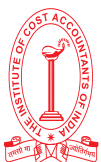
CMA STUDENT E-Bulletin

VOL 09 | NO. 11 | NOVEMBER 2024

An Initiative of Directorate of Studies



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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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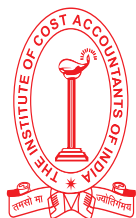

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Editorial Office
The Institute of Cost Accountants of India
CMA Bhawan
12, Sudder Street, KolKata - 700016
studies.ebulletin@icmai.in

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CHAIRMAN'S COMMUNIQUE

Dear CMA Students,

It gives me immense pleasure to connect with you through the November 2024 issue of the CMA Student E-Bulletin. As the Chairman of the Training & Educational Facilities Committee of ICMAI, I am excited to share the latest developments and initiatives that aim to enhance your learning experience and professional growth.

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

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

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

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

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

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

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

Warm regards,

CMA Vinayranjan P.

Chairman, Training & Educational Facilities Committee, ICMAI

CMA FOUNDATION COURSE

Syllabus 2022

Topic

Fundamentals of Business Laws -

Module 3: Sale of Goods Act, 1930

Business Communication -

Module 5: Business Communication

FOUNDATION

Paper-1

Fundamentals of Business Laws and Business Communication (FBLC)

SECTION – A: FUNDAMENTALS OF BUSINESS LAWS

MULTIPLE CHOICE QUESTIONS (MCQ)

1. The Sale of Goods Act, 1930 relates to—
   a) movable goods only
   b) immovable goods only
   c) both movable and immovable
   d) all goods except gold
2. Contract of Sale' is defined in Section 4(1) of the Sale of Goods Act, and it includes—
   a) sale
   b) agreement to sell
   c) barter
   d) both A and B
3. A contract for the sale of 'future goods' is—
   a) sale
   b) agreement to sell
   c) sale on approval
   d) hire-purchase agreement
4. The term, 'property', as used in the Sale of Goods Act, means—
   a) possession
   b) subject matter of sale
   c) ownership
   d) possession and ownership
5. For the validity of a contract of sale, there must be transfer of—
   a) custody of goods to the buyer
   b) property in the goods to the buyer
   c) possession of goods to the buyer.
   d) possession and custody of goods to the buyer
6. Bijoy agrees to sell his old laptop valued at ₹28,000 to Ajay, a dealer, in exchange for a new laptop and agrees to pay the difference is cash, it is—
   a) Barter
   b) Exchange
   c) Contract of Sale
   d) Invalid Contract
7. The modes of making a contract of sale are provided in Section
   a) 5(1)
   b) 6(1)
   c) 7(1)
   d) 8(1)
8. Which of the following statements is false?
   a) A contract of sale which provides for the payment of price and delivery of goods in installment is a valid contract of sale.
   b) A contract of sale may be made partly in writing and partly by words of mouth.
   c) 'Money' and 'actionable claims' are included in the legal definition of goods.
   d) A contract for the sale of 'unascertained goods', is an agreement to sell.
9. Which of the following statements is not true?
   a) The goods identified at the time of contract of sale are known as specific goods.
   b) The goods which are identified after the formation of contract of sale, are known as ascertained goods.
   c) A contract of sale which provides that the buyer shall pay the price fixed by some third party, is valid.
   d) The things attached to or forming part of land which cannot be severed from land are included in the legal definition of goods.
10. The loss of destruction of goods falls on in case of sale, and on in case of agreement to sell.
    a) buyer, seller
    b) seller, buyer
    c) auctioneer, agent
    d) none of these
11. If the price of goods is not determined by the parties in any manner, then the contract of sale is and the buyer shall pay them.

a) voidable, token price

b) valid, reasonable price

c) void, no price

d) unlawful, damages

12. Which of the following statement is not true as per Sale of Goods Act, 1930?

a) 'Earnest money' is liable to be forfeited.

b) 'Part-payment' cannot be forfeited.

c) Were the third party fails to fix the price in a contract of sale, the contract of sale becomes void.

d) The Sale of Goods Act, 1930 is validly applicable to contract for work and skill.

13. In Sale of Goods Act, 1930, Goods defined under section—

a) 2(7)

b) 2(10)

c) 2(8)

d) 2(9)

14. Essential elements for a valid contract of sale.

a) Property

b) Movable goods

c) Parties

d) all of the above

15. The terms 'condition' and 'warranty' are respectively defined in and of the Sale of Goods Act, 1930.

a) Section 12(1), Section 12(2)

b) Section 12(2), Section 12(3)

c) Section 12(3), Section 12(4)

d) Section 7, Section 8

16. In case of breach of condition, the buyer can reject the goods, but in case of breach of warranty, the buyer—

a) has no remedy

b) can claim damages only

c) can get the seller arrested

d) can either reject goods or claim damages

17. Seller defined in Sale of Goods Act, 1930 in Section

a) 2(11).

b) 2(12).

c) 2(14).

d) 2(13).

18. A sold a motor-cycle to B which turned out to be a stolen one and B was forced to return the same to the true owner. In this case, there is breach of implied condition as to—

a) title

b) fitness for buyer's purpose

c) sample

d) merchantability

19. Buyer defined in Sale of Goods Act, 1930 in Section

a) 3(1)

b) 4(1)

c) 5(1)

d) 2(1)

20. The implied condition and Warranties explained in Sale of goods Act, 1930 in Section

a) 14 to 17

b) 15 to 17

c) 13 to 18

d) 15 to 20

21. Which of the following statements is false?

a) They buyer may at his option treat the breach of conditions as a breach of warranty.

b) The buyer may at his option treat the breach of warranty as a breach of condition.

c) The liability for implied conditions and warranties may be excluded by the course of dealings between the parties.

d) Where the buyer treats the breach of condition as a breach of warranty, then he loses the right to reject the goods.

22. The doctrine of caveat emptor is incorporated in Section _____, and it implies

a) 15, let the seller beware.

b) 16, let the buyer beware.

c) 16, let seller take care of buyer's interest.

d) 17, let the buyer claim damages.

23. As per doctrine of caveat emptor, there is no implied condition or warranty in a contract of sale as to the quality or fitness of goods for buyer's purpose—
    a) True
    b) False
    c) Partly true
    d) Partly False

24. Barter and exchange transactions are not—
    a) Contract of sale
    b) Contract of work
    c) Gift
    d) none of these

SECTION – B: BUSINESS COMMUNICATION

25. If a message is short and to the point, the message is said to be
    a) Correct
    b) Concise
    c) Coherent
    d) Complete

26. The way the information is described or translated into a message and put in verbal or non-verbal medium is called .
    a) Feedback
    b) Decoding
    c) Encoding
    d) None of the above

27. Affirming comments with regard to future behaviour is called
    a) Positive Feedback
    b) Negative Feed forward
    c) Positive Feed forward
    d) Decoding

28. _____is the study of body language of a person.
    a) Kinesics
    b) Phonemics
    c) Paralanguage
    d) Economics

29. Interpretation and conversion of information communicated in to the intelligible form so that the recipient can fully understand the true meaning of the information is called
    a) Decoding
    b) Encoding
    c) Feedback
    d) None of the above

30. "Developing an idea" is the ____________ step of communication process?
    a) Third
    b) Fourth
    c) Second
    d) First

Answer:

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

25	26	27	28	29	30
b	c	c	a	a	d

Topic

Fundamentals of Financial Accounting -

Module 3: Preparation of Final Accounts

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. What is the primary purpose of preparing final accounts?
   a) To determine profitability
   b) To evaluate financial position
   c) Both a and b
   d) None
2. Which of the following is not a component of final accounts?
   a) Balance Sheet
   b) Profit & Loss Account
   c) Trial Balance
   d) Cash Flow Statement
3. What is the accounting equation?
   a) Assets = Liabilities + Equity
   b) Assets = Liabilities – Equity
   c) Assets = Liabilities + Expenses
   d) Assets = Revenues – Expenses
4. What is the difference between capital and revenue expenditure?
   a) Capital expenditure is recurring
   b) Revenue expenditure is non-recurring
   c) Capital expenditure is non-recurring
   d) Revenue expenditure is recurring
5. What is depreciation?
   a) Decrease in asset value
   b) Increase in asset value
   c) Decrease in liability
   d) Increase in revenue
6. What is the primary purpose of the Profit & Loss Account?
   a) To determine financial position
   b) To evaluate profitability
   c) To provide cash flow information
   d) To disclose tax liability
7. What is the purpose of providing for doubtful debts?
   a) To reduce profits
   b) To increase assets
   c) To match revenue with expenses
   d) To reduce liabilities
8. What is the accounting concept that assumes the business will continue to operate?
   a) Going concern concept
   b) Accrual concept
   c) Matching concept
   d) Materiality concept
9. What is gross profit?
   a) Sales - Cost of Goods Sold
   b) Sales - Operating Expenses
   c) Sales - Total Expenses
   d) Sales + Other Income
10. What is the primary purpose of the Balance Sheet?
    a) To determine profitability
    b) To evaluate financial position
    c) To provide cash flow information
    d) To disclose tax liability
11. Which of the following is a non-current asset?
    a) Inventory
    b) Accounts Receivable
    c) Land
    d) Prepaid Expenses
12. Which of the following is a current liability?
    a) Long-term loan
    b) Accounts Payable
    c) Salaries Payable
    d) d) Share Capital
13. Why is transparency important in non-profit financial reporting?
    a) To attract donors
    b) To ensure accountability
    c) To promote financial stability
    d) To reduce regulatory compliance

14. What is the purpose of financial analysis in non-profit organizations?
    a) To evaluate profitability
    b) To assess financial health
    c) To identify funding opportunities
    d) To measure social impact
15. General Reserve is debited to-
    a) Trading Account
    b) P&L Account
    c) Balance Sheet
    d) P&L Appropriation Account
16. The only Provision Account to have a debit balance is the Provision on-
    a) Assets
    b) Liabilities
    c) Expenses
    d) Incomes
17. Closing stock appearing in Trial Balance will be shown in –
    a) Trading Account
    b) Profit & Loss Account
    c) P&L Appropriation Account
    d) Balance Sheet
18. Preliminary Expenses paid are –
    a) Capital Expenditure
    b) Revenue Expenditure
    c) Deferred Revenue Expenditure
    d) None of these
19. Accrued income means –
    a) Income earned but not received
    b) Income received in advance
    c) Arrear income
    d) Arrear income received
20. In which method, an asset easily convertible into cash is written first in the Balance Sheet –
    a) Liquidity
    b) Permanence
    c) Horizontal
    d) Vertical
21. If there is an abnormal loss of stock of goods destroyed by fire then –
    a) Net Profit will increase
    b) Net Profit will decrease
    c) Gross Profit will decrease
    d) Liability will increase
22. Which of the following is an example of a direct cost?
    a) Rent
    b) Labour
    c) Advertising
    d) Depreciation
23. Which of the following is a semi-variable cost?
    a) Electricity
    b) Rent
    c) Labour
    d) Raw materials
24. What is the purpose of absorption costing?
    a) To determine profitability
    b) To evaluate performance
    c) To absorb fixed costs into product costs
    d) To reduce costs
25. What happens to variable costs when production increases?
    a) Remain constant
    b) Increase
    c) Decrease
    d) Become fixed

26. What is the contribution margin?
    a) Revenue minus total fixed costs
    b) Revenue minus total variable costs
    c) Revenue minus total costs
    d) Revenue plus total fixed costs
27. What is standard costing?
    a) A method of costing that uses actual costs
    b) A method of costing that uses estimated costs
    c) A method of costing that uses past costs
    d) A method of costing that uses predetermined costs
28. Which costing method assumes that costs are incurred uniformly throughout the production process?
    a) Job costing
    b) Process costing
    c) Batch costing
    d) Standard costing
29. What is the primary objective of costing?
    a) To determine profitability
    b) To evaluate performance
    c) To provide information for decision-making
    d) To reduce costs
30. What is the difference between fixed and variable costs?
    a) Fixed costs vary with production, while variable costs remain constant
    b) Fixed costs remain constant, while variable costs vary with production
    c) Fixed costs are incurred monthly, while variable costs are incurred annually
    d) Fixed costs are incurred annually, while variable costs are incurred monthly

Answer:

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

Topic

Fundamentals of Business Mathematics -

Module 2: Algebra

Fundamentals of Business Statistics

Module 8: Index Numbers and Time Series

FOUNDATION

Paper-3

Fundamentals of Business Mathematics and Statistics (FBMS)

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

1. 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

2. Simplify $(2^t)^6$, if the value of t > 6

a) 2^{6t}

b) $2^{t/6}$

c) 2^t

d) 2^2

3. Find the value of $5^3 * 5^2$

a) 3125

b) 125 * 25

c) 55

d) All of the Above

4. Simplify $1^{3/4} * 1^{5/4} * 1^{1/7} * 1^{-8} * 1^{-1/7}$

a) -1

b) 1/8

c) -1/4

d) None of the Above

5. What will be the value of $(11^{-2} * 11^6)/(11^3 * 11^1)$?

a) 11^{-2}

b) 11^2

c) 1

d) 0

6. Simplify $34(a^1)^2\, b^1/17b^2\, (a^3)^1$

a) 2ab

b) 2*ab

c) 2/ab

d) None of the Above

7. In how many different ways can 8 different mobiles, one of each of the 8 manufacturers, be placed on a shelf for display?

a) 40320 Ways

b) 8! Ways

c) 8*7! Ways

d) All of the Above

8. Compute $\frac{11! * 3!}{10!}$

a) 3

b) 33

c) 22

d) 66

9. Find the value of $\frac{1}{5!} + \frac{1}{4!} + \frac{1}{6!}$

a) (34+4)/6!

b) (22+17)/6!

c) (30+7)/6!

d) All of the Above

10. What will be the value of t, if sum of roots is 18 for the equation $-3(2t - 4)x + x^2 - 48t + 2 = 0$?

a) t = - 5

b) t = 5

c) t = 10

d) t = 10

11. Find the values of a, b, c for $6y^2 = -12y + 18$

a) a = 1, b = 2, c = 3

b) a = 1, b = - 2, c = - 3

c) a = - 1, b = 2, c = 3

d) a = 1, b = 2, c = - 3

12. For what value of ‘c’, would the equation 2x * 2x = 7 hold true.

a) c = 2

b) c = - 2

c) c = - 7

d) c = 7

13. According to Bureau of Indian Statistics in 2000, the average hourly earnings of production workers was ₹6.02. In 2013, it was ₹14.52. The Index of hourly earnings of production workers for 2013 based on 2000 data is

a) 241.19%

b) 164.76%

c) 41.46%

d) 182.14%

14. The price of a weekend package (including lodging and all meals) at ITC hotel, Kolkata in 2010 was ₹8,500. The price rose to ₹18,000 in 2024. Which of the following statement is correct?

a) The price of the weekend package increased 147.22% from 2010 to 2024

b) The price of the weekend package increased 47.22% from 2010 to 2024

c) The price of the weekend package increased 111.76% from 2010 to 2024

d) The price of the weekend package increased 211.76% from 2010 to 2024

15. The price of Staple food in 2020, 2021 and 2022 is respectively R120, R125, & R132 respectively. Price index of Staple food in the year 2022 on 2020-22 as base will be

a) 107.76%

b) 105.6%

c) 110%

d) 105.04%

16. The long-range or lack of change in a time series is called

a) Cyclical fluctuation

b) Secular Trend

c) Average Trend

d) Weighted Smoother

17. In a time series the rise and fall of the series over periods longer than 1 year is called

a) Secular Trend

b) Linear Trend

c) Cyclical Variation

d) Non-linear Trend

18. Consider the following data

Year	1	2	3	4	5	6	7	8	9
Sales (R)	1	2	3	4	5	4	3	2	3

In a Seven year moving average series the first data point will be at

a) 3.571 corresponding to year 6

b) 3.429 corresponding to year 5

c) 3.286 corresponding to year 7

d) 3.143 corresponding to year 4

19. The average hourly earnings of production workers for specified years are as follows:

Year	2010	2015	2020	2024
Average yearly Earnings	₹ 210.65	₹ 244.02	₹ 265.13	₹ 229.97

Using the average of 2010 and 2015 as the base year, Index for 2020 is

a) 116.63%

b) 101.16%

c) 107.34%

d) 92.67%

20. There are 6 items A, B, C, D, E and F and there corresponding prices in R per unit in Year 2010 and 2020 are as follows:

Item	A	B	C	D	E	F
2010	1.042	1.175	2.686	0.911	1.848	2.999
2020	1.422	1.933	3.526	1.350	2.511	5.902

Which one of the following statement is correct?

a) The mean price of the group of items increased 58.2% from 2010 to 2020

b) The mean price of the group of items increased 136.5% from 2010 to 2020

c) The mean price of the group of items increased 48.87% from 2010 to 2020

d) The mean price of the group of items increased 52.2% from 2010 to 2020

21. With respect to weighted price Index which one of the following statement is correct?

a) The Laspeyres method and Paasche method both use Current year weights

b) The Laspeyres method and Paasche method both use Base-period weights

c) The Laspeyres method uses Base-period weight whereas Paasche method uses Current year weights

d) The Laspeyres method use Current year weights whereas Paasche method uses Base-period weights

22. Index numbers are barometers of

a) Economic Activity

b) Specialized activity

c) Nations' Activity

d) Industrial Activity

23. Quantity indexes measure changes in

a) Volume characteristic compared to base period

b) Price characteristic compared to base period

c) Revenue characteristic compared to base period

(d) All the above

24. Base period is the period of

a) Specified Activities

b) Normal Activities

c) Economic Activities

d) Operational Activities

25. If the price index is 88 it means that

a) Price has increased by 12% compared to base period

b) Price has decreased by 88% compared to base period

c) Price has decreased by 12% compared to base period

d) Price has increased by 88% compared to base period

26. Price relative of TV set is 90 in 2021 compared to 2020. If a TV set costs ₹27,000 in 2020, the cost the TV set in 2021 is

a) ₹23,333

b) ₹21,000

c) ₹30,000

d) ₹24,300

27. Price relative of Sugar is 120 in 2002 compared to 2001. If sugar costs ₹18 per kg in 2002, then sugar costs in 2001 is

a) ₹21.6

b) ₹15

c) ₹19.8

d) ₹11

28. We are going to find three day moving averages with numbers 35, 70, 36, 59, 62, 60, 71. The third component of the designated moving average is

a) 55

b) 52.33

c) 60.33

d) 47

29. Which one of the following fluctuations indicate more prominent Seasonal variations

a) Crop yield during flood

b) Sale of Soft drinks

c) Market price of a stock in stock market

d) All the above

30. We are finding out 3 yearly moving average from following 3 yearly moving total -5.2, 5.9, 6.7, 8.5, 8.5, 12.3, 12.2, 15.4. The 5th component of 3yearly moving average series is

a) 2.83

b) 4.1

c) 2.23

d) 4.07

Answer Keys:

1	c	$(9^3 * 9^4)/(9^{-4} * 9^9) = (9^{3+4})/(9^{-4+9}) = (9^7)/(9^5) = 9^{7-5} = 9^2 = 81$
2	a	$(2^t)^6 = 2^{t*6} = 2^{t6}$
3	d	$5^3*5^2 = 5^{3+2} = 5^5 = 3125$
4	d	$1^{3/4} * 1^{5/4} * 1^{1/7}*1^{-8}*1^{-1/7} = 1^{3/4+5/4+1/7-8-1/7} = 1^{-6} = 1/1^6 = 1/1 = 1$
5	c	$(11^{-2}*11^6)/(11^3*11^1) = (11^{-2+6})/(11^{3+1}) = (11^4)/(11^4) = 11^{4-4} = 11^0 = 1$
6	c	$34(a^1)^2b^1 / 17b^2(a^3)^1 = (34/17)\ a^{1*2}b^1 / a^{3*1}b^2 = 2\ a^2b^1 / a^3b^2 = 2\ a^{2-3}b^{1-2} = 2\ a^{-1}b^{-1} = 2/ab$
7	d	8!/(8-8)!= 8!/0!=8!/1 =8! = 40320 ways
8	d	(11!*3!)/10! = 11*10!*3*2*1 / 10! = 11*3*2*1 = 66
9	c	1/6!+6*5/6!+6/6! = (1+30+6) /6! = 37 / 6!
10	b	3(2t-4)=18 or, 2t-4 = 6 or, 2t=6+4 or, 2t=10 or, t=5

Answer Keys:

11	d	$6y^2 = -12y+18$ or, $6y^2 = 6(-2y+3)$ or, $y^2 = -2y+3$ or, $y^2+2y-3 = 0$ $a = 1, b = 2, c = -3$
12	c	$2x*2x = 7$ or, $4x^2-7 = 0$ or, $4x^2-.0x-7 = 0$ Hence, $c = -7$
13	a	
14	c	
15	d	
16	b	
17	c	
18	d	
19	a	
20	c	
21	c	
22	a	
23	a	
24	b	
25	c	
26	d	
27	b	
28	b	
29	b	
30	a	

Suggestions:

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

Topic

Fundamentals of Business Economics -

Module 1:
Basic Concepts

Module 2:
Forms of Market

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 NOVEMBER 2024

I. Choose the correct answer:

1. Who was the proponent of the development definition of economics?
   a) Adam Smith
   b) Alfred Marshall
   c) Lionel Robbins
   d) Abba P. Samuelson

2. What is the basic problem in economics?
   a) What to produce
   b) How to produce
   c) For whom to produce
   d) All of the above

3. For the decrease in demand
   a) Demand curve will shift rightward
   b) Demand curve will shift leftward
   c) Along the same demand curve, the consumer will move from bottom to top
   d) None of the above

4. Under perfect competition, the firm's demand curve is represented by
   a) AR curve
   b) MR curve
   c) Both A and B
   d) None of the above

5. When both AR and MR curves are downward sloping straight lines, then the absolute slope of the AR curve will be
   a) Twice that of the MR curve
   b) Half of that of the MR curve
   c) Equal to that of the MR curve
   d) None of the above

6. In the long run
   a) All factors are variable
   b) All factors are fixed
   c) Some factors are variable
   d) None of the above

7. When TP is falling, then
   a) $MP = 0$
   b) $MP < 0$
   c) $MP > 0$
   d) None of the above

8. When TP curve becomes an upward sloping straight line through the origin, then the MP = AP becomes
   a) Horizontal
   b) Vertical
   c) Upward sloping
   d) Downward sloping

9. The third phase of returns to a variable factor shows
   a) Diminishing returns
   b) Increasing returns
   c) Negative returns
   d) None of the above

10. When AP is falling, then
    a) $AP = MP$
    b) $AP < MP$
    c) $AP > MP$
    d) None of the above

11. When there is decreasing returns to a variable factor, then
    a) $AP = MP$
    b) $AP < MP$
    c) $AP > MP$
    d) None of the above

12. The law of variable proportion operates during
    a) Medium term
    b) Short run
    c) Long run
    d) None of the above
13. In the long run
    a) All costs are variable
    b) All costs are fixed
    c) Some costs are variable
    d) None of the above
14. When LAC is minimum, then
    a) LMC > LAC
    b) LMC < LAC
    c) LMC = LAC
    d) None of the above
15. For an optimum plant size, the LAC curve touches the SAC curve at its
    a) Minimum point
    b) Maximum point
    c) Downward sloping portion
    d) Upward sloping portion
16. SMC curve cuts the minimum point of the SAC curve
    a) From above
    b) From below
    c) Both A and B
    d) None of the above
17. When AVC is rising, then
    a) SMC>AVC
    b) SMC<AVC
    c) SMC=AVC
    d) None of the above
18. As output rises, AFC
    a) Also rises
    b) First falls and then rises
    c) Falls but it cannot be zero
    d) None of the above
19. Which market structure is called "product differentiation"?
    a) Monopoly
    b) Monopolistic competition
    c) Oligopoly
    d) None of the above
20. Monopolist will never sell his product when the demand elasticity of his product is
    a) Highly inelastic
    b) Elastic
    c) Perfectly elastic
    d) None of the above
21. According to Quantity theory of demand, price will rise when money supply
    a) Falls
    b) Rises
    c) Remains constant
    d) None of the above
22. Maslow's model is formulated in terms of
    a) Human needs
    b) Wants
    c) Rewards
    d) Goals
23. Herzberg's model is formulated in terms of
    a) Human needs
    b) Wants
    c) Rewards or goals
    d) None of the above
24. Reward systems can be designed on
    a) Individual basis
    b) Group basis
    c) Either A or B
    d) None of the above

25. Physiological needs are also known as
    a) Biological needs
    b) Survival needs
    c) Either A or B
    d) None of the above
26. Which needs are required to preserve human life?
    a) Safety needs
    b) Social needs
    c) Physiological needs
    d) Esteem needs
27. The theory that implies use of carrot and stick approach is
    a) Theory Y
    b) Theory X
    c) Maslow's need hierarchy theory
    d) Herzberg's model
28. Is there any universal theory or approach to motivation?
    a) Yes
    b) False
    c) Partly true
    d) None of the above
29. Which of the following are non-financial incentives?
    a) Participation in decision making
    b) Challenging job
    c) Recognition
    d) All of the above
30. High motivation provides
    a) Optimum utilization of resources
    b) Better industrial relations
    c) Reduction in labour turnover
    d) All of the above

ANSWER

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

So friends!!

Hope you have enjoyed solving the problems in this mock test. Please try to follow the logic behind each and every theory. Because, Business economics and management both are based on logic. If you can follow the logic, it will be a cake-walk for you.

To make these mock tests useful, try to solve the problems on your own without consulting the KEY. Keep a record of your performance in each mock test. Hope your preparation is going on in full swing.

Best of luck in the exam!!!

CMA INTERMEDIATE COURSE

Syllabus 2022

Topic

Module 12: Companies Act, 2013

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 the 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 *Bear Act* and the *Sections* and start asking questions to yourself and find your own answers. Read the Act carefully and try to know the sense of the contents in it.

In this issue we shall deal with Formation and Incorporation of Company briefly with reference to *Companies Act, 2013*.

