing technologies and components, considering the functionalities and quality requirements of the new product. Direct Costs are determined by reference to design specifications, materials prices, labour processing time and wage rates. Indirect Costs may be estimated using Activity Based Costing Principles.

Key Derivative: What is the Existing Cost?

Step 7 - Cost Reduction Targets: Then follows the exercise of comparing the current costs with the target costs. The difference between Current Cost and Target Cost indicates the required cost reduction. This amount may be divided into two constituents namely – (a) Target Cost - Reduction Objective and (b) Strategic Cost - Reduction Challenge. The former is viewed as being achievable (yet still a very challenging target) while the latter acknowledges current inherent limitations. After analyzing the Cost Reduction Objective, a Product-Level Target Cost is set which is the difference between the current cost and the target cost -reduction objective.

Key Derivative: What is the targeted Cost Reduction?

Step 8 - Identifying Cost Reduction Opportunities (Iteration): After the Product-Level Target Cost is set, a series of analytical activities, commence to translate the cost challenge into reality. These activities continue from the design stage until the point when the new product goes into production. The total target is broken down into its various components, each component is studied and opportunities for cost reductions are identified. Target, or allowable, costs are identified for individual components or processes and cost improvement teams keep on working to reduce the estimated costs to match the target. There may also be a process of negotiation between different production departments and between the company and its suppliers to arrive at final target costs for the individual components. This process of cost reduction is an iterative one which continues until the target cost is reached or it is concluded that the overall target cost cannot be reached, and a decision is made not to launch the product.

Key Derivative: How to achieve the targeted Cost Reduction?

Step 9 - Launching the Product: Once the cost estimate is on target, the product is set for successful launching into the market.

Key Derivative: Successful launching of the Product!

Step 10 – Concurrent Cost Management: Once the target costs have been determined, actual costs can be monitored and managed against the targets using the usual costing methods such as standard costing, budgetary control, etc. A consumer-friendly post sale support service can also be oriented towards cost management during the consumption cycle of the product, as well.

Key Derivative: Concurrent Cost Management!

03.00 Advantages

Target costing offers a range of advantages as follows:

i. **Innovation:** It reinforces top-to-bottom commitment to process and product innovation and is aimed at identifying issues to be resolved.

ii. **Competitive Advantage:** It enables a firm to achieve competitive advantage over other firms in the industry. The firm which achieves cost reduction targets realistically stands to gain in the long run.

iii. **Market Driven Management:** It helps to create a competitive future with market-driven management for designing and manufacturing products that meet the price required for market success.

iv. **Real Cost Reduction:** It uses management control systems to support and reinforce manufacturing strategies, and to identify market opportunities that can be converted into real savings to achieve the best value rather than simply the lowest cost.

04.00 Management Techniques and Target Costing

Many organisations have found that the real strength of target costing lies in its overall framework for cost improvement and efficiency within which a range of different techniques are used. The choice of technique or combination of techniques may vary from one company to another. Important techniques that fit into the framework of target costing include:

- Value Analysis
- Value Engineering
- Just-In-Time (JIT)
- Total Quality Management (TQM)
- Materials Requirements Planning (MRP)
- Kaizen
- Lean Manufacturing
- Activity Based Costing and Management (ABCM)
- Cause-Effect Analysis (Fishbone Diagrams)

05.00 Illustrative Example

The following illustration, taken from the study notes, demonstrates certain primary aspects of target costing.

05.01 Problem

CELO Company has the capacity of production of 80,000 units and presently sells 20,000 units at ₹100 each. The demand is sensitive to selling price and it has been observed that for every reduction of ₹10 in Selling Price, the demand is doubled.

Required:

a. What should be the Target Cost at full capacity, if Profit Margin on Sale is 25%?

b. What should be the Cost Reduction Scheme at full capacity if at the present level 40% of the cost is variable and Total Fixed Cost is ₹36 lakhs?

c. If Rate of Return desired is 16%, what will be the maximum investment at full capacity?

05.02 Solution

a. **Target Cost at Full Capacity**

Projected Demand

Selling Price (₹ Per Unit)	Demand (Units)	Capacity Utilisation
100	20,000	25%
90	(20,000 × 2) = 40,000	50%
80	(40,000 × 2) = 80,000	100%

Selling Price at Full Capacity = ₹80.00

Target Profit = 25% on Sales = ₹20.00

Target Cost at Full Capacity = (80 – 20) = ₹ 60.00 per unit

b. **Cost Reduction Scheme**

(i) Computation of Variable Cost per unit

At the Present Capacity of 20,000 units

Selling Price = ₹100.00 per unit

Profit Margin = 25% on Sales = ₹25.00 per unit

Total Cost Target = (100– 25) = ₹75.00 per unit

Variable Cost = 40% of total cost = 40% of 75 = ₹30.00

(ii) Existing Projections of Total Cost at full capacity

Total Variable Cost = (30 × 80000) = ₹24.00 lakhs

Total Fixed Cost = ₹36.00 Lakhs

Total Cost = (24.00 + 36.00) = 60.00 lakhs

(iii) Target Cost = (60 × 80,000) = 48.00 lakhs

(iv) Cost Reduction Scheme

Cost Reduction Needed	=	(Existing Cost – Target Cost) = (60.00 – 48.00) = ₹ 12.00 lakhs

c. **Maximum Investment at full capacity**

(i) Target Profit at full Capacity

Sales = 80.00 × 80,000 units = ₹64.00 lakhs

Target Cost = ₹48.00 lakhs

Target Profit = (64.00 – 48.00) = ₹16.00 lakhs

(ii) Rate of Return on Investment = 16%

(iii) Minimum Investment

Investment Needed	=	(Target Profit ÷ Target Return on Investment) =(16.00 ÷ 16%)= ₹100.00 lakhs

06.00 Case Study: Unveiling the Indian Nano

Talking of the Indian scenario, the unveiling of Indian Nano holds a place of pride from the perspective of Target Costing. No other car launch in the history of Indian auto industry has received as much global press as the "people's car", the "Tata Nano". No other car promised to revolutionise motoring as the Nano has. Clever marketing apart, some frugal and out-of-the-box engineering has gone into the making of Nano. Nano modelled Indian Target Costing too.

Much like what Henry Ford had in the beginning of the 20thcentury with his Model T in 1908 at a price of $825, exactly 100 years thereafter Ratan Tata unveiled Nano, the Indian ultra-low-cost car. At Rs. one lakh, the Nano was the world's cheapest car and made motoring affordable to millions of Indians. Even its deluxe models, featuring air-conditioning and power windows, were fairly cheaper than the then cheapest car in the country, the Maruti 800.

When Ratan Tata addressed an Automotive Component Manufacturers' Association (ACMA) meeting saying that "Can we all get together to produce an Asian peoples' car?"; the response was lukewarm – as in the case of Henry Ford. Tata too encountered considerable amount of ridicule from certain close quarters. Even the vendors took it to be a hypothetical project. But, Ratan Tata didn't budge; he went ahead and did it. The initial idea was to come up with a low-cost car that Malaysia, Indonesia and India could produce jointly. As it turned out, it was left to Ratan Tata to respond to the FT Reporter at Geneva Motor show to commit an Indian Nano at about 1,00,000 rupees. The news got flashed, and it happened. Nano has restructured the dynamics of the car manufacturers all over the world.

Every component in the Nano is stated to have been studied from a functionality, cost and performance requirements as there was no other way to reduce costs. From an outsourcing perspective, the company put in place an Early Vendor Integration Programme. The company had a lot of design inputs from vendors that either facilitated manufacturing or brought the cost down. This could be for lamps, seats or for any other component.

The Nano was completely indigenised. At the same time over 85 per cent of the Nano was sourced from outside vendors. Vender parks have been put in place with the objective of ensuring that the components between vendors and the assembly line move smoothly and just in time. Keeping costs down was a major problem for vendors, and they found innovative ways to achieve it. The initial effort was towards cost prevention, which involved selecting a design concept with the least cost. Later on, it has been a perpetual cost-reduction effort.

