# CMA E-Bulletin

VOL 10 | NO. 04 | APRIL 2025

An Initiative of Directorate of Studies



### **About the Institute**

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

The Institute is headquartered in New Delhi having four Regional Councils at Kolkata, Delhi, Mumbai and Chennai, 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 तमसोमा ज्योतिर् गमय मृत्योर्मामृतं गमय ॐ शान्ति शान्ति शान्तिः From ignorance, lead me to truth From darkness, lead me to light From death, lead me to immortality Peace, Peace, Peace

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### **CONTENTS**

### CMA E-Bulletin

VOL 10 I NO. 04 I APRIL 2025

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### 06 - Chairman's Communique

(Training & Educational Facilities Committee)

07 - 24 - CMA Foundation Course

Syllabus 2022

(Paper 1 - 4)

25 - 68 - CMA Intermediate Course

Syllabus 2022

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

69 - 115 - CMA Final Course

Syllabus 2022

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



### CHAIRMAN'S COMMUNIQUE

Dear CMA Students,

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

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

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

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

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

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

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

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

Warm regards.

CMA Vinayranjan P.

Chairman, Training & Educational Facilities Committee, ICMAI

### CMA FOUNDATION COURSE

Syllabus 2022

Fundamentals of Business Laws -

Module 3: Sale of Goods Act, 1930

**Business** Communication -

Module 5: **Business** Communication

### **FOUNDATION**

Paper-1

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

contract or may be left to be fixed in way thereby agreed or may be determined by the course of

### SECTION - A: FUNDAMENTALS OF BUSINESS LAWS

### **MULTIPLE CHOICE QUESTIONS (MCQ)**

1. The Sale of Goods Act, 1930 relates to—

	a) movable goods only		agreed or may be determined by the course of dealing between the parties.
	b) immovable goods only		a) Price
	c) both movable and immovable		b) Product
	d) all goods except gold		c) Service
2.	Contract of sale' is defined in Section 4(1) of the Sale of Goods Act, and it includes—		d) Rate
	a) sale	8.	A contract of sale is made by an offer to buy or sell goods for a price and the of such offer.
	b) agreement to sell		a) Terms
	c) barter		b) Product
	d) both A and B		c) Service
3.	A contract for the sale of 'future goods' is—		d) Acceptance
	a) sale	9.	A contract of sale of goods is a contract whereby
	b) agreement to sell		the seller transfers or agrees to transfer the property
	c) sale on approval		in goods to the buyer for a
	d) hire-purchase agreement		a) Price
4.	The term, 'property', as used in the Sale of Goods		b) Rate
	Act, means—		c) Service
	a) possession		d) Condition
	b) subject matter of sale	10.	A contract of sale may be or conditional
	c) ownership		a) Terminal
	d) possession and ownership		b) Abstract
5.	For the validity of a contract of sale, there must be transfer of—		c) Variable d) Absolute
	a) custody of goods to the buyer.	11.	Condition is a stipulation which is essential to the
	b) property in the goods to the buyer.		purpose of the contract.
	c) possession of goods to the buyer.		a) Derived
	d) possession and custody of goods to the buyer.		b) Abstract
6.	Sourav agrees to sell his old laptop valued at		c) Secondary
	₹ 20,000 to Rahul, a dealer, inexchange for a new laptop and agrees to pay the		d) Main
	difference is cash, it is—	12.	The sale of goods Act only deals only with goods that are immovable in nature. This Statement is –
	a) barter		a) True
	b) exchange		b) Partly true
	c) contract of sale		c) False
	d) invalid contract		d) Right
7.	The in a contract of sale may be fixed by the		a) 14511

13.	is a stipulation which is collateral to the	(a) Buyer
	purpose of the contract.	(b) Seller
	a) Contract	(c) Carrier/Transporter
	b) Caveat Emptor	(d) All of the above
	c) Condition	20. The term "Unpaid Seller" includes —
14.	d) Warranty  Caveat Emptor is the concept of "let the beware".	(a) Buyer's agent to whom the Bill of Lading is endorsed
	a) Seller	(b) Buyer's agent to whom the goods have been delivered
	b) Producer c) Buyer	(c) Seller's agent to whom the Bill of Lading is endorsed
	d) Vendor	(d) Seller's agent to whom the goods have been
15.	The subject matter of the contract under Sale of	delivered
	Goods Act must be	21. The Sale of Goods Act enforced in which year?
	a) Service	a) 1948
	b) Product	b) 1930
	c) Goods	c) 1932
	d) Merchant	d) 1951
16.	Sale under Sale of Goods Act is an executory contract. This Statement is –	22. The Sale of Goods Act originated from
	a) True	(a) Indian Contract Act
	b) Partly true	(b) The Negotiable Instruments Act
	c) False	(c) Partnership Act
	d) Right	(d) Companies Act
17.	Delivery of the keys of a godown where goods are kept amounts to:	<ol> <li>Unpaid Seller can exercise his right of withholding delivery of goods —</li> </ol>
	(a) Actual delivery	(a) even when property in goods has passed to the Buyer
	(b) Symbolic delivery	(b) only when property in goods has not passed to
	(c) Constructive delivery	the Buyer
	(d) All of these	(c) either (a) or (b)
18.	There are modes of delivery	(d) neither (a) nor (b)
	(a) Three	24. A Share Certificate is a —
	(b) Two	(a) Document of Title to Goods
	(c) Four	(b) Bill of Exchange
	(d) Five	(c) Document Showing Title to Goods
19.	The term "Unpaid Seller" includes Agent of the	(d) Instrument of Transfer

### SECTION - B: BUSINESS COMMUNICATION

- 25. Feedback is needed in which way communication?
  - a) Two-way
  - b) One-way
  - c) Both a and b
  - d) None of the above
- 26. Communication happens when a person arbitrarily chooses some persons to pass on the information which is of little interest but not important.
  - a) Gossip Chain
  - b) Cluster Chain
  - c) Probability Chain
  - d) None of the above
- 27. The communication starts when a person tells something to a group of people, and then they pass on the information to some more people and in this way the information is passed on to everyone.
  - a) Gossip Chain
  - b) Probability Chain
  - c) Either (a) or (b)
  - d) None of the above

- 28. Which of the following is not an advantage of formal communication?
  - a) Reliable
  - b) Fast
  - c) Secrecy
  - d) None of the above
- 29. At which stage the communicator focuses on correcting the grammar, spellings and punctuations?
  - a) Proof Reading
  - b) Revising and editing
  - c) Either (a) or (b)
  - d) None of the above
- 30. Study of body language of a person is called
  - a) Economics
  - b) Phonemics
  - c) Paralanguage
  - d) Kinesics

#### **Answer:**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
a	d	b	c	b	с	a	d	a	d	d	с	d	с	С
16	17	18	19	20	21	22	23	24						
C	h	0	h	0	h	0	_	_						

25	26	27	28	29	30
a	С	a	С	b	d

**Fundamentals** of Financial Accounting -

Module 2: Accounting for **Special Transactions** 

Fundamentals of Cost Accounting -

Module 4: Fundamentals of **Cost Accounting** 

### **FOUNDATION**

Paper-2

Fundamentals of Financial and Cost Accounting (FFCA)

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

- 1. Mohon draws a bill on Shyam for ₹50, 000 for 3 months. Proceeds are to be shared equally. Mohon got the bill discounted @ 12% p.a. and remits required proceeds to Shyam. The amount of such remittance will be:
  - a. ₹24,250
  - b. ₹25,000
  - c. ₹16,167
  - d. ₹32,333
- 2. On 1.6.2024 X draws a bill on Y for ₹25,000. At maturity Y request X to Accept ₹5,000 in cash and noting charges incurred ₹100 and for the balance X draw a bill on Y for 2 months at 12% p.a. Interest amount will be:
  - a. ₹410
  - b. ₹420.
  - c. ₹440
  - d. ₹400
- 3. What types of account is a Bill Payable A/c.
  - a. Personal A/c
  - b. Real A/c
  - c. Nominal A/c
  - d. Suspense A/c.
- 4. When a Bill drawn and accepted on 23rd October, 2024 for three months will due date for payment on
  - a. 26th January, 2024
  - b. 23rd January, 2024
  - c. 25th January, 2024
  - d. 27th January, 2024
- 5. Mr. X accepted a bill of exchange of ₹15,000 drawn by Y and payable in 3 months got it discounted from Bank at 2% discount. On the due date X failed to pay the bill as he was adjudged insolvent. A final dividend of 0.25 in a rupee was received from his estate. What would be discounting charges of the Bill?
  - a. ₹300.
  - b. ₹75
  - c. ₹375
  - d. ₹400

- 6. A draws a bill on B for ₹5,000. A endorsed it to C. C endorsed it to D. The payee of the bill will be:
  - a. A
  - b. B
  - c. C
  - d. D.
- 7. On 15.08.2024, X draws a bill on Y for 3 months for ₹20, 000. 18th November suddenly declared as holiday, due date of the bill will be:
  - a. 17th November
  - b. 18th November
  - c. 19th November
  - d. 15th November
- 8. Under which circumstances drawer and payee is same person
  - a. When drawer discounted the bill with banker b.
     When drawer endorse the bill to the third party
  - c. When drawer held the bill till maturity
  - d. When drawee rejects to Accept the bill
- 9. Which of the following is not foreign bill?
  - a. A bill drawn in India, on a person resident outside India and made payable outside India
  - A bill drawn outside India, on a person resident outside India
  - c. A bill drawn outside India, made payable in India
  - d. A bill drawn on a person resident in India made payable in India
- 10. A draws a bill on B for ₹50, 000 for 3 months. At maturity, the bill returned dishonoured noting charges ₹300. An amount of 40 paise in a rupee is recovered from B's estate. The amount of deficiency to record on insolvency in books of B will be:
  - a. ₹20,200
  - b. ₹30,300
  - c. ₹19,800
  - d. ₹19,000
- 11. Which one is not correct
  - a. Joint venture can be formed with minor
  - b. Joint venture is not based on going concern
  - c. A bill of exchange is a negotiable instrument
  - d. Noting charges are the expenses of drawee

VOL 10 I NO. 04 12. Joint Venture is a ...... Account c. Sales at higher price a. Personal d. Credit sales less cash sales b. Nominal 18. Commission provided by the consignor to the consignee to cover bad debt is known as c. Real a. Ordinary commission d. Capital b. Del credere Commission 13. Joint venture accounting follows which concept? c. Over-riding commission a. Accrual concept d. Special commission b. Cash basis concept 19. A proforma invoice is sent by: c. Going concern concept a. Consignee to consignor d. Cost concept b. Consignor to consignee 14. Goods sent out on consignment ₹7, 60,000. Opening consignment stock ₹48, 000. Cash sales ₹7, 50,000. c .Debtors to consignee Consignor's expenses ₹30, 000. Consignee's expenses ₹22, 000. Commission ₹20,000. Closing d. Debtors to consignor consignment stock ₹2, 70,000. The profit on 20. X sends out goods costing ₹2, 00,000 to Y. 3/5th of consignment is: the goods were sold by consignee for ₹1, 40,000. a. ₹1,50,000 Commission is 2% on sales made plus 20% of goods sold exceeding cost price. The amount of b. ₹1,40,000 commission will be: c. ₹92,000 a. ₹5,667 d. None of the above b. ₹6,800 15. The unsold stock on consignment is valued atc. ₹6,000 a. Original cost of the goods d. ₹5,600 b. Original cost + necessary expenses incurred by 21. P sends out goods costing ₹3,00,000 to Y at cost, both consignor and consignee. consignor's expenses ₹5,000. 1/10th of goods were c. Original cost + expenses incurred only by the lost in transit. Insurance claim received ₹3,000. consignee The net loss on account of abnormal loss is: d. Original cost + all expenses incurred by a. ₹27,500 consignor & consignee b. ₹25,500 16. X sent goods costing ₹ 2,00,000 to his consignee Y, to be sold at 20% above cost. Y sold goods of c.₹30,500 Invoice value of ₹1,20,000 on credit, and 30,000 d.₹38,000 in cash. Goods costing 12000 were destroyed in Fire. Y is entitled to Commission of 10% + 2% Del credere commission on sale. What would be Costing commission payable to Y-22. According to ICMA London, costing is a. 18000 "that form of specific order costing, which applies where work is undertaken to customers' special b. 3600 requirements." c. 24000 a. Job

b. Batch

c. Process

d. Standard

a. Cash sales

d. 12000

b. Credit sales only

17. Over-riding commission is calculated on:

- 23. Which technique of costing differentiates between fixed and variable cost to analyse effect of changes in volume or type of output on profit?
  - a. Marginal costing
  - b. Historical costing
  - c. Absorption costing
  - d. Standard costing
- 24. What should be the price chargeable to a job if total cost incurred is ₹ 4830 and profit is 25% on sales?
  - a. 1610
  - b. 1208
  - c. 1200
  - d. 1630
- 25. A factory uses job costing. Given details obtained from its books: Direct materials ₹90000, Direct wages ₹75000, Selling OH ₹52500, Administration OH ₹42000, Factory OH ₹45000 & Profit ₹ 60900. Calculate cost of production.
  - a. ₹ 2,17,500
  - b. ₹ 2,07,000
  - c. ₹ 2,52,000
  - d. ₹ 2,10,000
- 26. The method of costing applied in a lathe machine is
  - a. Batch costing
  - b. Job costing
  - c. Process costing

- d. None of the above
- 27. For identification, each job or work order received from a customer is allotted
  - a. Production order
  - b. Batch number
  - c. Job number
  - d. Code number
- 28. cost is fixed per batch
  - a. Setting up
  - b. Manufacturing cost
  - c. Storage cost
  - d. Ordering cost
- 29. Manufacturers of components of television adopt
  - a. Job costing
  - b. Batch costing
  - c. Contract costing
  - d. Process costing
- 30. \_\_\_\_\_ costing is suitable for industries like builders, civil engineering contractors, mechanical engineering firms, etc.
  - a. Process costing
  - b. Batch costing
  - c. Contract costing
  - d. None of these

### **Answer:**

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

**Fundamentals** of Business Mathematics -

Module 2: Algebra

Fundamentals of **Business Statistics** 

Module 7: Probability

### **FOUNDATION**

Paper-3

**Fundamentals** of Business Mathematics and Statistics (FBMS)

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

- 1. Find the value of  $\frac{7! 4!}{4!}$ 
  - (a) 209
  - (b) 145
  - (c) 105
  - (d) 210
- **2.** How many seven digit numbers could be formed with the digits 3,0,3,8,3,7,8?
  - (a) 360 numbers.
  - (b) 420 numbers.
  - (c) 60 numbers.
  - (d) None of the Above
- **3.** In how many different ways can 5 different laptops, one of each of the 5 companies, be displayed on a shelf?
  - (a) 5! Ways
  - (b) 5\*4! Ways
  - (c) 120 Ways
  - (d) All of the Above
- **4.** Find the value of  $\frac{26! 25!}{24!}$ 
  - (a) 649
  - (b) 650
  - (c)625
  - (d) 600
- **5.** Determine the number of ways in a digit and a vowel along a consonant can be selected from 10 digits and 26 letters of Alphabets?
  - (a) 1500
  - (b) 1005
  - (c) 1050
  - (d) None of the Above
- **6.** Write the factorial notation for 11\*10\*9\*8.
  - (a) 11! /9!