FORMATION AND INCORPORATION OF COMPANIES

Formation of a Company

Section 3 of the Act provides for the formation of a company. This section provides that the company may be formed for any lawful purpose. The company cannot be formed for illegal purposes or unlawful purposes. The section further provides the number of members required for the formation of a company. The public limited company requires seven or more persons. The minimum for the public limited company is seven and there is no limit for the higher number of persons. The private limited company requires two or more persons. The minimum for the private limited company is two and the maximum number of members is 200. One Person Company requires one person. The One Person Company is treated as private company. The proviso to this section requires that the memorandum of One Person Company shall indicate the name of other person, with his prior written consent. The required persons for the formation of the above category of companies shall subscribe their name or his name to a memorandum and complying with the requirements of the Act in respect of registration. Section 3(2) provides that a company so formed may be either-

- A company limited by shares;
- A company limited by guarantee; or
- An unlimited company.

Selection of Name for the Company

Before incorporation of a company, the promoter has to select a name for the company. While selecting the name of the company the promoter has to comply with the provisions of Rule 8 which gives the list of undesirable name that cannot be adopted. Section 9 provides for the reservation of name. An application for the reservation of name shall be made in Form – INC 1 along with the fee. Where the articles contain entrenchment, the company shall give notice to the Registrar of such provisions in Form No. INC- 2 or Form No. INC-7 along with fee at the time of incorporation of the company. In case of existing company the same shall be filed in Form No. MGT – 14 within 30 days from the date of entrenchment of the articles, along with the fee.

Incorporation of Company

Section 7 of the Companies Act, 2013 provides for the procedure to be followed for of a company. The promoter of the company shall submit the following documents to the registrar of companies, whose jurisdiction the registered office of the company is proposed to be situated for registration.

(a) Memorandum and articles of the company duly signed by all the subscribers to the memorandum in such manner as may be prescribed;

(b) A declaration in the prescribed form by an Advocate, a Chartered Accountant, Cost Accountant or Company Secretary in practice, who is engaged in the formation of the company and by a person named in the articles as a director, manager or secretary of the company;

(c) An affidavit from each of the subscribers to the memorandum and from persons named as the first directors, if any, in the articles stating that

  (1) he is not convicted of any offence in connection with the promotion, formation or management of any company, or

  (2) he has not been found guilty of any fraud or misfeasance or of any breach of duty to any company under this Act or any previous company law during the last five years.

  (3) and that all the documents filed with the Registrar for registration of the company contain information that is correct and complete and true to the best of his knowledge and belief;

(d) The address for correspondence till registered office is established;

(e) All particulars of every subscriber to the memorandum along with the proof of identity;

(f) The particulars of the persons mentioned in the articles as the first directors of the company;

(g) The consent to act as directors of company in such form as may be prescribed.

The memorandum of association is an essential document for incorporation of the company.

Memorandum of Association

The Memorandum of Association of company is in fact its charter; it defines its constitution and the scope of the powers of the company with which it has been established under the Act. It is the very foundation on which the whole edifice of the company is built. As per Section 4(1), the memorandum of a limited company must state the following:

(a) the name of the company with "Limited" as its last word in the case of a public company; and "Private Limited" as its last words in the case of a private company; (**Name Clause**). This shall not apply in case of companies registered under section 8. Similarly, in case of government companies the name of the company shall end with the words "Limited". This is as per the exemptions to Government Companies under Section 462 of Companies Act, 2013 vide notification dated June 5, 2013.

(b) the State in which the registered office of the company is to be situated; (**Situation Clause**)

(c) the objects for which the company is proposed to be incorporated and any matter considered necessary in furtherance thereof; (**Objects clause).**Provided that nothing in this clause shall apply to a company registered under section 8;

(d) the liability of members of the company, whether limited or unlimited, and also state,— (**Liability Clause)**

   (i) in the case of a company limited by shares, that liability of its members is limited to the amount unpaid, if any, on the shares held by them; and

   (ii) in the case of a company limited by guarantee, the amount up to which each member undertakes to contribute—

   (A) to the assets of the company in the event of its being wound-up while he is a member or within one year after he ceases to be a member, for payment of the debts and liabilities of the company or of such debts and liabilities as may have been contracted before he ceases to be a member, as the case may be; and

   (B) to the costs, charges and expenses of winding-up and for adjustment of the rights of the contributories among themselves;

(e) in the case of a company having a share capital,— (**Capital Clause**)

   (i) the amount of share capital with which the company is to be registered and the division thereof into shares of a fixed amount and the number of shares which the subscribers to the memorandum agree to subscribe which shall not be less than one share per subscriber; and

   (ii) the number of shares each subscriber to the memorandum intends to take, indicated opposite his name;

(f) in the case of a One Person Company, the name of the person who, in the event of the death of the subscriber, shall become the member of the company.

According to section 4(7), any provision in the memorandum or articles, in the case of a company limited by guarantee and not having a share capital, purporting to give any person a right to participate in the divisible profits of the company otherwise than as a member, shall be void.

Form of Memorandum

Section 4(6) provides that the memorandum of a company shall be in respective of forms specified in Tables A, B, C, D and E in Schedule I as may be applicable to the company.

- Table A – Memorandum of Association of a company limited by shares;
- Table B – Memorandum of Association of a company limited by guarantee and not having share capital;
- Table C – Memorandum of Association of a company limited by guarantee and having a share capital;
- Table D – Memorandum of Association of an unlimited company and not having share capital;
- Table E – Memorandum of Association of an unlimited company and having share capital.

Topic

Module 3:

Preparation of Final Accounts of Commercial Organisations, Not-for-Profit Organisations and from Incomplete Records

INTERMEDIATE

Group I - Paper-6

Financial Accounting (FA)

Preparation of Financial Statements of Commercial Organisations and Preparation of Financial Statements of Not-for-Profit Organisation

Preparation of Financial Statements of Commercial Organisations

Preparation of financial statements for commercial organizations is a vital aspect of financial reporting and provides a comprehensive view of a company's financial performance, position, and cash flows.

Preparing financial statements for commercial organizations involves several key steps and considerations.

Gather Financial Data: Collect all relevant financial information including transactions, receipts, invoices, bank statements, etc.

Organize Transactions: Categorize transactions into appropriate accounts such as assets, liabilities, equity, revenue, and expenses.

Recording Transactions: Enter transactions into the accounting system. This could be done manually or using accounting software like QuickBooks or Xero.

Adjusting Entries: Make any necessary adjusting entries to ensure that revenues and expenses are recorded in the correct accounting period and that assets and liabilities are properly recognized.

Prepare Trial Balance: Create a trial balance to ensure that debits and credits are equal and the books are in balance.

Prepare Financial Statements:

Income Statement (Profit and Loss Statement): Summarizes revenues and expenses over a period of time to determine the company's profitability.

Balance Sheet: Presents the company's financial position at a specific point in time, showing assets, liabilities, and equity.

Cash Flow Statement: Reports cash generated and used by operating, investing, and financing activities during a period.

Statement of Changes in Equity (if applicable): Shows changes in equity during the reporting period, including shareholder transactions and changes in retained earnings.

Analysis and Interpretation: Analyze the financial statements to assess the company's financial health, performance, and liquidity. Look for trends, ratios, and other indicators to understand the company's strengths and weaknesses.

Disclosure and Presentation: Ensure that the financial statements comply with relevant accounting standards (e.g., GAAP, IFRS) and include all necessary disclosures and footnotes.

Review and Audit: Review the financial statements for accuracy and completeness. In some cases, an external audit may be required by regulatory authorities or stakeholders.

Distribution and Communication: Share the financial statements with stakeholders such as investors, creditors, management, and regulatory bodies as required.

It's essential to follow accounting principles and standards relevant to your jurisdiction and industry while preparing financial statements to ensure accuracy, transparency, and compliance. Additionally, seeking assistance from accounting professionals or consultants can be beneficial, especially for complex accounting issues or regulatory requirements.

Preparation of Financial Statements of Not-for-Profit Organisation

Preparing financial statements for a not-for-profit (NFP) organization involves similar steps to those for commercial organizations, with some key differences due to the nature of NFP operations. Here's an overview tailored to NFPs:

Gather Financial Data: Collect all financial information including donations, grants, program revenues, expenses, and other income sources.

Organize Transactions: Categorize transactions into appropriate accounts such as contributions, program expenses, administrative expenses, fundraising expenses, and investment income.

Recording Transactions: Enter transactions into the accounting system, ensuring accurate recording of all income and expenses related to the organization's activities.

Adjusting Entries: Make any necessary adjustments to ensure that revenues and expenses are recorded correctly and in accordance with generally accepted accounting principles (GAAP) for not-for-profit organizations.

Prepare Trial Balance: Create a trial balance to verify that debits and credits are equal and that the accounting records are in balance.

Prepare Financial Statements:

Statement of Financial Position (Balance Sheet): Presents the organization's assets, liabilities, and net assets (equity) at a specific point in time.

Statement of Activities (Income Statement): Summarizes revenues and expenses for a period, showing the organization's financial performance.

Statement of Cash Flows: Reports cash inflows and outflows from operating, investing, and financing activities during the reporting period.

Statement of Functional Expenses: Breaks down expenses by function (e.g., program services, management and general, fundraising) to provide transparency on how resources are utilized.

Analysis and Interpretation: Analyze the financial statements to assess the organization's financial health, efficiency in resource utilization, and sustainability. Evaluate key ratios and metrics relevant to not-for-profit organizations, such as program expense ratios and fundraising efficiency ratios.

Disclosure and Presentation: Ensure that the financial statements comply with applicable accounting standards for not-for-profit organizations, such as the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 958, and include all required disclosures and footnotes.

Review and Audit: Review the financial statements for accuracy and completeness. Depending on regulatory requirements and organizational policies, an external audit may be conducted to provide assurance to stakeholders.

Distribution and Communication: Share the financial statements with stakeholders such as donors, grantors, board members, and regulatory bodies as required. Transparent communication of financial information is crucial for maintaining trust and accountability in the organization.

It's essential for not-for-profit organizations to adhere to accounting standards specific to their sector and to accurately report on the allocation of resources towards achieving their mission and objectives. Seeking guidance from accounting professionals with expertise in not-for-profit accounting can ensure compliance and effective financial management.

Preparation of Financial Statements of Not-for-Profit Organisation

The preparation of financial statements holds significant importance for both commercial organizations and not-for-profit (NFP) organizations, albeit with some differences in their objectives and stakeholders. Here's a comparison of their importance:

Commercial Organizations:

Decision Making and Investor Confidence: Financial statements provide crucial information for decision-making by investors, creditors, suppliers, customers, and management in commercial organizations. Investors rely on financial statements to assess profitability, growth potential, and risks before making investment decisions. Transparent financial reporting enhances investor confidence and facilitates access to capital markets.

Creditworthiness and Financing: Financial statements play a vital role in determining a company's creditworthiness and ability to obtain financing from banks, financial institutions, and other creditors. Lenders analyze financial statements to evaluate the company's ability to repay loans, manage debt, and generate cash flows. Positive financial performance enhances the company's borrowing capacity and access to favourable financing terms.

Regulatory Compliance and Taxation: Commercial organizations are required to prepare financial statements in compliance with accounting standards and regulatory requirements, such as GAAP or IFRS. Accurate financial reporting ensures compliance with tax laws and facilitates tax planning strategies. Financial statements serve as the basis for tax assessment, auditing, and regulatory reporting.

Performance Evaluation and Benchmarking: Financial statements enable stakeholders to evaluate the company's financial performance, profitability, efficiency, and competitiveness over time. Comparative analysis with industry peers and benchmarks helps assess relative strengths and weaknesses and identify areas for improvement. Financial ratios and metrics derived from financial statements facilitate performance evaluation and benchmarking against industry standards.

Transparency and Accountability: Transparent financial reporting promotes accountability and integrity in commercial operations by providing stakeholders with clear, accurate, and timely information about the company's financial position and performance. Disclosure of significant accounting policies, assumptions, estimates, and risks enhances transparency and allows stakeholders to make informed decisions based on reliable financial information.

Not-for-Profit Organizations:

Stakeholder Trust and Accountability: Financial statements for NFP organizations are crucial for maintaining trust and accountability with donors, grantors, members, volunteers, and other stakeholders. Donors and grantors rely on financial statements to assess the organization's financial health, governance, and stewardship of resources before making contributions.

Transparency and Donor Confidence: Transparent financial reporting demonstrates the NFP organization's commitment to accountability, ethical stewardship, and mission fulfillment. Donors and grantors expect clear and detailed financial statements that provide insights into how their contributions are utilized and the impact achieved by the organization's programs and services.

Regulatory Compliance and Funding: NFP organizations are subject to regulatory requirements and reporting obligations imposed by governmental authorities, funding agencies, and oversight bodies. Compliance with accounting standards and regulatory requirements ensures transparency, credibility, and eligibility for funding, grants, and tax-exempt status.

Performance Evaluation and Impact Assessment: Financial statements enable stakeholders to evaluate the NFP organization's financial performance, efficiency, and effectiveness in delivering programs and services. Comparative analysis of financial data over time and benchmarking against industry standards help assess progress toward mission objectives and identify areas for improvement.

Mission fulfilment and Sustainability: Financial statements provide insights into the NFP organization's ability to achieve its mission, serve its beneficiaries, and sustain operations over the long term. Donors and stakeholders expect financial sustainability, prudent financial management, and accountability in the use of resources to ensure the organization's continued impact and relevance.

In summary, while the preparation of financial statements is essential for both commercial organizations and NFP organizations, the specific objectives, stakeholders, and regulatory environments may vary. Transparent financial reporting fosters trust, accountability, and informed decision-making in both sectors, contributing to organizational success and societal impact.

Questions:

1. Which financial statement summarizes a company's revenues and expenses over a specific period?
   a) Balance Sheet
   b) Income Statement
   c) Cash Flow Statement
   d) Statement of Changes in Equity

2. Which financial statement reports the cash inflows and outflows from operating, investing, and financing activities?
   a) Balance Sheet
   b) Income Statement
   c) Cash Flow Statement
   d) Statement of Changes in Equity

3. What is the purpose of adjusting entries in the preparation of financial statements?
   a) To correct errors in the trial balance
   b) To record transactions that were missed initially
   c) To ensure revenues and expenses are recognized in the correct accounting period
   d) To adjust the cash balance

4. Which financial statement reports changes in equity, including transactions with shareholders and changes in retained earnings?
   a) Income Statement
   b) Balance Sheet
   c) Cash Flow Statement
   d) Statement of Changes in Equity

5. Which of the following is NOT a purpose of financial statements for commercial organizations?
   a) Decision-making
   b) Regulatory compliance
   c) Stakeholder trust
   d) Identifying donors

6. What does the balance sheet of a not-for-profit organization primarily represent?
   a) Financial performance over a period
   b) Cash inflows and outflows
   c) Financial position at a specific point in time
   d) Sources and uses of cash

7. What is the purpose of the statement of changes in net assets for a not-for-profit organization?
   a) To disclose significant accounting policies
   b) To summarize program expenses
   c) To report changes in equity, including transactions with donors and changes in net assets
   d) To present the organization's financial position at a specific point in time

8. Which financial statement reports the organization's financial position, including its assets, liabilities, and net assets at a specific point in time?
   a) Income Statement
   b) Balance Sheet
   c) Cash Flow Statement
   d) Statement of Functional Expenses

9. What is the primary purpose of financial statements for not-for-profit organizations?
   a) Decision-making
   b) Regulatory compliance
   c) Stakeholder trust
   d) Maximizing shareholder wealth

10. Which of the following is NOT a characteristic of financial statements for not-for-profit organizations?
   a) Emphasis on transparency and accountability
   b) Focus on profitability and return on investment
   c) Presentation of financial position and performance
   d) Disclosure of significant accounting policies and estimates

Answer:

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

VOL 09 I NO. 11

Topic

Module 2:
Heads of Income

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

INTERMEDIATE

Group I - Paper-7A

Direct Taxation (DT)

Income From Other Sources

1. A receipt shall be taxable under this head if such income does not specifically fall under any one of the other four heads of income.

2. **Basis of chargeability:** Income under this head shall be chargeable on 'accrual' or 'cash' basis depending on the method of accounting regularly followed by the assessee.

3. **Casual Income:** Winning from lotteries, crossword puzzles, etc. are taxable under this head. Tax is charged on such income at a flat rate of 30% plus surcharge (if any) plus cess.

4. **Income from letting of machinery, plant or furniture is charged to tax under this head, if such income is not chargeable under the head "Profits and gains of business or profession".**

5. **Composite rent: If letting of building is inseparable from letting of machinery, furniture, etc. then income from such letting is charged to tax under the head "Income from other sources" otherwise Income from house property.**

6. **Family pension:** It is taxable under the head "Income from other sources" after allowing standard deduction to the minimum of a) 1/3rd of such pension; or b) ₹ 15,000.

7. **Gift: Following receipts by any person shall be considered as his income:**

   a) If any sum is received without consideration in excess of ₹ 50,000 during the previous year;

   b) If an immovable property is received without consideration and the stamp duty value exceeds ₹ 50,000, the stamp duty value of such property;

   c) If an immovable property is received with consideration and the stamp duty value of such property exceeds such consideration by higher of the following:

   (i) ₹ 50,000; or

   (ii) An amount equal to 10% of the consideration - the difference between the stamp duty value and the consideration;

   d) If movable properties are received without consideration and the aggregate fair market value of such properties exceeds ₹ 50,000, the whole of aggregate fair market value of such properties;

   e) If movable properties are received for consideration which is less than the aggregate fair market value of properties by an amount exceeding ₹ 50,000, the difference between the aggregate fair market value and the consideration

   Exceptions:

   (a) ***Gift received from any relative.***

   (b) ***Gift received on the occasion of the marriage of the individual.***

   (c) ***Any sum of money which is received under a will or by way of inheritance.***

   (d) ***Any sum of money which is received in contemplation of death of the payer***

   (e) ***Any sum of money which is received from - local authority, any fund or foundation or university or other educational institutions or hospital or other medical institutions or any trust or institution referred u/s 10(23C) or a registered trust or institution;***

   (f) ***Receipts from an individual by a trust created or established solely for the benefit of relative of the individual.***

   (g) ***Receipts by way of distribution at the time of total or partial partition of HUF;***

   (h) ***Shares received in a consequence of demerger or amalgamation of a company or business reorganization of a co-operative society***

8. **Share premium received by a company,** not being a company in which public is substantially interested, in excess of fair market value of issued shares shall be considered as income of the issuing company.

9. **Interest on securities** is charged to tax u/s 56. However, if such securities are held as stock, then taxed u/s 28.

10. **Interest on delayed receipt of compensation or enhanced compensation** shall be taxable in the year of receipt after deducting standard deduction @ 50% of such income.

11. **Bonus Stripping:** Where any person acquires any unit (original unit) within a period of 3 months prior to the record date and is allotted bonus unit on such date and such person transfers original unit within a period of 9 months after such date, then any loss arising to him shall be ignored and the amount of loss so ignored shall be deemed to be the cost of

acquisition of such bonus unit held by him on the date of such sale or transfer.

12. **Dividend:** As per sec. 2(22),

(a) Any distribution of accumulated profits, which results in the release of assets of the company.

(b) Any distribution of Debenture, debenture-stock, deposit certificates in any form whether with or without interest to its shareholders (equity as well as preference); and Shares to preference shareholders by way of bonus, to the extent to which company possess accumulated profit.

(c) Distribution made on liquidation to the extent to which company possess accumulated profit immediately before liquidation.

(d) Distribution made on reduction of capital of the company to the extent it possess accumulated profit.

(e) Any loan or advance by a company (in which public are not substantially interested) to the extent of accumulated profit (excluding capitalized profit) to its equity shareholder holding not less than 10% of voting power in the company or to a concern of which such shareholder is a member and has substantial interest in such concern or to any person on behalf of or for the benefit of such specified shareholder.

Tax treatment: Dividend or income from units shall be taxable in the hands of shareholders or unit holders at the applicable rate. No deduction shall be allowed from dividend income, or income in respect of units of mutual fund or specified company, other than deduction on account of interest expense and in any previous year. Further, such deduction shall not exceed 20% of the dividend income or income from units included in the total income for that year without this deduction

13. **Specific disallowance**: The following expenditures shall not be deducted from any income under this head

- Any personal expenses of the assessee.
- Any interest which is payable outside India on which tax has not been deducted at source.
- Any salary payable outside India on which tax has not been deducted at source.
- 30% of any payment made to a resident on which TDS provision is applicable without deducting TDS as referred u/s 40(a)(ia)
- Any amount paid as Wealth tax or Income tax.
- Any amount specified u/s 40A e.g. payment to relative in excess of requirement; or cash payment in excess of ₹ 10,000.
- No deduction in respect of any expenditure shall be allowed in computing the income by way of any winnings from lotteries, etc.

14. **Deemed Profits: Where an allowance or deduction has been allowed for any year in respect of loss, expenditure or trading liability incurred by the assessee; and subsequently, any amount is obtained, as revocation of such loss, expenditure or remission of liability, whether in cash or in any other manner, during any previous year, then such amount received or amount remitted shall be charged to tax.**

ADVANCE TAX

Advance Tax, often referred to as 'pay as you earn' tax, is the income tax that is payable if your total tax liability is ₹10,000 or more in a financial year. It is paid in installments as per the due dates provided by the Income Tax Department. The primary purpose of Advance Tax is to ensure a continuous flow of revenue to the government and to reduce the burden of lump-sum tax payments on taxpayers at the end of the financial year.

Who Needs to Pay Advance Tax?

Advance Tax is mandatory for:

- **Salaried individuals**: Salaried individuals who have income from sources other than salary such as rent, interest, capital gains, etc., need to pay advance tax.
- **Freelancers and self-employed individuals**: Individuals earning income from business or profession.
- **Companies**: Corporate taxpayers and businesses.
- **Others**: Any individual earning from dividends, capital gains, lottery winnings, or similar incomes.

However, a senior citizen (aged 60 years or above) who does not have income from business or profession is exempted from paying advance tax.

Due Dates and Installments

The Income Tax Department has prescribed specific due dates for the payment of advance tax. The payments can be made in four installments throughout the financial year:

1st Installment	By June 15	15% of the advance tax liability
2nd Installment	By September 15	45% of the advance tax liability (cumulative)
3rd Installment	By December 15	75% of the advance tax liability (cumulative)
4th Installment	By March 15	100% of the advance tax liability (cumulative)

For taxpayers who have opted for the presumptive taxation scheme u/s 44AD or 44ADA of the Income Tax Act, the entire advance tax liability has to be paid by March 15 in one installment.

Calculation of Advance Tax

Advance tax can be calculated using the following steps:

- **Estimate your total income**: Calculate the total income from all sources (salary, rent, business, capital gains, etc.) for the financial year.
- **Calculate gross taxable income**: Adjust the total income by considering deductions available under various sections of the Income Tax Act (such as Section 80C, 80D, etc.).
- **Compute tax liability**: Apply the applicable income tax rates to the gross taxable income to compute the tax liability.
- **Deduct TDS and other credits**: Subtract the Tax Deducted at Source (TDS) and any other tax credits available.
- **Determine advance tax liability**: If the net tax liability is ₹10,000 or more, then advance tax has to be paid as per the specified due dates.

Interest on Late Payment of Advance Tax

Under Sections 234B and 234C of the Income Tax Act, interest is charged for the late payment or short payment of advance tax:

- **Section 234B**: Interest is charged if the taxpayer has not paid 90% of the tax liability or has paid less than the prescribed percentage of advance tax within the previous year. The interest is charged at 1% per month from April 1 of the assessment year till the date of actual payment.
- **Section 234C**: Interest is charged for default in payment of each installment. It is calculated at 1% per month for the period of delay on the amount of shortfall.

Adjustment and Refund

Advance tax paid during the financial year is adjusted against the total tax liability at the time of filing the annual income tax return. If the advance tax paid is more than the actual tax liability, the excess amount is refunded to the taxpayer with interest under Section 244A of the Income Tax Act.

Importance of Advance Tax

- **Regular Revenue Flow**: It ensures a regular inflow of revenue to the government, helping in better financial planning and implementation of developmental projects.
- **Reduced Year-End Burden**: For taxpayers, it spreads the tax payment over the year, reducing the financial burden at the end of the financial year.
- **Compliance**: Paying advance tax on time helps in avoiding interest for non-compliance.
- **Tax Planning**: It helps in better tax planning and managing cash flows effectively.

Advance Tax for Specific Incomes

- **Capital Gains and Dividends**: Taxpayers with capital gains or dividends can pay advance tax in the remaining installments after the income arises.
- **Income from Lottery, Horse Races, etc.**: Advance tax (after considering TDS, if any) on such incomes should be paid immediately after earning the income.
- **Business Income**: Individuals with business income need to estimate their profits accurately to determine the advance tax liability.

Conclusion

Advance tax is a crucial component of the income tax system in India, designed to ensure timely payment of taxes and efficient revenue collection for the government. It helps taxpayers by reducing the burden of lump-sum payments at the end of the financial year and avoiding interest and penalties for late payments. Proper calculation and timely payment of advance tax reflect good financial discipline and compliance with tax laws.

Topic

Module 5: Goods and Services Tax (GST) Laws

INTERMEDIATE

Group I - Paper-7B

Indirect Taxation (IDT)

Tax Invoice

Tax invoices are essential documents under the Goods and Services Tax (GST) system, serving as a legal record of transactions between registered taxpayers. In this comprehensive note, we will explore the concept of tax invoices under GST, their significance, requirements, and implications for businesses and taxpayers.

An invoice is a commercial instrument issued by a seller to a buyer. It identifies both the trading parties and lists, describes, and quantifies the items sold, shows the date of shipment and mode of transport, prices and discounts, if any, and delivery and payment terms. In certain cases, (especially when it is signed by the seller or seller's agent), an invoice serves as a demand for payment and becomes a document of title when paid in full. An invoice does not bring into existence an agreement but merely records the terms of a pre-existing agreement (oral or written). An invoice can be understood as a document that is meant to serve a particular purpose.

Introduction to Tax Invoices under GST

Under GST a tax invoice is an important document.

- It not only evidences supply of goods or services, but is also an essential document for the recipient to avail Input Tax Credit (ITC). A registered person cannot avail input tax credit unless he is in possession of a tax invoice or a debit note.
- GST is chargeable at the time of supply. Invoice is an important indicator of the time of supply. Broadly speaking, the time of supply of goods or services is the date of issuance of invoice or receipt of payment whichever is earlier. However, a special procedure for payment of tax has been prescribed for registered persons (other than composition dealers) supplying goods. Such category of persons (suppliers of goods other than composition dealers) need to pay GST only at the time of issue of invoice irrespective of when they receive payment.