As Ratan Tata put it in his interview to the Economic Times in January 2008; "The real challenge is when you have some strength and you really choose to throw out the gauntlet that you can do X. And it ought to be the kind of challenge which somebody says that can't be done because then that really becomes the engine of innovation. …. We haven't said we will send a man to Mars, we may put landers on Mars, but we have not done those kinds of things. It is those areas which really create the innovation that we need".

07.00 Quick Take

As a consequence of Target Costing, the Management Accountants are geared to focus on influential roles rather than restraining themselves as information providers. There lies the emulative spirit of Target Costing!

Topic

Module 12: Evaluation of Corporate Image

FINAL

Group IV - Paper-17

Cost and Management Audit (CMAD)

COST AND MANAGEMENT AUDIT

A. **Corporate image and Reputational Risk**

In most spheres of human endeavour, one looks at past events to draw learnings for the future. As Accountants, we know that essentially in an audit recording of past events and its verification and validation is the task cut out for us. However, when Accountants are asked to perform 'valuations', we clearly have to enter into the realm of 'future performance' based on the historical achievements.

'True and fair' concept is the key consideration for the accounting statements and due to challenges of measurement, globally the accounting standards have very little coverage on intangibles like 'Brand and Reputation'. 'Framework for ERM' proposed by COSO mentions virtually every other imaginable risk except 'reputational risk'. The Basel framework, especially excludes 'reputational risk', mainly because of the difficulty in quantifying & factoring the same into Capital Adequacy requirement. IND AS 38, despite having coverage on many 'Intangible Assets ', does not specifically deal with 'Reputation' and its 'fair valuation'.

'Stakeholders' drive businesses and hence "expectation of behaviour" is the key behind reputation. Customers expect that a product or service they intend to buy should represent/fulfil or go beyond their perception of value dispensed with. Similarly, the 'employees' or 'employment seekers' expect to be with a reputed entity. Vendors/Service providers want to be associated with or work for Steller Brands. Investors want to put their money on Project/Product of Companies having a unique market standing and Regulators also want a situation of 'beyond compliance' from leading entities.

As part of evolution of businesses, old brands are constantly challenged by the newer ones. An example can be taken from the Indian Automobile industry. The first passenger car of the country 'Ambassador' is no longer in existence (excepting those on road now to complete 15- year period). Same is true for 'PAL – Premier Automobile Limited' manufacturer of "Fiat", the black and yellow taxis of Mumbai. With the advent of Maruti as a 'Brand', these old horses lost the race. 'Brand' and 'Reputation' are not synonymous however, both are very closely related. A 'Brand' power is reflected through its reputation; Brand power goes down when reputation is eroded.

Reason for measuring Reputation

The Committee of European Banking Supervision, defines 'reputation risk' as follows.

"Reputation risk is the current or prospective risk to earnings and capital arising from adverse perception of the image of the Organization on the part of Customers, Counterparties, Shareholders, Investors or Regulators".

One example can be referred here from the pages of Corporate India:

Maggi is actually one of Nestlé's oldest and largest global brands, originated in 1863 from the stable of Nestlé, the world's largest food and beverage company. Maggi was doing business in India for more than three decades. In 2014, Indians consumed more than 400,000 tons of the instant noodles and 'Maggi' was named one of India's five most trusted brands. In the same year, Maggi was banned; since it failed to pass laboratory tests of the food regulator of the country and TOI captured the headline: "Nestlé's half a Billion debacle in India".

Most agree that the value at risk in a reputational crisis is great, but they often think it is not readily measurable. That is no longer the case. As an exception activity, due-diligence process (buying an enterprise or brand) includes the evaluation of problems that could affect reputation, including pending lawsuits, weak product-testing procedures, product-liability concerns, and poor control systems for detecting management fraud. Reputation and Brand have an impact on financials and Investor sentiment. Hence, a Reputation Risk framework is necessary. A 'reputation risk' framework would look somewhat as follows:

Key elements of managing reputation and Internal Audit / Management Role -

- Prompt and effective communication to all stakeholders
- Lending ear to 'listen post'
- Control environment to address Business, Governance and legal compliance
- Monitoring threats to reputation
- Ensuring ethical practice in supply chain management

To accomplish the above objectives, the Audit function can play an important role as described hereunder (ten commandments):

a. Helping Management in preparing a risk basket for the entire product profile and 'life cycle' of the same of an entity;

b. Through review of the 'supply chain' risk and mitigation process;

c. Identification of 'risk champions' to monitor and report 'reputational risk';

d. Dip stick on present threats on reputational risk;

e. Monitoring of entity's PR (Public Relations) role;

f. Tracking of social media to understand mass mood w.r.t Brand/reputation of entity;

g. 'Customer protection and safeguarding data' on social media especially misuse by on-line platforms (broader part of ITGC);

h. Awareness building on Reputation Risk e.g. Environmental adherence and responsibilities with impact on reputation;

i. Governance status and practices by the entity;

j. Compliance calendar adherence and impacts for non-adherence on reputation.

The last word, not the least

"Character is like a tree and reputation like its shadow. The shadow is what we think of it; the tree is the real thing."—Abraham Lincoln.

If we think of a corollary in science, the shadow is lengthened when the Sun sets, when it spells scorching heat –shadows disappear. When a Brand is in full bloom, the organizations may not think of reputational risk. When it wanes, crisis management actions set in to protect and at times to re-build 'reputation'. We conclude with the famous quote by Dr. Raghuram, "Reputation Risk is the starting point of all Risks".

B. In the following statements , one item is not so relevant to the statement. Identify the same.

1. Forecasting future manpower requirement depends on –
    a. Near term business growth
    b. Technological redundancy of manpower deployed
    c. Product failure
    d. Entering into new geographies
2. Working Capital Management is dependent on-
    a. Credit Sales Policy
    b. Vendor pay term
    c. Inventory Holding
    d. EOQ (Economic Order Quantity)
3. Management Information Report includes –
    a. Past trend of off-season sales
    b. Collection shortfall from target
    c. High market return due quality issues
    d. Market price trend
4. Labour Turnover Rate can be reduced by –
    a. Job rotation
    b. Providing skill development training
    c. Giving excessive rest hours
    d. Incentivising above par performance

5. Performance analyses includes
    a. Variance Analysis
    b. Ratio Analysis
    c. Root Cause Analysis
    d. Unstructured Activity Report
6. A Fertilizer manufacturing Unit is struggling for high distribution cost caused by frequent freight increase demanded by Transporters. As Management Auditor, you are requested by Management to present a Report indicating rationality of freight and future course of action with an objective of transport cost minimization.

The following Pointers are suggested for consideration of Management Team-

- Benchmarking Rs. / MT / Km. (PTPK-Per Ton Km.) freight in similar distance slabs from the plant
    - Grouping of all destinations from the plant in ranges of 50 km.s
    - PTPK (Per Ton Km.) freight for each destination in a distance cluster group as well as the overall group on potential for reduction based on the following considerations:
        > Transportation demand–supply situation at various distance cluster regions

        > Potential for backhauling

        > Number of transporters operating in the region

        > Optimal physical route and thus accurate distance from the plant to the destination

> Assess the shortest distance amongst the alternate routes

> Identifying deviations between historical distance figures (part basis for old freight rates) and estimated distances for all routes analysed

> Segregate routes based on degree of deviations e.g>10%, 5% to 10% etc.

> Identification of various elements of the transporter's cost elements based on 'Key Cost Drivers'

> An average cost on a per MT per km basis is computed

> Transporter margins are assessed and to be used as leverage to negotiate freight rates

> Major cost heads to be considered (a) Fuel, (b) Depreciation, (c) Maintenance (d) Wages , (e) Tyres , (f) Insurance (g) Permit cost (h) Misc. etc.

> Above costs to be computed and subsequently apportioned to get PTPK

> Distance traveled (kms / annum)

> Diesel /Fuel cost (₹ / Litre)

> Mileage (Kms) / per Litre

> Purchase Cost (₹)

> Resale Value (₹) of the Vehicle

> No Of Years (life class)

> Driver, cleaner, helper etc. Salary (₹/ month)

Topic

Module 6: Consolidated Financial Statements and Separate Financial Statements

FINAL

Group IV - Paper-18

Corporate Financial Reporting (CFR)

BRSR Core

The Securities and Exchange Board of India (SEBI) requires the top 1000 listed entities in India by market capitalization to make filings as per the **Business Responsibility and Sustainability Report** from FY 2023. It should be included in their Annual Reports.