- (b) 11! /7!
- (c) 11! /10!
- (d) 11! /8!
- 7. Find the value of  $\frac{11! 9!}{9!}$ 
  - (a) 110
  - (b) 220
  - (c) 219
  - (d) 109
- **8.** How many seven digit numbers could be formed with the digits 1,9,3,1,3,1,0?
  - (a) 60 numbers.
  - (b) 220 numbers.
  - (c) 360 numbers.
  - (d) None of the Above
- 9. Find the value of  $[\frac{(\text{sum of roots})^2}{\text{product of roots}}]$  of  $2x^2 + x = 7$ 
  - (a) 2/14
  - (b) 1/7
  - (c) 1/14
  - (d) 2/7
- 10. If  $\alpha$  and  $\beta$  are the roots of the  $3x^2$  9x + 15 = 0 determine the value of  $\alpha^2 + \beta^2$ 
  - (a) -1
  - (b) 1
  - (c) 0
  - (d) None of the above
- 11. Form the quadratic equation when one of the roots is  $-\sqrt{9+5}$ 
  - (a)  $x^2 + 10x + 16 = 0$
  - (b)  $x^2 10x + 16 = 0$
  - (c)  $x^2 + 10x 16 = 0$
  - (d)  $x^2 10x 16 = 0$
- 12. If Coefficient of  $x^2 = 12$ , constant be 3 and coefficient of x be twice of constant. Form quadratic equation.
  - (a)  $12x^2+3x+3=0$
  - (b)  $12x^2+24x+3=0$

- (c)  $12x^2+9x+3=0$
- (d)  $12x^2+6x+3=0$
- **13.** Joint probabilities of events A & B under statistical dependence is
  - (a) P(BA)=P(B/A)\*P(B)
  - (b) P(BA)=P(B/A)\*P(A)
  - (c) P(BA)=P(B/A)/P(AB)
  - (d) P(BA)=P(B/A)
- 14. A golfer has 12 golf shirts in his closet. Suppose 9 of these shirts are white and the others blue. He gets dressed in the dark. So he just grabs a shirt and puts it on. He plays golf two days in a row and does not launder and return the used shirts to the closet. The likelihood that both the shirts selected are white is represented as
  - (a)  $P(W_2/W_1)=(P(W_2W_1))/(P(W_1))$ , Where  $W_1\&$   $W_2$  are events of wearing white shirts
  - (b)  $P(W_2/W_1)=P(W_2/W_1)*P(W_1)$  Where  $W_1\&W_2$  are events of wearing white shirts
  - (c) P(W<sub>2</sub>/W<sub>1</sub>)=P(W<sub>2</sub>/W<sub>1</sub>) Where W<sub>1</sub>&W<sub>2</sub> are events of wearing white shirts
  - (d) P(W<sub>1</sub>/W<sub>2</sub>)=P(W<sub>2</sub>/W<sub>1</sub>)\*P(W<sub>2</sub>), Where W<sub>1</sub>& W<sub>2</sub> are events of wearing white shirts
- 15. A golfer has 12 golf shirts in his closet. Suppose 9 of these shirts are white and the others blue. He gets dressed in the dark. So he just grabs a shirt and puts it on. He plays golf three days in a row and does not launder and return the used shirts to the closet. The likelihood that all the three shirts selected are white is
  - (a) 0.38
  - (b) 0.55
  - (c) 0.75
  - (d) 0.16
- 16. The board of directors of IBM consists of eight men and four women. A four member search committee is to be chosen at random to conduct a nationwide search for a new President. The probability that all four members of the search committee will be women is

- (a) 0.016
- (b) 0.1414
- (c) 0.002
- (d) 0.057
- 17. If two unbiased coins are tossed once, the probability of getting both the heads is
  - (a) 0.25
  - (b) 0.50
  - (c) 0.75
  - (d) 1
- **18.** The probability that a leap year selected at random contain 53 Sundays is
  - (a) 0.143
  - (b) 1
  - (c) 0.286
  - (d) 0.48
- **19.** A card is drawn from an ordinary pack and a gambler bets it is a spade or an ace. Odds against his winning is
  - (a) 1/13
  - (b) 11/13
  - (c) 9/4
  - (d) 5/11
- **20.** There are three events A, B, C one of which must and only one can happen. The odds are 7 to 3 against A and 6 to 4 against B. The odds against C is
  - (a) 3/10
  - (b) 4/10
  - (c) 1/2
  - (d) 7/3
- 21. If P(A)=0.7,  $P(\overline{B})=0.5$  &  $P(\overline{A}\cup\overline{B})=0.6$ , if A & B are not mutually exclusive events than  $P(A\cup B)$  is
  - (a) 0.5
  - (b) 0.8
  - (c) 0.4
  - (d) 0.3

- **22.** A lot contains 10 items of which 3 are defective. Three items are chosen from the lot at random one after another without replacement. The probability that all the three are defective is
  - (a) 0.008
  - (b) 0.992
  - (c) 0.067
  - (d) 0.05
- 23. The probability that machine A will be performing its usual function in 5 years' time is ½ while the probability that machine B will be operating usefully at the same period is 1/3. The probability that in 5 years' time neither of the machine will be operating is
  - (a) 3/4
  - (b) 2/3
  - (c) 1/2
  - (d) 1/3
- **24.** If P(A)=0.3,P(B)=0.2 and P(C)=0.1, then assuming A,B and C are independent events, the probability of occurrence of at least one of the three events is
  - (a) 0.7
  - (b) 0.8
  - (c) 0.006
  - (d) 0.496
- **25.** Which one of the following is based on Bayes' Theorem?

(a) 
$$P(A_1B) = \frac{P(A_1)P(BA_1)}{P(A_1)P(BA_1) + P(A_2)P(BA_2)}$$

(b) 
$$P(A_2/B) = \frac{P(A1)P(B/A1)}{P(A_1)P(B/A_1)+P(A_2)P(B/A_2)}$$

(c) 
$$P(A_1/B) = \frac{P(A_2)P(B/A_2)}{P(A_1)P(B/A_1)+P(A_2)P(B/A_2)}$$

(d) 
$$P(A_2/B) = \frac{P(A_1/2)P(B/A_1/2)}{P(A_1)P(B/A_1)+P(A_2)P(B/A_2)}$$

- 26. In IPL Kolkata Knight Riders plays 70% of their games at night (8 o clock slot) and 30% during the day (4 o clock slot). The team wins 50% of their night games and 90% of their day games. According to today's newspaper they own yesterday. The probability that the game was played at night is
  - (a) 0.4667
  - (b) 0.5645

- (c) 0.35
- (d) 0.5
- 27. A local bank reports that 80% of its customers maintain a checking account, 60% have a savings account and 50% have both. If a customer is chosen at random the probability that the customer does not have either a checking or a savings account is
  - (a) 0.90
  - (b) 0.50
  - (c) 0.45
  - (d) 0.10
- **28.** The probability that a value chosen at random from a particular population is larger than the median of the population
  - (a) 0.25
  - (b) 0.50
  - (c) 1.00
  - (d) 0.67
- 29. Sardar a taxi driver in Kolkata has found that the weather affects his customers' tipping. If it is raining his customers usually tip poorly. When it is not raining, however, they usually tip well. Which of the following is true?
  - (a) Tips and weather are statistically independent
  - (b) The weather conditions in Kolkata are not mutually exclusive
  - (c) P (Good tip | rain) is larger than P (bad tip | rain)
  - (d) None of these
- **30.** When two events happen simultaneously which of the following is true?
  - (a) The outcome of the first event always have an effect on the outcome of the second event
  - (b) The outcome of the first event may or may not have an effect on the outcome of the second event
  - (c) The outcome of the first event does not not have any effect on the outcome of the second event
  - (d) The outcome of the first event have always a 50% effect on the outcome of the second event

### **Answer:**

1	a	(7!-4!)/4! = (7*6*5*4!-4!) /4!
		=4!(210-1) / 4! = 210-1 = 209
2	a	7!/(3!*2!) = 420 ways
		6!/(3!*2!)=60 ways
		420-60 = 360 ways
3	d	5!/(5-5)! =5! / 0! = 5!/1 = 5! = 120 ways
4	С	(26!-25!)/24! = (26*25*24! – 25*24!) / 24!
		24! (26*25 -25) / 24! = (26*25 -25) = 650-25 = 625
5	С	10C1*5C1*21C1 = 10*5*21 = 1050
6	b	11*10*9*8= 11*10*9*8*7! / 7! = 11!/7!
7	d	(11!-9!)/9! = (11*10*9!)/9!
		=9!(110-1) / 9! = 110-1 = 109
8	С	7!/(3!*2!)=420 ways 6!/(3!*2!)=60 ways
		420-60 = 360 ways
9	С	Sum: (1/2) <sup>2</sup> , Product: 7/2;
		Hence, $(1/4) / (7/2) = 1/14$
10	a	Sum (-): 3, Product (-): 5
		$(3)^2 - 2*5 = 9 - 10 = -1$
11	b	x²-(Sum of Roots)*x+(product of roots)=0
		Hence, x <sup>2</sup> -10x+16=0
12	d	$x^2$ -(sum of roots)* $x$ + (product of roots)=0
		$x^2$ -(-6/12)x+(3/12)=0.
		Hence, 12x <sup>2</sup> +6x+3=0

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

### **Suggestions:**

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

Best Wishes.

Fundamentals of Business Economics -

Module 1: Basic Concepts

Module 5: Fundamentals of Management

### **FOUNDATION**

Paper-4

Fundamentals of Business Economics and Management (FBEM)

# TIPS ON BUSINESS ECONOMICS AND MANAGEMENT FOR THE MONTH OF APRIL 2025

t is often said that the only thing Indians have in common is their national currency, the rupee, and their geographic borders stretching approximately 2,500 miles from north to south and about the same distance from east to west. There are 28 states, four major ethnic groups, 16 official languages, hundreds of local dialects, and every religion known to man -calling the country complex would be an understatement. But if you have the luxury of time and money you might be able to get a complete picture by taking a journey through each of the states of India. A quick look at some of the numbers will give you a sense of the key roles that agriculture, manufacturing, IT, and tourism play in the Indian economy. Our main focus will be to analyse why India is considered as the largest market in the world, eventually it is larger than the China market. (to be continued)

Let us start our usual exercise on mock test:

#### I. Choose the correct answer:

- 1. Who proposed the growth definition of economics?
  - A. Keynes
  - B. Marshall
  - C. Samuelson
  - D. Pigou
- 2. What is the normal shape of the PPF curve?
  - A. Concave to the origin
  - B. Convex to the origin
  - C. Straight line rising upward to the right
  - D. None of the above
- 3. If the seller sells at a fixed market price, then the MR curve will be
  - A. Vertical
  - B. Horizontal
  - C. Upward rising
  - D. Downward falling
- 4. If the seller has to reduce the price to increase sales, then with an increase in sales
  - A. Both AR & MR will rise
  - B. AR falls & MR rises
  - C. Both AR & MR will fall

- D. MR falls & AR rises
- 5. Ceteris paribus means other things remaining
  - A. Negatively changed
  - B. Positively changed
  - C. Constant
  - D. None of the above
- 6. If the quantity demanded for good X is given by: Qx=K/Px, where, K>0, Px=Price of good X,

Then the MR curve is

- A. Downward sloping
- B. Indeterminate
- C. Flat (horizontal) and lies above the horizontal axis
- D. Coincides with the horizontal axis
- 7. For a normal demand curve the MR curve will
  - A. Appear below the demand curve
  - B. Appear above the demand curve
  - C. Parallel to the demand curve
  - D. None of the above
- 8. When both AR and MR 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
- 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
- When TP curve becomes an upward sloping straight line passing through the origin, then the MP=AP curve becomes
  - A. Horizontal
  - B. Vertical