Suffice it to say, that the tax invoice is the primary document evidencing the supply and is vital for availing input tax credit.

The GST Law requires that an invoice – tax invoice or bill of supply – is issued on the occurrence of a certain event, being a supply, within the prescribed timelines. Therefore, an invoice, among other documents is required to be issued for every form of supply such as sale, transfer, barter, exchange, license, rental, lease or disposal. This chapter provides an understanding of the various documents required to be issued under the GST law, timelines to issue such document and the contents of every such document. It is to be noted that GST Law does not prescribe any specific format of invoice but mandates that certain field or information should be incorporated in the invoice.

Significance of Tax Invoices

Tax invoices serve several important purposes in the GST framework:

- **Legal Compliance**: Tax invoices are mandated by law under the GST regime, and failure to issue proper invoices can lead to penalties and legal consequences.
- **Input Tax Credit (ITC)**: Tax invoices are necessary for claiming ITC, as they provide evidence of tax paid on inputs and input services used in the course of business.
- **Audit and Verification**: Tax authorities rely on tax invoices to audit and verify the accuracy of tax returns filed by taxpayers, ensuring compliance with GST laws and regulations.

Key Components of a Tax Invoice

A tax invoice under GST must contain specific details to be considered valid. These include:

- **Supplier's Details**: Name, address, GSTIN (Goods and Services Tax Identification Number), and State code of the supplier.
- **Recipient's Details**: Name, address, GSTIN (if registered), and State code of the recipient.
- **Invoice Number and Date**: A consecutive serial number and date of issue of the invoice.
- **Description of Goods or Services**: Details such as quantity, unit price, total value, and applicable GST rate for each item supplied.
- **Taxable Value and Tax Amount**: Separate disclosure of the taxable value, CGST (Central Goods and Services Tax), SGST (State Goods and Services Tax), IGST (Integrated Goods and Services Tax), and cess, if applicable.

- **Place of Supply**: Indicates whether the supply is intra-state (within the same state) or inter-state (between different states).
- **Shipping and Billing Address**: If different from the supplier's and recipient's addresses.
- **Payment Terms**: Terms and conditions of payment, including payment due date and mode of payment.

Types of Tax Invoices

Under GST, there are different types of tax invoices based on the nature of the transaction:

- **Tax Invoice**: Issued for taxable supplies of goods or services.
- **Bill of Supply**: Issued when GST is not applicable or when the supplier is registered under the composition scheme.
- **Credit Note**: Issued to reduce the taxable value or tax amount in case of goods returned or services cancelled.
- **Debit Note**: Issued to increase the taxable value or tax amount due to additional goods supplied or services provided.

Timeline for issuance of invoice

In general, time of issue of tax invoice for:

- **Supply of Goods**: A registered person supplying taxable goods shall issue a tax invoice, before or at the time of:

Where the supply involves the movement of goods	Removal of goods for supply to the recipient
Where the supply does not involve the movement of goods	Delivery of goods or making available thereof to the recipient

- **Supply of Services**: Invoice is required to be issued within 30 days from the date of the supply of service. However, in the case of an insurance/ banking company or a financial institution, including NBFC, the invoice is required to be issued within 45 days

Implications for Businesses and Taxpayers

For businesses and taxpayers, compliance with tax invoice requirements under GST is crucial for several reasons:

- **Input Tax Credit (ITC) Claim**: Proper maintenance and issuance of tax invoices enable businesses to claim ITC, reducing the overall tax liability.
- **Audit and Assessment**: Tax authorities may conduct audits or assessments based on tax invoices to verify the accuracy of tax returns and ensure compliance with GST laws.
- **Legal Compliance**: Failure to issue valid tax invoices or maintain proper records can lead to penalties, interest, and other legal consequences.
- **Business Relationships**: Clear and accurate tax invoices enhance transparency and trust in business transactions, fostering better relationships with customers and suppliers.

Conclusion

Tax invoices are fundamental documents under the GST regime, serving as the backbone of the tax system by providing evidence of transactions and enabling the claiming of input tax credit. Businesses must understand the requirements and significance of tax invoices to ensure compliance with GST laws and regulations. By issuing proper tax invoices, businesses can streamline their operations, minimize tax risks, and contribute to the overall efficiency and integrity of the GST system.

Topic

Module 5:
Methods of Costing
Module 6:
Cost Accounting Techniques

INTERMEDIATE

Group I - Paper-8

Cost Accounting (CA)

BUDGET AND BUDGETARY CONTROL

The main objective of Cost Accounting are to provide necessary information relating to the management for planning and control. Budgetary control is used widely for assisting management in planning and control. Budget is a plan expressed in terms of money. It is prepared and approved prior to the budget period and may show income expenditure and capital to be employed may be drawn up showing incremental effects on formal budgeted or actual figures to be complied by zero-based budgeting.

Almost every year a question is set in the examination. You should first learn how to prepare Cash budget, Purchase budget, Sales budget, Production budget, Expenditure budget, etc. Master budget is to be prepared by considering the result of functional budgets. Flexible budgets are prepared to show to show the expenditure appropriate to various levels of output in the same period.

Budgetary Control is designed to assist management in carrying out its functions by allocating responsibility and authority, to aid in making plans and estimates for the future and to assist in the analysis of variation between the actual and estimates in order to develop the basis for measurement with standard for the purpose of measuring efficiency of operations.

The following steps are necessary for a good budgetary control system:-

1) Dividing the organization according to function, known as budget center .
2) Preparation of separate budget for each center.
3) Coordination between the centers for establishing the responsibilities .
4) Measurement of actual performance.
5) Comparison of actual performance with the budget in order to develop the deviations or variances.
6) Analysis of variances into its possible causes for motivating the right people to take right action at right time.
7) Taking remedial action or to readjust the budgeted estimates.

Functional Budgets:

There are various types of functional budgets depending on the size and policy of the organisation . The functions are like production , sales , administration, research and development , capital expenditure , plant utilization , personal, maintenance , and different cost budgets. , Cash budget, Master Budget etc.

Cash Budget:

Cash Budget is the forecast of cash receipts and payments for a given period . This budget is prepared after the preparation of all functional budgets. for efficient running of a business the anticipated cash requirements should be known well in advance. Failure to meet the said requirements will lead to irreparable loss to the company"s reputation. In most cases monthly or quarterly cash forecast for the budget period are made but it can also be prepared for a week or a day according to the business requirements.

Master Budget:

It is a budget which summarises all the functional budgets of an organization a muster budget normally includes:

a) A budgeted Profit and Loss Accounts..
b) Budgeted Profit And Loss Appropriation account.
c) Budgeted Balance Sheet.
d) A Budgeted Cash Flow Statement.

Here I am giving an example of Cash Budget problem and its solution.

PROBLEM:-

Based on the following informations, prepare a Cash Budget for Sima & Sons.

	1st Qtr .(₹)	2nd Qtr. (₹)	3rd Qtr. (₹)	4th Qtr. (₹)
Opening Cash Balance	10,000			
Collection from customers.	1,25,000	1,50,000	1,60,000	2,21,000
Payments-				
Purchase of materials	20,000	35,000	35,000	54,200
Other Expenses	25,000	20,000	20,000	17,000
Salary and Wages	90,000	95,000	95,000	1,09,200
Income Tax	5,000			
Purchase of machinery				20,000

The Company desires to maintain a cass balance of ₹ 15,000 at end of each quarter. Cash can be borrowed or repaid in multiples of ₹ 500 at an interest of 10% per annum. Management does not want to borrow cash more than what is necessary and wants to repay as early as possible. In any event, loans cannot be extended beond four quarters. interest is computed and paid when the principal is repaid . assume that borrowings taken place of the beginning and repayments are made at the end of the quarter.

Above problem can be solved in the following way:

Cash Budget for Sima & Sons. Ltd.

	1st Qtr .(₹)	2nd Qtr. (₹)	3rd Qtr. (₹)	4th Qtr. (₹)
Opening Cash Balance	10,000	15,000	15,000	15,325
Collection from customers.	1,25,000	1,50,000	1,60,000	2,21,000
(A) Total Receipts	1,35,000	1,65,000	1,75,000	2,36,325
Payments:				
Purchase of materials	20,000	35,000	35,000	54,200
Other Expenses	25,000	20,000	20,000	17,000
Salary and Wages	90,000	95,000	95,000	1,09,200
Income Tax	5,000			
Purchase of machinery				20,000
(B) Total payments	1,40,000	1,50,000	1,50,000	2,00,400
Minimum Cash balance	15,000	15,000	15,000	15,000
Total Cash required	1,55,000	1,65,000	1,65,000	2,15,400
Excess / Deficit	(20,000)	Nil	10,000	20,925
(C) Borrowing	20,000			
Re-payments			9,000	11,000
Interest Payments (Note 1)			625	1,100
(D) Total			9,675	12,100
Closing Cash Balance (A+B + C – D)	15000	15000	15325	23825

Note: As given in Problem, interest is computed and paid when the principal is repaid. Borrowing is at the beginning of the Quarter and repayment made at the end of the quarter as given in the question.

₹ 20,000 borrowed at the beginning of the first quarter.

₹ 9,000 re-payment made at the end of the third quarter.

Interest is computed and paid when the principal is repaid.

Hence the interest on 9,000 for 3 quarters at 10% is calculated as: 9,000 × 9/12 × 10/100 = ₹ 675.

₹ 11,000 repaid at the end of 4th quarter. Hence interest on ₹ 11,000 for four quarters i.e., for one year at 10% will be ₹ 1,100.

Concept of Process Costing

Process costing is such a separate method of costing which refers to a costing of operations or process involved in converting raw material into finished goods or products. It is suitable for those types of business where continuous and mass production of homogeneous products are produced.

In process costing particular attention is given to : (a) cost relating to the process, (b)period for which cost for the process is collected, (c) complete and incomplete units produced during the period and (d) unit cost of the process for the period.

Features of Process Costing

(i) The products are produced in one or more process.

(ii) The products are of standardised and homogeneous nature.

(iii) When a products is produced through more than one process, then the output of each process will be input of the next process.

(iv) The cost of one process is transferred to next process.

(v) The total cost of each process after deducting Scrap value is divided by the total Production units to obtain Cost Per Unit in the process

Normal Loss, Abnormal Loss and Abnormal Gain

Normal Loss: Normal Loss means that loss which is inherent in the processing operations.It can be expected or anticipated in advance . i.e. at the time of estimation.

Accounting treatment: The cost of normal loss is considered as part of the cost of production in which it occurs . If normal loss units have any realisable scrap value ,the process account is credited by that amount. If there is no abnormal gain , then there is no necessity to maintain a separate account for normal loss.

Journal Entry :

(i) Normal Loss A/c …Dr

To Process A/c

(ii) Cost Ledger Control A/c (scrap value) …Dr

To Normal Loss

Abnormal Loss: Abnormal loss means that loss which is caused by unexpected or abnormal conditions such as accident, machine breakdown, substandard material etc. From accounting point of view we can say that Abnormal loss is that loss which occurred over and above normal loss.These losses are segregated from process costs and investigated to prevent their occurrence in future.

Process account is to be credited by abnormal loss account with cost of material, labour and overhead equivalent to good units and the loss due to abnormal is transferred to Costing Profit and Loss Account.

Journal Entries:

(i) Abnormal Loss A/c …Dr.

To Process A/c

(ii) Cost Ledger Control A/c (scrap valu …Dr

Costing Profit & Loss A/c …Dr

To Abnormal Loss

Abnormal Gain: If the actual loss of a Process is less than that of expected loss then the difference between the two will be treated as abnormal gain. In another way we can define it as the difference between actual production and expected production.

Accounting Treatment: The value of abnormal gain is transferred to the debit side of the relevant process and ultimately closed by crediting it to the Costing Profit and Loss Account.

Journal Entries:

(i) Process A/c …Dr

To Abnormal Gain

(ii) Abnormal Gain A/c …Dr

To Normal Loss

To Costing Profit & Loss A/c

Application of Process Costing

Process costing can be used in a large variety of industries. It is very suitable for such industries where the product is manufactured through a continuous sequence of operations.

Generally, the process costings are used in the following types of industries :

(i) Textile and Chemical Industries.

(ii) Manufacturing Industries like iron and steel, cement, paper mill, soap-making etc.

(iii) Mining Industries-coal, oil etc.

(iv) Public utility services-such as gas, electricity, water supply etc.

Basic Approach/ Procedure

1. The industry should be divided into distinct process centre and an account should be maintained for each process centre.
2. All costs relating to each process are recorded at the end of the period.
3. Average cost per unit is found out by dividing total cost of each process by total production.

   In order to get average unit cost, normal loss in production and incomplete units at the beginning and at the end of the period are taken into consideration.
4. Cost of one process is transferred to the subsequent process so that total cost and unit cost of products are accumulated.

Advantages of Process Costing

1. Costs are computed at the end of a particular period.
2. Average costs are easily computed.
3. It involves less clerical work than job costing.
4. Cost data are available process or department-wise for exercising managerial control.
5. It helps the management in determining or fixing up price quotations.

Limitations of Process Costing

(i) The whole concept of Process Costing is based on average cost and therefore these are not of much use for effective control.

(ii) Computation of average cost becomes more complicated when more than one type of product is produced.

(iii) Process costing system presumes that production activity of a factory is divided according to processes or departments. A process or department is an organisational entity or section of a firm, in which specific and repetitive work is done. Thus process becomes a practical unit in a plant for purpose of supervision of production. Often Process is an unsatisfactory unit for cost accounting purpose.

Topic

Module 7:

Economics of Maintenance and Spares Management

INTERMEDIATE

Group II - Paper-9

Operations Management and Strategic Management (OMSM)

Operations Management

In this issue we will discuss Replacement of Machines with some numerical problems

All we know that in any establishment replacement of existing equipment is called for whenever new equipment offers more efficient or economical service than old one. The problem, in such situation, is to determine the best policy to be adopted with respect to replacement of the equipment. The replacement theory of machines provides answer to this question in terms of optimal replacement period. We apply the replacement theory in the following situations:

- Replacement policy for equipment which deteriorates gradually
- Replacement of items that fail suddenly
- Self-Replacement

Illustration1: (Replacement policy for equipment which deteriorates gradually)

A firm is using a machine whose purchase price is ₹15,500, The machine was installed for which an installation cost ₹6,100 was incurred. The scarp value of the machine was estimated at ₹4,100.The yearly maintenance cost of the machine are given in the following table:

Year:	1	2	3	4	5	6	7	8	9
Cost (₹)	350	850	1100	1600	2200	3000	4100	4900	6100

We want to determine after how many years the machine should be replaced on economic considerations, assuming that the machine can be replaced only at year end.

Answer:

Cost of the machine

Scrap value of the machine = ₹4100

We can find out the optimum replacement period as detailed in the following table:

Year	Maintenance Cost	Cumulative Maintenance Cost	C - S	T (n)	A (n)
1	350	350	17500	17850	17850
2	850	1200	17500	18700	9350
3	1100	2300	17500	19800	6600
4	1600	3900	17500	21400	5350
5	2200	6100	17500	23600	4720
6	3000	9100	17500	26600	4433.333
7	4100	13200	17500	30700	4385.714
8	4900	18100	17500	35600	4450
9	6100	24200	17500	41700	4633.333

T (n) = Total cost of owning and maintain the machine for n years.

A (n) Average cost = T (n)/n

Our policy will be to determine the optimal replacement period that would be corresponding to which A (n) would be the minimum. In our table above, A (n) is minimum corresponding to 7 th year, So our machine needs to be replaced at the end of 7 th year.

In replacement analysis we do not view machine or equipment as a capital investment decision.

Illustration 2:

A machine costs ₹6000. Its maintenance cost is ₹2000 in each of the first four years and then it increases by ₹400 every year. Assuming that the machine has no salvage value and the maintenance cost is incurred in the beginning of each year, determine the optimal replacement time for the machine assuming that the time value of money is 10% p.a.

Answer:

Cost of the machine

Scrap value of the machine = ₹0

We can find out the optimum replacement period as detailed in the following table:

Year	Maintenance Cost	p.v. Factor	Present value of Maintenance Cost	Cumulative p.v. Maintenance Cost	Cost + Cum. Maintenance Cost	Cumulative p.v. Factors	Annualised
1	2000	1	2000	2000	8000	1	8000
2	2000	0.9091	1818.182	3818.18	9818.18	1.9091	5142.85714
3	2000	0.8264	1652.893	5471.07	11471.07	2.7355	4193.35347
4	2000	0.7513	1502.630	6973.70	12973.70	3.4869	3720.74984
5	2400	0.6830	1639.232	8612.94	14612.94	4.1699	3504.41434
6	2800	0.6209	1738.580	10351.52	16351.52	4.7908	3413.11704
7	3200	0.5645	1806.317	12157.83	18157.83	5.3553	3390.65334
8	3600	0.5132	1847.369	14005.20	20005.20	5.8684	3408.95945
9	4000	0.4665	1866.030	15871.23	21871.23	6.3349	3452.48399
10	4400	0.4241	1866.030	17737.26	23737.26	6.7590	3511.93626

Annualised cost is obtained by

In this table we compare the second column wherein values are constantly increasing with the last column where the values first decreased and then increase. Observing this we should decide to replace the machine in the latest year that the last column value exceed the corresponding second column value. Hence year 7 is the last where maintenance cost < than annualised quantum. After that maintenance cost > than annualised quantum. Year 7 is the year in which the annualised cost is minimum. Thus optimal replacement interval for the machine is 7 years.

Our decision will not be changed if maintenance is incurred at the end of each year. The details are shown in the table below:

Year	Maintenance Cost	p.v. Factor	Present value of Maintenance Cost	Cumulative p.v. Maintenance Cost	Cost + Cum. Maintenance Cost	Cumulative p.v. Factors	Annualised
1	2000	0.9091	1818.182	1818.182	7818.18	0.9091	8600
2	2000	0.8264	1652.893	3471.07	9471.07	1.7355	5457.14286
3	2000	0.7513	1502.630	4973.70	10973.70	2.4869	4412.68882
4	2000	0.6830	1366.027	6339.73	12339.73	3.1699	3892.82482
5	2400	0.6209	1490.211	7829.94	13829.94	3.7908	3648.30388
6	2800	0.5645	1580.527	9410.47	15410.47	4.3553	3538.35743
7	3200	0.5132	1642.106	11052.58	17052.58	4.8684	3502.6927
8	3600	0.4665	1679.427	12732.00	18732.00	5.3349	3511.20164
9	4000	0.4241	1696.390	14428.39	20428.39	5.7590	3547.19702
10	4400	0.3855	1696.390	16124.78	22124.78	6.1446	3600.70648

Illustration 3:

The data on the operating costs per year and resale price of equipment X whose purchase price is ₹12,000 are given below:

Year	1	2	3	4	5	6	7
Maintenance Costs (₹)	2500	2900	3300	3900	4600	5500	6500
Resale Value (₹)	6000	3500	2250	1600	1400	1400	1400

Required (a) Optimum period of replacement; (ii) when equipment X is 3 years old, equipment Y which is a new model for the same usage, is available. The optimum period for replacement is 4years with an average cost of ₹4600. Should we change equipment X with Y? If so when?

Answer:

Computation of the optimal period of replacement of equipment X is given below:

Year	Maintenance Cost	Cumulative Maintenance Cost	C - S	T (n)	A (n)
1	2500	2500	6000	8500	8500
2	2900	5400	8500	13900	6950
3	3300	8700	9750	18450	6150
4	3900	12600	10400	23000	5750
5	4600	17200	10600	27800	5560
6	5500	22700	10600	33300	5550
7	6500	29200	10600	39800	5685.714

Since the average cost corresponding to the 6 yearly is the least, the optimal period for replacement is 6 years.

As the minimum average cost for equipment Y (₹4600) is smaller than that for equipment X (₹5550), it is prudent to change the equipment. To decide the time of change, we would determine the cost of keeping the equipment in the 4th, 5th and 6th year of life and compare each of these values with ₹4600. The equipment shall be kept as long as the marginal cost of holding it would be smaller than the minimum average cost of equipment Y. In the computation depreciation is The computation is —

Year	Maintenance Cost	Depreciation	Total
4	3900	650	4550
5	4600	200	4800
6	5500	0	5500

Since keeping old equipment beyond 4th year attracts more cost, so X needs to be replaced with Y after 4th year.

Illustration 4: (Replacement of items that fail suddenly)

A large establishment has an installation with 2000 bulbs of a certain type. From the past experience it has observed the failure rates of these bulbs as detailed below:

End of week	1	2	3	4	5
Probability of failure to date	0.10	0.25	0.5	0.7	1.00

It is given that the cost of replacing an individual bulb is ₹3, while if the entire group of bulb is replaced the cost would be R1 per bulb. It is decided to replace all the bulbs simultaneously at fixed intervals of time and also to replace the individual bulbs that fail between.

Assuming that all the bulbs failing during a week might fail at any time of the week and that the group replacements can be made only at the end of a week, determine the optimal interval between the group replacements. Also establish if the policy, as determined by you, adopted is superior to the policy of replacing bulbs as and when they fail, there being nothing like group replacement.

Answer:

From the given information we first find out the probability of failure of a bulb during a current week of its life as follows:

End of week	1	2	3	4	5
Probability of failure to date	0.10	0.25	0.5	0.7	1.00
Probability of failure of a bulb during a current week of its life	0.10	0.15	0.25	0.20	0.30

From the above it is observed that 10% of the bulbs are expected to be failed during the first week of their life. In a lot of 2000 bulbs, therefore, 200 bulbs are expected to be failed in the first week.

Similarly out of 2000 bulbs, 300 bulbs are expected to be failed in 2nd week of their life (15%), 500 bulbs are expected to be failed in 3rd week of their life (25%), 400 bulbs are expected to be failed in 4th week of their life (20%), and 600 bulbs are expected to be failed in 5th week of their life (30%).

Now out of 200 bulbs failed in 1st week, 10% i.e. 20 bulbs are expected to be failed in the 1st week of their life i.e. effectively in 2nd week. 15% in second week of their life i,e, effectively in 3rd week and so on.. And a series will be formed.

Now in 2nd week total failure will be 300 +10% of 200 of first week i.e.320. 10% of this 320 i.e. 32 are expected to be failed in 1st week i.e. effectively third week and so on. Another series will be formed. Therefore total failure expected in a week will generate a series of failure. The details are as follows:

Year	1	2	3	4	5	6	7
Probability of failure of a bulb during current week	0.1	0.15	0.25	0.2	0.3		
Number of bulbs expected to be failed out of lot 2000	200	300	500	400	600		
Number of bulbs expected to be failed							
out of 200 failed in 1st week		20	30	50	40	60	
out of 320 failed in 2nd week			32	48	80	64	96
out of 562 failed in 3rd week				56.2	84.3	140.5	112.4
out of 554.2 failed in 4th week					55.42	83.13	138.55
out of 859.72 failed in 5th week						85.972	128.958
							43.3602
	200	320	562	554.2	859.72	433.602	519.2682

No of failures oscillate until finally it would settle to a steady state.

Now we can determine the total and average costs associated with the policy of replacing bulbs every weeks, every two weeks and so on. Details are as follows:

	No of Individual	Cost of Replacements			
Upto week	Replacements	Individual	Group	Total	Average Cost
1	200	600	2000	2600	2600
2	520	1560	2000	3560	1780
3	1082	3246	2000	5246	1748.7
4	1636.2	4908.6	2000	6908.6	1727.2
5	2495.92	7487.76	2000	9487.76	1897.6
6	2929.52	8788.566	2000	10788.6	1798.1
7	3448.79	10346.371	2000	12346.4	1763.8

From the table, it is clear that the minimum cost per week is obtained by replacing all bulbs together (whether failed or not) after every 4th week. Thus optimal replacement time interval is 4 weeks.

It is assumed that a bulb can fail at any time during the week, the mean life of a bulb can be obtained as follows:

Life in weeks (X_i)	Probability (p_i)	$p_i x_i$
0.5	0.1	0.05
1.5	0.15	0.225
2.5	0.25	0.625
3.5	0.2	0.7
4.5	0.3	1.35
	Total	2.95

Mean life of a bulb = 2.95 weeks

Expected number of failures during a week = $\frac{\text{Number of Bulbs}}{\text{Mean life}} = \frac{2000}{2.95} \sim 678$

Weekly replacement cost = Expected Number of failures (replacements) * Cost of a replacement = 678 * 3 = 2034

Since the cost of the policy of individual replacement (₹2034) is higher than that of group replacements, it is advisable to adopt group replacements.

Suggestions:

This lesson is prepared purely from teachings imparted by the Guide book issued by Institute. The study guide on Operations Management issued by Institute is to be studied thoroughly to understand concept of Replacement of machines. For supplementary readings one can refer Operations Management by R.S. Russell & B.W. Taylor, Operations Management by J Stevenson.

Topic

Module 5:

Accounting Standards

Module 8:

Auditing of Different Types of Undertakings

INTERMEDIATE

Group II - Paper-10

Corporate Accounting and Auditing (CAA)

Section A: Corporate Accounting

Topic: Accounting Standards (Ind AS 33 – Earnings Per Share)

- **Meaning of Earnings Per Share (EPS)**

  Earnings per share is the ratio of earnings available to equity shareholders to total number of equity shares. It indicates the amount of earnings for each equity share.

- **Objectives of Ind AS 33, *Earnings Per Share***

  The objective of this Standard is to prescribe principles for the determination and presentation of earnings per share, so as to improve performance comparisons between different entities in the same reporting period and between different reporting periods for the same entity.

- **Basic Earnings Per Share (BEPS)**

  An entity shall calculate basic earnings per share amounts for profit or loss attributable to ordinary equity holders of the parent entity and, if presented, profit or loss from continuing operations attributable to those equity holders.

  Basic earnings per share shall be calculated by dividing profit or loss attributable to ordinary equity holders of the parent entity (the numerator) by the weighted average number of ordinary shares outstanding (the denominator) during the period.

  The objective of basic earnings per share information is to provide a measure of the interests of each ordinary share of a parent entity in the performance of the entity over the reporting period.