Further, based on the recommendations of the ESG Advisory Committee, in July 2023, SEBI added new ESG metrics for mandatory disclosure under 'BRSR Core' for certain listed companies in India. Following timeline was provided by SEBI where the BRSR Core compliance will become mandatory for listed entities.

Financial year	Applicability of BRSR Core to top listed entities (by market capitalization)
2023-24	Top 150 listed entities
2024-25	Top 250 listed entities
2025-26	Top 500 listed entities
2026-27	Top 1000 listed entities

In addition, the Board has decided to introduce disclosures and assurance for the value chain of listed entities, aligning with the guidelines set out in the BRSR Core.

The BRSR Core represents a subset of the BRSR and includes a specific set of key performance indicators (KPIs) / metrics across nine ESG attributes.

Example of KPIs under BRSR Core and cross-reference to the BRSR

Sr. No.	ESG attribute	Cross-reference to the BRSR
1.	Green-house gas (GHG) footprint Greenhouse gas emissions may be measured in accordance with the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard	Principle 6
2.	Water footprint	Principle 6
3.	Energy footprint	Principle 6
4.	Embracing circularity – details related to waste management by the entity	Principle 6
5.	Enhancing Employee Wellbeing and Safety	Principle 3
6.	Enabling Gender Diversity in Business	Principle 5
7.	Enabling Inclusive Development	Principle 8
8.	Fairness in Engaging with Customers and Suppliers	Principle 9 Principle 1
9.	Open-ness of business	Principle 1

Jul 12, 2023, Circular No.: SEBI/HO/CFD/CFD-SEC-2/P/CIR/2023/122

An introduction to preparation of consolidated Balance Sheet

An introduction to preparation of consolidated balance sheet

Preparation of consolidated financial statements are required if an Ind AS complied (investor) company holds shares in the investee company, such that:

A. The investor company holds 20% or more voting rights having **significant influence** over the investee company (called Associate) as per Ind AS 28.

B. The investor company holds **joint control** over the investee company (called a Joint Venture) as per Ind AS 28.

C. The investor company (called parent company) holds **control** over investee company (called subsidiary company) as per Ind AS 110 (and Ind AS 103).

An investor company is considered an Ind AS complied company if it (or its parent or its subsidiary) is a company working in India either listed in any stock exchange (other than an SME exchange) in India/ abroad or its net worth exceeds 2.5 billion INR.

No consolidation is required for holding shares in investee not falling under A, B, C above and the investor company prepares only individual financial statements.

Preparation of consolidated financial statements are not required if investor company is an Investment Entity. An investment entity shall not consolidate its subsidiaries or apply Ind AS 103 when it obtains control of another

entity. Instead, an investment entity shall measure an investment in a subsidiary at fair value through profit or loss in accordance with Ind AS 109.

Further, a parent need not present consolidated financial statements if it meets **all** the following conditions:

(i) it is a wholly-owned subsidiary or is a partially-owned subsidiary of another entity and all its other owners, including those not otherwise entitled to vote, have been informed about, and do not object to, the parent not presenting consolidated financial statements;

(ii) its debt or equity instruments are not traded in a public market (a domestic or foreign stock exchange or an over-the-counter market, including local and regional markets);

(iii) it did not file, nor is it in the process of filing, its financial statements with a securities commission or other regulatory organisation for the purpose of issuing any class of instruments in a public market; and

(iv) its ultimate or any intermediate parent produces consolidated financial statements that are available for public use and comply with Ind ASs.

Ind AS 27 requires that when **consolidated financial statements** are prepared the investor company shall also prepare **separate financial statements** which is same as individual/standalone financial statements.

In the separate financial statements of the investor company investment account is recognised for holding shares in the investee company (whether it is an associate, joint venture, subsidiary). It is measured at cost or as per Ind AS 109 (at fair value through profit or loss),

Consolidated financial statements are required to be prepared as per Ind AS 28 under **Equity Method** when investor company has significant influence or joint control over the investee company (associate or joint venture). Under Equity Method of consolidation, no assets or liabilities of the investee is recognised, rather investment account is recognised at cost plus share of investor in post-acquisition profits (both profit or loss and other comprehensive income) in the investee.

When investor company has control over the investee company (subsidiary) consolidated financial statements are required to be prepared as per Ind AS 110 by recognising assets, liabilities, non-controlling interest, goodwill or gains from bargain purchase (at acquisition as per Ind AS 103) and share of post-acquisition profits in the subsidiary company. No investment account is recognised for holding shares in the subsidiary.

A **parent** is an entity that **controls** one or more entities. A **subsidiary** is an entity that is controlled by another entity. A **group** consists of a parent and its subsidiaries.

Thus, it appears that a parent has to report consolidated financial statements based on Ind AS 103 and Ind AS 110.

When a company purchases less than 20% shares of another company the transaction is recorded in the books of investor company as:

Investment a/c Dr.

To, Bank/Equity

Investment a/c will appear in the **Individual/standalone** Balance sheet of the Investor company.

When a company purchases 20% or more shares of another company, having significant influence in the investee (called Associate), the transaction is recorded in the books of investor company as:

Investment a/c Dr.

To, Bank/Equity

Investment a/c will appear in the **Separate** and also in the **Consolidated** Balance sheet of investor company. In the subsequent years in Separate Balance sheet Investment a/c will be carried at cost or as per Ind AS 109.

However, in consolidated accounts, Investment a/c shall be valued under **Equity Method**. If in subsequent years Investee company's net assets change (assume, increase) by profit or loss (P/L) and by other comprehensive income (OCI), following journal entry shall be passed in the consolidated accounts of the investor company:

Investment a/c Dr.
(share of investor in
change of net assets
of investee)

To, P&L a/c (share of P/L)

To, OCI a/c (share of OCI)

Thus, in consolidated balance sheet Investment a/c shall appear at cost plus share of investor company in change of net assets of the investee and Other Equity will increase by share of P/L and OCI of the investee (Associate).

This is the required accounting for investment in Associates as per Ind AS 28 and 27. The same accounting is done for investment in Joint Venture, where the investor has joint control.

But when by purchase of shares investment company acquires control of investee company (not joint control), the investee becomes subsidiary and investor is parent. For such transaction, at the acquisition date accounting shall be made in the consolidated accounts of the parent and also in the separate accounts of parent.

In the separate accounts the following entry shall be made:

Investment a/c Dr.

To, Bank/Equity

In the subsequent years in Separate Balance sheet Investment a/c will be carried at cost or as per Ind AS 109.

However, in consolidated set of accounts following entry will be passed under acquisition method of Ind AS 103:

Assets (of subsidiary identified at Fair Value) Dr.

Goodwill (balancing figure) Dr.

To, Consideration

To, Liabilities (of subsidiary identified at Fair Value)

To, Previously held Interest (at fair value)

To, Non-Controlling Interest (at fair value or at proportionate net asset value)

To, Gain on bargain purchase (balancing figure)

Thus, at acquisition, the assets and liabilities of parent at carrying amount are combined with the fair value of assets and liabilities of subsidiary for preparation of consolidated balance sheet. Goodwill is shown under non-current assets or Gain on bargain purchase is shown under (consolidated) Other Equity. Non-Controlling Interest is also shown below Other Equity.

If subsequently, parent purchases additional shares in subsidiary, NCI is reduced proportionately to its carrying amount and the following entry is passed:

NCI (at proportionate carrying amount) Dr.

To, Bank/Equity

Difference, if any, between proportionate carrying amount of NCI and consideration for additional stake is debited or credited to Other Equity.

If subsequently some shares of subsidiary are sold retaining control of parent:

Bank a/c Dr.

To, NCI (at proportionate carrying amount)

Difference, if any, between proportionate carrying amount of NCI and sale value of shares is debited or credited to Other Equity.

Thus, we see that preparation of consolidated balance sheet under Ind AS 110 at the acquisition date is simply incorporating the entries of business combination with the balance sheet items of parent.

However, for subsequent consolidation the post-acquisition changes in assets and liabilities and in NCI should also be considered but no change should be made to Goodwill/Gain on Bargain Purchase other than for impairment of goodwill.