- C. Upward sloping
- D. Downward sloping
- 11. In the long run, the possibility of greater technical division of labour in any factory leads to
  - A. Decreasing returns to scale
  - B. Constant returns to scale
  - C. Increasing returns to scale
  - D. None of the above
- 12. The MR curve of a competitive firm becomes
  - A. Vertical
  - B. Horizontal
  - C. Upward rising
  - D. None of the above
- 13. The long run equilibrium of a firm under perfect competition indicates that the plant size will be
  - A. Below optimum size
  - B. Over optimum size
  - C. Optimum size
  - D. None of the above
- 14. If SAC=AR of a competitive firm at its short-run equilibrium point, then it is called
  - A. Shut down point
  - B. Break-even point
  - C. Turning point
  - D. None of the above
- 15. A monopoly firm sells equilibrium quantity corresponding to which the price elasticity of demand is
  - A. Relatively inelastic
  - B. Relatively elastic
  - C. Unit elastic
  - D. Perfectly inelastic
- 16. At the profit maximizing output level of a monopolist, the marginal cost curve has to be upward rising
  - A. True
  - B. False
  - C. Not necessarily true
  - D. Usually false

- 17. A monopolist does not have a supply curve for its product because
  - A. It is a price taker in the product market
  - B. It can select both its output and its price
  - C. The price is always fixed by the Govt.
  - D. None of the above
- 18. Inflation means
  - A. High price situation
  - B. Stable price situation
  - C. Rising price situation
  - D. None of these
- 19. Monetary policy means
  - A. Change in money supply of the economy
  - B. Change in the tax rate of the economy
  - C. Change in the Govt. expenditure of the economy
  - D. All of these
- 20. Product differentiation is the other name of which one of the following market form?
  - A. Perfect competition
  - B. monopoly
  - C. monopolistic competition
  - D. none of the above
- 21. OPEC countries form a cartel under
  - A. monopoly
  - B. oligopoly
  - C. monopolistic competition
  - D. None of the above
- 22. Leadership is a part of
  - A. Organization
  - B. Management
  - C. Both A & B
  - D. None of the above
- 23. Accountability is the liability created for the use of
  - A. Authority
  - B. Responsibility
  - C. Accountability
  - D. All of the above

- 24. The process of co-ordination must begin in the early stages of
  - A. Control
  - B. Planning
  - C. Organizing
  - D. Staffing
- 25. The premises which can be controlled by the management are known as
  - A. Internal premises
  - B. External premises
  - C. Controllable premises
  - D. Tangible premises
- 26. Which of the following is not an agency cost?
  - A. Residual loss
  - B. Bonding costs
  - C. Concurrent loss
  - D. Monitoring costs
- 27. Introduction of a person to the job and the organization is called
  - A. Induction
  - B. Placement

- C. Orientation
- D. None of the above
- 28. Which of the following are the methods of off-thejob training?
  - A. Role playing
  - B. Case studies
  - C. Lectures and classroom instruction
  - D. All of the above
- 29. Selection of language in which the message is to be given is called
  - A. Medium
  - B. Decoding
  - C. Encoding
  - D. Feedback
- Informal means of circulating the information is called as
  - A. Grapevine
  - B. Verbal
  - C. Horizontal
  - D. Written

#### **Answer:**

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

### So friends!!

Hope you have enjoyed this mock test. But please do not consult the key before you finish off solving all the problems given in this mock test. Keep a record of the test result so that you can measure your progress yourself.

Best of luck for your exam !!!

# CMA INTERMEDIATE COURSE

Syllabus 2022

Module 8: Payment of Gratuity Act, 1972

### **INTERMEDIATE**

Group I - Paper-5

**Business Laws and** Ethics (BLE)

### **BUSINESS LAWS AND ETHICS**

It is expected that you - the students prepare a timetable with time allotted for each subject and read, write, revise and recapitulate all that you keep on reading. The first important point is that you must read the *Bare Act* and the *Sections* and start asking questions to yourself and find your own answers. In this issue we shall deal with The Payment of Gratuity Act, 1972 with special emphasis on the concept relating to Payment of Gratuity.

### The Payment of Gratuity Act, 1972

The term 'gratuity' is derived from the Latin word 'gratuitous'. 'Gratuity' is the payment made by the employer to the employee at the time of termination of his service either by retirement on superannuation or on resignation or on termination of the service. This is the old age retrial social security benefit. A lump sum is payable in consideration of the past services rendered by the employee. The payment of gratuity will be a relief to the retired employee or to the family members of the employee who dies during his service. For this purpose the Payment of Gratuity Act, 1972 was enacted. The Act was amended from time to time. To carry out the provisions of the Act the Central Government made 'The Payment of Gratuity Rules, 1972 which came into force with effect from 16th September, 1972.

The Supreme Court in 'Burhanpur Tapti Mills Limited V. Burhanpur Tapti Mills Mazdoor Sangh' – 1964 (11) TMI 79 -SUPREME COURT – it was held that it is a gratuitous payment extended to an employee on retirement or discharge, in addition to the retrial benefits payable to the employee

### **Object**

An Act to provide for a scheme for the payment of gratuity to employees engaged in factories, mines, oil fields, plantations, ports, railway companies, shops or other establishments and for matters connected therewith or incidental thereto, employing 10 or more persons (with aid of power) and 20 (without aid of power).

### **Important Definition**

### **Appropriate Government**

Section2 (a) defines the term 'Appropriate Government' as – in relation to an establishment-

- A Belonging to, or under the control of, the Central Government,
- ▲ Having branches in more than one State,
- ▲ Of a factory belonging to, or under the control of, the Central Government,
- ▲ Of a major port, mine, oil field or railway company

- the Central Government in any other case-the State Government;

### **Employee**

Section 2(e) of the Act defines the term 'employee' as any person, other than an apprentice, who is employed for wages, whether the terms of such employment are express or implied, in any kind of work, manual or otherwise, in or in connection with the work of a factory, mine, oilfield, plantation, port, railway company, shop or other establishment to which this Act applies, but does not include any such person who holds a post under the Central Government or a State Government and is governed by any other Act or by any rules providing for payment of gratuity.

In 'Ahmadabad Private Primary Teachers Association V. Administrative Officer' – AIR 2004 SC 1426 it was held that teacher was held to be not an employee under the Act. The teachers are clearly not intended to be covered by the definition of employee. But the Payment of Gratuity (Amendment) Act, 2009 has amended the definition of employee, including teachers in educational institutions within the purview of the Act.

### Important Amendments:

The amendment has increased the ceiling limit of the maximum amount of gratuity payable in 2010. This upper cap prescribed by Section 4(3) of the Act, has been removed. Section 4(5) of the Act prescribes that if the terms of employment contract provide for a higher amount of gratuity over and above the ceiling limit stated in the Act, then the employee will been titled to such higher amount. This transition has been introduced for the implementation of the 7th Central Pay Commission, whereby the ceiling of gratuity for Central Government employees has been increased from `10 lakhs to `20 lakhs. Instead of mentioning and specifying the ceiling amount in Act, the amendment empowers the Central Government to notify the ceiling proposed so that the limit can be revised from time to time keeping in view the increase in wage and inflation, and future Pay Commissions.

Also, the period of maternity leaves for females in continuous service which was twelve weeks under section 2A of the earlier Act, the amendment has modified them maternity leave period from twelve weeks to twenty-six weeks in order to keep the Act in tune with the recently amended Maternity Benefit Act.

#### **Employer**

Section 2(f) defines the term 'employer', in relation to any establishment, factory, mine, oilfield, port, Railway Company or shop-

- belonging to, or under the control of, the Central Government or a State Government, a person or authority appointed by appropriate Government for the supervision or control of employees, or where no person or authority has been so appointed, the head of the Ministry or the Department concerned;
- belonging to, or under the control of, any local authority, the person appointed by such authority for supervision and control of employees or where no person has been so appointed, the Chief Executive Officer of the local authority;
- in any other case, the person, who, or the authority which, has the ultimate control over the affairs of the establishment, factory, mine, oil field, plantation, port, railway company or shop, and where the said affairs are entrusted to any other person, whether called a manager, managing director or by any other name, such person.

### Family

Section 2(h) defines the term 'family' in relation to an employee, shall be deemed to consist of-

- in case of a male employee, himself, his wife, his children, whether married or unmarried, his dependent parents and the dependent parents of his wife and the widow and children of his predeceased son , if any;
- ii) in the case of a female employee, herself, her husband, her children, whether married or unmarried, her dependent parents and the dependent parents of her husband and the widow and children of her predeceased on, if any.

The explanation to this section provides that where the personal law of an employee permits the adoption by him of a child, any lawfully adopted by him shall be deemed to be included in his family, and where a child of an employee has been adopted by another person and such adoption is, under the personal law of the person making such adoption lawful such child shall be deemed to be excluded from the family of the employees.

Rule 5 provides that a notice under the proviso to sub clause (ii) of clause (h) of section 2 shall be in Form D and sent in triplicate by the employee to the employer, who shall, after recording its receipt on one copy thereof, return the copy to the employee and send the second copy to the controlling authority of the area

Rule 5(2) provides that an employee may withdraw the notice referred to in sub-rule (1) by giving another notice in triplicate in Form 'E' to the employer, who shall follow the same procedure as in sub-rule (1).

#### Retirement

Section 2(q) of the Act defines the term 'retirement' as termination of the service of an employee otherwise than on superannuation.

### **Superannuation**

Section 2(r) defines the term 'superannuation' as in relation to an employee, the attainment by the employee of surcharges is fixed in the contract or conditions of service as the age on the attainment of which the employee shall vacate the employment.

### Wages

Section 2(s) defines the term 'wages' as all emoluments which are earned by an employee while on duty or on leave in accordance with the terms and conditions of his employment and which are paid or payable to him in cash and includes dearness allowance but does not include any bonus, commission, house rent allowance, overtime wages and any other allowance.

Module 5: Lease Accounting

Module 8: Hire Purchase and Installment Sale Transactions

### INTERMEDIATE

Group I - Paper-6

Financial Accounting (FA)

### Lease Accounts / Hire Purchase and Instalment Sale Transactions

#### Lease Accounts

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

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

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

### **Types of Leases**

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

### 1. Finance Lease (Capital Lease)

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

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

### 2. Operating Lease

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

### **Key Features:**

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

### **Journal Entries for Lease Accounting**

### **Example 1: Initial Recognition (Finance Lease)**

#### Lessor's Books:

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

#### Lessee's Books:

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

### **Example 2: Lease Payment (Finance Lease)**

### Lessor's Books:

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

### Lessee's Books:

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

#### Hire Purchase and Instalment Sale Transactions

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

### **Hire Purchase System**

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

### **Key Features of Hire Purchase:**

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

### **Accounting Treatment in Hire Purchase:**

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

#### Journal Entries:

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### 1. On Purchase of Asset (initial recognition):

Debit: Asset Account

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

### 2. For Interest Payment:

o Debit: Interest Expense Account

Credit: Hire Vendor Account

### 3. For Installment Payment:

Debit: Hire Vendor Account

Credit: Cash/Bank Account

### **Instalment Sale System**

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

### **Key Features of Instalment Sale:**

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

### **Accounting Treatment in Instalment Sale:**

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

### **Journal Entries:**

### 1. On Purchase of Asset:

Debit: Asset Account

Credit: Instalment Vendor Account

#### 2. For Interest Payment:

Debit: Interest Expense Account

Credit: Instalment Vendor Account

### 3. For Installment Payment:

Debit: Instalment Vendor Account

Credit: Cash/Bank Account

### Key Differences Between Hire Purchase and Instalment Sale

Aspect	Hire Purchase	Instalment Sale
Ownership Transfer	After the last installment is paid.	Immediately upon signing the agreement.
Seller's Rights in Default	Can repossess the asset.	Cannot repossess; may sue for damages.
Interest Treatment	Interest on the outstanding balance.	Interest on the outstanding balance.
Legal Rights	Buyer has possession but not ownership.	Buyer has both possession and ownership.
Accounting Treatment	Asset recorded at cost with ownership conditional.	Asset recorded with immediate ownership.

### **Questions:**

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

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

#### **Answer:**

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

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

### **INTERMEDIATE**

Group I - Paper-7A

Direct Taxation (DT)

### Set off and Carry Forward of Losses

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

The computation of Gross Total Income (GTI) involves aggregating income under five heads. However, if any source or head incurs a loss, it must be adjusted—first by set-off and then, if needed, carried forward.

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

In this comprehensive guide, we delve into the meaning, provisions of set off and carry forward of loss.

### **Set-off provisions**

### A. Intra-Head Adjustment [Sec. 70]

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

Head of Income	Set-Off Rules					
Capital Gains	$\begin{array}{c} STCL \leftrightarrow STCG/LTCG, \\ LTCL \leftrightarrow LTCG \text{ only} \end{array}$					
Business Income (Speculative)	Speculative loss ↔ speculative income only					
Business Income (Non-Speculative)	Non-Speculative loss  → Speculative / Non- speculative business income					

Specified Business (u/s 35AD)	Only from other specified businesses		
Owning & Maintaining Race Horses	Only from the same activity income		
Exempt Income (Sec. 10)	No set-off allowed		
Lottery, betting, gambling (Sec. 115BB)	No loss can be set off against such income		
Unexplained Income (Sec. 68–69D)	No set-off allowed (Sec. 115BBE)		

### B. Inter-Head Adjustment [Sec. 71]

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

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

### Note:

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

### **Carry Forward provisions**

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

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

### **Strategic Tax Planning Tips**

- File loss return within due date (Sec. 139(3)) to preserve right to carry forward.
- Prioritize adjustment of non-carry forward losses first.
- Plan set-offs considering tax regimes (Old/New)—as some losses are not permitted under new regime.