  (a) **Meaning of Earnings**

  For the purpose of calculating basic earnings per share, the amounts attributable to ordinary equity holders of the parent entity in respect of:

  (a) profit or loss from continuing operations attributable to the parent entity; and

  (b) profit or loss attributable to the parent entity shall be the amounts in (a) and (b) adjusted for the after-tax amounts of preference dividends, differences arising on the settlement of preference shares, and other similar effects of preference shares classified as equity.

- **Weighted Average Number of Shares**

  For the purpose of calculating basic earnings per share, the number of ordinary shares shall be the weighted average number of ordinary shares outstanding during the period.

  The weighted average number of ordinary shares outstanding during the period and for all periods presented shall be adjusted for events, other than the conversion of potential ordinary shares, that have changed the number of ordinary shares outstanding without a corresponding change in resources.

  Ordinary shares may be issued, or the number of ordinary shares outstanding may be reduced, without a corresponding change in resources.

  Examples include:

  (a) a capitalization or bonus issue (sometimes referred to as a stock dividend);

  (b) a bonus element in any other issue, for example a bonus element in a rights issue to existing shareholders;

  (c) a share split; and

  (d) a reverse share split (consolidation of shares).

- **Diluted earnings per share**

  An entity shall calculate diluted earnings per share amounts for profit or loss attributable to ordinary equity holders of the parent entity and, if presented, profit or loss from continuing operations attributable to those equity holders.

  For the purpose of calculating diluted earnings per share, an entity shall adjust profit or loss attributable to ordinary equity holders of the parent entity, and the weighted average number of shares outstanding, for the effects of all dilutive potential ordinary shares.

  The objective of diluted earnings per share is consistent with that of basic earnings per share—to provide a measure of the interest of each ordinary share in the performance of an entity—while giving effect to all dilutive potential ordinary shares outstanding during the period.

For the purpose of calculating diluted earnings per share, an entity shall adjust profit or loss attributable to ordinary equity holders of the parent entity, as calculated in accordance with paragraph 12 of Ind AS 33, by the after-tax effect of:

(a) any dividends or other items related to dilutive potential ordinary shares deducted in arriving at profit or loss attributable to ordinary equity holders of the parent entity as calculated in accordance with paragraph 12;

(b) any interest recognised in the period related to dilutive potential ordinary shares; and

(c) any other changes in income or expense that would result from the conversion of the dilutive potential ordinary shares.

- **Comprehensive Problem on Diluted EPS**

The following information is available relating to Omega Ltd. for the financial year 2022-2023:

Net profit attributable to equity shareholders	₹90,000
Number of equity share outstanding	16,000
Average fair value of equity shares during the year	₹ 90

Potential Ordinary Shares:

Options	900 options with exercise price of ₹75
Convertible Preference Shares	7,500 shares entitled to a cumulative dividend of ₹9 per share. Each preference share is convertible into 2 equity shares.
10% Convertible Debentures of ₹100 each	₹10,00,000 and each debenture is convertible into 4 equity shares.

Tax rate applicable is 25%.

You are required to calculate Basic and Diluted EPS of the company for the financial year 2022-2023.

Solution:

(i) Calculation of Basic EPS

Particulars	₹
Net profit attributable to equity shareholders	90,000
Number of equity share outstanding	16,000
EPS = 90,000/16,000	5.625

Diluted EPS

Options are most dilutive as their earnings per incremental share is nil. Hence, for the purpose of computation of Diluted earnings per share, Options will be considered first, 10% convertible debentures being second most dilutive will be considered next and thereafter convertible Preference shares will be considered (**as per working notes**).

	Net Profit attributable to equity share holders	**No. of Equity shares**	**Net Profit attributable per share**	
Net Profit attributable to equity share holders	90,000	16,000	5.625	
Options		150		
	90,000	16,150	5.572	**Dilutive**
10% Convertible debentures	75,000	40,000		
	165,000	56,150	2.939	**Dilutive**
Convertible Preference shares	67,500	15,000		
	232,500	71,150	3.268	**Anti- dilutive**

Since Diluted earnings per share is increased when taking the convertible Preference shares into account (₹2.939 to ₹ 3.268), the convertible Preference shares are anti-dilutive and are ignored in the calculation of Diluted earnings per share for the year ended 31.3.2023. Therefore, Diluted earnings per share for the year ended 31.3.2023 is 2.939.

Working Notes:

	Increase in earnings (1)	Increased in number of equity shares (2)	Earnings per incremental share	Rank
	₹		₹	
Options	Nil	[900 x (90-75)/90] = 150	Nil	1
Convertible Preference shares	67,500 (9 x 7,500)	15,000 (2 x 7,500)	4.50	3
10% convertible debentures	75,000 [10,00,000 x 10% x (1-0.25)]	40,000 (10,000x4)	1.875	2

Section B: Auditing

Topic: Auditing of Different Types of Undertakings

Question:

Briefly discuss the receipts related aspects to be considered while auditing a hospital.

Answer:

The following points, the auditor shall take into consideration:

Receipts related aspects

1. Cash collections: The auditor should check the cash collections as entered in the cash book, with the receipt counterfoils and other evidence. He should also check the bill registers of patients to see that the bills have been correctly prepared.
2. Free bed facility: He should see that bills have been issued to all patients from whom any amount was recoverable according to the rules of the hospital. He should also ensure that free bed facilities were extended to the patients only in terms of hospital regulations.
3. Income from property and investments: The auditor should refer to the properties and investment registers to see that all the incomes that should have been recovered by way of rent from properties, dividend and interest on securities, etc. have been collected.
4. Legacies and donations: He should also ascertain those legacies and donation received for a specific purpose has been so utilized.
5. Grants received: The auditor should verify that the grants received, if any, have been duly accounted for. He should also ensure that the refund in respect of taxes deducted has been claimed.
6. Income from other sources: The auditor should verify the income of the hospital from any other sources, with reference to the source of income, e.g. X-rays lab, blood testing lab, etc.

Topic

Module 6: Working Capital Management

Module 9: Data Processing, Organisation, Cleaning and Validation

INTERMEDIATE

Group II - Paper-11

Financial Management and Business Data Analytics (FMDA)

Subject: Financial Management and Business Data Analytics

Financial Management

Inventory Management

The management of inventory is different from the management of other current assets in that virtually all the functional areas are involved. The job of the finance manager is to reconcile the conflicting viewpoints of the various functional areas regarding the appropriate inventory levels. The objectives of inventory management consist of two counterbalancing parts:

(i) to minimise investments in inventory and

(ii) to meet the demand for products by efficiently organising the production and sales operations.

In operational terms, the goal of inventory management is to have a trade-off between these two conflicting objectives which can be expressed in terms of costs and benefits associated with different levels of inventory.

There are four decision areas in inventory management:

(i) classification problem,

(ii) order quantity problem,

(iii) order point problem and

(iv) safety stock.

Economic order quantity (EOQ) model is the inventory management technique for determining optimum order quantity which is the one that minimises the total of its order and carrying costs; it balances fi xed ordering costs against variable ordering costs

Methods of Determination of Optimal level of Holding Cash

The optimal level of cash holding by a company can be determined with the help of the following models:

1. **Inventory Model (Economic Order Quantity) to Cash Management (Baumol Model):**

   Baumol Model is a model that provides for cost-efficient transactional balances and assumes that the demand for cash can be predicted with certainty and determines the optimal conversion size/ lot.

   $C = \sqrt{\frac{2AF}{0}}$

   Where,

   C = Optimum Cash Balance (Transaction Size)

   A = Annual or Monthly Cash Disbursement

   F = Fixed Cost per transaction

   O = Opportunity cost of one rupee per annum

2. **Stochastic (Miller-Orr) Model**

   Miller-Orr model is a model that provides for cost-efficient transactional balances and assumes uncertain cash flows and determines an upper limit and return point for cash balances.

   The optimal point of cash balance (Z) is determined by using the formula:

   $Z = \left(\frac{3}{4} X \frac{c\sigma^2}{k}\right)^{1/3}$

   Where,

   Z = Target cash balance (Optimal cash balance)

   c = Transaction cost

   k = Interest rate

   σ = Standard deviation of net cash flows.

Example 1:

XYZ Ltd. requires 36,000 units of a product per year at cost of ₹ 100 per unit. Ordering cost per order is ₹ 250 and the carrying cost is 4.5% per year of the inventory cost. Normal lead time is 25 days and safety stock is NIL.

Assume 360 working days in a year.

(i) Calculate the Reorder Inventory Level.

(ii) Calculate the Economic Order Quantity (EOQ).

(iii) If the supplier offers 1% quantity discount for purchase in lots of 9,000 units or more, should the company accept the proposal?

Answer:

Annual Consumption = 36,000 (A)

Ordering Cost = ₹ 250 per order (O)

Carrying Cost = $\frac{4.5}{100} \times 100 =$ ₹ 4.5

Lead Time = 25 days

(i) Reorder Level = Lead Time × Daily Consumption

$= 25 \times \frac{36000}{360} = 2,500$ units

(ii) Economic Ordering Quantity (EOQ) = $\sqrt{\frac{2AO}{C}}$

$EOQ = \sqrt{\frac{2 \times 36,000 \times 250}{4.5}}$

EOQ = 2,000 Units

(iii) Evaluation of Profitability of Quantity Discount Offer:

(a) When EOQ is ordered

		(₹)
Purchase Cost	(36,000 units × ₹100)	36,00,000
Ordering Cost	[(36,000 units/2,000 units) × ₹ 250]	4,500
Carrying Cost	(2,000 units × ½× ₹4.5)	4,500
Total Cost		36,09,000

(b)When Quantity Discount is accepted

		(₹)
Purchase Cost	(36,000 units × ₹ 99*)	35,64,000
Ordering Cost	[(36,000 units/9,000 units) × ₹ 250]	1,000
Carrying Cost	(9,000 units × ½ × ₹ 99 x 4.5%)	20,048
Total Cost		35,85,048

*Unit Cost = ₹100
Less: Quantity Discount @ 1% = ₹1
Purchase Cost = ₹ 99

Advise – The total cost of inventory is lower if Quantity Discount is accepted. Hence, the company is advised to accept the proposal.

Example 2

The following information is available in respect of a M/s Prasant Trading:

(i) On an average, debtors are collected after 45 days; inventories have an average holding period of 75 days and creditors payment period on an average is 30 days.

(ii) The firm spends a total of ₹ 120 lakh annually at a constant rate.

(iii) It can earn 10 per cent on investments.

From the above information, compute: (a) the cash cycle and cash turnover, (b) minimum amounts of cash to be maintained to meet payments as they become due, (c) savings by reducing the average inventory holding period by 30 days.

Answer:

(a) Cash cycle = 45 days + 75 days – 30 days = 90 days (3 months)

Cash turnover = 12 months (360 days)/3 months (90 days) = 4.

(b) Minimum operating cash = Total operating annual outlay/cash turnover, that is, ₹ 120 lakh/4 = ₹ 30 lakh.

(c) Cash cycle = 45 days + 45 days – 30 days = 60 days (2 months)

Cash turnover = 12 months (360 days)/2 months (60 days) = 6.

Minimum operating cash = ₹ 120 lakh/6 = ₹ 20 lakh

Reduction in investments = ₹ 30 lakh – ₹ 20 lakh = ₹ 10 lakh

Savings = 0.10 3 ₹ 10 lakh = ₹ 1 lakh.

Data Analytics
(Data Processing, Organisation, Cleaning and Validation)

Data processing is the process of collecting, organizing, and manipulating digital data to create useful information. Data processing involves converting raw data into usable information such as graphs, text, charts, and other helpful tools.

Data processing is typically performed by data processors, data engineers, data scientists, and the like. The stages of data processing include: data collection, data preparation, data input, data output, and data storage. Today this field is heavily technical and analytical with an emphasis in communication and programming.

Trends of Data Processing

Following are the innovative trends and technologies are shaping the future of data processing:

1. **Cloud computing.** Data processing increasingly occurs in the cloud as organizations adopt cloud computing instead of running all resources on-premises. The emergence of serverless computing and function as a service also simplifies and optimizes data processing tasks in the cloud.
2. **Edge computing.** Another trend impacting data processing is edge computing, driven by internet of things device usage and the deployment of fifth-generation wireless (5G) communications. Edge computing processes data closer to its source, reducing latency and bandwidth and enabling real-time processing capabilities.
3. **Machine Learning (ML) and Artificial Intelligence (AI) integration.** The integration of

ML and AI with data processing technologies is accelerating. This integration allows the automation of data analysis, predictive modelling and decision-making processes.

4. **Privacy-preserving data Processing.** With rising concerns over data privacy and the tightening of regulations, technologies that support privacy-preserving data processing are increasingly important.

(source: https://www.techtarget.com/searchdatabackup/definition/data-processing)

Data Organization

Data organization is the process of putting data into groups and categories to make it easier to use so that it can be accessed, processed, and analyzed more quickly.

It enables us to organize the information so that it is simple to read and use. Working with or performing any analytics on raw data is challenging. So, to properly portray the data, we must arrange it.

Data Cleaning

Data cleaning is the process of identifying and fixing incorrect, incomplete, or irrelevant data in a dataset, table, or database. It's also known as data cleansing or scrubbing.

Importance of Data Cleaning

1. **Improves data quality:** Data cleaning helps to ensure data integrity, relevance, and accuracy.
2. **Prepares data for analysis:** Data cleaning is a key step in preparing data for business intelligence (BI) and machine learning (ML) applications.
3. **Protects privacy:** Data cleaning helps organizations adhere to data governance initiatives that protect privacy.
4. **Keeps data organized:** Regular data cleaning helps to keep data tidy and stored more effectively and securely.

Some steps in the data cleaning process include:

1. Removing duplicate information.
2. Correcting formatting, missing values, and spelling errors.
3. Modifying and removing incorrect and incomplete data fields.
4. Identifying and removing unrelated data.

Data Validation

Data validation is a process that checks the accuracy and quality of data before it is used, imported, or processed. It is a type of data cleansing that can be applied to any type of data.

Importance of Data Validation

1. It ensures data is consistent, accurate, and complete.
2. It prevents data loss and errors.
3. It ensures data from different sources conforms to business rules.

Topic

Module 5:
Transfer Pricing

Module 8 :
Divisional
Performance
Measurement

INTERMEDIATE

Group II - Paper-12

Management Accounting (MA)

Transfer Pricing

In the realm of cost and management accounting, transfer pricing is a vital mechanism for allocating costs and evaluating performance within multinational corporations. It involves setting prices for transactions of goods, services or intangible assets between different divisions or subsidiaries of an organization. The primary goal is to fairly allocate costs and accurately reflect the value of these transactions across various entities, supporting informed decision-making related to pricing, resource allocation, and performance assessment.

Methods and Techniques

Cost and management accountants utilize several methods to determine transfer prices that align with both the organization's strategic goals and regulatory standards. Traditional methods, such as the Cost-Plus Method—which applies a markup to production costs—are widely used. Additionally, advanced techniques like Activity-Based Costing (ABC) offer precision by allocating costs based on the specific activities driving them. By applying these methods, companies can derive transfer prices that not only reflect true costs but also provide valuable insights for managerial decisions.

Divisional Performance and Goal Congruence Challenges

Transfer pricing plays a crucial role in evaluating divisional performance, with cost and management accountants ensuring that transfer prices are consistent with corporate performance metrics and foster goal congruence across divisions. However, challenges arise when divisional managers focus on their own targets rather than the organization's broader objectives. Cost and management accountants must tackle these issues by designing performance measures that promote collaboration and support alignment with overall corporate goals.

Determining Inter-Departmental or Inter-Company Transfer Prices

Setting inter-departmental or inter-company transfer prices is essential for efficient resource allocation and seamless coordination among an organization's units. These prices should reflect the true cost of exchanged goods or services, accounting for production costs, overhead, and market conditions. Transparent, equitable transfer pricing structures allow for effective resource use and operational efficiency across the organization.

International Transfer Pricing

International transfer pricing brings unique challenges, given variations in tax regulations, currency exchange rates, and compliance requirements across different jurisdictions. Cost and management accountants must navigate these complexities to develop strategies that optimize tax efficiency while ensuring regulatory compliance. Their expertise in cost analysis and performance measurement enables multinational corporations to handle the intricacies of international transfer pricing and meet their strategic objectives.

Overall, transfer pricing is central to multinational business operations, employing various methods to ensure fairness and adherence to the arm's length principle. Techniques such as the Comparable Uncontrolled Price (CUP), Resale Price, Cost-Plus, and Profit Split Methods are common tools in setting transfer prices. However, these approaches must be carefully tailored to address divisional performance metrics and reinforce goal congruence. Further complicating matters, inter-departmental and international transfer pricing demand careful consideration to balance divisional profitability, resource allocation, tax law compliance, and alignment with corporate goals.

Multiple Choice Question (MCQ):

1. Transfer pricing in cost and management accounting primarily aims to:
   a) Maximize shareholder wealth
   b) Ensure fairness and accuracy in cost allocation
   c) Minimize tax liabilities
   d) Increase market share
2. What role do cost and management accountants play in determining transfer prices?
   a) Implementing tax strategies
   b) Evaluating market share
   c) Allocating production costs
   d) Analyzing financial statements

3. In the context of divisional performance, primary challenge transfer pricing presents is:

   a) Incentivizing collaboration

   b) Ensuring compliance with tax regulations

   c) Addressing goal congruence issues

   d) Minimizing production costs

4. Which factor becomes complex in international transfer pricing for multinational corporations?

   a) Navigating differences in tax regulations

   b) Allocating overhead costs

   c) Determining divisional performance metrics

   d) Setting transfer prices based on market conditions

5. Division R transfers its output to Division S at variable cost, charging a fixed annual fee representing R's fixed costs. This is known as:

   a) Dual pricing

   b) Negotiated transfer pricing

   c) Opportunity cost-based transfer pricing

   d) Two-part tariff transfer pricing

6. In cost and management accounting, transfer pricing is most closely associated with:

   a) Allocating indirect costs

   b) Assessing divisional performance

   c) Budgeting and forecasting

   d) Financial statement analysis

7. When divisional managers focus on their own performance objectives over organizational goals, it results in issues related to:

   a) Goal congruence

   b) Transfer pricing compliance

   c) Tax optimization

   d) Resource allocation

8. The problem of goal congruence in transfer pricing refers to:

   a) Ensuring compliance with tax regulations

   b) Maximizing shareholder wealth

   c) Minimizing production costs

   d) Aligning divisional goals with corporate objectives

9. Which transfer pricing approach applies when a division negotiates with another division to set the transfer price?

   a) Market-based transfer pricing

   b) Negotiated transfer pricing

   c) Cost plus transfer pricing

   d) Dual pricing

10. What is the key objective when determining inter-departmental transfer prices?

    a) Maximizing divisional profits

    b) Ensuring compliance with tax regulations

    c) Promoting collaboration and efficiency

    d) Reducing market competition

11. Which of the following situations is considered under negotiated transfer pricing?

    a) Divisions are not forced to purchase internally

    b) When external markets do not exist and market prices are unavailable

    c) To increase sales revenue

    d) For the existence of an export market

12. The Northern division of XYZ company sells goods to the Southern division. The external price in industry publications is ₹ 200 per ton plus ₹ 20 per ton for transportation. Eastern division's actual direct material cost is ₹ 100, direct labor is ₹ 50, and storage/handling is ₹ 40. The transfer price set by the company president is ₹ 218. This scenario illustrates:

    a) Market-based transfer pricing

    b) Negotiated transfer pricing

    c) Cost plus 20% transfer pricing

    d) Cost-based transfer pricing

Answer

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

True and False

1. Transfer prices should not motivate the divisional managers into maximizing the profitability of their divisions and making decisions that are in the best interests of the organizations as a whole.
2. Comparison of internal and external costs tends to keep internal costs, such as transfer pricing of intercompany goods or services, in line.
3. Multinational companies use transfer pricing to minimize their worldwide taxes, duties, and tariffs.
4. The decision-making and the performance evaluation objectives for establishing a transfer pricing system does not conflict with each other.
5. If Divisional Managers are given "absolute free hand" in decision making on Transfer Prices, there is a possibility that divisional goals may be pursued, ignoring overall Company interests.

Answer

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

Fill in the blanks

1. ______________ is the degree of freedom a division manager can exercise in decisions making.
2. Domestic transfer pricing is concerned with fairly compensating an _________ for products.
3. A company can choose a __________ to locate profit in a division in a country with a low corporate tax rate.
4. In most circumstances, where there is a ___________ market for an intermediate product, the current market price is the most suitable basis for setting the transfer price.
5. The __________ principle requires that compensation for any intercompany transaction conform to the level that would have applied had the transaction taken place between unrelated parties.

Answer

1. Autonomy
2. internal division
3. transfer price
4. perfectly competitive
5. arm's-length

Divisional Performance Measurement

As organizations grow, they often transition from centralized to decentralized structures to adapt to changing and dynamic needs. Decentralization empowers lower levels of management with decision-making authority, fostering responsiveness to local conditions.

Responsibility centers, including cost, revenue, profit, and investment centers, are established to monitor and evaluate performance. The degree of decentralization depends on factors like managerial style, growth requirements, and the nature of organizational activities.

Disadvantages of Decentralization:

- Risk of goal misalignment, as sub-unit managers may prioritize their own objectives over organizational goals.
- Greater need for communication, as decisions are made farther from the central office.
- Personnel challenges may arise, especially if managers find it difficult to delegate responsibilities.
- Higher implementation costs, including training expenses and the potential for suboptimal decision-making.

DuPont Methodology Overview:

The DuPont method, pioneered by the DuPont Corporation, analyzes financial performance by breaking down Return on Equity (ROE) into its components, offering a deeper understanding of underlying financial drivers. This analysis helps investors identify strengths and weaknesses.

Components of DuPont Analysis:

1. Operating Performance: Evaluates profitability by dividing net profit by total revenues, where healthy profit margins enhance ROE.
2. Asset Usage Performance: Measured through the Total Asset Turnover ratio, which reflects how effectively assets are used. Higher turnover boosts ROE.
3. Financial Leverage: The use of debt to finance assets, which can amplify ROE, though excessive leverage may increase financial risk.

Significance of DuPont Analysis:

- High net profit margins, efficient asset use, and appropriate leverage contribute to improved ROE.
- Helps divisional managers understand their segment's impact on ROE, guiding top management in capital allocation.
- Increasing ROE solely through leverage can heighten risk, so a balanced approach is advised.

Performance Measurement and ROI:

Effective performance measurement aligns with the organization's objective of maximizing shareholder wealth. Profit-based measures are common, yet they may not consider the cost of equity capital, leading to an incomplete assessment of value creation.

ROI as a Performance Measure:

Return on Investment (ROI) measures divisional profit relative to the assets used, enabling comparisons across divisions. It aids in planning for profit improvements, focusing on margin and turnover. ROI is widely used in financial reporting for aggregating and comparing performance, although it may encourage short-term thinking due to asset measurement challenges.

Residual Income (RI):

Definition: Residual Income (RI) is the profit remaining after deducting a cost of capital charge from divisional profit, providing a more comprehensive performance measure than ROI.

Calculation: RI = Divisional profit - (Capital charge rate × Divisional investment)

Advantages of RI:

- Prevents suboptimal decisions by accepting investments that exceed the cost of capital.
- Promotes growth by prioritizing opportunities with returns above the cost of capital, benefiting shareholder wealth.
- Emphasizes opportunity cost by accounting for the cost of capital in divisional decision-making.
- Aligns divisional actions with organizational interests, using the cost of capital as a benchmark.

Economic Value Added (EVA):

EVA is a value-based financial measure that evaluates whether a company generates returns exceeding its cost of capital.

Calculation: EVA = Net Operating Profit After Tax (NOPAT) - (Weighted Average Cost of Capital (WACC) × Economic Capital Employed)

Significance of EVA:

- Performance Measurement: Indicates if the company's economic profit surpasses shareholder expectations.
- Incentive Compensation: Forms the basis for incentive compensation, balancing short- and long-term results.
- Decision-Making: Provides insights for managers on strategies that enhance EVA.

Multiple Choice Question (MCQ):

1. What is the primary advantage of decentralization in organizational structures?

    a) Increased profitability

    b) Enhanced decision-making agility

    c) Higher central control

    d) Reduced operational costs

2. In a decentralized organization, responsibility centers include:

    a) Only profit and cost centers

    b) Cost, revenue, profit, and investment centers

    c) Only cost and revenue centers

    d) Profit and investment centers only

3. Which one is not the formula of ROE under DuPont analysis?

    a) Net Profit Margin × Asset Turnover Ratio × Financial Leverage

    b) (Net Income ÷Sales) × Asset Turnover Ratio × Financial Leverage

    c) Net Profit Margin × Asset Turnover Ratio × (Total Assets ÷Total Equity)

    d) Gross Profit Margin × (Sales ÷Total Assets) × Financial Leverage

4. What is a primary benefit of the DuPont analysis for organizations?

    a) Simplifies the ROI calculation

    b) Breaks down ROE for deeper financial insights

    c) Reduces the need for performance measurement

    d) Focuses solely on net profit

5. In the DuPont analysis, which component assesses how efficiently assets are utilized?

    a) Operating performance

    b) Financial leverage

    c) Asset usage performance

    d) Cost control

6. A company has Net profit Margine is 0.25, total asset turnover is 1.6 times and equity multiplier is 2.5 Calculate ROE as per Du Pont analysis.

    a) 0.625

    b) 4

    c) 1

    d) 1.5

7. Return on investment (ROI) calculated as

    a) (Profit before interest and tax ÷ Operations management capital employed) × 100

    b) (Profit after tax ÷ Operations management capital employed) × 100

    c) (Profit before interest and tax ÷ Operating profit) × 100

    d) (Profit after interest and before tax ÷ Operating profit) × 100

8. Residual Income (RI) can be calculated as

    a) (Profit before interest and tax ÷ Operations management capital employed) × 100

    b) Divisional profit - (Percent capital charge × Divisional investment)

    c) Divisional profit + (Percent capital charge × Divisional investment)

    d) (Profit after interest and before tax ÷ Operating profit) × 100

9. Economic Value Added (EVA) measures whether:

    a) Returns exceed the cost of capital

    b) An organization is maximizing short-term profits

    c) Divisions are meeting cost targets

    d) Net income is positive

10. A company has gross margin of ₹ 258,000, Selling and administrative expense ₹ 210,000, net book

value of operating assets ₹ 2,80,000 and Minimum rate of return 12%. Calculate Residual Income from the above details.

a) 14400

b) 15000

c) 16000

d) 219240

11. What is one limitation of using ROI as a performance measure?

a) It may encourage short-term focus

b) It considers only long-term goals

c) It disregards profit margins

d) It emphasizes asset turnover excessively

12. Which component of the DuPont analysis involves using debt to finance assets?

a) Asset usage performance

b) Cost control

c) Operating performance

d) Financial leverage

Answer

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

True & False

1. Decentralization does not necessarily mean that a unit manager has the authority to make all decisions concerning that unit.
2. Even when functions and the decision-making authority for those functions are delegated, top management retains ultimate responsibility for decision outcomes.
3. In calculation of EVA the cost of debt should be considered as before tax.
4. Decentralization does not help the top management to recognize and develop managerial talent.
5. Negative EVA indicates that a company surpassed the expectations of its shareholders

Answer

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

Fill in the blanks

1. _________________ analysis is a multi-step framework of financial equations that provide insight into business's fundamental performance.
2. Economic Value Added = NOPAT – (WACC x ____________)
3. ___________ expresses divisional profit as a percentage of the assets employed in the division.
4. _______________ attempts to overcome the weakness in ROI by measuring the rupees amount of return that is provided to the company by a department or division.
5. Total Assets Turnover ratio depicts the efficiency of the company in using its_______.