At the time of acquisition of shares in Subsidiary company (S) identified assets and liabilities of S are recorded in the consolidated accounts at fair value. Subsequently the non-current items (assets and liabilities) of S are carried in the consolidated balance sheet at acquisition date fair value plus subsequent change in book value.

Topic

Module 10: GST Returns

FINAL

Group IV - Paper-19

Indirect Tax Laws and Practice (ITLP)

GST Returns

The implementation of the Goods and Services Tax (GST) in many countries has transformed the indirect tax landscape, replacing a myriad of indirect taxes with a unified tax regime. Central to the GST framework is the concept of GST returns, which play a crucial role in tax compliance, revenue collection, and taxpayer accountability. In this comprehensive guide, we explore the intricacies of GST returns, including their purpose, types and filing requirements.

The basic features of the return mechanism in GST includes electronic filing of returns, uploading of invoice level information, auto-population of information relating to input tax credit from returns of supplier to that of recipient, invoice level information matching and auto-reversal of input tax credit in case of mismatch. The returns mechanism is designed to assist the taxpayer to file returns and avail ITC. A return is required to be filed for the following purposes:

a. Mode for transfer of information to tax administration;

b. Compliance verification program of tax administration;

c. Finalization of the tax liabilities of the taxpayer within stipulated period of limitation; to declare tax liability for a given period;

d. Providing necessary inputs for taking policy decision;

e. Management of audit and anti-evasion programs of tax administration.

Under GST, a regular taxpayer needs to furnish monthly returns and one annual return. There are separate returns for a taxpayer registered under the composition scheme, non-resident taxpayer, taxpayer registered as an Input Service Distributor, a person liable to deduct or collect the tax (TDS/TCS), a person granted Unique Identification Number. It is important to note that a taxpayer is not required to file all the types of returns. In fact, taxpayers are required to file returns depending on the activities they undertake. The GST Council has however recommended to ease the compliance requirements for small tax payers by allowing taxpayers to file details of outward supplies in Form GSTR-1 on a quarterly basis. All the returns are to be filed online. Returns can be filed using any of the following methods:

1. GSTN portal (www.gst.gov.in)
2. Offline utilities provided by GSTN
3. GST Suvidha Providers (GSPs).

Returns under GST Laws

Returns under GST Laws

Form	Particulars	Due Date	Applicable to
GSTR-3B	Monthly/ Quarterly summary return As per sec. 2(92), "quarter" shall mean a period comprising three consecutive calendar months, ending on the last day of March, June, September and December of a calendar year;	To be filed as under: ➢ Registered persons, who are not under QRMP Scheme – 20th of the next month. ➢ Registered persons, who have opted for QRMP Scheme - a. Aggregate turnover up to ₹ 5 Cr. in the previous financial year and registered in category 1[1] States – **22nd** of the next month following the quarter.	All registered persons other than: 1. Input service distributor (ISD), 2. Non-resident taxable person, 3. Person paying tax u/s: a. 10 – Composition levy b. 51 – Tax deduction at source

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

Form	Particulars	Due Date	Applicable to
		b. Aggregate turnover up to ₹ 5 Cr. in the previous financial year and registered in category 2[2] States – **24th** of the next month following the quarter ➢ pay the tax due in each of the first two months of the quarter by depositing the due amount in Form GST PMT-06, by 25th day of the month succeeding such month under the head "Monthly payment for quarterly taxpayer"	c. 52 - Collection of tax at source
GSTR-1/ IFF	Statement for furnishing details of outward supplies	To be filed by either of the following persons on or before the below given dates: ➢ Registered person, who are not under QRMP Scheme - 11th of the next month ➢ Registered persons, who have opted for QRMP Scheme - 13th of the subsequent quarter However, such persons can furnish details of outward supplies using IFF for the first 2 months of the quarter as under: - 1st month of the quarter – on or before 13th of the subsequent month (max value = ₹ 50 Lakhs) - 2nd month of the quarter - on or before 13th of the subsequent month (max value = ₹ 50 Lakhs) ➢ Invoices furnished using the said facility in the first two months are not required to be furnished again in Form GSTR-1.	Normal / regular taxpayer
GSTR-4	Return by composition tax payers	CMP-08 by 18th of the month succeeding the quarter. GSTR-4 Annually by 30th April following the end of a financial year.	Composition taxpayer

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

Form	Particulars	Due Date	Applicable to
GSTR-5	Return by non-resident tax payers	13th of the next month or within 7 days after expiry of registration, whichever is earlier	Non-resident taxpayer
GSTR-5A	Monthly return by online information and database access or retrieval services (supply to a person other than a registered person i.e., online non-taxable recipient)	20th of the next month	Online information and database access or retrieval services
GSTR-6	Monthly return by input service distributors	13th of the next month	Input service distributors
GSTR-7	Monthly return for TDS	10th of the next month	Tax Deductor
GSTR-8	Monthly return (statement) for collection of tax at source	10th of the next month	E-commerce operator
GSTR-9/9A/9C	Annual return	31st December of the next financial year	Various person (Covered in Final)
GSTR-10	Final Return	Within 3 months of the date of cancellation or date of receipt of order of cancellation, whichever is later	Registered person whose registration has been cancelled
GSTR-11	Return to be filed by a person having UIN (Unique Identity Number) w.r.t inward supplies received by him to file refund of the taxes paid by him on inward supplies.		Person having UIN

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

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)

Module 3: Economic Efficiency of the Firm – Performance Analysis

Strategic Performance Management: Economic Efficiency of the Firm – Performance Analysis

Case Study

"Reliable Toy Products PTE Ltd Manufacturing Co." is a medium-sized manufacturing firm specializing in industrial equipment. It has been operating for 20 years and has built a strong reputation within its niche, serving clients across the automotive, construction, and aerospace industries. The company has two manufacturing plants: Plant A, which focuses on automotive components, and Plant B, which focuses on construction and aerospace components.

Despite consistent growth for a decade, Reliable Toy Products PTE Ltd has faced economic challenges in recent years due to rising raw material costs, increased labor expenses, and disruptions in the supply chain. Reliable Toy Products PTE Ltd is under pressure to improve efficiency to maintain its competitive edge.

Company Overview

Annual Revenue: $50 million (2023).

Net Income: $3 million (2023).

Employee Count: 200 (100 at each plant).

Gross Profit Margin: 20% (2023), a drop from 25% (2020).

Operating Margin: 10% (2023), a decrease from 15% (2020).

Return on Investment (ROI): 12% (2023), down from 18% (2020).

Production Lines: Plant A has 3 production lines (automotive components), and Plant B has 2 production lines (construction and aerospace components).

Downtime: Average of 10% across all production lines, with peaks of 15% during maintenance periods.

Labor Costs: $20 million (2023), a 10% increase from 2020.

Raw Material Costs: $15 million (2023), up by 15% from 2020 due to global supply chain disruptions.

Key Metrics for Evaluation as laid out by the CFO in last meeting

Cost Efficiency: Analyze the cost structure, focusing on labor, raw materials, and overheads. Identify high-cost areas and potential cost-saving opportunities.

Productivity: Evaluate output per labor hour and output per machine hour. Investigate causes of downtime and operational bottlenecks.

Profitability: Analyze trends in gross margins, operating margins, and net margins. Assess the impact of changing cost structures on profitability.

Resource Utilization: Assess the use of raw materials, energy, and other resources. Examine waste levels and identify areas for improvement.

Questions:

1. Given the data about raw material costs, overheads, and labor costs, which strategy would likely have the most significant impact on Acme's operating margin?

   A. Reducing overheads through energy-saving measures

   B. Increasing output per labor hour

   C. Lowering raw material costs by finding alternative suppliers

   D. Implementing price adjustments to align with industry standards

   Answer:

   C. Lowering raw material costs by finding alternative suppliers

(Lowering raw material costs would directly reduce cost of goods sold, potentially leading to an increase in operating margin.)

2. Considering the trends in gross margin and operating margin, which of the following is the most plausible explanation for the company's declining profitability?

   A. High labor costs due to wage increases

   B. High maintenance costs due to outdated machinery

   C. Rising raw material costs due to supply chain disruptions

   D. All of the above

   Answer:

   D. All of the above

   (The data indicates multiple factors contributing to the decline in profitability, including increased labor costs, maintenance costs, and raw material costs.)