#### Conclusion

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

### MULTIPLE CHOICE QUESTIONS

#### Choose the correct alternative

- Unabsorbed business losses cannot be carried for more than
  - **a.** 7 assessment years
  - b. 8 assessment years
  - **c.** 10 assessment years
  - d. 12 assessment years

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

Module 5: Goods and Services Tax (GST) Laws

### **INTERMEDIATE**

Group I - Paper-7B

**Indirect Taxation** (IDT)

### Input Tax Credit - A Strategic Tool Under GST

The introduction of the Goods and Services Tax (GST) brought transformative change to India's indirect tax regime by replacing a fragmented structure with a unified system. At the heart of GST lies the Input Tax Credit (ITC) mechanism, designed to eliminate the cascading effect of taxes and reduce the overall tax burden across the value chain. For businesses, a sound understanding of ITC is essential to ensure compliance, maintain cash flow efficiency, and improve profitability.

#### **Understanding Input Tax Credit**

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

#### **Mechanism of ITC**

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

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

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

#### **Conditions for Availing ITC**

To claim ITC, the following criteria must be satisfied:

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

#### **Blocked Credits under GST**

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

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

#### **Strategies for Maximizing ITC Benefits**

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

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

#### Conclusion

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

# Topic

Module 5: Methods of Costing

# INTERMEDIATE

Group I - Paper-8

Cost Accounting (CA)

In process industries, there are most likely the problems of work-in-progress in respect of each process. Further, the degree of completion in respect of each elements of cost also varies. In such circumstances it is very difficult to find out the related cost of each unit of incomplete product. So incomplete units require to be converted into completed units.

#### **Definition**

The term "equivalent units" defines by C.I.M.A. as: "notional whole units representing completed work". The term 'equivalent production' represents a technique through which incomplete units are expressed as completed units. As the incompleted units do not bear the same cost as completed units, it requires to be converted into their equivalent completed units for finding out the cost of process-both finished and unfinished units. For example, if out of 3,000 units of closing stock, 1,000 units are of 100% completion stage and the remaining 2,000 units are of 50% completion stage, the total closing stock should be calculated as:

Input (units)	Output	Units	Degree of Completion	Equivalent Production(units)
3000	Completely processed	1000	100%	1000
	Incompleted units (i.e. W.I.P)	2000	50%	1000
3000	Total	3000		2000

Thus, though there are 3000 incompleted units of closing stock ,it should be treated as 2000 equivalent completed units for the purpose of evaluation . So it represents the production of a process in terms of completed units .

#### **Procedure of Evaluation**

For transferring the number of units and its related cost the following steps are necessary:

Step1 Ascertain the number of units introduced and finished.

Step2 Convert the production into equivalent units after taking into consideration the process losses , opening / closing work in progress with their degree of completion.

Step3 Find out the total cost of material, labour and over head

Step 4.Determine the cost per unit of equivalent production separately element wise, by dividing each element of cost by its respective equivalent units.

Step 5. Finally, ascertain the cost of production including the cost of work-in-progress. Thus, for solving the practical problem, three statements are required to be prepared:

- (1) Statement of equivalent production.
- (2) Statement of Cost, and
- (3) Statement of Evaluation.

#### Methods of Calculation

There are two basic methods of calculation for finding out the cost of opening stock and their related equivalent units of production:

- (i) Average Cost Method
- (ii) First-in-First-Out Method (FIFO), and
- (iii) Last-in-First-Out Method (LIFO)
- (A) **Average Cost Method** Under this method, the opening inventory costs are combine with the current period Cost, and the Work done in prior periods is completely ignored. The aim of this method is to treat all units finished during the period as if they were started and finished with in the same period. The cost of closing work in progress in the previous period is added to the cost of the current period and an average rate is obtained; when price is fluctuating this method is used.
- (B)First-in-First-Out Method (FIFO) Under this method, the work started first, have to be completed first. So this method assumes that the opening work in progress completed and transferred first and then the current year's production is completed. Cost of the opening stock carried over from the previous period and the cost of the units

started and completed in the current period are calculated separately. Thus, it distinguishes between work done in the current as well as previous periods. Closing stock of work-in-progress, if any, shall include within the current year's product only. So, to obtain the total as well as unit costs for the carried over units at the beginning, the additional cost incurred to complete these units should be added to the cost of the opening stock.

#### Difference between FIFO and Average Cost Method

- (i) FIFO method separates the cost composition of opening work-in-progress units and the costs related to work done in the current period, as cost of opening inventory includes previous year's cost also. Whereas, the average cost method is based on averaging the work done to date as contained in work-in-process beginning inventory with the work done in the current period.
- (ii) The main difference between the two methods concerns the assignment of costs to the work in progress.
- (C) Last-in-First-Out Method (LIFO)- This method is based on the principle that products are charged at their latest price. Under the method cost incurred is used:
- (i) first to complete the newly introduced units, and
- (ii) then, to finish the opening work-in-progress, if any.

Hence, the opening W.I.P. remains within the closing WI.P., if not completed within the period. So when the closing inventory is greater than the opening inventory, it is presumed that all the opening units remain in closing stock at the end of the period.

When LIFO method is followed, the closing inventory value will consist of one or both of the two following points:

- (i) Proportional value of W.I.P and
- (ii) Value of newly introduced units lying in closing stock.

#### Difference between FIFO and LIFO

The main difference between the two methods of valuation is in the valuation of closing W.I.P. Under FIFO method all the closing units are valued at current price, whereas, under LIFO method the closing stocks are valued at mixing of the two costs ( i.e. value of opening W.I.P and the proportional cost incurred during the period ) , provided closing WIP is higher than opening W.I.P.

To clear the concept a problem is solved here under.

#### **PROBLEM**

From the following information prepare:

- A) Statement of Equivalent Production .
- B) Statement of Cost
- C) Find out the value of output transferred and Closing W.I.P. under Average Cost Method . and FIFO Method method of valuation of process stock.

Opening Stock WIP (2000) units:

 Materials 100% complete
 ₹ 7000

 Wages 60% complete
 ₹ 3000

 Overheads 70% complete
 ₹ 1000

 ₹ 11000

There are 2000 units in process and the stage of completion is estimated to be:

Materials 100% Labour & Overhead 50% 8000 units are transferred to the next process. The process cost for the period are:

Material ₹ 100000

Wages ₹ 78000

Overheads ₹ 44000

#### **Solution:**

Under Average Cost Method :--

#### STATEMENT OF EQUIVALENT PRODUCTION

IN	IPUT	OUTPUT		EQUVA	LENT PRO	ODUCTIO	N
Items	Units	Items	Units	Mate	erials	Wages &	Overhead
				% compn	Eqv.units	%compr	n. Eqv.unt
Opening WIP	2000	Finished & Trfd.	8000	100	8000	100	8000
Units introduced	d 8000	Closing WIP	2000	100	2000	50	1000
Total	10000		10000				9000

#### STATEMENT OF COST

	Material (₹)	Wages ₹)	Overheads (₹)	Total
Cost of Opening WIP	7000	3000	1000	11000
Add: Cost incurred in the period	100000	78000	44000	222000
Total Cost	107000	81000	45000	233000
Equivalent Units	10000	9000	9000	
Cost per unit	10.70	9.00	5.00	24.70

#### Valuation of output transferred :--

8000 units @ ₹ 24.70 197600

Value of Closing WIP:

 Materials 2000 units @ ₹ 10.70
 21400

 Wages 1000 units @ ₹ 9
 9000

 Overhead 1000 units @ ₹ 5
 5000

35400

233000

#### **Under FIFO Method: --**

#### Statement of Equivalent Production

Lagust		Output		Equivalent Productions					
Input		Materials		Wag	ges	Overl	neads		
Items	units	Items	units	% Compl.	Eqv. Units	% of Compl	Eqv. Unit	% Compl	Eqv. Unit
Opening W.I.P	2000	Opening WIP	2000			40	80	30	600
Units		Completely Processed (8000-2000)	6000	100	6000	100	6000	100	6000
Introduced	8000	Closing WIP	2000	100	2000	50	1000	50	1000
Total	10000		10000		8000				7600

#### **Statement Of Cost**

	Materils	Wages	Overheads	Total
Cost of opening WIP ( Not considered )				
Cost incurred during the year (a)	10000	78000	44000	222000
Equivalent Units (b)	8.00	7.800	7.600	
Cost per units (a) / (b)	12.50	10.00	5.79	28.29

Value of output (8000 units) transferred :--

For opening 2000 units of WIP.—

Opening Balance:-

Related Cost during the year:

Material ₹ 11000

Wages 800 units @ Rs 10 = 8000

Overhed 600 units @ ₹5.79= 3470 ₹ 11470 22470

For units completely processed 6000units @28.29 169740

> Total 192210

Value of closing WIP:

Materials 2000 units @ Rs 12.50 = 25000

1000 units @ ₹ 10.00 = 10000 Wages

Overheads 1000 units@₹ 5.79 40790

> Total 233000

> > Amount charged for 8000units closing stock ₹

₹ 35,400 Average Cost method ₹ 197600

FIFO method ₹ 192210 ₹ 40,790 \* Higher

#### Service Costing or Operating Costing

Service costing or operating costing is usually applied to transport services, utility services and distribution services. It is generally adopted by such types of industries as render services instead of producing goods. Services may be classified into two parts- internal and external. The services which can be performed on an inter-departmental basis in factory itself, i.e., supplying electricity from own power house 10 other departments. Services are termed as external when they have to be rendered to outside parties, such as, services rendered by State Transport Corporations, Hospitals, Gas Companies etc. in both cases service costing are required. It is just a variant of unit of output costing.

The term 'Operating Costing has now been replaced by 'Service /Function Costing as per latest CIMA Terminology. It is defined as — The cost of providing a service or function. The cost of rendering the services for a particular period is related to quantum of services rendered during the period to arrive at cost per unit of service rendered.

#### **Objectives**

The following are the objectives of operating service costing:

- (i) It is used for computing the related operating cost.
- (ii) To collect actual cost under different heads.
- (iii) To fix up the rate to be charged for providing service to customers.
- (iv) To decide the definite policy either to use own source or hire from outside for providing
- (v) To help the concern to take appropriate decision for reducing the service cost.

#### Features/Characteristics

The method of operating costing has some specific features by which we can from other methods of costing. These features are:

- (a) This method is applied to those organisations which provide services to
- (b) In this method costs are classified into three heads, viz., Standing Charge (i.e., Fixed Cost), Running Charges (i.e., Variable Cost) and Maintenance Cost.
- (c) Here costs are usually computed on periodic basis.
- (d) Single or composite units like per tonne, per passenger km are generally used for computing servicing cost.

A problem relating to Operating Cost is given below:

#### PROBLEM:

Shankar has been promised a contract to run a tourist car on a 20 km long route for the chief executive of a multinational firm. He buys a car costing  $\[ \] 1,50,000$ . The annual cost of Insurance and taxes are  $\[ \] 4,500$  and  $\[ \] 900$ , respectively. He has to pay  $\[ \] 500$  per month for a garage where he keeps the car when it is not in use. The annual repair cost is estimated at  $\[ \] 4,000$ . The car is estimated to have a life of 10 years, at the end of which scrap value is likely to be  $\[ \] 50,000$ . He hires a driver who is to be paid  $\[ \] 300$  per month plus 10% of taking as commission. Other incidental expenses are estimated at  $\[ \] 200$  per month.

Petrol and oil will cost ₹ 100 per 100 kms. The car will make four round trips each day. Assuming that a profit of 15% on takings is desired and that the car will be on the road for 25 days on an average per month, what should he charge per round trip?

#### **Solution:**

Statement showing Operating Cost of the Tourist Car per month owned by Shankar.

		Amount ₹	Amount ₹
A)	Variable Expenses:		
	Petrol and Oil @ ₹ 100 kms ( ₹100/100kms x 4000kms )		4000
B)	Standing Charges :-		
	Insurance (₹4500/12months)	375	
	Taxes (₹900/12months)	75	
	Garage Rent	500	

	D 4/F4000/12 41 )			
ŀ	Repair cost (₹4000/12 months) 334			
Ι	Depreciation ( working b)		833	
Ι	Driver fixed salaries	300		
I	ncidental Expenses	200		
			<u>2617</u>	
C) T	6617			
A	_882			
D) To	7499			
A	ld: Profit @ 15% of taking (Working -c)		1324	
E) Total taking of the month			8823	
F)	100			
G)	88.23			

### Workings -

- a) Total km run = 20 km x 2 times x 4trips x 25 days = 4000 km.
- b) Depreciation per month = ₹150000- 50000 / 10 yr x 12 = ₹833
- c) Calculation of Drivers Commission and Profit :--

Gross takings	Commission	Profit	Net takings
₹ 100	₹ 10	₹ 15	₹ 75
	₹X	₹Y	₹ 6617

 $X = (6617x10)/75 = \$82, Y = 6617 \times 15 / 75 = \$1323$ 

## **Topic**

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

# INTERMEDIATE

Group II - Paper-9

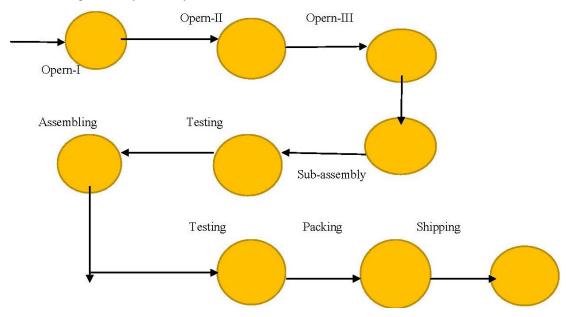
Operations
Management
and Strategic
Management
(OMSM)

### **Operations Management**

In this issue let us discuss -Line Balancing with numerical illustration. Refer study guide module: 4.8. To understand Line Balancing let us refer product layout as depicted in the following figure:

#### **Product Layout:**

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



Best Example: Buffet system in a marriage ceremony

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

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

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

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

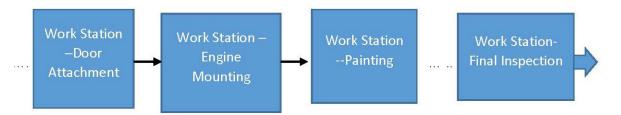
#### Steps in line balancing:

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

#### Line Balancing in detail:

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

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



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

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

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

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

If task times are not equal among workstations ---some workstations are capable of finishing job at higher rates than others and these fast stations will be forced to wait for the output from preceding slower stations or to enjoy idleness in order to avoid buildup of work between stations. These sort of situation create *unbalanced work lines* --- i) a source of inefficient utilisation of labour and equipment; ii) a source of moral problems at the slower stations because there workers have to work continuously to remove idle time in the line.