Answer

1. DuPont
2. Capital Employed
3. ROI
4. Residual Income (RI)
5. assets

CMA FINAL COURSE

Syllabus 2022

Topic

Module 8:

Laws and Regulations related to Insurance Sector

FINAL

Group III - Paper-13

Corporate and Economic Laws (CEL)

INSURANCE

Type of Risks

Risk can be classified in to various categories. The major categories of risk are as follows:

1. *Pure & Speculative risks:* Pure risk is defined as a situation where there are only possibilities of loss or no loss. In contrast, speculative risk is defined as a situation where either profit or loss is possible
2. *Static & Dynamic Risks:* Static risks are risks concerned with losses caused by the irregular action of nature or by mistake or misdeed of human beings. In contrast, dynamic risks are risk associated with a changing economy.
3. *Fundamental & Particular Risks:* A Fundamental risk affects the entire economy or large number of people within the economy. In contrast , a Particular risk is a risk that affects only the individual and not the entire community or country

Methods of risk handling:

1. Risk Avoidance
2. Risk Transfer
3. Risk Retention
4. Loss Control
5. Insurance

Insurance can be of following types:

1. Insurance of Person
2. Insurance of Property
3. Insurance of Interest, &
4. Insurance of Liability

REINSURENCE:

Reinsurance is an extension of the basic principle of insurance of spreading the risk to make it bearable. As someone put it: Loss of one; is shared by many; and it does not break any. This insurance of Insurers, involves transfer of some part of risk assumed by a direct Insurer to a single or a group of re-insurers in a pre agreed manner.

OMBUDSMAN:

The ombudsman shall act as a councilor and as mediator in matters within its terms of reference. His decision as to whether the complaint is fit and proper for being considered by it or not shall be final. The ombudsman may receive & consider complaints relating to:

1. Any dispute regarding premium paid or payable.
2. Any dispute regarding delay in settlement of claim.
3. Any dispute on legal construction of the policy.
4. Non-Issue of insurance document.

GENERAL INSURANCE

A Contract of insurance will be valid if it satisfy the following clauses:

1. Offer & Acceptance
2. Consideration
3. Free consent and consensus ad-item
4. Capacity to contract
5. Legality of the object
6. Utmost Good Faith
7. Insurable Interest

Different Types of main General Insurance products are:

1. Motor Insurance Policy
2. Property Insurance Policy
3. Fire Insurance Policy
4. Burglary Insurance Policy
5. Health Insurance Policy
6. Travel Insurance Policy
7. Business Insurance Policy
8. Other General Insurance Policy

Export Credit Guarantee Corporation of India (ECGC)

ECGC Provides a range of credit risk insurance cover to exporters against loss in export of goods and services, offers guarantees to banks and financial institutions to enable exporters obtain better facilities from them, provides Overseas Investment Insurance to Indian companies investing in joint ventures abroad in the form of equity or loan.

LIFE INSURANCE

Basic Elements:

A life insurance product has two basic elements:

1. Risk Cover: benefit payable in the event of death
2. Savings: benefit payable in the event of survival

Life Insurance Plans that provide only risk cover during a specified period without any survival benefit are called TERM INSURANCE plans. Whole Life plans are effectively Term Insurance plans. Life Insurance Plans that provide for payment of policy monies only on survival of the specified period are called PURE ENDOWNMENT plans.

LAW OF INSURANCE

- there may be adverse consequence of happening of any event which may or may not happen
- happening of such event would result to substantantial loss to life or property
- insurancle is the mechanism by which a monetary compensation shall be payable to reduce/ substitute such loss
- person who may incur the loss is called insured, the person who pays the compensation is called the insurer

PROVISIONS RELATING TO INSURANCE BUSINESS

- **REGISTRATION**
  - o the law requires the regulatory authority to register insurers and suspend / renew their registration. this registration is to be renewed annually.
- **INVESTMENT OF FUNDS**
  - o the law states that the insurers shall not invest the fund of the policy holders outside India either directly or indirectly. the registered insurers to invest their asset only in those investments as approved under the act. returns are to be submitted periodically in prescribed form to IRDA. 75% of the investible surplus should be invested in the development of rural infrastructure.
- **AMALGAMATION AND TRANSFERS**
  - o no insurer to transfer his business to another promoter or another company without the express permission of IRA. if an insurer plans to transfer or amalgamate then he will have to follow a formula charted out in the law. in case an insurer wants to transfer his holding or amalgamate his life insurance business with any other insurance company then he will have to follow a rigid code set out by IRDA.
- **CAPITAL ADEQUACY**
  - o the minimum paid up equity capital of the insurer has to be rs. 100 crores for life insurance or general insurance and rs. 200 crores for re – insurance business.
- **DEPOSIT WITH RBI**
  - o the registered insurer will have to deposit with reserve bank of India, in cash or approved security, a sum equivalent to 1% (life insurance) or 3% (general insurance), of the total gross premium in any financial year commencing after 31st march, 2000 subject to a maximum deposit of rs. 10 crores. for re – insurance business, the deposit amount is fixed at rs. 20 crores.
- **MAINTENANCE OF ACCOUNTS**
  - o the registered insurer to prepare and keep separate accounts of receipts and payments revenue account, shareholder's funds, balance sheet and profit and loss account at the expiration of each financial year in respect of each class of insurance business.
- **MINIMUM BUSINESS**
  - o the act requires every insurere to do a minimum insurance business in the rural or social sector, as may be specified by the authority.
- **INVESTIGATION / INSPECTION**
  - o the authority may order in writing an investigation into the affairs on any insurer by an investigating authority specified in the order.

- **SOLVENCY MARGIN**
  - the provisions of the act provides as to how the assets and liabilities have to be determined and the extent to which the assets are required to exceed the liabilities. the act also has made provision as to how the accounts shall be maintained and the returns to be rendered to the authority.
- **PAYMENT OF PREMIUM BEFORE ASSUMPTION OF RISK**
  - insurers can assume a risk only after receiving the premium or a guarantee that the premium shall be paid within the prescribed time, or, a deposit of such amount as may be prescribed is to be made in advance. a risk may be assumed not earlier than the date on which the premium has been paid in cash or cherub. if premium is tendered by postal money order then risk to be assumed on the date when the money order is booked.

ESTABLISHMENT OF REGULATORY AND DEVELOPMENT AUTHORITY

- regulatory and development authority is to be established to protect the interest of holders of insurance policy, to regulate, promote and ensure orderly growth of insurance industry and for matters connected therewith and incidental thereto.
- under the act IRDA has been established as a body corporate to effectuate the objects of the act as set out in the preamble. this authority has the power to specify the conditions for registration of insurers and the qualifications, training and code of conduct for the intermediaries / agents.
- **FUNCTIONS OF IRDA**

the functions of IRDA are the following:

- to issue certificate of registration, renew, withdraw, suspend or cancel such registration.
- to protect the interests of the policyholders / insured in the matter of insurance contract with the insurance company.
- to promote efficiency in the conduct of insurance business.
- to control and regulate the rates, terms and conditions to be offered by insurer.
- to specify the form and manner for maintenance of books of accounts and the statement of accounts.
- to regulate investment of funds by the insurance companies.
- to specify requisite qualification, code of conduct and training for insurance intermediaries and agents.
- to specify code of conduct for surveyors / loss assessors.
- to specify the percentage of life and general insurance business to be undertaken in tne rurak or social sector.

Topic

Module 6:

Equity and Bond Valuation and Evaluation of Performance

FINAL

Group III - Paper-14

Strategic Financial Management (SFM)

Strategic Financial Management
Topic: Equity and Bond Valuation

- **Concept of Bond**

A bond represents a security issued to borrow funds. A bond obligates its issuer to make specified payments (interest and/or principal) to the bondholder as per some stated terms. A bond may be described in terms of the following three:

(a) Par value: The par value is the value stated on the face of the bond. It represents the amount the issuer promises to pay at the time of maturity.

(b) Coupon rate: The coupon rate is the interest rate payable to the bondholder.

(c) Maturity date. The maturity date is the date when the principal amount is payable to the bondholder.

In the bond indenture i.e., the contract between the issuer and the bondholder, the par value, coupon rate, and maturity date are specified. For example, an issuer may sell a bond with a par value of ₹ 1,000, a coupon rate of nine percent payable semi-annually, and a maturity period of 10 years. The buyer of such a bond would receive an interest of ₹ 45 every six months for 10 years and a principal amount of ₹ 1000 at the end of 10 years.

- **Different Types of Bonds**

Bonds can be categorised into the following types:

1. Plain Vanilla Bonds: The plain vanilla bond (also called straight bond) pays a fixed periodic (annual, semi-annual or quarterly) coupon/interest over its life and returns the principal on the maturity date.
2. Zero Coupon Bonds: A zero-coupon bond does not carry any periodic interest payment. It is issued at a discount and redeemed at face value on maturity.
3. Floating Rate Bonds: Unlike straight bonds, floating rate bonds pay an interest rate that is linked to a benchmark rate such as the Treasury bill interest rate.
4. Bonds with Embedded Options: These are bonds with options embedded in them. Some of the common types of bonds with embedded options are:

(a) Convertible Bonds: Convertible bonds give the bond holder the right (option) to convert them into equity shares on certain terms.

(b) Callable Bonds: Callable bonds give the issuer the right (option) to redeem them prematurely on certain terms.

(c) Puttable Bonds: Puttable bonds give the investor the right to prematurely sell them back to the issuer on certain terms.

- **Valuation of Plain Vanilla Bonds**

The value of a bond is:

$$P = \sum_{i=1}^{n} \frac{c_i}{(1+r)^i} + \frac{M}{(1+r)^n}$$

where P is the value (in rupees), n is the number of years to maturity, C is the annual coupon payment (in rupees), r is the periodic required return, M is the maturity value, and t is the time period when the payment is received.

Since the stream of annual coupon payments is an ordinary annuity, we can apply the formula for the present value of an ordinary annuity. Hence the bond value is given by the formula:

$$P = C \times PVIFA_{r,n} + M \times PVIF_{r,n}$$

To illustrate how to compute the value of a bond, consider a 10-year, 8 percent coupon bond with a par value of ₹1,000.

Let us assume that the required yield on this bond is 13 percent. The cash flows for this bond are as follows:

a) 10 annual coupon payments of ₹. 80

b) ₹. 1,000 principal repayment 10 years from now

The value of the bond is:

$$P = 120 \times PVIFA_{13\%,10yrs} + 1{,}000 \times PVIF_{13\%,10yrs}$$

$$= 80 \times 5.426 + 1{,}000 \times 0.295$$

$$= 729.08$$

- **Bond Yields**

  Bond Yields refer to the return on bonds. Various bond yields are:

  1. **Current Yield:** The current yield relates the annual coupon interest to the market price. It is expressed as:

  $$\text{Current yield} = \frac{(\text{Annual Interest})}{\text{Price}}$$

  For example, the current yield of a 10-year, 8 percent coupon bond with a par value of ₹ 1000 and selling for ₹ 970 is 8.25 percent.

  2. **Yield to Maturity:** Yield to maturity (YTM) is the discount rate that makes the present value of the cash flows receivable from owning the bond equal to the price of the bond.

- **Relationship between Bond Price and Bond Yield**

  A basic property of a bond is that its price varies inversely with yield. As the required yield increases, the present value of the cash flow decreases; hence the price decreases. Conversely, when the required yield decreases, the present value of the cash flow increases; hence the price increases. The graph of the price-yield relationship for any non-callable bond has a convex shape.

- **Comprehensive Problems on Bond Valuation**

Problem 1

A ₹ 100 par value bond bears a coupon rate of 12 percent and matures after five years. Interest is payable semi-annually. Compute the value of the bond if the required rate of return is 16 percent.

Solution

In this case the number of half-yearly periods is 10, the half-yearly interest payment is ₹ 7, and the discount rate applicable to a half-yearly period is 8 percent. Hence, the value of the bond is:

$V = 6\ (PVIFA_{8\%,\ 10}) + 100\ (PVIF_{8\%,\ 10})$

$= 6\ (PVIFA_{8\%,\ 10}) + 100\ (PVIF_{8\%,\ 10})$

$= 6\ (6.710) + 100\ (0.463)$

$= 40.26 + 46.30$

= ₹ 86.56

Problem 2

A ₹ 100 par value bond bearing a coupon rate of 12 percent will mature after five years. What is the value of the bond, if the discount rate is 15 percent?

Solution

Since the annual interest payment will be ₹ 12 for five years and the principal repayment will be ₹ 100 after five years, the value of the bond, at a discount rate of 15 percent, will be:

V = ₹ 12 $(PVIFA_{15\%,\ 5\ yrs})$ + ₹ 100 $(PVIF_{15\%,\ 5\ yrs})$

= ₹ 12 (3.352) + ₹ 100 (0.497)

= 40. 22 + 49.70

= ₹ 89.92

Problem 3

The market price of a ₹ 1,000 par value bond carrying a coupon rate of 14 percent and maturing after five years is ₹ 1050. What is the yield to maturity (YTM) on this bond? What is the approximate YTM? What will be the realised yield to maturity if the reinvestment rate is 12 percent?

Solution

The YTM is the value of r in the following equation:

$1{,}050 = 140\ (PVIFA_{r,\ 5\ yrs}) + 1{,}000\ (PVIF_{r,\ 5\ yrs})$

Let us try a value of 13 percent for r. The right-hand side of the above expression becomes:

$140\ (PVIFA_{13\%,\ 5\ yrs}) + 1{,}000\ (PVIF_{13\%,\ 5\ yrs})$

$= 140\ (3.517) + 1{,}000\ (0.543)$

$= 492.4 + 543.0$

= ₹ 1035.4

Since this is less than ₹ 1,050, we try a lower value for r. Let us try r = 12 percent. This makes the right-hand side equal to:

$140\ (PVIFA_{12\%,\ 5\ yrs}) + 1{,}000\ (PVIF_{12\%,\ 5\ yrs})$

$= 140\ (3.605) + 1{,}000\ (0.567)$

$= 504.7 + 567.0$

= ₹ 1071.7

Thus, r lies between 12 percent and 13 percent. Using a linear interpolation in this range,

we find that r is equal to:

$12\% + (13\% – 12\%) \times (1071.7 – 1050.0)/(1071.7 – 1035.4) = 12.60$ percent

Topic: Mutual Funds

Multiple Choice Questions:

1. B can earn a return of 18% by investing in equity shares on his own. Now he is considering a recently announced equity based Mutual Fund Scheme in which initial expenses are 1% and annual recurring expenses are 2%. How much should be Mutual Fund earn to provide B, a return of 18%?

A. 18.18%

B. 20.18%

C. 22.18%

D. 21%

Solution: The correct option is (B)

18/ 99% + 2% = 18.18 %+ 2% = 20.18%

[Initially, only 99% is available for investment]

- **Comprehensive Problem**

During a five-year period, the relevant results for the aggregate market are that the risk-free rate (rf) is 8% and the return on market (rm) is 14%. For that period, the results of five portfolio managers are as follows:

Portfolio Manager	Actual Average Return (%)	Beta (B)
A	13	0.80
B	14	1.05
C	17	1.25
D	13	0.90
E	15	0.95

Using CAPM model, you are required to:

(i) calculate the expected rate of return for each portfolio manager and compare the actual returns with the expected returns; and

(ii) find which of the mangers need to be warned for under-performance?

Solution:

(i) CAPM Equation:

$R, = R_f + \beta (R_m - R_f)$

Where R_j = Expected rate of return

R_f = Risk free rate

R_m = Return on Market

β = Beta

The expected rates of return are as follows:

Portfolio Manager	Expected Return (%)	Actual Average Return (%)	Difference (%)
A	8% + 0.80 (14%-8%) = 12.8	13	+0.2
B	8% + 1.05(14%-8%) = 14.3	14	-0.3
C	8% + 1.25(14%-8%) = 15.5	17	+1.5
D	8% + 0.90(14%-8%) = 13.4	13	-0.4
E	8% + 0.95(14%-8%) = 13.7	15	+1.3

(ii) Managers B and D did not perform up to expectation, they have to be warned.

Topic

Module 12:

Double Taxation and Avoidance Agreements (DTAA) [Sec.90. 90A and 91]

FINAL

Group III - Paper-15

Direct Tax Laws and International Taxation (DIT)

Double Taxation Avoidance Agreement

In home country, tax is an obligation, while in the host country, tax is a cost.

Generally, income is taxable on two basis viz. i) Source of income basis and ii) Residential Status basis. Double Taxation Avoidance Agreements (DTAA) play a crucial role in the realm of international taxation, facilitating smoother transactions between countries and preventing individuals and businesses from being taxed twice on the same income.

What is Double Taxation?

Double taxation occurs when an individual or a business is taxed twice on the same income in two or more countries. This can happen due to conflicting tax laws and regulations between nations. For instance, if a person earns income in one country but is also considered a tax resident in another, they may be subject to taxation on the same income by both countries. For instance, Mr. X, an ordinarily resident in India, earned bank interest of ₹ 1,00,000 on his money deposited into a bank located in US. In that case, such income is taxable in US on the Source of income basis and again in India as he is an ordinarily resident India.

In times when economies are going global and borders fading, double taxation is still one of the major obstacles to the development of inter-country economic relations. In order to prevent this hardship or to avoid double taxation, relief is provided to the tax-payer.

Introduction to Double Taxation Avoidance Agreements (DTAA)

DTAA, also known as tax treaties, are bilateral agreements between two countries aimed at preventing double taxation and promoting cooperation in tax matters. These agreements delineate the taxing rights of each country concerning various types of income, such as dividends, interest, royalties, and capital gains.

Significance of DTAA

DTAA serves several significant purposes:

- **Preventing Double Taxation**: The primary purpose of DTAA is to eliminate or mitigate double taxation, thereby promoting cross-border trade, investment, and economic activities.
- **Promoting Investment**: By providing certainty and clarity on tax matters, DTAA encourages foreign investment by reducing the tax burden on investors and businesses operating across borders.
- **Facilitating Exchange of Information**: DTAA facilitates the exchange of information between tax authorities of different countries, promoting transparency and combating tax evasion and avoidance.

Key Components of DTAA

DTAA typically includes the following key components:

- **Residency Rules**: Defines the criteria for determining an individual's tax residency status, which is essential for determining the country's right to tax.
- **Permanent Establishment (PE)**: Establishes the threshold for determining when a business activities in one country constitute a permanent establishment, subject to taxation in that country.
- **Taxation of Various Income Sources**: Specifies the rules for taxing different types of income, such as dividends, interest, royalties, and capital gains, ensuring that each country has the right to tax certain types of income.
- **Tax Rates and Tax Credits**: Prescribes the applicable tax rates for various types of income and provides mechanisms for granting tax credits or exemptions to prevent double taxation.
- **Mutual Agreement Procedure (MAP)**: Sets out procedures for resolving disputes between tax authorities of the treaty countries and ensuring the consistent application of the treaty provisions.

Mode of providing relief

As per Article 2 of the Vienna Convention on Laws of Treaties, 1969, "Treaty" means an international agreement concluded between States in written form and governed by international law, whether embodied in a single instrument or in two or more related instruments and whatever its particular designation. The two countries' government agrees to provide

relief against double taxation of the same income. The relief is granted based on the terms of such agreement. Generally, such an agreement provides relief through the following methods:

Exemption Method

In this method, one country provides an exemption to such type of income. Generally, the residence country gave up its right and the country of source is then given the exclusive right to tax such incomes.

a. Full Exemption Method: Under this method, income earned in the State of Source is fully exempt in the State of Residence.

b. Exemption with Progression: Under this method, income from the State of Source is considered by the State of Residence only for the rate purpose.

Credit Method

In this method, the resident remains liable in the country of residence on its global income, however as far as the quantum of tax liabilities is concerned credit or deduction for tax paid in the source country is given by the residence country against its domestic tax as if the foreign tax were paid to the country of the residence itself.

a. **Full Credit**: Total tax paid in the State of Source is allowed as a credit against tax payable in the State of Residence.

b. **Ordinary Credit**: The state of Residence allows credit of tax paid in the state of Source restricted to that part of income tax which is attributable to the income taxable in the state of Residence.

c. **Tax Sparing**: The state of Residence allows credit for deemed tax paid on income which is otherwise exempt from tax in the State of Source.

d. **Underlying Tax Credit**: In this method attempts to mitigate the economic double taxation. Economic double taxation occurs when the same income is taxed more than once in the hands of different persons in the same tax jurisdiction.

DTAA can be of two types, limited or comprehensive. Limited DTAA are those which are limited to certain types of incomes only e.g. DTAA between India and Pakistan is limited to shipping and aircraft profits only. Comprehensive DTAAs are those which cover almost all types of incomes covered by any model convention.

Impact on Taxpayers and Businesses

DTAA has a profound impact on taxpayers and businesses engaged in cross-border transactions:

- **Reduced Tax Liability**: Taxpayers benefit from reduced tax liability on income derived from foreign sources, as DTAA often lowers the withholding tax rates on dividends, interest, royalties, and other income.

- **Certainty and Predictability**: Businesses enjoy greater certainty and predictability regarding their tax obligations in foreign jurisdictions, enabling better tax planning and investment decisions.

- **Enhanced Compliance**: DTAA promotes compliance with tax laws by providing clear rules and procedures for determining tax liability, reducing the risk of unintentional non-compliance.

- **Dispute Resolution**: The inclusion of a Mutual Agreement Procedure (MAP) in DTAA provides a mechanism for resolving disputes between taxpayers and tax authorities, ensuring fair and impartial resolution of tax disputes.

Conclusion

In conclusion, Double Taxation Avoidance Agreements (DTAA) play a pivotal role in facilitating cross-border trade and investment by preventing double taxation and promoting cooperation between countries in tax matters. These agreements provide taxpayers and businesses with certainty, predictability, and transparency regarding their tax obligations, thereby fostering economic growth and international cooperation. As globalization continues to drive interconnectedness between economies, DTAA will remain a cornerstone of international tax policy, ensuring fair and equitable taxation in an increasingly globalized world.

Topic

Module 4:

Activity Based Management and Just in Time (JIT)

FINAL

Group III - Paper-16

Strategic Cost Management (SCM)

Activity Based Management & JIT

Activity Based Management

Activity-Based Management (ABM) is a tool of management that helps in analyzing the activities of an organization to identify the areas where improvements can be made in efficiency and effectiveness. It is a set of actions that management can take, on the basis of information available under Activity Based Costing system, to improve the profitability. Major functions of Activity Based Management include Cost Driver Analysis, Activity Analysis and Performance Analysis. These functions to be performed on concurrent basis to achieve continuous improvement.

Cost Driver Analysis: The factors that cause activities to be performed need to be identified in order to manage activity costs. Cost driver analysis identifies these casual factors. For example, in a stores department, it may be observed that slow moving and obsolete stock is not disposed of in time, the reason being the staff in the stores is not trained properly in this area. Managers have to address this cost driver to correct the root cause of this problem and take proper action.

Activity Analysis: Activity Analysis identifies value added and non-value-added activities and efforts are made to eliminate the non-value adding activities.

Performance Analysis: Performance analysis involves the identification of appropriate measures to report the performance of activity centers or other organizational units consistent with each unit's goals and objectives. Performance Analysis aims to identify the best ways to measure the performance of factors that are important to organizations in order to stimulate continuous improvement.

Managers and employee teams are seeking more transparency and visibility of their costs. Just reliably knowing ABCM's per-each-unit costs of their outputs of work is useful for benchmarking to search for best practices or monitor trends to measure performance improvement. ABCM removes the illusion that support overhead (i.e., indirect) expenses are necessary and, therefore, appear to be free—they are not free.

Cost Reduction through ABM:

The costs of an output, product, or service (i.e., a final cost object) can be reduced by:

- Reducing the quantity, frequency, and/or intensity of the activity driver (e.g., fewer inspections reduce the "inspect product" activity cost);
- Lowering the activity driver cost rate by productivity improvements (e.g., shorten the time for each "inspect product" event); and
- Understanding the sources and causes of waste leading to nonvalue-adding activities to reduce or eliminate them (e.g., solve the problem that requires an inspection in the first place).

These three are examples of how ABCM data leads to cost management for productivity improvement. The idea is to do more with less (or at least with the same). That is, produce more outputs with the same amount of resources or the same amount of outputs with fewer resources. Note how these actions support the continuous improvement principles of the Six Sigma quality and lean management initiatives that are embraced by the operations and quality communities.

Just In Time (JIT)

Just-In-Time (JIT) is a management technique in which goods are received from suppliers only as and when they are needed. The main objective of this method is to reduce inventory holding costs and increase inventory turnover. This technique has, probably, received more attention in a short time than any other new manufacturing technique. The main reason is that JIT gets the credit for much of Japan's manufacturing success.