3. If Acme Manufacturing Co. were to invest in new machinery to improve productivity, which of the following would be the most likely outcome?

   A. Decrease in downtime and increase in output per machine hour

   B. Increase in energy consumption and decrease in output per labor hour

   C. Increase in raw material waste and decrease in production costs

   D. Increase in operating margin with no change in net income

   Answer:

   A. Decrease in downtime and increase in output per machine hour

   (Investing in new machinery is likely to reduce downtime and increase productivity, leading to higher output per machine hour.)

4. Given Acme's average downtime rate of 10% and its peaks of 15%, which strategy would be most effective in addressing productivity issues?

   A. Implementing predictive maintenance to reduce downtime

   B. Increasing labor hours to offset production delays

   C. Reducing the number of production lines to focus on core products

   D. Outsourcing part of the production to reduce labor costs

   Answer:

   A. Implementing predictive maintenance to reduce downtime

   (Predictive maintenance can help reduce unplanned downtime, improving productivity.)

5. Considering Acme's revenue of $50 million and its resource utilization issues, which sustainability strategy could have the most significant impact on both cost efficiency and resource utilization?

   A. Implementing waste reduction programs to reduce raw material waste

   B. Introducing energy-efficient technologies to reduce energy consumption

   C. Streamlining production processes to minimize resource usage

   D. All of the above

   Answer:

   D. All of the above

   (All these sustainability strategies can impact cost efficiency and resource utilization, contributing to improved economic efficiency.)

Module 8 : Valuation of Assets and Liabilities

Valuation of Assets:

Discounted Cash Flow (DCF)

The Discounted Cash Flow (DCF) method calculates the present value of future cash flows from an asset. This involves projecting cash flows over a set period and discounting them to their present value using a rate that reflects the risk associated with the asset. Typically, the discount rate is the weighted average cost of capital (WACC) or another risk-adjusted rate. The steps include estimating future cash flows, determining a terminal value, applying a discount rate, and summing the discounted cash flows to derive the asset's valuation (Ross et al., 2019).

Market Approach

The Market Approach involves valuing an asset based on comparable sales or "comparables." This method is common in real estate and business valuations, where the focus is on identifying similar assets that have been sold in the market. The process involves identifying comparable assets, adjusting for differences (such as size, condition, or location), and applying valuation metrics to determine the asset's value (Damodaran, 2016).

Cost Approach

The Cost Approach values an asset based on the cost to replace or reproduce it, with adjustments for depreciation and obsolescence. This approach is often used for tangible assets like real estate or machinery. To determine the asset's value, one estimates the replacement or reproduction cost, accounts for depreciation and obsolescence, and considers other relevant factors, such as location and market trends (Kieso et al., 2020).

Real Options Analysis

Real Options Analysis (ROA) is used for assets with inherent flexibility in future decisions, resembling financial options. This method is valuable for projects with potential growth opportunities, such as natural resource projects or technology companies. The process involves identifying the "options" in the asset, using option pricing models (like Black-Scholes or binomial trees), and combining the underlying asset's value with the value of its options to obtain a comprehensive valuation (Mun, 2006).

Multiples Analysis

Multiples Analysis involves valuing an asset based on multiples derived from similar assets or companies. This method is widely used in business valuation and mergers and acquisitions. Key multiples include price-to-earnings, enterprise value-to-EBITDA, and price-to-sales. The process involves identifying relevant multiples, selecting comparable assets or companies, and applying the multiple to the asset's financial metrics to estimate its value (Damodaran, 2016).

Each of these valuation techniques has specific applications depending on the asset type and the context of the valuation. The DCF approach is suitable for cash-flow-generating assets, while the Market Approach is often used in real estate and business acquisitions. The Cost Approach is typically applied to tangible assets, and Real Options Analysis is ideal for assets with embedded flexibility. Multiples Analysis is used for quick benchmark-based valuation. The choice of valuation method depends on the asset's characteristics, market conditions, and the purpose of the valuation.

Valuation of Liabilities

Present Value

The Present Value (PV) metric calculates the current worth of future cash flows by discounting them at a specific rate. This approach is critical for long-term liabilities such as bonds, leases, and other financial obligations with a future payment schedule.

Discount Rate: This is typically the weighted average cost of capital (WACC), the company's cost of debt, or a risk-adjusted rate, reflecting the inherent risk and the time value of money (Ross et al., 2019).

Cash Flow Projections: The estimation involves principal and interest payments, lease payments, or other cash flows tied to the liability.

Time Horizon: The length of time over which the liability will incur cash flows.

Fair Value: Fair Value aims to estimate the price at which a liability could be transferred in an orderly transaction between market participants on the measurement date. This metric is commonly used for liabilities with observable market data, such as publicly traded bonds and derivatives.

Market Comparables: The use of comparable liabilities traded in active markets to derive fair value (Damodaran, 2016).

Quoted Prices: When available, public market data for liabilities like bonds or derivatives can be used to estimate fair value.

Valuation Models: In the absence of market data, models like discounted cash flow or option pricing can help estimate fair value.

Amortized Cost: Amortized Cost values a liability based on its original cost, adjusted for interest and principal payments over time. This method is typical for liabilities with structured payment schedules, such as loans or bonds.

Effective Interest Rate: This rate is used to calculate the interest expense and establish the amortization schedule.

Payment Schedule: This defines the timing and amount of interest and principal repayments.

Carrying Amount: The book value of the liability is adjusted for amortization as it is paid off (Kieso et al., 2020).

Expected Value: The Expected Value metric is used for liabilities with uncertain outcomes, such as contingent liabilities. It calculates a weighted average based on the probability of different outcomes and their associated costs.

Potential Outcomes: Identifies various scenarios that could occur.

Probability: The likelihood of each outcome occurring.

Expected Cost: Each outcome's estimated cost, weighted by its probability, to derive an expected value for the liability.

Credit Risk Metrics: Credit Risk metrics assess the risk of default or credit deterioration, which impacts the valuation of liabilities. These metrics are particularly relevant for long-term debt instruments and financial obligations.

Credit Rating: A measure of the creditworthiness of the company or bond issuer, affecting the discount rate.

Credit Spreads: The difference between the yield on a risk-free bond and the yield on a company's bond, indicating perceived credit risk (Brealey et al., 2020).

Default Probability: An estimate of the likelihood of default, affecting the liability's valuation.

Duration and Convexity: Duration and Convexity are metrics that measure a bond's sensitivity to changes in interest rates. These metrics are relevant for valuing liabilities such as bonds or long-term loans.

Duration: Indicates the expected change in bond prices in response to interest rate changes.

Convexity: A measure of the curvature in the bond's price-response to changes in interest rates, providing a more nuanced understanding of rate sensitivity (Bodie et al., 2019).

Each of these metrics plays a significant role in valuing liabilities. Present Value is often used for long-term obligations, while Fair Value applies to marketable liabilities. Amortized Cost is common for structured repayment liabilities, while Expected Value is useful for contingent liabilities. Credit Risk metrics are vital for assessing default risk, and Duration and Convexity offer insights into interest rate risk. The choice of metrics depends on the type of liability, market conditions, and relevant accounting standards.

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Topic

Module 3: Credit Risk and Liquidity Risk

Module 4: Sovereign Risk and Insolvency Risk

ELECTIVES

Paper-20B

Risk Management In Banking and Insurance (RMBI)

Risk Management in Banking (Credit Risk)

Every business, individual or organization takes different risks when conducting transactions. These could be financial (e.g., the risk of not being paid), legal (e.g., the risk of being sued) or operational (e.g., the risk that a process will not be executed as planned). Credit risk is one specific type of financial risk. It refers to the possibility that a debtor won't repay what they owe according to agreed terms, often resulting in losses for creditors such as banks and other lenders.

Many factors can contribute to credit risk, including deteriorating economic conditions, changes in interest rates, company failures, and war. When assessing credit risk, lenders typically use analytical methods such as ratios, trends and historical data to understand how likely it is that an applicant will renege on their loan obligations. Lenders may also require collateral from borrowers, which can help mitigate potential losses if things go wrong.