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

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

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

Reasons behind difficulties in making perfectly balance lines are:

- Differences in Equipment requirements by different activities;
- Activities are not compatible;
- > Grouping tasks cannot always overcome differences among elemental task length;
- \*Required Technological sequence may prohibit otherwise desirable task combination;
- \* Say before rolling steel, quenching in oil is required. Now Quenching activity is being done in work station 5 whereas rolling is done in work stations 6, 7. To get a perfectly balanced line by bundling tasks suppose we require to bundle activities of quenching and activities of rolling of work station 7. But technological sequence i.e. rolling following quenching is prohibiting to form a perfectly balanced line.

Line Balancing involves assigning tasks to workstations.

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

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

Primary determinant to this question is:

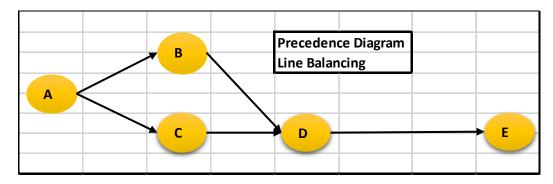
#### What will be the line's Cycle time?

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

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

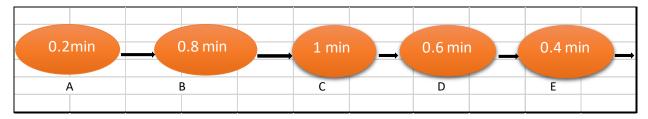
Capacity of a line is a function of cycle time

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



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

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



Note: A, B, C, D, E are workstations comprising either individual task A, B, C, D, E or Bundle of tasks A, B, C, D, E The task times govern the range of possible cycle times.

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

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

In the above illustration

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

The maximum cycle time = Sum of respective task time =

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

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

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

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

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

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

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

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

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

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

Theoretical minimum number of stations=  $N_{min} = \Sigma t/(Cycle time)$ .....(5)

Where, N<sub>min</sub>=Theoretical Minimum number of stations

&  $\Sigma t = Sum of task times$ 

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

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

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

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

Percentage of idle time= (Idle time per cycle)/(N\_actual\*Cycle time)\*100.....(6)

Where N<sub>actual</sub>=Actual number of stations. Percentage of idle time of line is also called Balance delay.

Efficiency of the line=(N<sub>Actual</sub> \*Cycle time-Idle time)/(N<sub>Actual</sub> \*Cycle time)\*100.....(7)

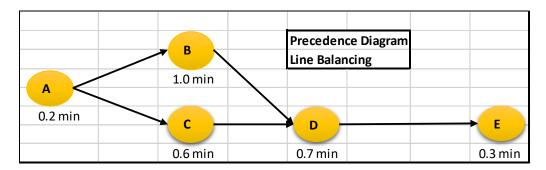
Guidelines for Line Balancing:

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

<sup>\*</sup> Positional Weight=Time of a task+Time of all following task

#### Illustration:

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



#### Answer:

Workstation	Time	Eligible	Assign	Revised	Station
	Remaining		Task	Time	Idle
				Remaining	Time
		_	_		
1	1	Α	Α	0.8	
	0.8	С	С	0.2	
	0.2				0.2
2	1	В	В	0	0
3	1	D	D	0.3	
	0.3	E	E	0	0
					0.2

#### Illustration:

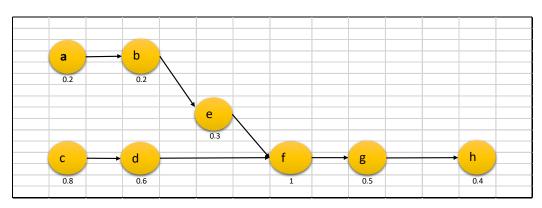
Consider the information given in the following table.

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

- (a) Draw a precedence diagram;
- (b) Assuming a ten hour workday, compute the cycle time needed to obtain an output of 500 units per day;
- (c) Determine the minimum number of workstations required;
- (d) Assign tasks to workstations using the rule: Assign tasks according to greatest number of following tasks. In case of a tie, use the tiebreak of assigning the task with the longest processing time first.
- (e) Compute the resulting percent idle time and efficiency of the system.

Ans:

(a)



- (b) Cycle time = (Operating time per day)/(Desired output rate) = (60\*10)/500 = 1.2 minutes per cycle = 1.2 minutes per unit
- (c) Theoretical minimum number of stations=  $N_{min}$ = $\Sigma t/(Cycle time)$  = 4/1.2=3.33=rounded to 4 station

(d)

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

(e) Percentage of idle time= (Idle time per cycle)/ $(N_{actual}^*\text{Cycle time})*100 = 0.8/(4*1.2)*100 = 16.67\%$ Efficiency=100%-Percentage of idle time=100%-16.67%=83.33% or Efficiency of the line= $(N_{Actual}^*\text{Cycle time-Idle time})/(N_{Actual}^*\text{Cycle time})*100 = (4*1.2-0.8)/(4*1.2)*100=83.33%.$ 

### Suggestions:

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

Best Wishes.

## **Topic**

Module 4: Accounts of Banking, Electricity and Insurance Companies

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

# INTERMEDIATE

Group II - Paper-10

Corporate Accounting and Auditing (CAA)

### **Section A: Corporate Accounting**

### Topic: Accounts of Banking, Electricity and Insurance Companies

#### > Accounts of Banking Companies

#### • Discounting of Bills

"Discounting of bills" refers to making payment for the bills before its maturity date. Sellers of the goods may discount these bills with the bankers or sell these to their bankers.

Accounting entry in the books of account of the banking company will be as follows:

Bills Discounted A/c ..... Dr.

To Customer A/c

To Discount A/c

In the final accounts, bills discounted account is to be shown in the balance sheet under the head "Advances" and details should be given in Schedule 9 annexed to the balance sheet.

#### Rebate on Bills Discounted

This is also called "unexpired discount" or "discount received but not earned".

When a bank discounts or purchases a bill, it is credited to Discount A/c, treating this as item of income of the accounting period. But at times, bills discounted may mature on a date beyond the relevant accounting period. This is the unearned amount received for such bills, which will mature after the date of preparation of final accounts. Hence, it cannot be treated as income of the current accounting period. To illustrate, if a bill is discounted on 1 December 2024 for 3 months at ₹ 18000 and accounts are closed on 31 December 2024, ₹ 12,000 is the unexpired discount as it is related to 2 months, i.e. January and February in 2025, the next accounting period.

The Accounting Entry is as follows:

Bills Discounted A/c ......Dr. ... (With Full Amount of the Bill)

To Customer's A/c ... (With Discounted Value of Bill)

To Discount A/c ... (With Amount of Discount Earned in Current Accounting Period)

To Rebate on Bills Discounted A/c ... (With the Amount of Unexpired Portion of Discount)

If the Discount A/c is created with the full amount of discount (earned and unearned) and appears in trial balance, then the entry will be as follows:

Discount A/c ......Dr. ...

To Rebate on Bills Discounted ... (With Unearned Amount Only)

In final accounts, rebate on bills discounted is shown on the liabilities side of the balance sheet under the head "Other Liabilities and Provisions". Details are given in Schedule 5.

In the next accounting period, it is transferred to Discount A/c and closed thereby.

Consider the following illustrations.

#### Problem 1

On 31 March 2025, a bank held the following bills discounted by it earlier:

Date of Bill	Term of Bill (Months)	Discounted @ % p.a.	Value of Bill (₹)
17 January 2025	4	12	10,95,000
7 February 2025	3	18	25,55,000
9 March 2025	3	15	51,10,000

You are required to calculate the rebate on bills discounted. Also show the necessary journal entry for the rebate.

#### **Solution:**

#### **Calculation of Discount**

Date of Bill	Date of Maturity	No. of Days After 31 March 2025	Bill Value (₹)	Rate of Discount (%)	Discount Amount After 31 March 2025 (₹)
17 January2025	20 May 2025	50	10,95,000	12	18,000
7 February 2025	10 May 2025	40	25,55,000	18	50,400
9 March 2025	12 June 2025	73	51,10,000	15	1,53,300
	Rebate on Bills Discounted			=	2,21,700

#### Journal

Date	Particulars	L.F.	Dr.	₹	Cr.	₹
31.12.10			2,21,	700		
	Discount Received A/c Dr.					
	To Rebate on Bills Discounted A/c				2,21,	700
	(Adjustment made for discount not earned on discounted Bills)					

#### Problem 2

The following information is available in the books of AZ Bank Limited as on 31 March 2025.

Particulars	₹
Bills Discounted	1,20,11,350
Rebate on Bills Discounted (1 April 2024)	3,15,550
Discount Received	12,22,450

Details of bills discounted are as follows:

Value of Bill (₹)	Due Date	Rate of Discount (%)
15,00,000	12 June 2025	14
20,00,000	9 July 2025	12

50,00,000	29 July 2025	15
80,00,00	28 August 2025	18

Calculate the rebate on bills discounted as on 31 March 2010 and give necessary journal entries.

#### **Solution:**

Date of Maturity	No. of Days After 31 March 2010			Amount for Unexpired Period ₹
12 June 2025	73	15,00,000	14	42,000
9 July 2025	100	20,00,000	12	65,753
29 July 2025	120	50,00,000	15	2,46,575
28 Aug. 2025	150	80,00,000	18	5,91,781
	Rebate on Bills Discounted			9,46,109

Rebate on Bills Discounted (1 April 2024)	3,15,550
Add: Discount Received (Given)	12,22,450
	15,38,000
Less: Rebate on Bills Discounted (31 March 2025)	9,46,109
Amount on Rebate on Bills Discounted for the year to be transferred to P/L A/c	5,91,891

#### Journal

Date	Particulars	L.F.	Dr.	₹	Cr.	₹
	Rebate on Bills Discounted A/c Dr.		3,15,	550	3,15,5	50
	To Discount on Bills A/c					
	(Opening Balance of Rebate on Bills Discounted A/c					
	Transferred to Discount on Bills A/c)					
	Discount on Bills A/c Dr.		9,46,	109	9,46,1	09
	To Rebate on Bills Discounted A/c					
	(Provision created on 31 March 2010)					
	Discount on Bills A/c Dr		5,91,	891	5,91,8	91
	To Profit & Loss A/c					
	(Discount on the Bills of the Year Transferred to P/L A/c)					

Discuss the rights of a company auditor with reference to the Companies Act, 2013.

#### Answer:

The Companies Act provides the following rights to the auditor to enable him to discharge his duties properly:

#### **Section: B**

### Topic: Provisions Relating to Audit under Companies Act, 2013

- 1. Right of access to books and vouchers: Section 143(1) of the Companies Act, 2013 provides that the auditor of a company shall have the right of access to the books and vouchers of the company whether kept at the head office or elsewhere. This right of the auditor is the fundamental basis on which the auditor can proceed to examine and inspect the records of the company for the purpose of making his report.
- 2. Right to obtain information and explanations: Section 143(1) also entitles the auditor to require from the officer of the company such information and explanations as the auditor may think necessary for the performance of his duties.
- 3. Right to visit branch offices and access to branch accounts: Section 143(8) of the Companies Act gives specific rights to the company auditor, where the accounts of any branch office are audited by another person. The company auditor has the right to visit branch office, if he deems it necessary to do so for the performance of his duties and has the right of access to books and accounts along with vouchers maintained by the branch office.
- 4. Right to receive branch audit reports: Section 143(8) of the Companies Act also provides that the company auditor has also the right to receive the audit report from the branch auditor for his consideration and deal with it in such a way, as he considers necessary while preparing his audit report on the accounts of the company.