Just in time is a demand – pull system of production, wherein actual orders provide a signal for as to when a product should be manufactured. Demand-pull enables a firm to produce only what is required, in the correct quantity and at the correct time. This means that stock levels of raw materials, components, work in progress and finished goods can be kept to a minimum. This requires a carefully planned scheduling and flow of resources through the production process.

Modern manufacturing firms use sophisticated production scheduling software to plan production for each period of time, which includes ordering the correct stock. Information is exchanged with suppliers and customers through EDI (Electronic Data Interchange) to help ensure that every detail is correct. Supplies are delivered right to the production line only when they are needed. For example, a car manufacturing plant might receive exactly the right number and type of tyres for one day's production, and the supplier would be expected to deliver them to the correct loading bay on the production line within a very narrow time slot.

The JIT Strategy

JIT approach to inventory helps the companies to cut costs significantly. Holding inventory costs heavily to the company, especially in manufacturing organizations. By minimizing the quantum of inventory, one can save space, free up cash resources and minimize the waste that comes from obsolescence.

To facilitate a JIT approach, a variety of systems need to be in place. JIT also exists in concert with continuous improvement systems. Total Quality Management and Six Sigma are overarching programs that help you take a detailed look at every point of the production process and identify ways to make improvements. By applying JIT, you are continuously monitoring the production process. This gives you opportunities for making the production process smoother and more efficient. Because JIT is intended to spread throughout the organization, it can have an impact on many areas through improvements in processes. When the emphasis is on lean production, systems tend to be made simpler and more predictable. From how a product moves through the building to ways to increase worker involvement in system design, JIT improves efficiency.

Benefits of JIT

Following are the advantages of adopting Just-In-Time Manufacturing System:

i. Minimum stock holding costs, release of storage space, reduced rent paid and insurance premiums;

ii. Elimination of waste, as expired products are not maintained;

iii. Less working capital is required, hence lower working capital interest cost;

iv. Higher the organization's return on investment (ROI);

v. Reduced inspection costs and cost of rework;

Disadvantages of JIT

Following are the disadvantages of adopting JIT Manufacturing Systems:

i. Zero tolerance for mistakes, as it makes re-working very difficult in practice, as inventory is kept to a bare minimum.

ii. High reliance on suppliers, whose performance is generally outside the purview of the manufacturer.

iii. As there will be no buffers for delays, production downtime and line idling can occur;

iv. The organization would not be able to meet an unexpected increase in orders, due to the fact that there are no excess finished goods.

v. Transaction costs would be relatively high, as frequent transactions would be made.

vi. Detrimental effects on the environment, due to the frequent deliveries that would result in increased use of transportation which in turn would consume more fossil fuels.

Just-in-time manufacturing is a philosophy that has been successfully implemented in many manufacturing organizations. It is an optimal system that reduces inventory whilst being increasingly responsive to customer needs, this is not to say that it is not without its pitfalls. However, the disadvantages can be overcome, with a little forethought and a lot of commitment at all levels of the organization.

Illustration

Nexon Ltd. has decided to adopt JIT policy for materials. The following effects of JIT policy are identified-

1. To implement JIT, the company has to modify its production and material receipt facilities at a capital cost of ₹10,00,000. The new machine will require a cash operating cost ₹1,08,000 p.a. The capital cost will be depreciated over 5 years.

2. Raw material stockholding will be reduced from ₹40,00,000 to ₹10,00,000.

3. The company can earn 15% on its long-term investments.

4. The company can avoid rental expenditure on storage facilities amounting to ₹33,000 per annum. Property taxes and insurance amounting to ₹22,000 will be saved due to JIT program implementation.

5. Presently there are 7 workers in the store department at a salary of ₹15,000 each per month. After implementing JIT scheme, only 5 workers will be required in this department. Balance 2 workers' employment will be terminated.

6. Due to receipt of smaller lots of Raw Materials, there will be some disruption of production. The costs of stock- outs are estimated at ₹77,000 per annum.

Determine the financial impact of the JIT policy. Is it advisable for the company to implement JIT system?

Solution

Cost-Benefit Analysis of JIT policy

A. Costs

Serial	Particulars	Rupees
1	Interest on capital for modifying production facilities (₹10,00,000×15%)	1,50,000
2	Operating Costs of new production facilities	1,08,000
3	Stock-Outs Costs (given)	77,000
4	Total Costs	3,35,000

B. Benefits

Serial	Particulars	Rupees
1	Interest on investment on funds released due toreduction in raw material stocking (₹40,00,000 - ₹10,00,000) × 15%	4,50,000
2	Saving in salary of 2 workers terminated (₹15,000×12 months ×2)	3,60,000
3	Saving in rental Expenditure	33,000
4	Saving in Property Tax & Insurance	22,000
6	Total Benefits	8,65,000

C. Net Benefits = (8,65,000 – 3,35,000) = ₹5,30,000/-

Advise: The JIT policy may be implemented, as there is a Net Benefit of ₹5,30,000 per annum.

Note: Depreciation, being apportionment of capital cost, is ignored in decision- making, Tax Saving on Depreciation is not considered in the above analysis.

Topic

Module 6:
Cost Audit Programme

FINAL

Group IV - Paper-17

Cost and Management Audit (CMAD)

COST AND MANAGEMENT AUDIT

To accomplish the underlined objective, audit of cost elements (described hereunder) is essential and by following the below referred checklist, the accuracy as well as cost rationalization objectives can be fulfilled

Audit of Production – Product-wise

Audit of Raw Material cost

Audit of Electricity Cost (excluding Diesel Generator)

Audit of DM Water cost

Audit of Steam cost

Audit of Stores and Spares cost

Audit of Repair and Maintenance cost

Audit of Employee cost

Audit of Insurance cost

Audit of Depreciation cost

Audit of Administrative cost

Audit of selling and distribution cost

Audit of Packing Material cost

Audit of Production – Product-wise

- o Whether appropriate cut-offs are observed to identify calendar dates with stages of production?
- o Whether organizational guideline is in place to identity percentage completion in different product stages?
- o Whether Finished products, Work In Progress -WIP (SFG Semi Finished Goods) are segregated and considered Accordingly?
- o Whether products manufactured and capacity available are compared to find out utilization?
- o Whether only Quality approved products are declared as 'production' and considered for further analysis?
- o Whether any incremental capacity reckoned for actual product-wise higher output?
- o Whether technological improvement caused higher product-wise output?
- o Whether efficiency enhancement of labour force resulted in higher output?
- o Whether production tracking over a period of time (say 5-years) captured for further analysis?

Audit of Raw Material Cost

- ✓ Whether BOM (Bill Of Materials) includes every element/item required to carry out Production with Product-wise details.
- ✓ Whether a Budget with expected price is made for all key raw material?
- ✓ Whether any subsequent changes in BOM are updated for considering consumption?
- ✓ Whether a variance analysis is carried out at periodical intervals to assess actual cost is within a reason level?
- ✓ Whether high difference is analysed to pre-empt any possibility to avoid/reduce such implications?
- ✓ Whether receipting process is in place and inventory update carried out on real time basis?
- ✓ Whether storage is made appropriately without any possibility of mix-up, spilling over and losses due to airborne?
- ✓ Whether inventory movements are made against approvals of appropriate authority?
- ✓ Whether raw materials including bulks are issued for consumption/kept in storage against a proper method of measurement?
- ✓ Whether perpetual and/or quarterly physical verification process is in place?
- ✓ Whether the difference between Book Stock and physical stock adjusted in the relevant period of accounting?
- ✓ Whether the Ordering process considers , (a) EOQ (b) Lead Time (c) effective life of RM etc.
- ✓ Whether the entity having a policy to identify slow and non-moving raw materials and fixing level for provision against such items?
- ✓ Whether a material codification logic is followed for identification of imported and local raw

materials (having similar look but difference in price and effectiveness)?

✓ Whether abnormal loss of material is appropriately treated?

Audit of Electricity Cost

- ❖ Whether all Cost Centres (Production and Utility) are mapped for electricity consumption, e.g Kiln, Grinding , Packer (Production) and Air Compressor, Chilling Plant etc.(Utilities)
- ❖ Whether Electricity consumption standard and required heat is mapped against each of the facilities.
- ❖ Whether actual electricity consumption is in tandem with output/Production from each of the facility e.g Packing Volume vs. electricity consumption, Kiln consumption vs. Clicker produced , Grinding Mill electricity consumption vs. Cement manufactured.
- ❖ Whether difference between actual consumption and Standard mapped and reason for such differences are validated.
- ❖ Whether self-generation of electricity for captive consumption and buying are appropriate metered and allocated to cost centres.
- ❖ Whether calibration and certification there of obtained for entire metering process.
- ❖ Whether appropriate allocation methodology is followed for common area of consumption.
- ❖ Whether source-wise electricity cost is analysed for appropriate cost allocation and product-wise absorption purposes.
- ❖ Whether cost trend over a period (say 5-years) is analysed planning power cost scenario and possible requirement of Capex in the area.

Audit of Demineralised (DM) water cost

- o Whether allotment of 'Cost Centre' and capturing of cost is carried out properly?
- o Whether element-wise cost with volume of consumption is maintained ?

  - Volume of filtered water

  - Volume of chemicals

  -Electricity used in TP(Treatment Plant)
- o Whether volume of DM Water generated are captured correctly ?
- o Whether use points are mapped and consumption of DM Water captured appropriately?
- o Whether a proper cost structure is in place and DM Water consumption data ensures accuracy?
- o Whether all relevant cost including deprecation captured in DM Water Cost Centre?

Audit of Steam Cost

- o Whether running hours of Boiler and Steam generated are (Mt.) are recorded ?
- o Whether all relevant Boiler running expenses/ consumptions like DM Water (Ltr.), Electricity (KWH), Fuel (Light Diesel Oil , Coal (Mt.) ,Steam consumption etc. are recorded and maintained.
- o Whether line losses are measured for future corrective actions.
- o Whether standard requirement (Mt.)of Product (Mt.) are compared for any probable variance.
- o Whether high consumption areas are covered by Meters and meter readings obtained at fixed intervals.
- o Whether consumption variance ,if any, is analysed for understanding the reason (e.g leakage in pipe lines, erroneous reading of meters, inactive meters etc.)
- o Whether manpower cost , consumables and other Boiler House related cost (e.g repair, maintenance etc.) are booked timely and correctly.

Audit of Stores and Spares cost

- ❑ Whether Cost Centre-wise Requisition for Spares are maintained to arrive at total requirement of Spares at Unit/Entity level.
- ❑ Whether to support the above and to avail 'price advantage',appropriate codification logic is in place?
- ❑ Whether Spares are classified under A,B , C Category to exercise proper supervision and control.

- ❑ Whether there exists any organizational Guideline to differentiate between Slow, Non-moving spares based yearly consumption history?
- ❑ Whether appropriate valuation methodology exists for Stores and Spares falling under Slow, Non-moving category?
- ❑ Whether Product-wise , Plant-wise, Cost Centre-wise Spares issues and consumption are tracked ?
- ❑ Whether accounting guidance for recording Stores and Spares to appropriate 'cost centres' / 'Plants' in place?
- ❑ Whether the 'Spares Control Account' is reflected in Trial Balance and tallied.

Audit of Repair and maintenance cost

- ✓ Whether Repair and Maintenance Costs are attached/tied against each of the 'Cost Centres'?
- ✓ Whether age of plant along-with 'Repair Maintenance expenditure ' (R & M spent trending higher) compared to 'Plant Value and remaining life' decide on replacement of the asset.
- ✓ Whether all 'R & M Expenditure' booked to appropriate 'cost centres'?
- ✓ Whether 'Repair and Maintenance cost' per Mt. of Product indicating a 'rising , falling or constant' trend?
- ✓ Whether a 'R & M Budget' is prepared to keep the expenses within the limit?
- ✓ Whether ' R & M Cost' is bifurcated into " Normal , Special, Shut-down, Break-down" etc. to have (R & M) better visibility on normal and abnormal Cost hike.

Audit of Employee Cost

- ❑ Whether Employees whose names are appearing in the 'pay roll ' only considered for 'employee cost'?
- ❑ Whether permanent deployment with contractual pay, also clubbed as 'employee cost'?
- ❑ Whether employees are tagged against each of the 'cost centre' whereby cost centre-wise 'pay roll' cost can be validated?
- ❑ Whether any employee movement, A-D-C (Addition –Deletion- Change) tracked immediately against relevant 'cost centre'?
- ❑ Whether 'product cost build up' considers 'cost centre-wise' employee cost ?
- ❑ Whether trend analysis is carried out for employee cost captured over a period?
- ❑ Whether such trend indicated employee performance improvement overriding 'inflationary / statutory increases?'
- ❑ Whether industry-wide bench marking applied for 'employee cost' of the relevant industry?
- ❑ Whether 'employee cost' as percentage of product cost analysed for cost reduction/ minimization purposes?

Audit of Insurance cost

- ❖ Whether 'cost centre-wise' Assets are identified and tagged?
- ❖ Whether abovesaid Assets are covered against insurable perils obtaining appropriate policy cover under individual policy or 'umbrella policy' ?
- ❖ Whether Premia cost against each of the Asset/Cost Centre are identifiable and captured?
- ❖ Whether new assets are also covered immediately and premia cost allocated to appropriate asset cost centre?
- ❖ Whether 'cost centre-wise' insurance cost allocation being checked and any Y-O-Y variance can be validated with proper reasoning?
- ❖ Whether monetary impact of insurance cost with product-wise absorption compared for product cost movement purposes?
- ❖ Whether impact of changed output considered to measure movement of 'product-wise insurance' cost?

Audit of Depreciation cost

- ❑ Whether 'Cost Centre-wise' Assets are identified and depreciation against those are captured for the period under review?
- ❑ Whether new installations are mapped and considered on the depreciation schedule?

- Whether 'product cost' includes depreciation as per aforesaid calculation?
- Whether individual asset performance and remaining life considered for depreciation assessed?
- Whether reason for sudden increase or decrease in depreciation cost w.r.t 'cost centre' /s analysed for the 'root cause'?

Audit of Administrative cost

- Whether specific guideline is available for the heads of expenditure to be considered as 'Administrative Overhead'?
- Whether Year-wise administrative cost break-up is available w.r.t Product, Cost Centre ?
- Whether allocation/apportionment of administrative expenses are carried out logically and consistently the same followed?
- Whether any abnormal increase/decrease noticed in administrative overhead cost and also in the Product?

Audit of selling and distribution cost

- Whether categorization of Selling and Distribution (S & D)cost available at the organizational level and Product, cost centre-wise also?
- Whether Selling and Distribution cost at product level as a percentage of COGS is fixed?
- Whether Y-O-Y (year on year) S & D Cost trend over a period is analyzed to get feedback on the responsible account head, where expenditure trend is much higher/lower than anticipated?
- Whether sound logical allocation /apportionment principle is followed for overhead cost division?
- Whether the principle followed for allocation/ apportionment is consistently followed year after year?
- Whether per Unit increase/decrease in S & D Cost at each of the Product level considered for 'price fixation'?
- Whether infrastructural improvement and/or change in sales policy evaluated for increase/ decrease of S & D Expenditure.

Audit of packing material cost

- Whether Primary and Secondary Packing Materials are identified based on usage purpose?
- Whether special packing opted by bulk buyers are recovered via Invoice Price?
- Whether proper consumption record is maintained and the same compared with standard set for Packing Materials?
- Whether any abnormality being noticed in the Packer , which resulted in high abnormal consumption of packing materials.
- Whether quality of packing materials ensured before they issued to 'shop floor' for consumption.
- Whether consumption trend is examined for the Products which are 'key products' at least for last five years.
- Whether packing material rates , examined for last few years (say five) and how packing materials can be replaced to withstand price pressure.
- Whether separate codification logic is followed for 'self-produced' packing materials and cost for the same.
- Whether Inventory records are maintained for above 'self-produced' items w.r.t generation, Issue and Consumption.
- Whether change in procurement cost of packing items are accumulated for impact analysis and examine the possibility of pass on to consumer.
- Whether any abnormal cost is identified for appropriate treatment?

Topic

Module 6: Consolidated Financial Statements and Separate Financial Statements

FINAL

Group IV - Paper-18

Corporate Financial Reporting (CFR)

Consolidated Financial Statements and Separate Financial Statements

Prepare abstract of Consolidated Balance Sheet (CBS) of a group of P Ltd., Q Ltd. and R Ltd. for which the abstracts of Balance sheets on 31.03.2024 are given below.

(₹ in Lakhs)

Particulars	P	Q	R
PPE	800	1000	640
Investment in Q (80%)	960		
Investment in R (75%)		600	
Current Assets:	1560	500	740
Total Assets	3320	2100	1380
Equity and Liabilities			
Equity Share Cap (₹ 10)	1200	1000	600
Other Equity	920	320	240
Dividend Payable		100	
Other Current Liabilities	1200	680	540
Total	3320	2100	1380

Control was acquired on 01.10.2023 when fair value of PPE was in excess of carrying amount by Q: 100 and R: 60. On 01.04.2023 the balances of Other Equity were Q : 200 and R : 100 NCI is measured at fair value.

Inventory of Q included 32 purchased from R at cost plus 33.33%.

Answer:

Consolidated Balance sheet of the group as at 31-03-2024 (₹ in Lakhs)

Assets	Workings ₹	₹
Non-Current:		
PPE	800 + 1000 + 640 + 100 + 60	2,600
Current Assets:	1560 + 500 + 740 - 8 = 2792	2792
Total Assets		**5392**
Equity and Liabilities		
Equity Share Cap		1200
Other Equity	Note 2	1282
NCI of Q	Note 3	122
NCI of R	Note 2	348
Dividend Payable		20
Other Current Liabilities	1200 + 680 + 540	2420
Total		**5392**

Workings:

I. Share of parent and NCI Share of P in Q = 80%

Share of Q in R = 75% Share of Group in R = 80% × 75% = 60% NCI in R = 40%

II. Analysis of Profits

(₹ in Lakhs)

Particulars	P	Q	R
Other Equity at the year end + dividend payable	920	420	240
Other Equity at the beginning		200	100
Profits during the year		220	140
Pre-acquisition upto 30.09.2023		110	70
Post-acquisition Profits		110	70
Share from Q = 80% × ₹110	88		
Share from R = 60% × ₹70	42		
	1050		
Less Unrealised Profits in inter-company Inventory = 32 × 1/4	8		
Other Equity	1042		

III. Net Assets on acquisition

Particulars	Q (₹)	R (₹)
Share Cap	1000	600
Other Equity on 01.04.2023	200	100
Revaluation	100	60
Add Profits	110	70
Net Assets	1410	830

IV. NCI on 01-10-2023

Consideration × (NCI Share/Parent Share)	Q (₹)	R (₹)
NCI - Q = 960 × 20%/80%	240	
NCI - R = 600 × 40%/75%		320

Note 1: Goodwill/ Bargain Purchase

Particulars		Q (₹)	R (₹)	Consolidated (₹)
Net Assets	a = (III)	1410	830	
Consideration	b from (IV)	960	480$	
NCI on acquisition at fair value	C from (IV)	240	320	
Gains on bargain Purchase	a-(b+c)	210	30	
Net amount to Other Equity				240

$ 80% × ₹600

Note 2:

Consolidated Other Equity

= Other Equity (II) + Net Gains on Bargain Purchase

= (₹1042+₹240) Lakhs = ₹1282 lakhs

Note 3:

NCI on 31.03.2016

Particulars	Q (₹)	R (₹)
NCI on acquisition	240	320
Post acquisition profit = Q: 110 × 20%; R: ₹70 × 40%	22	28
Less: NCI share in investment in R = 20% × ₹600	-120	
Less; Dividend payable	-20	
NCI on Reporting date	122	348

Topic

Module 18: Valuation and Related Party Transactions

FINAL

Group IV - Paper-19

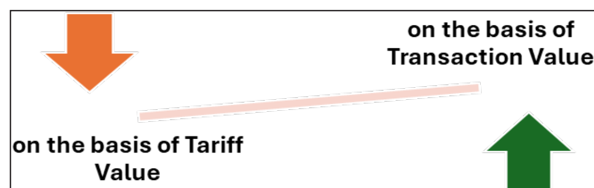
Indirect Tax Laws and Practice (ITLP)

CUSTOMS VALUATION RULES

The terms 'customs' derives its colour and essence from the term 'custom', which means a habitual practice or course of action that characteristically repeated in like circumstances. The collection of revenue through Customs is known in India, from the time immemorial. Laws for collection of revenue and punishments for violation thereof are indicated as early as in Kautilya's "Arthasasthra". Customs, as a major source of revenue, plays a very important role in the economy of our country.

Entry No. 83 of the List I to the Schedule VII of the Constitution empowers the Union Government to legislate and collect duties on imports and exports. Accordingly, the Customs Act, 1962, effective from 1-2-1963 provides vide its section 12 for the levy of duties on goods imported into or exported from India. The items and the rates of duties leviable thereon are specified in two Schedules to the Customs Tariff Act, 1975. The First Schedule specifies the various import items in systematic and well considered categories, in accordance with an international scheme of classification of internationally traded goods known as 'Harmonized System of Commodity Classification' and specifies the rates of import duties thereon, as prescribed by the legislature. The duties on imported items are usually levied either on specific or ad-valorem basis, but in few cases specific-cum-ad valorem duties are also levied. The Second Schedule incorporates items that are subject to exports duties and the rates of duties thereof.

The rate of customs duty leviable on imported or exported goods are either specific or ad valorem basis (i.e., as a percentage of the value of goods) or at times on specific cum ad valorem. In case of ad valorem duty, the valuation of the goods may be determined in any of the following manner:



Valuation on the basis of Transaction Value [Sec. 14(1)]

1. ***Valuation of Imported Goods***: The value of the imported goods shall be the transaction value of such goods, that is to say,

   - the price actually paid or payable for the goods;
   - when sold for export to India;
   - for delivery at the time and place of importation;
   - where the buyer and seller of the goods are not related; and
   - price is the sole consideration for the sale

   subject to such other conditions as may be specified in the rules made in this behalf.

Taxpoint

- Such transaction value in the case of imported goods shall include, in addition to the price as aforesaid, any amount paid or payable for costs and services, including
  - commissions and brokerage (excluding buying commission);
  - engineering, design work;
  - royalties and licence fees;
  - costs of transportation to the place of importation;
  - insurance;
  - loading, unloading and handling charges

  to the extent and in the manner specified in the Customs Valuation (Determination of Value of Imported Goods) Rules, 2007

Customs Valuation (Determination of price of imported goods) Rules, 1988

Methods to be followed (in hierarchal order) for determination of the price of imported goods

- Primary Method: Transaction value [Rule 3]
- Secondary Method

1. The Customs Valuation (Determination of Value of Imported Goods) Rules, 2007 have been specified.

1. Transaction value of identical goods [Rule 4]
2. Transaction value of similar goods [Rule 5]
3. Deductive value [Rule 7]
4. Computed value [Rule 8]
5. Residual method [Rule 9]

Note: On request, the order of application of rules 7 (i.e. Deductive value) and 8 (i.e. Computed value) shall be reversed.

Transaction Value [Rule 3]

Transaction value shall be accepted as price, provided the following conditions are satisfied –

1. The sale is in the ordinary course of trade under fully competitive conditions;
2. There are no restriction as to the disposition or use of the goods by the buyer other than restrictions which –
   a. are imposed or required by law or by public authorities in India; or
   b. limit the geographical area in which the goods may be resold; or
   c. do not substantially affect the value of the goods;
3. The sale or price is not subject to condition or consideration for which a value cannot be determined;
4. Any part of the proceeds of subsequent resale, disposal or use of the goods by the buyer will not be shared with the seller unless an appropriate adjustment is made;
5. The buyer and seller are not related.

Transaction value of identical goods [Rule 4]

The value of imported goods shall be the transaction value of identical goods sold for export to India and imported at or about the same time as the goods being valued.

Taxpoint

1. *Identical goods* means imported goods –
   a) which are same in all respects, including physical characteristics, quality and reputation as the goods being valued except for minor differences in appearance that do not affect the value of goods;
   b) produced in the country in which the goods being valued were produced; and
   c) produced by the same person who produced the goods or where no such goods are available, then goods produced by a different manufacturer.

   However, identical goods do not include goods where engineering, development, art work, design work, plan or sketch was done by the buyer in India free of charge or at a reduced cost.
2. Such identical goods shall be sold at the same commercial and quantity level. Where no such sale is found, the transaction value of identical goods sold at a different commercial level or in different quantity or both shall be used with certain adjustment.
3. Where more than one transaction value of identical goods is found, then the lowest of such value shall be used for determining the value of imported goods.

Transaction value of similar goods [Rule 5]

The value of imported goods shall be the transaction value of similar goods sold for export to India and imported at or about the same time as the goods being valued.

Notes:

1. *Similar goods* means imported goods –
   a) which although not alike in all respect, have like characteristics and like component materials which enable them to perform the same function. Such goods shall be commercially interchangeable with the goods being valued having regard to the quality, reputation and the existence of trade-mark.
   b) produced in the country in which the goods being valued were produced; and
   c) produced by the same person who produced the goods or where no such goods are available, then goods produced by a different manufacturer.

However, similar goods do not include goods where engineering, development, art work, design work, plan or sketch was done by the buyer in India free of charge or at a reduced cost.

2. Such similar goods shall be sold at the same commercial and quantity level. Where no such sale is found, the transaction value of similar goods sold at a different commercial level or in different quantity or both shall be used with certain adjustment.
3. Where more than one transaction value of similar goods is found, then the lowest of such value shall be used for determining the value of imported goods.

Deductive Value [Rule 7]

Where the goods being valued or identical or similar imported goods are sold in India at or about the time of determination of value, then the value of imported goods shall be based on the unit price at which such goods are sold in the *greatest aggregate quantity* to the *unrelated* person in India as reduced by -

a) the commission usually paid or payable or the additions usually made for profits and general expenses for sales in India;

b) the cost of transport and insurance and other cost incurred within India;

c) the customs duty and other taxes payable in India by reason of importation or sale of the goods.