Credit risk has become increasingly important over time largely due to deregulation within global banking systems and increased competitive pressures among lenders vying for customers looking for finance for their business ventures, both large and small scale, making all types of lending activities far riskier than ever before.

How is Credit Risk Measured?

There is no one-size-fits-all answer to this question, as the way credit risk is measured will vary according to the business. However, lenders typically look at a few key factors when assessing a borrower's credit risk.

One important factor is the borrower's credit score. This number reflects how likely it is that the borrower will default on their loan obligations, and lenders generally consider borrowers with lower scores to be higher risk. Another important consideration is the amount of debt the borrower already owes. Lenders want to ensure that borrowers don't take on too much debt relative to their income, as this could indicate financial instability and an increased probability of defaulting on loans. Additionally, lenders may look at borrowers' credit history to understand how responsible they have been with past debts. If a borrower has consistently missed payments or defaulted on loans in the past, that signals a high risk for potential future defaults. Finally, lenders may also require collateral from borrowers, which can help mitigate potential losses if things go wrong.

Why should Lenders Care About Credit Risk?

There are a few key reasons why lenders care about credit risk. First, if a borrower defaults on their loan, the lender can lose money. This is especially true for unsecured loans, where the lender has no way to recover its losses other than through legal action. Second, high levels of credit risk can indicate that a borrower may be struggling financially and potentially have trouble repaying their debts in the future.

All these factors together mean that lenders must carefully assess a potential borrower's credit risk before lending them money. Doing so can minimize their chances of losing money if things go wrong and also ensure that they're lending to people who are likely to repay what they owe.

Types of Risk Associated with Lending Money:

When issuing loans, lenders have to assess a borrower's credit risk. This is the likelihood that the borrower will be unable to repay their debt in the future. Several factors can contribute to this, including a person's credit history, current financial situation and overall credit score.

Lenders need to be careful when lending money as various risks are associated with doing so. One such risk is the risk of default. Lenders can lose out financially when borrowers don't repay what they owe. In extreme cases, they may even have to take legal action to recoup their losses.

Another potential risk is if the borrower cannot afford repayments due to poor financial circumstances. If interest rates rise or the economy takes a turn for the worse, some borrowers may struggle to meet minimum payments on their loans.

Risk Management in Banking (Liquidity Risk)

Liquidity is a bank's capacity to fund increase in assets and meet both expected and unexpected cash and collateral obligations at reasonable cost and without incurring unacceptable losses. Liquidity risk is the inability of a bank to meet such obligations as they become due, without adversely affecting the bank's financial condition. Effective liquidity risk management helps ensure a bank's ability to meet its obligations as they fall due and reduces the probability of an adverse situation developing. This assumes significance on account of the fact that liquidity crisis, even at a single institution, can have systemic implications.

Traditionally, liquidity has been defined as. the capacity of financial institutions to finance increases in their assets and comply with their liabilities as these mature. Bank liquidity has two distinct but interrelated dimensions: liability (or cash) liquidity, which refers to the ability to obtain funding on the market and asset (or market) liquidity, associated with the possibility of selling the assets. Both concepts are interrelated, and the interaction between them tends towards their mutual reinforcement.

However, under adverse conditions this dependency tends to weaken market liquidity because adverse circumstances that affect one dimension can rapidly be transferred to the other. Under normal circumstances liquidity management is basically a cost-benefit trade off, because a financial institution will be able to obtain funding provided it is willing to pay the prevailing market prices, or has the choice of selling or committing its assets. In like manner a bank can store a stock of liquid assets to ensure some liquidity (liquidity warehousing), although at the expense of smaller returns. However, in the event of a crisis specific to a bank, its access to liquidity may be found to be severely restricted because its counterparties may be unwilling to provide it neither with funds, not even providing collateral nor in exchange for high rates. In a systemic liquidity crisis it may even be impossible for the bank to place its assets on the market.

The liquidity risk of banks arises from funding of long-term assets by short-term liabilities, thereby making the liabilities subject to rollover or refinancing risk. Liquidity risk is usually of an individual nature, but in certain situations may compromise the liquidity of the financial system. As in overall terms it is about a situation that is very dependent on the individual characteristics of each financial institution, defining the liquidity policy is the primary responsibility of each bank, in terms of the way it operates and its specialization.

Bank Deposits generally have a much shorter contractual maturity than loans and liquidity management need to provide a cushion to cover anticipated deposit withdrawals. Liquidity is the ability to efficiently accommodate deposit as also reduction in liabilities and to fund the loan growth and possible funding of the off-balance sheet claims. The cash flows are placed in different time buckets based on future likely behaviour of assets, liabilities and off-balance sheet items. The liquidity risk is closely linked to other dimensions of the financial structure of the financial institution, like the interest rate and market risks, its profitability, and solvency, for example.

The interest rate risk that results from mismatches of maturities or the dates for interest rate adjustments may appear as either market or refinancing (and/or reinvestment) risk. Also, as it operates to transform maturities, subject to these risks, the bank collects a yield that is related to its profitability. Having a larger amount of liquid assets or improving the matching of asset and liability flows reduces the liquidity risk, but also its profitability. This relationship also operates in the opposite direction: loans in an irregular situation will impact jointly on profitability and liquidity, as the expected cash flows do not appear.

In addition, there is a relationship with solvency: more capital reduces liquidity creation, but allows for more strength to face financial crises.

Risk Management in Insurance (About Health Insurance Policies)

Question:

What is Health Insurance?

Answer:

The term health insurance is a type of insurance that covers your medical expenses. A health insurance policy is a contract between an insurer and an individual /group in which the insurer agrees to provide specified health insurance cover at a particular "premium".

Question:

What are the forms of Health Insurance available?

Answer:

The commonest form of health insurance policies in India covers the expenses incurred on Hospitalization, though a variety of products are now available which offer a range of health covers, depending on the need and choice of the insured. The health insurer usually provides either direct payment to hospital (cashless facility) or reimburses the expenses associated with illnesses and injuries or disburses a fixed benefit on occurrence of an illness. The type and amount of health care costs that will be covered by the health plan are specified in advance.

Question:

Why is Health Insurance important?

Answer:

All of us should buy health insurance and for all members of our family, according to our needs. Buying health insurance protects us from the sudden, unexpected costs of hospitalization (or other covered health events, like critical illnesses) which would otherwise make a major dent into household savings or even lead to indebtedness. Each of us is exposed to various health hazards and a medical emergency can strike anyone of us without any prior warning. Healthcare is increasingly expensive, with technological advances, new procedures and more effective medicines that have also driven up the costs of healthcare. While these high treatment expenses may be beyond the reach of many, taking the security of health insurance is much more affordable.

Question:

What is cashless facility?

Answer:

Insurance companies have tie-up arrangements with several hospitals all over the country as part of their network. Under a health insurance policy offering cashless facility, a policyholder can take treatment in any of the network hospitals without having to pay the hospital bills as the payment is made to the hospital directly by the Third-Party Administrator, on behalf of the insurance company. However, expenses beyond the limits or sub-limits allowed by the insurance policy or expenses not covered under the policy have to be settled by you directly with the hospital. Cashless facility, however, is not available if you take treatment in a hospital that is not in the network.

Question:

What are the factors that affect Health Insurance premium?

Answer:

Age is a major factor that determines the premium, the older you are the premium cost will be higher because you are more prone to illnesses. Previous medical history is another major factor that determines the premium. If no prior medical history exists, premium will automatically be lower. Claim free years can also be a factor in determining the cost of the premium as it might benefit you with certain percentage of discount. This will automatically help you reduce your premium.

Question:

What does a Health Insurance policy not cover?

Answer:

You must read the prospectus/ policy and understand what is not covered under it. Generally, pre-existing diseases (read the policy to understand what a pre-existing disease is defined as) are excluded under a Health Insurance policy. Further, the policy would generally exclude certain diseases from the first year of coverage and also impose a waiting period. There would also be certain standard exclusions such as cost of spectacles, contact lenses and hearing aids not being covered, dental treatment/surgery (unless requiring hospitalization) not being covered, convalescence, general debility, congenital external defects, venereal disease, intentional self-injury, use of intoxicating drugs/alcohol, AIDS, expenses for diagnosis, x-ray or laboratory tests not consistent with the disease requiring hospitalization, treatment relating to pregnancy or child birth including caesarean section, Naturopathy treatment.