- 5. Right to receive notices and to attend general meeting: Section 146 of the Companies Act entitles the auditors of a company to attend any general meeting of the company and to be heard on any part of the business, which concerns him as the auditor. He is also entitled to receive all notices and communications relating to any general meeting of the company.
- 6. Right to make representation: As per Section 140, the retiring auditor is entitled to receive a copy of the special notice intending to remove him or proposing to appoint any other person as auditor in his place. The retiring auditor sought to be removed has a right to make his representation in writing and request that the same be circulated amongst the members of the company. In case, the same could not be circulated, the auditor may require that the representation shall be read out at the general meeting.
- 7. Right to sign audit report: According to Section 145 of the Companies Act, only the person appointed as auditor of the company, or where a firm is so appointed only a partner in the firm practicing in India, may sign the auditor's report.
- 8. Right to receive remuneration: On completion of his work, an auditor is entitled to receive his remuneration. The rights of the auditor cannot be limited by any resolution of the members passed in the general meeting.

## **Topic**

Module 5: Capital Budgeting

Module 11: Data Analysis and Modelling

### INTERMEDIATE

Group II - Paper-11

Financial Management and Business Data Analytics (FMDA)

# **Subject: Financial Management and Business Data Analytics Capital Budgeting**

#### Capital budgeting decisions under uncertainty

Capital budgeting decisions under uncertainty involve evaluating potential long-term investments when future outcomes are not certain, requiring techniques to assess and manage risk, like sensitivity analysis, scenario planning, and risk-adjusted discount rates.

#### **Sources of Uncertainty:**

- (a) **Demand Uncertainty:** Fluctuations in customer demand, market trends, and competitive pressures can impact sales forecasts.
- (b) Cost Uncertainty: Unexpected increases in raw material costs, labor costs, or other expenses can affect project profitability.
- (c) **Technological Uncertainty:** Rapid technological advancements can render current investments obsolete or create new competitive threats.
- (d) **Regulatory Uncertainty:** Changes in government regulations or policies can impact project timelines, costs, and feasibility.
- (e) **Economic Uncertainty:** Economic downturns, recessions, or unexpected events can negatively impact project performance



#### Example

SCOPUS Limited, a highly profitable company, is engaged in the manufacture of power intensive products. As part of its diversification plans, the company proposes to put up a Windmill to generate electricity. The details of the scheme are as follows:

1. Cost of Windmill ₹ 300 lakhs

2. Cost of Land ₹15 lakhs

- 3. Subsidy from State Government to be received at the end of first year of installation ₹15 lakhs
- 4. Cost of electricity will be 2.25 per unit in year 1. This will increase by 0.25 per unit every year till year 7. After that it will increase by 0.50 per unit every year.
- 5. Maintenance cost will be Rs 4 lakhs in year 1 and the same will increase by ₹2 lakhs every year.
- 6. Estimated life 10 years.
- 7. Cost of capital 15%.
- 8. Residual value of Windmill will be nil. However, land value will go up to ₹60 lakhs, at the end of year 10.
- 9. Depreciation will be 100% of the cost of the Windmill in year 1 and the same will be allowed for tax purposes.
- 10. As Windmill is expected to work based on wind velocity, the efficiency is expected to be an average 30% Gross electricity generated at this level will be 25 lacs units per annum, 45% of this electricity generated will be committed free to the State Electricity Board as per the agreement.
- 11. Tax rate 50%.

From the above information you are required to calculate the Net Present Value. (Ignore tax on capital profits).

#### **Solution:**

#### (a) Determination of PV of Cash Outflow (CO2)

Particulars	₹ in lakhs
Cost of windmills	300
Cost of land	15
CO <sub>0</sub> (Year 0)	315

#### (b) Determination of PV of Annual Cash Inflows After Tax (CIAT)

Particulars	Year									
	1	2	3	4	5	6	7	8	9	10
Cost per unit (₹)	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.25	4.75	5.25
Savings (24 lakhs unit X cost p.u.)	54	60	66	72	78	84	90	102	114	126
Less: Cost of Maintenance	4	6	8	10	12	14	16	18	20	22
EBDT										
Less: Depreciation	50	54	58	62	66	70	74	84	94	104
EBT	(-)300	-	-	-	-	-	-	-	-	-
Less: Tax 50%	(-)250	54	58	62	66	70	74	84	94	104
EAT	125	(-)27	(-)29	(-)31	(-)33	(-)35	(-)37	(-)42	(-)47	(-)52
Add: Depreciation	(-)125	27	29	31	33	35	37	42	47	52
Add: Subsidy from Govt.  CIAT	300 15	-	- -							
	190	27	29	31	33	35	37	42	47	52
PV factor @15%	0.87	0.76	0.66	0.57	0.50	0.43	0.38	0.33	0.28	0.25
PV of CIAT	165.30	20.52	19.14	17.67	16.50	15.05	14.06	13.86	13.16	13.00

#### **Notes:**

#### 1. Net units generated

Gross units generated 25 lakhs

Less: 4% free supply to State Electricity Board 1 lakhs

Units available to the firm 24 lakhs

- 2. The savings in the above calculations refer to the value of electricity generated by the windmill. For year 1, the cost of electricity is  $\stackrel{?}{\underset{?}{?}}2.25$  per unit. So, the total cost saved would be 24 lakhs x  $\stackrel{?}{\underset{?}{?}}2.25 = \stackrel{?}{\underset{?}{?}}54$  lakhs
- 3. Cost per unit will increase by ₹0.25 per unit every year till year 7 and after that it will increase by ₹0.50 per unit.
- 4. Maintenance cost will be ₹4 lakhs in year 1 and the same will increase by ₹2 lakhs every year.

#### (c) Determination of PV of Terminal Cash Inflow at the end of year 10

Realisable value of Land	₹ 60 lakhs
PV factor @ 15%	0.25
PV of Terminal Cash Inflow	₹15 lakhs

#### (d) Calculation of Net Present Value (NPV)

NPV = 
$$\sum$$
 PV of CIAT -  $\sum$ PV of CO0

$$= [165.30 + 20.52 + 19.14 + 17.67 + 16.50 + 15.5 + 14.6 + 13.86 + 13.16 + (13.00 + 15.00)] - 315$$

= ₹ 8.26 lakhs (>0)

Since the NPV is positive, the project is financially viable.

# Business Data Analytics Standards for Data Tagging and Reporting (XML, XBRL)

Data tagging and reporting standards involve assigning metadata or tags to data elements for better organization, searchability, and analysis, while also ensuring data accuracy and compliance with regulation. Data tagging, also known as metadata tagging, involves adding descriptive labels or metadata to data elements to provide context, organization, and meaning. This process helps to categorize and label data, making it easier to search, retrieve, and analyze information effectively. Two important languages are used here **XML and XBRL**.

#### XML (eXtensible Markup Language)

XML serves as a data standard by providing a structured, human and machine-readable format for storing and exchanging data, facilitating interoperability between different systems and applications.

#### Features of XML

- (a) **Human-readable**: XML documents can be read by both humans and machines.
- (b) **Self-descriptive**: XML documents tell you what their data stands for.
- (c) **Supports namespaces**: XML avoids tag conflicts by using namespaces.
- (d) **Supports hierarchical data structure**: XML can represent complex data relationships

#### Uses of XML

- (a) XML was designed to store and transport data in a structured format that is both human and machinereadable.
- (b) XML supports information exchange between computer systems such as websites, databases, and third-party applications.
- (c) XML uses tags (like HTML tags, but customizable) to define the structure and content of data, allowing for clear organization and interpretation.

- (d) XML is often used for distributing data over the internet and exchanging data between different systems, applications, and databases.
- (e) XML can be used as a standard for data exchange, ensuring that data is structured and formatted in a consistent way, which is crucial for interoperability.

#### **Examples of XML Data Standards:**

**ACORD:** The Association for Cooperative Operations Research and Development (ACORD) provides XML standards for the insurance industry, facilitating data exchange between different insurance companies and systems.

**CDISC:** The Clinical Data Interchange Standards Consortium (CDISC) uses XML for data exchange in clinical trials, including Define-XML for describing study data and datasets.

**GS1 XML:** GS1 (Global Standard 1) uses XML for electronic business messaging, providing a standard format for exchanging business documents between computer applications.

Office Open XML (OOXML): This is a zipped, XML-based file format developed by Microsoft for representing spreadsheets, charts, presentations, and word processing documents.

XML for Analysis (XMLA): An industry standard for data access in analytical systems, such as online analytical processing (OLAP) and data mining.

MISMO: Mortgage Industry Standards Maintenance Organization (MISMO) uses XML to define and exchange data in the mortgage industry.

**NAACCR XML:** A data exchange standard for cancer registry data.

#### eXtensible Business Reporting Language (XBRL)

XBRL is a global standard for exchanging and communicating business information, enabling efficient

and accurate processing and sharing of financial data. It is a freely available, open, and global standard. It is used by businesses to prepare, validate, and submit reports to regulators, government agencies, and business partners.

#### Importance of XBRL

- (a) Standardization: XBRL provides a standardized format for financial reporting, ensuring consistency and comparability across different companies and countries.
- (b) Efficiency: It streamlines data management and reduces manual data entry, leading to faster and more accurate reporting.
- (c) **Transparency:** XBRL promotes transparency by making financial data easily accessible and analyzable.
- (d) **Improved Analysis:** XBRL makes it easier for investors, analysts, and regulators to access, analyze, and compare financial information.
- (e) Regulatory Compliance: Many regulators, including the SEC, mandate XBRL reporting for regulatory filings.
- (f) **Global Adoption:** XBRL is used by millions of businesses and organizations worldwide.

#### **Examples of XBRL Use:**

(a) **Financial Statements:** Businesses use XBRL to tag their financial statements, such as income statements and balance sheets.

- (b) **Regulatory Filings:** Companies file their financial reports with regulators in XBRL format.
- (c) Taxonomies: XBRL uses taxonomies to define elements and relationships among those elements, such as "cash" and "assets".

#### **XBRL Tags:**

- (a) Each fact in an XBRL report is digitally "tagged" so that it can be recognized by computer software.
- (b) These tags travel with each fact, ensuring accurate information flow through reporting chains and between multiple organizations.
- (c) XBRL tags are similar to barcodes, allowing for quick and accurate identification of data elements.

#### **XBRL** and Big Data:

- (a) XBRL is increasingly used to represent large data sets, and efforts are underway to enable XBRL to work more effectively with very large reports and via alternate technologies.
- (b) The Open Information Model (OIM) provides a syntax-independent model for XBRL data, allowing reliable transformation of XBRL data into other representations.
- (c) The OIM aims to provide a clean, simplified model for XBRL, supporting different formats like JSON and CSV.

## **Topic**

Module 7: Forecasting, **Budgeting and Budgetary Control** 

# **INTERMEDIATE**

Group II - Paper-12

Management Accounting (MA)

### **Module 7.2: Budgetary Control**

#### Meaning

A **budget** is a financial plan that estimates an organization's revenues, expenditures, and financial goals over a specific period, typically a fiscal year. It serves as a roadmap for financial decision-making and resource allocation. Budgets can be prepared for individuals, businesses, governments, and non-profit organizations.

**Budgetary control** is the process of planning, monitoring, and controlling financial resources to ensure that actual financial performance aligns with budgeted targets. It involves setting budgets, comparing actual performance with the budget, identifying variances, and taking corrective actions.

#### **Key Steps in Budgetary Control:**

- 1. Setting Budgetary Targets Defining financial goals for different departments.
- Measuring Actual Performance Recording financial activities and results.
- 3. Comparing Actual vs. Budgeted Performance Identifying deviations or variances.
- 4. Taking Corrective Actions Implementing necessary changes to align with budgetary targets.

#### **Types of Budgets**

Budgets can be classified into various types based on their purpose and approach:

#### 1. Based on Timeframe:

- Short-term Budget Covers a period of up to one year.
- Long-term Budget Covers a period exceeding one year, often used for capital investments and strategic planning.

#### 2. Based on Function:

- *Operating Budget* Includes revenue and expenses related to daily business operations.
- *Capital Budget* Focuses on long-term investments like machinery, buildings, and infrastructure.
- *Cash Budget* Estimates cash inflows and outflows to ensure liquidity.
- Financial Budget Includes cash flow, capital structure, and overall financial planning.

#### 3. Based on Flexibility:

• Fixed Budget - Prepared for a specific level of

activity and remains unchanged.

• Flexible Budget – Adjusts based on changes in the level of business activity.

#### 4. Based on Techniques:

- *Incremental Budgeting* Modifies the previous budget with incremental changes.
- Zero-Based Budgeting (ZBB) Every expense must be justified from scratch, rather than based on past budgets.
- Rolling Budget Continuously updated by adding a new period as the old one expires.

#### **Objectives of Budget and Budgetary Control**

- **Resource** Allocation: Ensuring efficient distribution of financial resources.
- **Performance Measurement:** Comparing actual outcomes with budgeted figures.
- ➤ Cost Control: Identifying and reducing unnecessary expenditures.
- ➤ **Decision-Making Support:** Providing financial data for strategic planning.
- **Profit Maximization:** Enhancing financial efficiency and profitability.
- ➤ Coordination and Communication: Aligning departments towards common financial goals.
- **Risk Management:** Anticipating financial risks and preparing for contingencies.

#### **Advantages of Budget and Budgetary Control**

- > Improved Financial Planning: Helps in systematic financial decision-making.
- ➤ Effective Cost Control: Identifies areas of overspending and cost-saving opportunities.
- **Enhanced Coordination:** Aligns various departments toward organizational goals.
- **Performance Evaluation:** Compares actual vs. budgeted performance.
- **Encourages Efficiency:** Motivates managers to work within financial constraints.
- ➤ Helps in Forecasting: Predicts future financial trends based on past data.
- Facilitates Better Communication: Encourages transparency and accountability in financial matters.