Notes

1. Where such goods are not sold at or about the same time of importation of the goods being valued, then the value of imported goods shall be based on the unit price at which the imported goods or identical or similar imported goods are sold in India at the earliest date after importation but before the expiry of 90 days after such importation.
2. Where such goods are sold in India after further processing, then the value shall be based on the unit price at which the imported goods after processing are sold in the greatest aggregate quantity to an unrelated person in India as reduced by processing and other cost (as referred above) incurred in India.

Computed value [Rule 8]

The value of imported goods shall consist of –

a) The cost or value of materials and fabrication or other processing employed in producing the imported goods;

b) An amount for general expenses and profit made by producers in the country of exportation for export to India;

c) The cost of transport, insurance, etc.

Residual method [Rule 9]

Where the value of imported goods shall not be determined as per any preceding rules, then the value shall be determined using -

- reasonable means consistent with the principles;
- general provisions of these rules; and
- data available in India.

These methods are designed to ensure that customs valuation is based on real economic transactions and reflects the true value of the goods. Importers must provide detailed documentation to support their declared value, including invoices, contracts, and other relevant documents. Failure to comply with these rules can result in penalties, including additional duties and fines.

Topic

Module 4:

Enterprise Risk Management

Module 7: Business Valuation Mothods and Approaches

ELECTIVES

Paper-20A

Strategic Performance Management and Business Valuation (SPMBV)

Modern areas in Enterprise Risk Management

Modern areas in Enterprise Risk Management

Enterprise Risk Management (ERM) has long been a fundamental part of how organisations safeguard their operations, mitigate unforeseen threats, and capitalise on opportunities. However, as globalisation, technological advancements, and societal shifts progress, new dimensions of risk are emerging, prompting a recalibration of ERM frameworks. Modern ERM research has expanded to address these complexities, integrating innovative perspectives and methodologies. This article discusses the contemporary areas of ERM research that are reshaping the field, with a case study illustrating their practical application.

1. Integration of Artificial Intelligence and Machine Learning

One of the most significant areas of emerging research in ERM is the integration of Artificial Intelligence (AI) and Machine Learning (ML). AI algorithms provide predictive analytics, enabling organisations to anticipate risks with greater accuracy. By processing vast datasets, AI-driven models can uncover complex patterns and correlations that are difficult, if not impossible, for human analysts to discern.

Key Contributions of AI and ML in ERM:

Predictive Analysis: AI systems can forecast potential risks by learning from historical data, recognising subtle warning signs that precede crises.

Real-Time Monitoring: ML algorithms facilitate continuous monitoring of internal and external risk factors, enhancing an organisation's ability to react promptly.

Automated Response Mechanisms: AI is also being leveraged to develop automated risk response protocols that trigger predefined actions upon detecting specific indicators.

Recent research delves into ethical AI use in risk management, examining how biases inherent in datasets can lead to skewed risk assessments and proposing frameworks for ensuring equitable decision-making.

2. Cybersecurity and Digital Resilience

In the digital age, cybersecurity has escalated from being a purely technical concern to a pivotal part of enterprise risk. Cyber risk management now goes beyond traditional IT defences, encompassing data privacy regulations, reputational risks, and economic impacts. Emerging research in this sphere focuses on building digital resilience — the capacity of an organisation to adapt to and recover from cyber incidents.

Innovative Research Areas in Cybersecurity:

Zero Trust Architectures (ZTA): The shift towards Zero Trust, which operates under the principle of "never trust, always verify," aims to mitigate risks associated with remote work and digital supply chains.

Cyber Insurance Analytics: New models are being developed to better quantify cyber risk, enabling more precise cyber insurance underwriting.

Human Factors: Research emphasises training and cultivating a cybersecurity-conscious culture, recognising that human error remains a significant vulnerability.

The research trajectory also includes examining the intersections of cyber risk with other enterprise risks such as operational and reputational risks, and how interconnected vulnerabilities can amplify overall exposure.

3. Climate Risk Management and Sustainability

The effects of climate change are far-reaching, impacting industries, economies, and communities. Consequently, the domain of ERM has had to evolve to encompass climate risk management. Emerging research in this field explores methods for quantifying climate-related risks and integrating them into comprehensive risk management strategies.

Key Aspects of Climate Risk Research:

Scenario Analysis: Advanced research uses scenario modelling to evaluate the potential impacts of various climate futures on an organisation's operations and supply chains.

Regulatory Compliance and ESG Reporting: The integration of Environmental, Social, and Governance (ESG) criteria into risk management strategies is a burgeoning area of focus. Regulatory bodies across the globe are increasingly mandating ESG disclosures, prompting new studies on best practices for compliance.

Financial Stress Testing: The development of frameworks that stress-test financial resilience against climate risks is becoming crucial, as stakeholders demand transparency regarding how organisations plan to endure climate-related disruptions.

Recent academic works propose metrics for assessing the effectiveness of climate risk mitigation strategies, contributing to a more nuanced understanding of how environmental factors should be embedded within ERM.

4. Supply Chain and Geopolitical Risk

The COVID-19 pandemic and subsequent geopolitical events, such as trade wars and regional conflicts, have underscored the importance of resilient supply chains. The field of ERM now encompasses research on how organisations can safeguard against supply chain disruptions and geopolitical tensions.

Emerging Research Areas:

Diversification Strategies: Studies are being conducted to assess the optimal balance between global and regional sourcing, with an emphasis on avoiding over-reliance on a single region.

Supply Chain Mapping Technologies: New research is exploring the use of blockchain and other digital ledger technologies to enhance transparency and traceability throughout the supply chain.

Geopolitical Scenario Planning: This field leverages quantitative models to simulate geopolitical shifts and their potential impacts on trade routes and operational stability.

These areas of research not only aim to bolster immediate resilience but also ensure that organisations can pre-emptively adapt to shifting political landscapes.

5. Behavioural and Cultural Risk

The importance of an organisation's internal culture and the behavioural responses of its personnel is gaining recognition as an area crucial to risk management. Current research highlights how intangible elements, such as leadership, ethics, and communication, can either mitigate or exacerbate risk.

New Insights in Behavioural and Cultural Risk:

Psychological Safety: Studies show that environments where employees feel secure in voicing concerns without fear of retribution are more adept at identifying and mitigating risks.

Leadership and Decision-Making: Recent research examines the role of leadership styles in influencing risk-related decision-making processes and outcomes.

Bias and Cognitive Load: The examination of how biases and cognitive load affect the perception and management of risks is a growing field, underscoring the necessity of balanced risk assessment teams.

These findings stress the value of fostering a culture that not only prioritises compliance but also encourages proactive engagement in risk management practices.

6. Digital Transformation and Emerging Technologies

As enterprises rapidly adopt new technologies, managing the associated risks becomes an essential part of ERM. This branch of research considers the implications of digital transformations, such as the adoption of cloud computing, the Internet of Things (IoT), and blockchain.

Research Focus Areas:

Blockchain and Smart Contracts: Investigations are ongoing into how blockchain can provide secure, transparent records of transactions, reducing certain types of financial risk.

IoT Risk Management: The proliferation of interconnected devices introduces new vectors for cyber-attacks and operational disruptions. Research in this field focuses on securing IoT networks and understanding the ramifications of potential failures.

Digital Twins: The concept of digital twins, or virtual replicas of physical assets, allows for risk testing in a simulated environment. This method can reveal potential failures before they occur in the real world, offering an innovative approach to proactive risk management.

Case Study: Climate Risk Management at a Major Financial Institution

Background: In recent years, GreenFin Bank, a multinational financial institution, has emerged as a leader in integrating climate risk into its ERM strategy. Headquartered in the United Kingdom, the bank has faced increasing pressure from regulators and investors to disclose its climate resilience.

Research-Driven Strategy: GreenFin Bank collaborated with academic institutions to develop a sophisticated climate risk assessment model. This model utilises scenario analysis to project the potential impacts of climate change on the bank's loan portfolio over the next 30 years. By incorporating variables such as temperature increases, sea-level rise, and extreme weather events, the bank could assess which industries and regions were most vulnerable.

Implementation: The model allowed GreenFin Bank to adjust its portfolio by reducing exposure to high-risk sectors, such as coal mining, and increasing investments in renewable energy projects. Furthermore, the institution implemented a financial stress testing framework that projected the effects of climate-related economic shocks on its capital adequacy.

Outcomes:

Enhanced Transparency: The bank's ESG reports now include detailed disclosures on climate risk, meeting the requirements of both the Task Force on Climate-related Financial Disclosures (TCFD) and emerging European Union regulations.

Resilience Building: The climate scenario analysis facilitated proactive measures, such as redirecting investments and setting up reserves, which significantly strengthened the bank's financial resilience.

Investor Confidence: As a result of its comprehensive approach to climate risk, GreenFin Bank experienced a notable increase in investor confidence, evidenced by a 15% uptick in long-term investment inflows.

Insights for Broader Application: The case of GreenFin Bank underscores the value of integrating forward-looking climate risk models within ERM strategies. By leveraging emerging research and sophisticated tools, organisations can make informed decisions that not only mitigate risk but also create opportunities for sustainable growth.

7. Regulatory and Compliance Risk Evolution

With global regulatory landscapes becoming increasingly complex, ERM research has turned its focus to compliance risk. The harmonisation of international laws, such as data protection regulations (e.g., GDPR) and anti-bribery acts, challenges companies to stay compliant across jurisdictions.

Current Research Highlights:

Automated Compliance Tools: The use of AI-driven platforms for continuous compliance monitoring is a novel field, providing real-time updates on policy changes and automatically aligning company practices.

Cross-Border Risk Analysis: Research is evolving to help multinational corporations understand and manage compliance risks that vary significantly by region.

Regulatory Technology (RegTech): Studies are assessing how RegTech innovations can streamline risk management processes, enhance efficiency, and reduce human error.

The findings reveal that proactive compliance not only helps in avoiding fines but also enhances a company's reputation, making it an integral component of comprehensive ERM.

The landscape of ERM is expanding to address an array of emerging risks driven by technological advancements, environmental concerns, and shifting global dynamics. The integration of AI, digital transformation, and behavioural insights into ERM frameworks signals a significant evolution in risk management strategies. Moreover, the emphasis on cybersecurity, supply chain resilience, and regulatory compliance reflects a growing recognition that risk management is no longer confined to financial metrics but encompasses broader, interconnected factors.

Practical issues as well as areas that can go wrong in a valuation exercise

Valuing a company is a critical process for investors, analysts, and stakeholders involved in mergers, acquisitions, and strategic decision-making. However, arriving at an accurate valuation is far from straightforward. It requires a comprehensive understanding of the business, the industry landscape, and economic conditions. Numerous practical issues can arise during this process, and errors in judgement or methodology can lead to significant financial consequences. This discussion explores the main practical issues that can complicate company valuation and highlights areas where things can go wrong.

1. Inaccurate Financial Projections

A fundamental component of most valuation methods, such as discounted cash flow (DCF) analysis, is the projection of future financial performance. However, making these projections is fraught with challenges:

Practical Challenges:

Overly Optimistic Assumptions: One of the most common issues is over-optimism in growth rates, profit margins, or market expansion. Companies, especially startups or growth-oriented firms, may overestimate revenue potential or underestimate costs.

Cyclical Business Models: Companies operating in cyclical industries can be particularly challenging to value accurately, as their earnings can vary significantly with economic cycles. Failure to account for this variability can lead to inflated valuations during peak phases and undervalued estimates during troughs.

Data Reliability: Historical data is used to inform future projections, but if this data is inconsistent or manipulated (e.g., through aggressive accounting practices), the entire valuation could be flawed.

Areas That Can Go Wrong: When projections are based on unrealistic or unsupported assumptions, the calculated valuation can severely misrepresent the true potential of the business. This overvaluation or undervaluation can lead to poor investment decisions, resulting in financial losses or missed opportunities.

2. Choice of Valuation Methodology

Valuation approaches can differ significantly, and choosing an inappropriate methodology can lead to skewed results. Common methodologies include DCF analysis, comparable company analysis (CCA), and precedent transaction analysis.

Practical Challenges:

Mismatch of Methods: Selecting a valuation method that does not align with the nature of the business can lead to incorrect assessments. For instance, using DCF for a young startup that has yet to generate consistent cash flows may not provide an accurate representation of its value.

Subjectivity in Market Comparisons: The comparable company analysis depends heavily on finding similar companies in terms of size, growth rate, and industry. In niche markets or industries with few listed competitors, this comparison can be challenging and subjective.

Outdated Precedent Transactions: Relying on past transactions for valuation can become problematic if the market environment has changed substantially since those transactions, such as shifts in regulation or technological advancements.

Areas That Can Go Wrong: If an analyst chooses an ill-suited valuation methodology, the outcome can be misleading. For example, using a CCA with inappropriate peers or an outdated precedent transaction analysis can yield values that do not reflect current market dynamics or company-specific risks.

3. Estimating the Cost of Capital

A core component of valuation, particularly for DCF analysis, is determining the appropriate discount rate. This discount rate reflects the company's cost of capital and influences the present value of future cash flows.

Practical Challenges:

Subjectivity in Weighted Average Cost of Capital (WACC): Calculating WACC involves estimating the cost of equity and cost of debt, each of which comes with

its complexities. The cost of equity, often determined using the Capital Asset Pricing Model (CAPM), can be highly sensitive to assumptions about the risk-free rate, beta, and equity risk premium.

Changing Capital Structures: Companies with fluctuating debt and equity ratios present a challenge, as their true cost of capital may vary over time. Analysts must either assume a stable capital structure or build complex models that adjust over the forecast period.

Country and Currency Risks: Multinational companies require consideration of risks associated with various geographic markets. Exchange rate volatility and differences in country risk premiums can complicate the estimation of WACC.

Areas That Can Go Wrong: An incorrectly calculated WACC can distort the discount rate applied to future cash flows, leading to either an overstated or understated company valuation. An underestimated WACC inflates the valuation, presenting the company as more valuable than it truly is.

4. Accounting for Non-Financial Factors

While financial data is essential, non-financial factors such as intellectual property, brand value, and management quality can significantly influence a company's worth.

Practical Challenges:

Intangible Assets Valuation: Assigning value to intangible assets, such as patents, proprietary technology, or brand reputation, can be highly subjective. Analysts often struggle to quantify these elements accurately, and their value may not be fully captured in traditional financial statements.

Management and Corporate Governance: A company's leadership and governance structure play an integral role in its future performance. However, evaluating management quality is inherently qualitative and can be overlooked or misjudged in quantitative models.

ESG Considerations: Environmental, Social, and Governance (ESG) factors are increasingly being factored into valuations, as they can have long-term financial implications. However, quantifying ESG risk and its potential impact on future earnings is still an emerging practice that lacks uniform standards.

Areas That Can Go Wrong: Failure to adequately account for non-financial factors can lead to undervaluation, particularly in industries where intangible assets and innovation are crucial. Conversely, overestimating the value of a strong brand or proprietary technology without solid justification can inflate a valuation.

5. Market Conditions and External Factors

The broader economic environment and industry-specific trends can dramatically impact company valuations.

Practical Challenges:

Economic Volatility: Macroeconomic factors such as interest rate changes, inflation, and recession risks can shift valuation metrics. For example, during periods of low interest rates, valuations may be higher due to lower discount rates. Conversely, during economic downturns, valuations often drop as market sentiment turns risk-averse.

Regulatory Changes: Industries subject to heavy regulation may face significant valuation changes if there is a shift in policy. For example, pharmaceutical companies can experience valuation swings depending on drug approval processes or healthcare reforms.

Technological Disruption: Companies in sectors vulnerable to rapid technological change face valuation risks tied to their ability to innovate. A failure to adapt can lead to a decline in future earnings potential, which may not be apparent in static valuation models.

Areas That Can Go Wrong: Ignoring or underestimating the impact of external market conditions can make valuations obsolete quickly. For example, an analysis performed without considering upcoming regulatory changes may lead to valuations that are rendered inaccurate once the new regulations take effect.

6. Adjusting for Risk

Properly incorporating risk into a valuation model is essential for generating realistic estimates.

Practical Challenges:

Risk Premium Assumptions: Accurately reflecting risk in a valuation model involves assumptions about the risk premium. These assumptions can be influenced by subjective judgement, leading to inconsistent risk adjustment across similar valuations.

Sensitivity Analysis: Conducting sensitivity analyses is vital to understanding how changes in assumptions impact the valuation. However, this process can be resource-intensive, and failing to perform a comprehensive sensitivity analysis can lead to underestimating potential valuation fluctuations.

Areas That Can Go Wrong: If risk is either overemphasised or underestimated, it can distort the final valuation. Overestimating risk could undervalue a company and discourage investment, while underestimating risk could lead to overvaluation and eventual financial disappointment.

7. Issues in Gathering Comparable Data

Comparable company analysis (CCA) and precedent transaction analysis rely on accurate and relevant data for peers or historical transactions.

Practical Challenges:

Lack of Suitable Comparables: For unique or highly specialised companies, finding appropriate comparables can be difficult. Analysts may be forced to use less relevant companies or transactions, which skews the valuation.

Data Inconsistency: Publicly available data may differ in terms of accounting practices, currencies, or reporting standards. Adjusting for these differences to ensure a fair comparison requires expertise and can be prone to error.

Outliers and Adjustments: Identifying and appropriately adjusting for outliers within datasets is necessary but challenging. For example, a one-time gain or loss that impacted a peer company's earnings needs to be isolated for an accurate comparison.

Areas That Can Go Wrong: Relying on mismatched or outdated comparable data can lead to valuations that do not accurately reflect the company's standing. An improper adjustment or failure to normalise for one-off events can lead to significant valuation inaccuracies.

8. Bias in Valuation

Human bias can manifest in various stages of the valuation process, whether consciously or unconsciously.

Practical Challenges:

Confirmation Bias: Valuation analysts may have preconceived notions or pressures that influence their valuation inputs and interpretations. This bias can lead to selecting data or making assumptions that align with a desired outcome.

Client Pressure: Analysts working for investment banks or advisory firms may face pressure to deliver valuations that support strategic goals, such as a higher valuation to secure a favourable deal.

Anchoring Bias: Initial figures or previous valuations can anchor analysts' perceptions, leading them to adjust their final valuation less than is warranted by new data.

Areas That Can Go Wrong: Bias can significantly distort the outcome of a valuation. An overvaluation driven by confirmation bias or client pressure can lead to inflated asset prices and misinformed investments. On the other hand, overly conservative estimates can cause undervaluation and hinder strategic opportunities.

Topic

Module 5: Operational Risk and Off-Balance Sheet Risk

Module 8: Managing Risk in Insurance Business

ELECTIVES

Paper-20B

Risk Management In Banking and Insurance (RMBI)

Operational Risk and Off-Balance Sheet (Contingent Liabilities) Risk in Banking Sector

Operational Risk:

Growing number of high-profile operational loss events worldwide have led banks and supervisors to increasingly view operational risk management as an integral part of the risk management activity.

Management of specific operational risks is not a new practice; it has always been important for banks to try to prevent fraud, maintain the integrity of internal controls, reduce errors in transaction processing, and so on.

However, what is relatively new is the view of operational risk management as a comprehensive practice comparable to the management of credit and market risk. 'Management' of operational risk is taken to mean the 'identification, assessment, and / or measurement, monitoring and control / mitigation' of this risk.

Deregulation and globalisation of financial services, together with the growing sophistication of financial technology, are making the activities of banks and thus their profiles more complex. Evolving banking practices suggest that risks other than credit risks and market risks can be substantial.

Definition of operational risk has evolved rapidly over the past few years. At first, it was commonly defined as every type of unquantifiable risk faced by a bank. However, further analysis has refined the definition considerably. Operational risk has been defined by the Basel Committee on Banking Supervision1 as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. This definition includes legal risk, but excludes strategic and reputational risk. This definition is based on the underlying causes of operational risk. It seeks to identify why a loss happened and at the broadest level includes the breakdown by four causes: people, processes, systems and external factors.

Examples of these new and growing risks faced by banks include:

- Highly Automated Technology: If not properly controlled, the greater use of more highly automated technology has the potential to transform risks from manual processing errors to system failure risks, as greater reliance is placed on integrated systems.
- Emergence of E- Commerce: Growth of e-commerce brings with it potential risks (e.g. internal and external fraud and system securities issues).
- Emergence of banks acting as very large volume service providers creates the need for continual maintenance of high-grade internal controls and back-up systems.
- Outsourcing: growing use of outsourcing arrangements and the participation in clearing and settlement systems can mitigate some risks but can also present significant other risks to banks.
- Large-scale acquisitions, mergers, de-mergers and consolidations test the viability of new or newly integrated systems.

Banks may engage in risk mitigation techniques (e.g. collateral, derivatives, netting arrangements and asset securitisations) to optimise their exposure to market risk and credit risk, but which in turn may produce other forms of risk (e.g. legal risk).

A clear appreciation and understanding by banks of what is meant by operational risk is critical to the effective management and control of this risk category. It is also important to consider the full range of material operational risks facing the bank and capture all significant causes of severe operational losses. Operational risk is pervasive, complex and dynamic. Unlike market and credit risk, which tend to be in specific areas of business, operational risk is inherent in all business processes. Operational risk may manifest in a variety of ways in the banking industry.

The Basel Committee has identified the following types of operational risk events as having the potential to result in substantial losses:

- ✓ Internal fraud. For example, intentional misreporting of positions, employee theft, and insider trading on an employee's own account.
- ✓ External fraud. For example, robbery, forgery, cheque kiting, and damage from computer hacking.

- ✓ Employment practices and workplace safety. For example, workers compensation claims, violation of employee health and safety rules, organised labour activities, discrimination claims, and general liability.
- ✓ Clients, products and business practices. For example, fiduciary breaches, misuse of confidential customer information, improper trading activities on the bank's account, money laundering, and sale of unauthorised products.
- ✓ Damage to physical assets. For example, terrorism, vandalism, earthquakes, fires and floods.
- ✓ Business disruption and system failures. For example, hardware and software failures, telecommunication problems, and utility outages.
- ✓ Execution, delivery and process management. For example: data entry errors, collateral management failures, incomplete legal documentation, and unauthorized access given to client accounts, non-client counterparty mis-performance, and vendor disputes.

Risks on Off-Balance Sheet Products of Bank:

The reasons for the rapid growth in banks' off-balance-sheet exposures over recent years have been much debated. Deregulation and technological progress have provided new opportunities for banks but have also increased competitive pressures, from banks and non-banks alike. The margins available for many types of conventional on-balance-sheet business have been diminishing, whilst at the same time supervisors have acted to restore and strengthen banks' capital adequacy.

Banks' off-balance sheet activities are among the many factors blamed for the risk-taking that led to the 2007–2008 financial crisis.

- Larger off-balance sheet exposures are associated with lower aggregate and idiosyncratic risk but higher tail risk.
- The association varies across types of banks differentiated by bank size, non-performing loans, charter value, loan growth, and capital.
- Banks experiencing higher loan growth coupled with Off-Balance Sheet (OBS) are riskier in terms of volatility of stock returns and idiosyncratic risk.
- A greater loan base is associated with greater risks in presence of bank leverage, although better capitalized banks with bigger loan books are susceptible to lower tail risk.

Banks have responded to these and other developments imaginatively and vigorously in an effort both to retain their traditional customer base and to boost fee income from sources which in many countries are (so far at least) largely or wholly free from capital requirements.

The increasing use of financial instruments which do not involve the acquisition by banks of conventional on-balance-sheet assets raises some difficult questions for individual bank managements, for supervisory authorities. While the pace of developments appears quicker in some countries than others, banks generally are becoming more deeply involved in an array of novel instruments and techniques.

Liquidity and market/position risks arising from off-balance-sheet activities Liquidity and funding risk.

Funding risk may be defined as the risk that a bank will be unable to purchase or otherwise obtain the necessary funds to meet its obligations as they fall due. (These obligations might, for example, take the form of maturing deposits or drawings under committed facilities.)

Funding difficulties may arise when, in order to meet sudden or unusually large withdrawals of funds, a bank is forced to rely on less stable, purchased deposits for a greater than normal proportion of its funding requirements. This may strain the willingness of the market to supply funds at competitive rates and may convey a signal that the bank is facing serious problems. The worldwide total of commitments now outstanding for Note Issuance Facilities (NIFs), standby letters

of credit, loan commitments and, where they exist, undrawn overdraft facilities, is very large indeed.

The Basel Committee has concluded that the rapid growth of commitments represents a significant additional risk to banks' funding strategies. Many commitments are callable entirely at the borrower's option and many are most likely to be called when other markets (in particular the capital markets) are reluctant to meet the borrower's needs. It is therefore possible that a bank might be faced with large and perhaps unexpected calls under commitments at a time when markets are unreceptive to its needs for additional funds. To the extent that the growth in commitments represents a structural shift in borrowing patterns, such that banks move away from direct lending and increasingly towards a "back-stop" function, it may prove difficult to raise large sums at short notice to meet these commitments.

With the more traditional commitments, for example overdrafts, there is considerable historical experience indicating in aggregate a relatively stable rate of drawdown, which varies between different countries and different banks and will also vary with economic conditions. It is too soon to be able to draw any conclusions about the draw-down experience with some of the newer types of commitment.

Banks may wish to assess (and set limits on) their total volume of commitments in terms of their perceived funding capacity, perhaps assessing this on a "worst case" basis and revising it in line with market conditions, actual draw-down and developments in borrowers' creditworthiness. It may be that, wherever possible, banks will seek committed lines for their own use to reduce their funding mismatch.

The particular perspective of supervisory authorities in relation to off-balance sheet risk is to seek to ensure that banks are adopting appropriate procedures to measure and control the risks.

Managing Risk in Insurance Business

Risk management in the insurance business is a bit of a head-scratcher. On one hand, insurance companies are selling what many people consider to be a risk mitigation. On the other, insurance companies themselves face a variety of risks they need to mitigate.

Insurance companies can "self-insure," or purchase coverage from a reinsurer, but this doesn't ensure all of the company's risk is accounted for. One of the biggest values an insurance company provides is customer service for those who need to submit a claim. If customers consistently have poor customer service experiences, they're likely to share their stories on social media, tarnishing the company's reputation and leading the company to fall behind their competition.

According to a study by the National Association of Insurance Commissioners (NAIC), core risks in the insurance business include "underwriting, credit, market, operational, liquidity risks, etc." Given this wide variety of concerns, there is a tremendous opportunity for risk management in insurance companies to make a positive impact.