Question:

Is there any Waiting Period for claims under a policy?

Answer:

Yes. When you get a new policy, generally, there will be 30 days waiting period starting from the policy inception date, during which period any hospitalization charges will not be payable by the insurance companies. However, this is not applicable to any emergency hospitalization occurring due to an accident. This waiting period will not be applicable for subsequent policies under renewal.

Question:

What is pre-existing condition in health insurance policy?

Answer:

It is a medical condition/disease that existed before you obtained health insurance policy, and it is significant, because the insurance companies do not cover such pre-existing conditions, within 48 months of prior to the 1st policy. It means, pre-existing conditions can be considered for payment after completion of 48 months of continuous insurance cover.

Question:

If my policy is not renewed in time before expiry date, will I be denied for renewal?

Answer:

The policy will be renewable provided you pay the premium within 15 days (called as Grace Period) of expiry date. However, coverage would not be available for the period for which no premium is received by the insurance company. The policy will lapse if the premium is not paid within the grace period.

Question:

Can I transfer my policy from one insurance company to another without losing the renewal benefits?

Answer:

Yes. The Insurance Regulatory and Development Authority (IRDA) has issued a circular making it effective from 1st October, 2011, which directs the insurance companies to allow portability from one insurance company to another and from one plan to another, without making the insured to lose the renewal credits for pre-existing conditions, enjoyed in the previous policy. However, this credit will be limited to the Sum Insured (including Bonus) under previous policy. For details, you may check with the insurance company.

Question:

What happens to the policy coverage after a claim is filed?

Answer:

After a claim is filed and settled, the policy coverage is reduced by the amount that has been paid out on settlement. For Example: In January you start a policy with a coverage of Rs 5 Lakh for the year. In April, you make a claim of Rs 2 lakh. The coverage available to you for the May to December will be the balance of Rs.3 lakh.

Question:

What is 'Any one illness'?

Answer:

'Any one illness' would mean the continuous period of illness, including relapse within a certain number of days as specified in the policy. Usually this is 45 days.

Question:

What is the maximum number of claims allowed over a year?

Answer:

Any number of claims is allowed during the policy period unless there is a specific cap prescribed in any policy. However, the sum insured is the maximum limit under the policy.

Question:

What is "health check" facility?

Answer:

Some health insurance policies pay for specified expenses towards general health check-up once in a few years. Normally this is available once in four years.

Question:

What do you mean by Family Floater Policy?

Answer:

Family Floater is one single policy that takes care of the hospitalization expenses of your entire family. The policy has one single sum insured, which can be utilised by any/all insured persons in any proportion or amount subject to maximum of overall limit of the policy sum insured. Quite often Family floater plans are better than buying separate individual policies. Family Floater plans takes care of all the medical expenses during sudden illness, surgeries and accidents.

Topic

Module 5: Value Addition/ Scalability, Scaling up and Stabilisation of Sustainable Business

ELECTIVES

Paper-20C

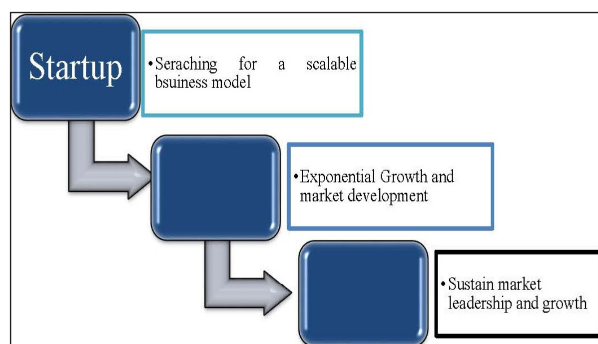
Entrepreneurship and Start Up (ENTS)

Paper 20C : Entrepreneurship and Startup
Scalability, Scaling up and Stabilisation of Sustainable Business

Scalability is considered to be a very important factor in any start-ups. This means that a scalable business model allows investors to drastically increase the scale of operations within a short period of time. Under normal circumstances, growing a business can be a very difficult process.

What is Scalable Business Model?

A scalable business model is one that describes your plan for growth. This model can grow without any significant changes to its structure or finances. A business can grow without major complications, regardless of costs or available resources. The most widely understood scalable business ideas include tech companies like Netflix, but any business can be scalable.



Road from Startup to Scaleup

Characteristics of a Scalable Business Model

1. **Asset-Light:** The concept of asset-light business model is also closely related to scalable business models. The basic concept is that if a company needs to invest a lot of money in plant and machinery or any other production set-up, they cannot access different markets at a very high pace. It is a prerequisite to building a scalable model but not the only factor that needs to be taken into consideration.

2. **Automation:** The degree of automation with which a business can operate has a huge influence on the scalability of that business. If a business requires human intervention in order to run its processes, then such a business cannot be scaled up easily. Alternatively, if a large part of the business processes operates in an automated manner, then the scale of operations can be increased without adding any pressure to existing resources. For instance, companies like Wal-Mart have an automated system to keep a check of inventory levels and place orders when the inventory goes below a certain threshold.

3. **Less Dependence on Skilled Labour:** It is also important to note that a scalable business model should not have much reliance on skilled labor. Skilled labor can be difficult to obtain and it can be expensive. A start-up can be considered to be scalable if it can achieve its business objectives even with unskilled labor. Companies like Uber have scaled their business models while relying on a huge human workforce.

4. **Replicability:** Another important feature that needs to be taken into account is replicability. A business becomes scalable when it can be easily replicated in many different markets. If the product or service is highly localized then such localization acts as a barrier to scalability. For instance, if a company sells food products, it needs to be taken into account the tastes, cultural preferences, and religious preferences of the target market. Hence, such a business is less scalable as compared to a cab service which may be the same across most parts of the globe.

Why Do Investors Prefer Scalable Business Models?

A scalable business model provides investors with some very specific advantages. Some of these advantages have been mentioned below:

1. **Larger Investments are Possible:** Venture capital and angel investors are very concerned about their ability to make the best possible use of a successful business model in a short period of time. Venture capital funds are time-bound. Hence, if they have a five-year horizon and if it takes them two years to find a winner, they would want to deploy as much money in the project as possible so that they are in a position to exit the investment at a high valuation when the fund is about to mature.

2. **Shorter Payback Period:** Investors can not only deploy their capital faster in such businesses but they can also recover it very quickly. This shorter payback period means that the investors, as well as

the founders, are likely to have more cash available at the end of the investment cycle which will allow them to scale the business even more. Scalable business models have a self-perpetuating cycle which allows them to reach even more scale till the market has been saturated.

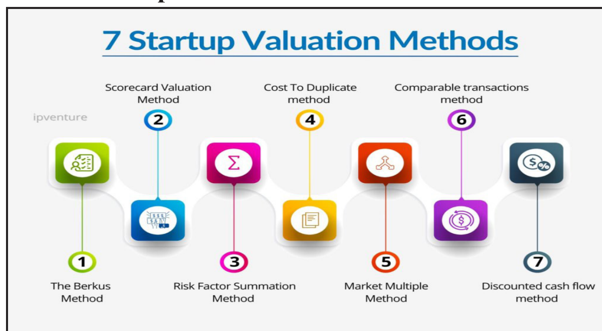
3. **Capturing Market Share:** A scalable business model allows investors and founders to quickly take their product offerings to a large number of people within a short span of time. This can be very advantageous to any investor. This first-mover advantage is crucial to the success of the business in the later stages.

4. **Resilience:** Scalability allows the business model to increase or decrease the number of users within a short period of time. Hence, such business models have a higher degree of cost control compared to usual businesses. This cost control makes these businesses more equipped to deal with a period of recession in the external market.

What is a pitch deck?

A pitch deck is a brief presentation created by the co-founders of a startup company. Its objective is to provide investors, team, co-founders and partners with a quick overview of the company's business plan. You can use a similar but simpler version of this presentation to inform customers of what the product is, how it works and how it benefits them.