#### **Disadvantages of Budget and Budgetary Control**

- ➤ **Rigidity:** Fixed budgets may not adapt to unexpected changes.
- ➤ **Time-Consuming:** Preparing and monitoring budgets requires significant time and effort.
- Subject to Estimation Errors: Inaccurate forecasts can lead to unrealistic budgeting.
- ➤ Lack of Flexibility: Some budgets do not accommodate dynamic market conditions.
- **Employee Resistance:** Departments may resist strict budget controls, affecting morale.
- > Short-Term Focus: May prioritize immediate cost-cutting over long-term investment.
- ➤ Manipulation Risks: Budget figures can be distorted to meet targets rather than reflect true performance.

Budget and budgetary control are essential financial tools for organizations, helping in effective resource management, cost control, and decision-making. While they offer several advantages like financial discipline and strategic planning, they also pose challenges such as rigidity and estimation errors. A well-implemented budgetary control system balances flexibility with financial discipline, ensuring long-term sustainability.

#### MCO:

- 1. What does the budgetary control process primarily aim to achieve?
  - a) Reducing tax liabilities.
  - b) Monitoring and controlling financial performance.
  - c) Maximizing budgetary slack.
  - d) Eliminating financial reporting.
- 2. Which of the following is NOT a limitation of budgetary control?
  - a) Rigidity
  - b) Unrealistic targets
  - c) Lack of coordination
  - d) Enhancing employee motivation
- 3. Which of the following is responsible for coordinating the preparation of a budget?

- a) Budget Committee
- b) Finance Department
- c) Chief Executive Officer
- d) Shareholders
- 4. Which of the following is a feature of budgetary control?
  - a) Reactive decision-making
  - b) Continuous comparison of actual performance with budgeted targets
  - c) Setting arbitrary financial targets
  - d) Ad hoc resource allocation
- 5. What is the primary difference between budgetary control and standard costing?
  - Budgetary control focuses on financial planning, while standard costing focuses on cost estimation.
  - b) Budgetary control involves continuous comparison of actual performance with budgeted targets, while standard costing primarily deals with setting cost standards.
  - Budgetary control is used for short-term planning, while standard costing is used for long-term planning.
  - d) Budgetary control is a top-down approach, while standard costing is a bottom-up approach.
- 6. Assertion: Budgetary control is primarily concerned with future performance prediction.

Reason: Budgetary control helps organizations to set financial targets for each department.

- a) Both the assertion and reason are true, and the reason is a correct explanation of the assertion.
- Both the assertion and reason are true, but the reason is NOT a correct explanation of the assertion.
- c) The assertion is true, but the reason is false.
- d) The assertion is false, but the reason is true.
- 7. Assertion: Budgetary control contributes to organizational coordination by aligning departmental efforts with organizational objectives.

Reason: Budgetary control promotes competition among departments, leading to better coordination.

- a) Both the assertion and reason are true, and the reason is a correct explanation of the assertion.
- Both the assertion and reason are true, but the reason is NOT a correct explanation of the assertion.
- c) The assertion is true, but the reason is false.
- d) The assertion is false, but the reason is true.
- 8. Production at 70% activity is C₹ 700 units, if flexible budget needs to be calculated at 80% activity what will be units produced?
  - a) ₹800
  - b) ₹600
  - c) ₹1200
  - d) ₹1000
- 9. Budgeted sales for the next year is 5,00,000 units. Desired ending finished goodsinventory is 1,50,000 units and equivalent units in ending WIP inventory is 60,000 units. The opening finished goods inventory for the next year is 80,000 units, with 50,000 equivalent units in beginning WIP inventory. How many equivalent units should be produced?
  - a) 5,80,000
  - b) 5,50,000
  - c) 5,00,000
  - d) 5,75,000
- 10. When preparing a production budget, the quantity to be produced equals
  - a) sales quantity + opening inventory of finished goods + closing inventory of finished goods
  - b) sales quantity opening inventory of finished goods + closing inventory of finished goods
  - c) sales quantity opening inventory of finished goods closing inventory of finished goods
  - d) sales quantity + opening inventory of finished goods closing inventory of finished goods
- 11. Which budgeting approach focuses on activities to improve customer value and reduce costs?
  - a) Incremental Budgeting
  - b) Zero-Based Budgeting (ZBB)
  - c) Activity-Based Budgeting (ABB)
  - d) Participative Budgeting
- 12. Which budget estimates the expected number of units to be manufactured?
  - a) Sales Budget

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- b) Production Budget
- c) Manufacturing Overhead Budget
- d) Cash Budget

#### Answer

- $1.\;b,\,2.\;d,\,3.\;a,\,4.\;b,\,5.\;\;b,\,6.\;d,\,7.\;c,\,8.\;a,\,9.\;a,\,10.\;b$
- 11. c, 12. b.

#### True and False

- A formal and comprehensive financial plan through which management can control day-to-day business affairs and activities is called Administrative Budget.
- Zero-Base Budgeting (ZBB) assumes that the previous year's activities must be continued without justification.
- 3. A static budget adjusts dynamically based on changes in the level of business activity.
- 4. Budgetary slack is the amount by which a manager intentionally underestimates budgeted revenues oroverestimates budgeted expenses.
- 5. Factory overhead budget includes direct material and direct labor costs.

#### Answer

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

#### Fill in the blanks

- 1. A budget that is always available for a specified future period.
- 2. Budgetary actions carried out according to a budget plan is known as \_\_\_\_\_.
- 3. A budgeting approach that focuses management's attention on activities with the goal of improving customer value, reducing costs, and increasing profit is known as \_\_\_\_\_.
- 4. \_\_\_\_\_ is the difference between actual factory overhead costs and standard costs, multiplied by the standard units of activity allowed for actual production.
- 5. Under \_\_\_\_\_ cost and benefit estimates are built up from scratch, from the zero level, and must be justified.

#### Answer

- Rolling Budget
- 2. Budget Control
- 3. Activity-Based Budgeting (ABB)
- 4. Flexible budget variance
- 5. Zero-base budgeting

### **Module 7: Forecasting and Budgeting**

#### Introduction to Forecasting and Budgeting

Forecasting is a method of predicting a future event or condition by analyzing patterns and uncovering trends in previous and current data. It employs mathematical approaches and applies statistical models to generate predictions. Business forecasting aims to estimate customer demand for products or services, project sales or estimate growth and expansion. It can facilitate the allocation of budgets, capital, human resources and more. In short, business forecasting helps inform the decision-making process.

Budgeting is an essential financial and management tool used in organizations to plan, allocate, and control resources efficiently. It provides a structured approach to estimating future financial activities and ensuring that business operations align with strategic goals. A budget acts as a financial blueprint that guides decision-making processes in a company, allowing management to forecast revenues, control expenses, and optimize resource utilization.

#### **Definition of Budget**

# The Chartered Institute of Management Accountants (CIMA) defines a budget as:

"A financial and/or quantitative statement, prepared and approved prior to a defined period, of the policy to be pursued during that period for the purpose of attaining a given objective."

This definition highlights that a budget is a **pre-planned financial framework** that outlines expected revenue, expenses, and resource allocation. It is prepared for a specific period and serves as a guideline for organizational performance.

#### **Objectives of Budgeting**

The primary objectives of budgeting include:

- 1. Planning and Forecasting Budgeting helps organizations forecast future financial conditions and develop strategic plans accordingly.
- **2. Resource Allocation** It ensures that available resources are allocated optimally to various business operations.

- **3.** Cost Control Budgets set spending limits, helping organizations manage costs effectively.
- **4. Performance Measurement** Actual performance is compared against budgeted figures, allowing for evaluation and corrective actions.
- **5. Profit Maximization** Through effective cost control and revenue generation, budgeting contributes to profit maximization.
- **6. Decision Making** Budgeting provides a financial basis for informed decision-making.

#### Forecasting vs. Budgeting

While budgeting is a **planned financial strategy**, **forecasting** is the process of predicting future trends based on historical and current data.

- Forecasting helps businesses anticipate financial trends but do not establish control mechanisms.
- **Budgeting** provides a structured financial plan with set goals and control measures.

#### **Importance of Budgeting in Business**

- **1. Enhances Financial Discipline** Ensures that expenses do not exceed income.
- **2. Optimizes Resource Utilization** Allocates resources efficiently across departments.
- **3. Improves Decision-Making** Provides a financial framework for management decisions.
- **4.** Facilitates Cost Reduction Helps in identifying cost-saving opportunities.
- **5. Encourages Goal Alignment**—Aligns departmental objectives with overall business strategy.

#### Variance Analysis in Budgeting

Variance analysis helps in assessing the difference between **budgeted** and **actual figures**. A **favorable variance** occurs when actual revenue is higher than expected, whereas an **unfavorable variance** arises when actual costs exceed budgeted expenses.

#### **MCQs**

- 1. What is the primary purpose of a budget in a business?
  - a) To predict future market trends
  - b) To serve as a financial and/or quantitative plan
  - c) To increase business expenses
  - d) To ensure tax compliance
- 2. Budgetary control involves:
  - a) Continuous comparison of actual results with budgeted figures.
  - b) Only setting financial goals.
  - c) Predicting market trends.
  - d) Reducing business operations.
- 3. A forecast differs from a budget in that:
  - a) It sets financial targets
  - b) It is an annual concept
  - c) It is a prediction based on past and present data
  - d) It focuses on cost control
- Which of the following is **not** a feature of a budget?
   a) It is prepared and approved prior to a defined period.
  - b) It includes variance analysis.
  - c) It is purely an estimation with no specific objectives.
  - d) It involves income, expenditure, and capital employment.
- 5. A budget that quantifies cash collections from debtors is known as:
  - a) Sales budget
  - b) Cash budget
  - c) Capital budget
  - d) Production budget
- 6. Which of the following budgets is concerned with the procurement of raw materials?
  - a) Cash budget
  - b) Sales budget
  - c) Material budget
  - d) Labour budget

- 7. The process of setting objectives, policies, and plans for a budget period is called:
  - a) Forecasting
  - b) Planning
  - c) Controlling
  - d) Evaluating
- 8. A master budget is a combination of:
  - a) Only revenue and expense budgets
  - b) Financial and operating budgets
  - c) Only financial budgets
  - d) Labour and production budgets
- 9. The variance between budgeted and actual performance is analyzed under:
  - a) Forecasting
  - b) Budgetary control
  - c) Capital budgeting
  - d) Financial auditing
- 10. A flexible budget:
  - a) Remains constant regardless of activity level
  - b) Adjusts based on actual activity levels
  - c) Is prepared only for startups
  - d) Does not allow modifications
- 11. Zero-based budgeting means:
  - a) Reducing budgeted expenses to zero.
  - b) Creating a new budget from scratch every year.
  - c) Using last year's budget as a baseline.
  - d) Eliminating non-financial budgets.
- 12. The budgeting technique where every expense must be justified is called:
  - a) Incremental budgeting
  - b) Zero-based budgeting
  - c) Fixed budgeting
  - d) Rolling budgeting

#### Answers

- 1. B, 2. A, 3. C, 4. C, 5. B
- 6. C, 7. B, 8. B, 9. B, 10. B
- 11. B, 12. B

#### Fill in the Blanks

1.	Budgeting is an important tool in
	accounting.
2.	is the process of predicting future events based on past and present data.
3.	Budgetary control is the process of comparing actual results with figures.
4.	A budget is a financial plan that includes income and expenditure for a defined period.
5.	budgeting starts from zero and justifies every expense.

#### **Answers**

- Management
- Forecasting
- 3. Budgeted
- 4. Revenue
- 5. Zero-based

#### **True and False**

- 1. Budgeting is used only by large organizations.
- A forecast is always prepared before a budget.
- 3. A budget is a prediction of future events with no targets.
- 4. Budgetary control helps in comparing actual performance with planned objectives.
- 5. Forecasting and budgeting are the same.

#### **Answers**

- 1. False
- True 2.
- 3. False
- True
- 5. False

# CMA FINAL COURSE

Syllabus 2022

# Topic

Module 7: Laws and Regulations related to Banking Sector

**FINAL** 

Group III - Paper-13

Corporate and **Economic Laws** (CEL)

#### **BANKING LAW**

#### Role of RBI

Since its inception, Reserve Bank has been playing key role in the formulation of monetary, banking and financial policies. To facilitate the transition process and in order to effectively perform its varying roles in the changing banking scenario, from 'regulator' to 'facilitator' over the period, Department has undergone various organizational changes and so also in its activities, approach and functioning.

#### (i) Inspection of banks

Reserve Bank of India has been empowered under Banking Regulation Act, 1949 to conduct the inspection of banks and regulate them in the interest of banking system, banking policy and depositors/public.

#### (ii) Regulatory role of commercial banks

Department of Banking Operations and Development exercises regulatory powers in respect of commercial banks and Local Area Banks (LABs). The Department of Banking Operations and Development is entrusted with the responsibility of regulation of commercial banks and LABs under the regulatory provisions contained in the Banking Regulation Act, 1949 and the Reserve Bank of India Act, 1934 and other related statutes besides enunciation of banking polices. It's functions broadly relate to prescription of regulations for compliance with various provisions of Banking Regulation Act on establishment of banks such as licensing and branch expansion, maintenance of statutory liquidity reserves, management and operations, amalgamation, reconstruction and liquidation of banking companies.

#### (iii) Anti - money laundering under PMLA

RBI has a role in PMLA by creating an anti money laundering Cell(AML Cell) for combating Financing of Terrorism (CFT) and tracking domestic and global developments in AML and CFT.

(iv) Approval/ monitoring of Board level appointments of commercial banks.