Emerging risks fall under the category of 'anticipated risks'. Such risks often go unnoticed until it's generally too late and they've had large-scale adverse impacts on markets and businesses. Since the nature of emerging risks cannot be quantified, they have to be anticipated by studying historical risks emerging from developing trends.

While unprecedented events cannot be forecasted, businesses and in this case, insurance companies, their third-party collaborators, reinsurers, and miscellaneous operating vendors can still be prepared for such challenges by effectively managing risks after analysing underlying risk factors.

In the realm of risk management, staying attuned to macro trends is a fundamental practice that holds

particular significance when addressing emerging risks as they provide a panoramic view of the larger forces at play.

1. Environmental dangers and climate change: The growing frequency and intensity of extreme weather events, such as hurricanes, floods, earthquakes and wildfires, put financial burden on insurance houses, leading to larger economic challenges.

2. Modern technological developments: The rapid development of technology, including mobile applications, AI/ML platform automation and digital KYC, requires new risk assessments and coverage models, considering possible responsibility shifts from traditional insurance firms to third-party insurance brokers and technology providers.

3. Geopolitical instabilities: Political unrest, trade tensions and geopolitical conflicts can lead to economic volatility and may cause insurers to face heightened risks related to property damage, business interruptions and supply chain disruptions.

4. Social shifts: Social shifts that affect insurance companies extensively include urbanisation and demographics. Rapid urbanisation increases the magnitude and severity of claims involving infrastructural losses and overpopulation. Changes in demographics, such as increasing aging population and permanent migrations, drastically influence the demand patterns for property, life and health insurance, while bolstering the need for novel insurance products and strategies for risk management.

5. Economic uncertainties: Solvency and investment returns of insurers are greatly impacted by fluctuations in interest rates, unpredictable investment market and global economic volatility.

6. Regulatory compliance and data privacy: Following data protection laws such as the newly introduced Digital Personal Data Protection Act 2023 (DPDP) in India is essential to safeguard customer data and avoid heavy fines. Non-compliance to data privacy laws will lead to severe distrust amongst policyholders, while resulting in serious reputational damage and loss of potential customers.

7. Data security breach: Data security breaches, due to cyberattacks and illegal access to private data, pose serious dangers to insurers and policyholders. If such breaches result in compromising personal and financial information, identity theft and fraud, there can be serious financial losses for both insurers and policyholders.

8. Insider threats: Insider threats, which consist of employees' or outside contractors' purposeful or inadvertent abuse of information, represent intra-organisational dangers to insurers' data security. Threat actors may gain access to sensitive private data by way of illegal access, data theft or due to careless data management.

9. Data integrity: Assurance of data quality and integrity is an essential need for insurers to carry out well-informed business decisions and provide accurate risk assessments. Inconsistent, inaccurate or out-of-date data can lead to misunderstandings, arguments over claims and financial losses.

10. Biases in data: AI and data analytics integrated into the insurance decision-making process carry the possibility of prejudice and discrimination. Age, gender or socioeconomic status are some of the few factors due to which policyholders may be treated unfairly because of erroneous data models or biased algorithms.

Market conduct risk Another aspect of emerging risks is the market conduct risk. Insurance as a concept deal with two very important and sensitive human characteristics health and death. Hence, it becomes imperative for insurance firms to strictly adhere to ethical practices while marketing their products.

The emergence of bancassurance models, banks offering insurance products to their clients is a noteworthy trend in the insurance sector. A bank and an insurance business form a relationship known as bancassurance in which the bank offers the insurance firm's products

to its own clientele. This way, the insurance firm can reach a wider audience by capitalising on the bank's vast customer base and distribution network.

In any economy, older populations are heavily impacted by this model, as their risk management requirements are often complex. Therefore, there's a growing concern regarding banking investments being sold as insurance products with highly attractive benefits despite their inadequate coverage. This ultimately raises significant reputational risk for insurance firms and their distributors, since it misleads consumers.

Furthermore, banks are not the only distribution channels where conduct risks are noticeably greater. There are several regulated and unregulated insurance distribution channels, including:

- Tied-agency channels: Tied agents, working for a single insurer, have to strike a balance between advancing the interests of their clients and completing targeted sales goals. Mis-selling and putting business objectives ahead of consumer demands is a recurring risk with tied agencies.
- Insurance broking: Consumers are frequently offered biased insurance investment advice and products to complete target sales. The risks stem from conflicts of interest, insufficient commissions and inaccurate fee disclosures.
- Direct insurance sales: Sales through telesales and e-commerce tend to be more efficient, but there are risks associated with transparency and client understanding of product conditions. As a result, there are numerous consumers who become susceptible to the mis-selling of insurance products.
- Call centres and digital channels: Call centre and digital insurance executives must provide accurate insurance information and clear communication on products and their underlying policies. Risks encompass violations of data privacy, deceptive selling and inadequate outlining of policy specifics. Strict controls are required for direct marketing via phone, email or SMS to avoid incorrect sales made by deceiving consumers, while being compliant with regulations governing consumer consent and data privacy.
- Microfinance: To serve low-income populations, microfinance institutions must make sure that insurance products are both reasonably priced and tailored to the individual needs of their clients. To stop consumer exploitation, it is important to educate them about insurance products/services.
- Technological distribution: Insurance sales via online platforms and mobile apps increase efficiency but also raise issues of data protection, cybersecurity and unclear communication regarding policy details. Protecting customer information and maintaining privacy are top priorities across all channels particularly considering the growing usage of digital tools and platforms.

To Conclude: The insurance industry will likely face a changing regulatory landscape in the years ahead. Multiple regulatory influences at the Country and international levels continue to present significant challenges for the industry. How to classify insurance companies as systemically important financial institutions (SIFIs) still requires clarification. Risk management for insurance companies enables insurance companies to succeed among this uncertainty by anticipating and addressing a wide variety of change before risks materialize.

Topic

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

ELECTIVES

Paper-20C

Entrepreneurship and Start Up (ENTS)

Scalability, Scaling up and Stabilisation of Sustainable Business

A scalable startup is one that begins with a lucrative and innovative idea and adopts a profitable business model that can grow quickly into a hugely profitable company. This includes entering a large market and creating a niche for the company's products**.** Some examples of scalable startups:

(a) **Social media platforms:** Facebook, Twitter, and Instagram.

(b) **Online stores:** Amazon and Flipkart.

(c) **Fast-food chains:** McDonald's

(d) **Software as a Service (SaaS**

(e) **Online marketplaces**

(f) **Razor and blade business model**

How to stabilize a Startup Business?

The following ways to stabilize a startup business:

1. **Establish a strong financial foundation**: A robust financial foundation is essential for business stability. Monitor your financial metrics like debt-to-equity ratio, working capital ratio, net profit margin, and cash conversion cycle. One has to focus on the following aspects:

(a) **Develop a Clear Financial Plan:** Create a comprehensive financial plan that outlines your business goals, revenue targets, expense forecasts, and cash flow projections

(b) **Maintain Accurate Financial Records:** Keep detailed and updated records of your transactions, such as income, expenses, assets, and liabilities.

(c) **Monitor Cash Flow Regularly:** Check your business cash flow regularly to ensure you have enough liquidity to cover your operating expenses, debt obligations, and other financial commitments.

(d) **Manage Debt Wisely:** Manage your debt and avoid taking on excessive debt that could strain your financial resources.

[Source:https://www.invensis.net/blog/how-to-improve-business-stability]

2. **Create firm policies and procedures**: Ensure that your policies reflect your company's current condition, product/service, and culture. Improve and document processes and procedures so that these policies can be executed.
3. **Diversify revenue streams**: Diversifying revenue streams can help stabilize a business. This includes: (a) Expand Product or Service Offerings; (b) Explore New Markets or Customer Segments; (c) Develop Recurring Revenue Models and (d) Embrace E-commerce and Digital Channels.
4. **Follow a customer-centric approach**: Focus on the needs of your customers.
5. **Maintain strategic partnerships**: Strategic partnerships can help stabilize a business.
6. **Be adaptable and agile**: Be flexible and adaptable to changing conditions.
7. **Establish a board of directors**: A board of directors can help a business run more effectively.

Startup Exit Strategy

A **startup exit strategy** is a startup's strategic plan to sell or make liquid stakeholders' ownership in the company. While not every entrepreneur starts a business with the goal of selling it, when startups take on investors, they need to have a plan to allow founders and investors to exit the business when the time comes. Startup exit strategies are plans to exit the business or make the business liquid (take it public) to allow for founders, investors, and other stakeholders to exit.

Types of Exit Strategies

Every startup founder will need to consider exiting their business at some point or another. A well-defined exit plan helps entrepreneurs swiftly move on to their next big project.

1. **Initial Public Offer:** An initial public offering (IPO) is the process of taking the company public by selling shares on the publicly traded market. The IPO is the first (or initial) sale of a company's shares on the public market. Once shares go on sale and begin trading publicly, founders and other shareholders can then sell their shares on the market, effectively exiting (or at least ending their ownership of) a startup.

2. **Mergers:** Mergers and acquisitions (M&A) are two other common types of startup exit. Startups usually explore mergers because both parties stand to benefit. Mergers may occur when two or more companies believe they can streamline operations, reduce costs, create economies of scale, or build some other competitive advantage.

3. **Acquisitions:** Another common form of startup exit is **acquisitions. Acquisitions are when another company acquires (or purchases) your startup. When an acquisition** occurs, your startup may continue operating as is or it may be dissolved into the acquiring company. Some founders take their earnings and walk away. Other founders and stakeholders negotiate a role and are hired by the acquiring company to continue in their present position. In fact, cashing out or remaining with the company may even be a condition of the deal and end up being required for founders to vest all of their shares.

4. **Liquidation:** Liquidation is typically a much quicker exit option than most other exit strategies, but it is likely to net you the least in return. You can liquidate as quickly as you can sell your business's assets. However, when you liquidate, you lose the value of most of your intangible assets, such as your customer base, reputation, and relationships you and your startup have worked hard to build.

5. **Private Offerings:** Private offerings are less expensive and need less time to conduct since the services of underwriters or brokers are less required. You can choose investors who exhibit similar goals and interests, offering these investors more complex and confidential transactions. If these investors are entrepreneurs themselves, they can help in the company's management.

6. **Cash Cow:** Cash cows are firms that are able to command a high market share in an industry dominated by low growth. They are able to sustain enough capital to stay afloat for the foreseeable future as they promise years of increased profits. These startups are least likely to exit and will be more able to keep paying dividends to their investors and shareholders.

7. **Venture Capital:** The key to maintaining a level of security among investors is to keep the cash rolling into the startup. Venture capitalists usually invest large sums of money into businesses and startups that are deemed worthy of note. Currently, there had been a downward trend of investments by venture capitalists due to the length of time it would normally take for investments to mature.

8. **Third-Party Sale:** Selling to a third party creates an instant successor to the business, and finding an ambitious buyer may continue and grow the legacy of the business.

9. **Family Succession:** Family succession, also known as a legacy exit, is the process of turning your business over to your children. While family succession is a popular exit strategy among small business owners, it is typically not an exit strategy for larger businesses or high-growth startups as family succession does not usually provide a liquidity event for investors and other stakeholders to cash out of the company.

10. **Management Buyout:** Sometimes, a rising generation of company leaders successfully takes over the business — but this exit strategy requires a great deal of careful succession planning, and can be complicated by employees' ability to front the money or secure the credit for the purchase. There are certain advantages to structuring the sale over time, but if one of the involved parties wants to back out, financing can be fraught.

11. **Partner/Investor Buyout:** Partner and investor buyouts are another exit event that some startup founders pursue. In many instances, when a startup has multiple co-founders or investors and a founder wants to leave the company, partners and investors are the first options.

Case Scenario

Bisleri was founded by an Italian businessman, inventor and chemist- Signor Felice Bisleri. At first, he developed Bisleri with the intention of an alcohol remedy which is made up of Cinchona, Herbs and iron salts.

After the demise of Felice Bisleri, the brand originated in Mumbai in 1965 which was regulated by the Parle company in 1969 under the Late Shri Jayantilal

Chauhan. The company came up with a different concept of selling Soda in two categories- Carbonated and non-carbonated mineral water, this spiked up the production of mineral water in India. The real shift happened in the 1980s where the company used PVC packaging and later converted it into PET bottles with an aim of an eco-friendly environment. Then, in order to augment the production, the company started providing affordable and convenient water bottles to the customers. This generation of people look for quality water, so without any dubious customers go for BISLERI from the shop.

Despite the increasing competition in the packaged drinking water industry, Bisleri holds the largest market share of 36%. Bisleri's packaged drinking water is the main component in the marketing mix of Bisleri. Products Bisleri's are affordable and offer more quantity with less cost. Bisleri uses location-based pricing strategy. Bisleri's products sold in restaurants, theatres, etc are costlier compared to retail shops.

Bisleri maintains a solid supply chain with a fast distribution system. Even though the company's head office is located in Mumbai, Bisleri has 15 plus manufacturing units across the country leading to large scale production and the company's own distribution network in the manufacturing cities makes access to products easier. Bisleri also owns a large number of trucks that makes smooth and fast transportation possible.

Bisleri has adopted several forms of promotional activities from advertising on television, print forms to personal selling and usage of billboards, posters and hoardings. The brand also has a complete website detailing its various products. The famous one-liner 'Biasleri is veri veri extraordinari' in Bisleri's first advertisement has captured the attention of a substantial number of consumers. The different campaigns Bisleri has initiated have given the brand a great deal of exposure. Notable campaigns include the 'one nation, one water' where labelling was done in different languages to connect with people from different regions; 'Har Pani ki bottle Bisleri Nahi' where they promote the idea that not all water is pure and hygienic like Bisleri.

(Source: https://startuptalky.com/bisleri-success-story/)

Choose the correct option from the given alternatives based on the above scenario:

1. Scalability in business refers to an organization's ability to grow to meet increased-----------.

   (a) Price

   (b) Customer

   (c) Demand

   (d) Sales

   Answer: (c)

2. Product positioning is a --------- that helps a product or service stand out from competitors by establishing a unique identity in the minds of the target audience.

   (a) Pricing strategy

   (b) Product strategy

   (c) Place strategy

   (d) Marketing strategy

   Answer: (d)

3. Which of the following factor (s) is/are not influencing scaling up of a business?

   (a) Innovation

   (b) Internal process

   (c) Marketing

   (d) All of the above

   Answer: (d)

4. Which one of the following is the strategy of Bisleri 'Har Pani ki bottle Bisleri Nahi'?

   (a) Marketing

   (b) Promotion

   (c) Pricing

   (d) Product

   Answer: (b)

Invitation to Contribute Articles for CMA Student E-Bulletin - Showcasing Your Expertise!

Dear CMA Student,

We are excited to extend an invitation to you to contribute an article for the **CMA Student E-Bulletin,** our esteemed monthly e-journal exclusively crafted for CMA students. This platform, managed by the Directorate of Studies at ICMAI, aims to provide a space for your insights, experiences and knowledge-sharing within the CMA community.

Submission Guidelines:

- **Article Length:** Please prepare articles ranging between 1200 to 1500 words.
- **Topic:** The articles can cover a wide spectrum of subjects, including but not limited to advancements in finance, industry insights, case studies, personal experiences and emerging trends in the field.
- **Originality:** We encourage you to share your unique perspectives and experiences. Ensure that your submission has not been published elsewhere.

Submission Deadline: We kindly request you to submit your article by **20th of the previous month of publication.** This will allow us ample time to review and prepare the upcoming issues of the CMA Student E-Bulletin.

Submission Process: Please send your article to ***studies.ebulletin@icmai.in*** with the subject line **"CMA Student E-Bulletin Submission - [Your Name, Registration No.]".** Include a brief author bio and a high-resolution photograph to be featured alongside your article.

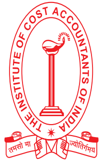
Recognition and Rewards: Selected articles will be featured prominently in the CMA Student E-Bulletin, providing you with a valuable platform to showcase your expertise. Additionally, authors of published articles will be acknowledged and the top contributors may be eligible for special recognition and rewards.

We believe that your unique insights and experiences will contribute significantly to the enrichment of the CMA Student E-Bulletin. Your participation will not only enhance your visibility within the CMA community but also foster a culture of knowledge-sharing and collaboration.

Best Regards,

Team DoS
The Institute of Cost Accountants of India

E-mail – studies.ebulletin@icmai.in



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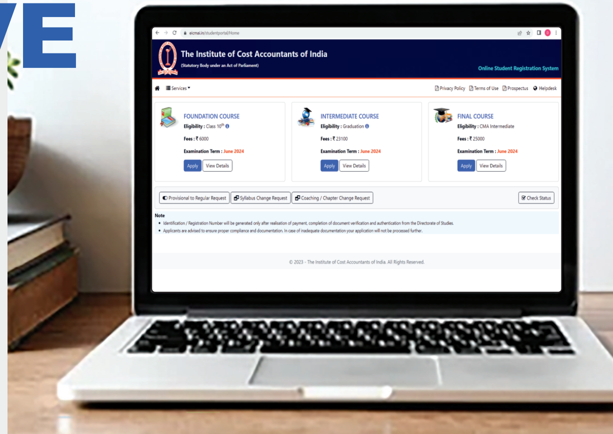
NEW IT INITIATIVE TO PROVIDE ENHANCED FACILITIES TO CMA STUDENTS



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:

- Register online for Foundation, Intermediate & Final Courses
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- Request Conversion from Old Syllabus to New Syllabus
- Request changes in Oral / Postal Coaching and opt for Chapter-to-Chapter Conversion
- Convert from Provisional to Regular status

Additional services for students will be seamlessly incorporated in the near future.

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- For June Exam - 31st January of same Calendar Year
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- Passed CMA Foundation Examination
- Graduates of any discipline (Students awaiting final result also apply on provisional basis)
- Qualified CAT Level - I of The Institute of Cost Accountants of India
- Qualified CA Intermediate
- Qualified Engineers

Course Fees

Foundation - ₹6,000/-	Intermediate - ₹23,100/-*	Final - ₹25,000/-*

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Website : www.icmai.in

Ref. No.: G/128/11-1/2024 **Date:** November 25, 2024

NOTIFICATION

Sub.: Change of Elective Paper for the CMA Final Level students

The Council of the Institute in its 355th Meeting, held on 5th September, 2024 has decided that CMA Final Level students, who are willing to change their Elective Paper has to pay a nominal fee of Rs. 1,000/-, which includes free distribution of study material for the new Elective Paper.

Fees for change of Elective Paper shall be paid through Demand Draft to be issued in favour of 'The Institute of Cost Accountants of India', payable at 'Kolkata'.

Students can submit their applications along with original Demand Draft to the following address of the Institute:

The Directorate of Studies,

CMA Bhawan,

12, Sudder Street, Kolkata – 700016.

This is for information of all concerned.

Sd/-

CMA (Dr.) Debaprosanna Nandy
Secretary (Officiating)

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Ref. No.: G/128/11/2024 **Date:** November 1, 2024

NOTIFICATION

Sub.: Revised Scholarship Schemes for the Economically Challenged-cum-Meritorious students, Physically Challenged/Differently Abled students and CMA National Scholarship Scheme 2024-25

The Council of the Institute in its 355th Meeting, held on 5th September, 2024 has revised the existing Scholarship Schemes and introduced CMA National Scholarship Scheme 2024-25 for the students of ICMAI, details of which are annexed herewith.

1. **Revised Scholarship Scheme (*waiver*) - 2024 for the Economically Challenged-cum-Meritorious students**

Foundation and Intermediate Level students can apply for this Scholarship Scheme by fulfilling the eligibility criteria **(Annexure – I)**.

2. **Revised Scholarship Scheme (*refund*) - 2024 for Physically Challenged/ Differently Abled students**

Physically Challenged/Differently Abled students, who are suffering from more than 40% disability (certified by appropriate Government Hospitals and showing degree of disability) can apply for this Scholarship Scheme **(Annexure – II)**.

3. **CMA National Scholarship Scheme 2024-25**

Graduate and Post-Graduate Rank Holders from any recognized university (Passing on or after 1st January 2023) in any stream who wish to pursue the CMA Intermediate Course are eligible to apply for this Scholarship Scheme **(Annexure – III)**.

For more information, please visit the web link:

https://icmai.in/studentswebsite/Financial_Aids.php

Candidates eligible for the above mentioned schemes can apply through Offline Mode by providing all supporting documents.

This is for information of all concerned.

Sd/-
CMA (Dr.) Debaprosanna Nandy
Secretary (Officiating)

Page **1** of **4**

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Annexure - I

Revised Scholarship Scheme (waiver) - 2024 for the Economically Challenged-cum-Meritorious Students (applicable for Foundation and Intermediate Level students only)

Foundation Level (Max. Allotment Per Exam Term – 500 nos.)	Intermediate Level (Max. Allotment Per Exam Term – 250 nos.)	Income Criteria	Cut-off Date of Form Submission
Marks Criteria	**Marks Criteria**		
Class 10 & 12 - 80% **Must have passed in the first attempt**	**Class 12 - 80% & Foundation** Aggregate - 65 % **Must have passed in the first attempt**	Having an income (if employed or is having an independent source of income) of not more than Rs.1,00,000 per annum (if living on his/her independent income) or If he/she is dependent on his/her parents/guardian/spouse whether partially or wholly, the combined income from all sources should not exceed Rs.2,00,000 per annum	**For June Term** Starting date of Form submission - 16th August Last Date of Form Submission - 31st October
	Or, **Class 12 - 80% & UG/PG** - Aggregate - 75 % **Must have passed in one sitting and in the first attempt at the prescribed Examinations of the University/Institute**		**For December Term** Starting date of Form submission - 16th February Last Date of Form Submission - 30th April

Students who are eligible to avail benefits under this scheme, shall have to make an application in prescribed form along with the prescribed fee for that respective Course. The fees are one-time payment only and are non-refundable in nature.

Course	Prescribed fee	Nature of payment	Course	Prescribed fee	Nature of payment
Foundation	**Rs.500**	**Admission Fee**	**Intermediate**	**Rs.500**	**Registration Fee**

Note:

1. Application shall be made in the Prescribed Form for the Revised Scholarship Scheme for the Economically Challenged-cum-Meritorious Students.
2. The hard copy of the duly filled Form, along with original Income proof certificate, photo copy of all supporting documents (Self attested) and original Demand Draft of Rs.500/- for Admission/ Registration Fee for Foundation Level/Intermediate Level respectively, shall be submitted to the following address of the Institute:
   The Directorate of Studies, CMA Bhawan, 12, Sudder Street, Kolkata – 700016.
3. The Demand Draft of Rs.500/- (for Admission/ Registration Fee) shall be issued in favour of 'The Institute of Cost Accountants of India', payable at 'Kolkata'.
4. All the relevant documents must be submitted within the cut-off date for the respective term of examinations.
5. Selected candidates will be informed over the mail after the cut-off date of the the respective term of examination.
6. Selected Candidates shall be exempted from the course fee of Foundation / Intermediate Level (excluding Admission/ Registration Fee for Foundation Level/Intermediate Level respectively).
7. Candidates, who are not selected, their Demand Draft with all submitted documents shall be returned after the cut-off date. Those students have to take Admission/Registration by paying full course fee.
8. Contact mail id.: studies@icmai.in

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Annexure - II

Revised Scholarship Scheme (refund) - 2024 for the Physically Challenged/Differently Abled Students (applicable for Intermediate and Final Level students only)

Physically Challenged/Differently Abled students, who are suffering from more than 40% disability (certified by appropriate Government Hospitals and showing degree of disability) are eligible for full exemption from the following payments:

a. Postal Tuition Fee
b. Oral Coaching Fee
c. Student Practical Training Registration Fee
d. Industry Oriented Training Fee
e. De-Novo Registration Fee
f. Coaching Revalidation Fee
g. Subject Exemption Fee

Note:

1. Student has to pay full course fee for Registration/Enrolment in Intermediate/Final Level respectively. Web link for online Admission: https://eicmai.in/studentportal/Home
2. Candidates eligible for the scheme can apply for the applicable refunds through Offline Mode.
3. Hard copy of the application with all supporting documents shall be submitted to the following address of the Institute:
   The Directorate of Studies, CMA Bhawan, 12, Sudder Street, Kolkata – 700016.
4. Refund shall be made to the eligible students after deducting the Registration/Enrolment fee of Rs.500/Rs.750 for Intermediate/Final Level respectively.
5. Contact mail id.: studies@icmai.in

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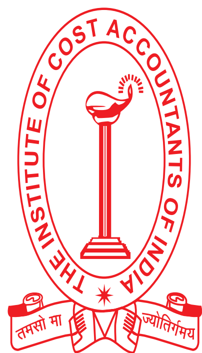
Annexure - III

CMA National Scholarship Scheme 2024-25 (applicable for Intermediate Level students only)

Intermediate Level			
Criteria	**Procedure of Fee Payment and allowing Refund**	**Max. Allotment Per Exam Term**	**Cut-off Date of claim submission**
Graduate and Post-Graduate Rank Holders from any recognized university (Passing on or after 1st January 2023) in any stream who wish to pursue the CMA Intermediate Course are eligible to apply for the scholarship.	All candidates are required to pay the full Intermediate Course fee as per the current fee structure. The Institute will then refund 50% of the course fee (excluding Registration fee of Rs.500/-) in the form of a scholarship after thorough verification of the documents submitted as proof of rank.	Total - 50 Nos. The scheme is available to the top 5 female and top 5 male rank holders from any stream per academic year from any recognized university.	**For June Term** Last Date of claim Submission 31st March **For December Term** Last Date of claim Submission 30th September

Note:

1. Student has to pay full course fee for Registration in Intermediate Level. Web link for online Admission: https://eicmai.in/studentportal/Home
2. Candidates eligible for the scheme can apply for the refund through Offline Mode by providing all supporting documents.
3. Application shall be made in the Prescribed Form for CMA National Scholarship Scheme 2024-25.
4. The hard copy of the duly filled Form along with all supporting documents shall be submitted to the following address of the Institute:
   The Directorate of Studies, CMA Bhawan, 12, Sudder Street, Kolkata – 700016.
5. Contact mail id.: studies@icmai.in



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