Startup Valuation Model: At a Glance



Source: https://ipventures.in/valuation-of-a-startup/

Case study

Amazon.com, an American international e-commerce company, was started by the computer scientist Jeffrey P. Bezos in the year 1994. The online shopping platform initially started as a bookstore and soon expanded and became *the everything store.* It went online in 1995 and issued an IPO in May 1997. Amazon was launched as **Amazon India** in India in **June 2013**. Since its launch in India, Amazon has built the most prominent online marketplace in the country.

Amazon India covers every serviceable pin-code in India for the delivery of its products with 41 fulfilment centres across 13 states. More than 20,000 Indian sellers on Amazon marketing their products worldwide.

The value proposition provided by Amazon is convenience and the widest range of products at the lowest prices cost without compromising on quality by any means. Their employees have high technological skills including optimised software development, data mining, data analysis and more.

Amazon opted for a marketplace model, to begin with. The marketplace model provides small businesses with a huge scaling opportunity without having to build the technical or operational infrastructure of scale.

In terms of operating income, the growth is mainly driven by the high margins deriving from the service sales. By looking in-depth at the revenue sources, subscription and Amazon AWS (Amazon Web Services) services have accelerated the income growth. The Amazon site is one of the most visited pages in any region. Hence, sellers can expect to boost sales by advertising on it. Moving forward, Amazon also makes a huge chunk of money from the Kindle marketplace. Their internally-developed tablet-like device, Kindle, is widely used by readers who prefer e-books. Amazon has a 75 percent market share in the eBook market.

The business model of Amazon is not a capital-intensive model. It also doesn't depend extensively on human resources. This makes it scalable. Amazon has achieved such high levels of automation that they can run an entire departmental store without having any employees.

Achieving customer loyalty and repeated purchases has been the key to Amazon's triumph. Many ecommerce store failed because they succeeded in achieving awareness, but not loyalty. Amazon achieved both.

1. Which one of the following statements is not correct for scalability of business?
   (a) Scaling success in startups can be measured through key indicators: revenue growth, customer retention, acquisition cost, and profitability
   (b) To scale—or scale up—a business means growing it in such a way that its revenues increasingly outpace its costs.
   (c) A scale-up often refers to a business that has survived its start-up phase, established itself in its market, and moved into an early growth phase.
   (d) A scalable business can adapt and expand in response to increased demand with a significant decline in the operation's overall effectiveness.
2. How do you define value proposition?
   (a) A business or marketing statement that a company uses to summarize why a consumer should buy a product or use a service.
   (b) The process by which you create a unique image of a product or service in the mind of the consumer.
   (c) Writing and designing online advertisements for target audiences to make purchases.
   (d) Sending specific emails to a curated customer base in order to achieve brand success.
3. Which one of the following is the primary value proposition of Amazon?
   (a) Personalization and customization
   (b) Selection and convenience
   (c) Reduction of price discovery cost
   (d) Management of product delivery
4. Which one of the following is describing how a firm will produce a superior return on invested capital?
   (a) Value proposition
   (b) Market strategy
   (c) Revenue model
   (d) Competitive advantage
5. Which of the following is not a key element of the business model.
   (a) Competitive advantage
   (b) Market strategy
   (c) Value Proposition
   (d) Universal standards

Answers: 1. (d); 2. (a); 3. (b): 4. (c); 5. (d)

Invitation to Contribute Articles for CMA Student E-Bulletin - Showcasing Your Expertise!

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Submission Guidelines:

- **Article Length:** Please prepare articles ranging between 1200 to 1500 words.
- **Topic:** The articles can cover a wide spectrum of subjects, including but not limited to advancements in finance, industry insights, case studies, personal experiences and emerging trends in the field.
- **Originality:** We encourage you to share your unique perspectives and experiences. Ensure that your submission has not been published elsewhere.

Submission Deadline: We kindly request you to submit your article by **20th of the previous month of publication.** This will allow us ample time to review and prepare the upcoming issues of the CMA Student E-Bulletin.

Submission Process: Please send your article to *studies.ebulletin@icmai.in* with the subject line **"CMA Student E-Bulletin Submission - [Your Name, Registration No.]".** Include a brief author bio and a high-resolution photograph to be featured alongside your article.

Recognition and Rewards: Selected articles will be featured prominently in the CMA Student E-Bulletin, providing you with a valuable platform to showcase your expertise. Additionally, authors of published articles will be acknowledged and the top contributors may be eligible for special recognition and rewards.

We believe that your unique insights and experiences will contribute significantly to the enrichment of the CMA Student E-Bulletin. Your participation will not only enhance your visibility within the CMA community but also foster a culture of knowledge-sharing and collaboration.

Best Regards,

Team DoS
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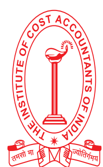

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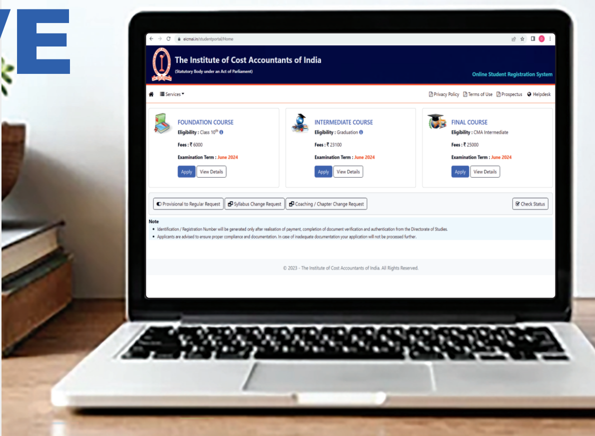
NEW IT INITIATIVE TO PROVIDE ENHANCED FACILITIES TO CMA STUDENTS



A login feature has been integrated into the **ONLINE REGISTRATION APPLICATION SYSTEM** enabling students to access various services through their accounts.

To utilize this feature, students need to create a login account by verifying their email address through an OTP sent to their registered email ID. Once the email ID is verified, it becomes the user ID and students can set their password during the account creation process.

The introduced system enables students to:

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- Check the status of their online applications
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Additional services for students will be seamlessly incorporated in the near future.

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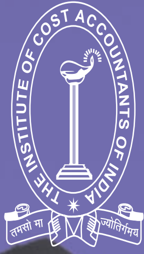

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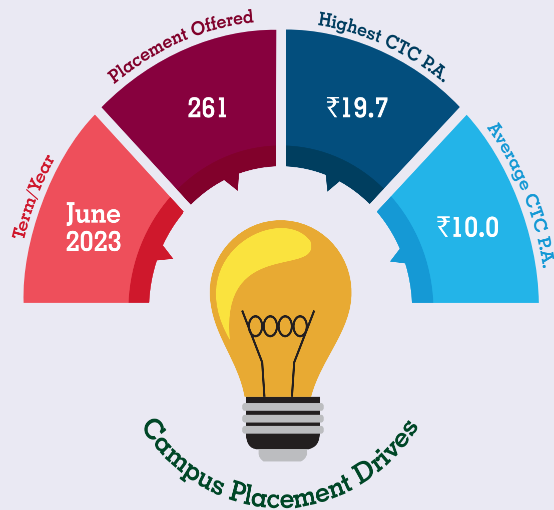
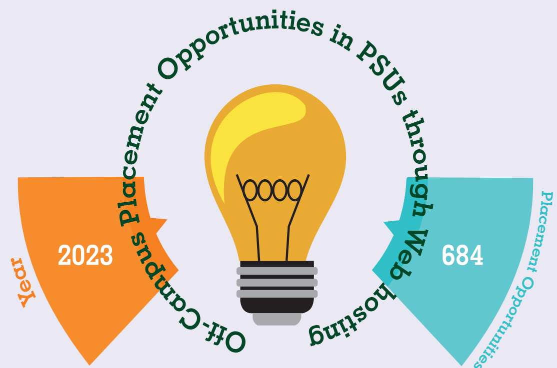
CMA Campus Placement Initiatives 2023

Campus Placement Statistics

Organized 1st Overseas Campus Placement Drive in December 2023





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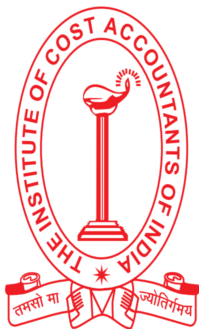

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