The key activity of the section, appropriately named as Appointments Section, relate

 Approval of proposals from the domestic private sector banks for appointment/ removal of parttime Chairman/Managing Director/ whole-time Chairman and Chief Executive Officers. Ensuring compliance with the provisions of the Banking Regulation Act, 1949 with regard to the composition

- of the Board of Directors of commercial banks in the private sector.
- Making recommendations to Government regarding appointment of Executive Directors/Chairmen & Managing Directors of public sector banks, fixation of their salaries, payment of superannuation benefits and other allied matters.
- Making recommendations to Government regarding appointment of non-official directors, non-workmen directors and RBI Nominee Directors on the Boards of Nationalised banks.
- (v) licensing of branches
- (a) issue of authorisations to Indian commercial banks including Local Area Banks for opening of branches in pursuance to regulatory powers vested with Reserve Bank under the provisions of Banking Regulation Act, 1949.
- (b) To consider representations/complaints from institutions/VIPs and members of public for opening/shifting/closure of bank offices.
  - Review of branch licensing policy periodically
- (d) Maintenance and updation of database on opening/ substitution/closure/shifting of branches, Extension Counters, ATMs, etc.
- (vi) banking policy
  - it undertakes various new policy initiatives and reviews existing guidelines for progressive upgradation of prudential norms to move towards best practices. The major activities of the Section are as follows:
- Formulation of policy and issue of prudential guidelines pertaining to Capital adequacy; Income recognition; asset classification and provisioning pertaining to advances portfolio; Classification, valuation and operation of investment portfolio; and Credit exposure limits
- Formulation of policy and issues regarding capital structure of public sector banks, including raising of fresh equity, return of capital, recapitalisation.
- Formulation of policy and issuance of regulatory guidelines for implementation of the Basel II framework.
- Policy guidelines / clarifications on integrated risk management systems including Asset Liability

Management and issue of guidance notes on various aspects.

- Policy issues/ guidelines pertaining to compromise settlement of NPAs of banks.
- Matters regarding Foreign Contributions Regulations Act – donations received by organizations from abroad.

#### (vii) issue of directives to banks

Various directions are issued by RBI from time to time, on payment of Interest rates on various types of deposit accounts (including NRI deposit), maintenance of deposit accounts, prohibitions in respect of S.B. Accounts, matters relating to payment of additional interest and brokerage on deposits, appointment of agents for soliciting deposits, giving gifts/incentives to depositor's/staff members, freezing of accounts, Resurgent India Bonds, Development Bonds, etc. RBI may also direct Capital Market Exposure of banks.

#### (viii) collection and dissemination of information

Collection and dissemination of information from/to banks and notified All-India financial institutions (FIs) regarding defaulting borrowers with outstanding aggregating ₹1 crore and above, which have been classified by them as 'doubtful' or 'loss' (non-suit filed accounts) on half-yearly basis viz., as on March 31 and September 30.

- (ix) overseeing/ monitoring Indian banks operations abroad
- Policy formulation and issue of guidelines regarding overseas operations of Indian banks, examination of proposals and grant of approvals for opening their Joint Ventures / Representative Offices / branches and review of their overseas operations including closure of branches / joint ventures / representative offices.
- Approval of Indian banks' proposals for entering into Management Agreements and correspondent banking arrangements with foreign entities.
- Preparation of proposals for submission before IDC of GOI regarding opening of branches / representatives offices of Indian banks abroad.

#### (x) Authorisation for dealing in precious metals

Policy matters relating to Gold Deposit and Gold Import Schemes and dealing with references received from banks in this regard, issue and renewal of authorization for banks for import of gold / silver / platinum and acceptance of gold under Gold Deposit Scheme and collection of data relating to import of gold and Gold Deposit Scheme and collection of data relating to import of gold and gold deposits by banks in India.

(xi) overseeing and monitoring offshore banking units

- Approvals for setting up of Offshore Banking Units (OBUs) and issue of policy guidelines for the operation of OBUs in Special Economic Zones (SEZs).
- Correspondence with Government and other agencies relating to setting up of Special Economic Zones, International Financial Services Centres.

(xii) monitoring and policy making industrial and export credit

The industrial credit segment has been considerably liberalized / deregulated over the period. At present, various items of work currently undertaken by IECS are distributed amongst three desks viz. (i) Policy Desk (ii) Export Credit Desk and (iii) Industrial Rehabilitation Desk.

#### (xiii) interpretation of regulations

 RBI is involved in interpretation of the various provisions of the Banking Regulation Act, 1949, Reserve Bank of India Act, 1934, etc. Examining and framing of rules/regulations and amendments thereto.

#### (xiv) granting exemptions

 Dealing with applications received from banks for exemptions from the various provisions of the Banking Regulation Act, 1949, and Rules framed thereunder.

(xiii) management of foreign exchange and related issue:

It may have mentioned that RBI is the Regulator of foreign exchange and is entrusted with management of FEMA.

- a) Controlling dealings in foreign exchange by giving general or special permission for dealing in foreign exchange, excluding those cases where specific provisions have been made in Act, Rules or Regulations.
- b) These can be imposed only by Central Government in consultation with RB. In certain cases, prior approval of RBI is required for current account

- transactions as provided in Foreign Exchange Management (Current Account Transactions) Rules, 2000.
- c) Specifying conditions for payment in respect of capital account transaction;
- d) Regulate/prohibit/restrict the following, by issuing Regulations:
  - Transfer or issue of foreign security to resident and Indian security to non-resident;
  - Borrowing and lending in foreign exchange or to a foreign person;
  - Export/import of currency or currency notes;
  - Transfer of immovable property outside India;
  - Giving guarantee or surety where foreign exchange transaction is involved;
- e) Specify (by regulation) period and manner in which foreign exchange due from export of goods and services should be received;

- To grant exemption from realisation and repatriation in specified cases;
- g) Granting authorisation to 'Authorised Person' to deal in foreign exchange, to give directions to them and to inspect the authorised person;
- (xiv) Bankers bank: serves as banker to the commercial banks, who may take loan from RBI;
- (xv) Bankers to Central Govt./State Govt: RBI keeps accounts of the CG and in certain cases SG.
- (xvi) Oversee payment and settlement system: RBI is supposed to oversee the payment system between the banks and FI inter se and with customers
- (xvii) Currency management: Supply of currency in the system is the job of RBI;
- (xviii) Treasury Management : RBI is authorised to determine fund requirement of Govt. and issue or repay bonds;

Module 15: Foreign Exchange Market

Module 16: Foreign Exchange Risk Management **FINAL** 

Group III - Paper-14

Strategic Financial Management (SFM)

# **Topic: Foreign Exchange Market**

# • Multiple Choice Questions

- 1. The spot rate of the US dollar is ₹ 65.00/USD and the four-month forward rate is ₹65.90/USD. The annualized premium is:
  - A. 4.2%
  - B. 5.1%
  - C. 6.0%
  - D. 6.4%

## Answer: (A)

Justification: The annualized premium

- = [(Forward Rate-Spot Rate)/Spot Rate] x [12/ Forward Contract length in months] x100
- $= (65.90-65)/65 \times (12/4) \times 100 = 4.2\%.$
- 2. The following statement is true in the context of rupee-dollar exchange rate with  $r_i$  denoting interest rate in India and  $r_i$  denoting interest rate in the US.
  - A. Rupee will be at forward discount if ri > r
  - B. Rupee will be at forward premium if ru > r,
  - C. Rupee will be forward premium if ri > r
  - D. Rupee will be at par with dollar if  $ri = r_{ij}$

# Answer: (B)

**Justification:** Interest Parity =  $F/S = (1+r_i)/(1+r_u)$ Rupee premium is when spot is more than forward rupee/dollar Forward value is less if  $r_i < r_u$  i.e.,  $r_u > r_v$ .

- **3.** The 90-day interest rate is 1.85% in USA and 1.35% in the UK and the current spot exchange rate is \$ 1.6/£. The 90-day forward rate is:
  - A. \$1.607893
  - B. \$1.901221
  - C. \$1.342132
  - D. \$1.652312

**Answer: (A)** \$ 1.607893

#### **Justification:**

[Forward Rate / Spot Rate] = [(1 + domestic interest rate)/(1 + foreign interest rate)]

$$F/\$1.6 = [(1 + 0.0185)/(1 + 0.0135)] = \$1.607893$$

- **4.** A Ltd., an export customer requested his banker B to purchase a bill for USD 40,000. Calculate the rate to be quoted to A Ltd. if B wants a margin of 0.08%, given that the inter-bank rate is ₹ /\$ 81.50/10.
  - A. ₹71.1569
  - B. ₹71.0431
  - C. ₹71.5572
  - D. ₹71.4428

Answer: (B)

#### **Explanation:**

A's banker will purchase \$ from A and sell in the interbank market. In the interbank market, B is a customer and hence he can sell at only ₹81.10 while B can purchase in the interbank market at ₹81.50. Hence, if B sells at ₹81.10, it has for itself only the margin of 0.08%. Hence it will quote to A (₹81.10 -.08% x 81.10) for purchasing the \$ from A.

i.e. 81.10-0.06488 = ₹81.04

## • Comprehensive Problems

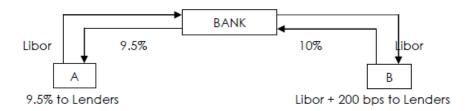
### **Problem 1: Swap Deal**

Company A has outstanding debt on which, it currently pays fixed rate of interest at 9.5%. The company intends to refinance the debt with a floating rate interest. The best floating rate it can obtain is LIBOR + 2%. However, it does not want to pay more than LIBOR. Another company B is looking for a loan at a fixed rate of interest to finance its exports. The best rate it can obtain is 13.5% but it cannot afford to pay more than 12%. However, one bank has agreed to offer finance at a floating rate of LIBOR + 2% and is in the process of arranging rate swap between these two companies. (i) Enumerate the steps in the swap deal. (ii) What are the interest savings by each company? (iii) How much would the bank's benefit be?

#### **Solution:**

(i) First let us tabulate the details to find the quality spread differential:

		Cost of funds to company A and B	
	Objective	Fixed Rate	Floating Rate
Company A	Floating	9.50% p.a.	Libor + 200 bps
Company B	Fixed	13.5% p.a.	Libor + 200 bps
Differential		400 bps	0 bps



The differential between the two markets = 400 bps - 0 = 400 bps.

A total of 400 bps needs to be shared between A, B and bank.

Since A cannot afford to pay more than LIBOR, it needs 200bps benefits out of the total 400 bps (Libor +2% -Libor).

Similarly, B cannot pay more than 12% as against the existing available fixed rate funding of 13.5%. It requires 150 bps benefits, out of 400 bps.

The balance 50 bps would be shared/charged by the bank.

The swap can therefore be structured as follows:

Firm	Paid to Bank	Received from Bank	Paid to market	Net Cost	Savings
A	LIBOR	9.5%	9.5%	LIBOR	(LIBOR+2%) -(LIBOR) =200bps
В	10%	LIBOR	LIBOR+200bps	12%	(13.5-12.0) =150bps

(ii)Company A gets floating rate funds at LIBOR as against (LIBOR+2%), thereby getting an advantage of 200 bps. Company B gets fixed rate funds at 12% as against 13.5%, thereby getting an advantage of 150 bps.

(iii) Bank gets 50 bps as commission.

## **Problem 2: Swap Deal**

Companies M and N have the following interest rates:

	M	N
U.S. Dollars (floating rate)	LIBOR + 0.5%	LIBOR + 1%
Canadian Dollars Fixed Rate	6%	4.5%

M wants to borrow Canadian Dollars at fixed rate while N wants US dollars at floating rate.

F, a financial institution charges, if it arranges a swap, 50 basis points spread.

Design, if possible, a swap to share the benefits equally between M and N. Discuss the steps of action in the swap and arrive at the final effective interest rate for M and N.

In case a swap is not possible, give your calculations to substantiate why it is not possible.

#### **Solution:**

M has an advantage over N in floating rate USD and N has an advantage in Canadian Dollar fixed rate.

Effective net benefit between the rates = 2% (0.5% in floating and 1.5% in fixed)

Less: Share of benefit for the banker = 0.5%

Balance to be shared by M and N equally = 1.5% totally, each getting 0.75%.

M will borrow USD at floating rate and pay its banker	N will borrow Canadian Dollars at fixed rate 4.5%
LIBOR + 0.5%	
It will collect from N, LIBOR + 0.5% - 6%, i.e., collect,	It will collect from M, LIBOR + 1% - 4.5%, i.e., collect,
- 5.5% + LIBOR	LIBOR-3.5%
It will collect its share of benefit $(2 - 0.5) / 2 = 0.75\%$	It will collect its share of benefit from the swap 0.75%
Effective interest rate = $+$ (LIBOR + 0.5%) -(-5.5% +	Effective rate = LIBOR + $1\%$ - $0.75\%$ = LIBOR + $0.25\%$
LIBOR) - 0.75% = 5.25%	
i.e., desired fixed rate 6% less advantage share 0.75%	i.e., desired floating rate LIBOR + 1% less advantage share
= fixed 5.25%	0.75% = floating LIBOR + 0.25%

# Sub-topic: Foreign Exchange Risk Management

### • Comprehensive Problems

#### Problem 3: Foreign Exchange Risk Management

JB ltd. an American Company will need £3,00,000 in 180 days. In this connection, the following information is available:

Spot rate £1= \$2.00

180 days forward rate of £ as of today = \$1.96

Interest rates are as follows:

	U.K	US
180 days deposit rate %	4.50	5.00
180 days borrowing rate %	5.00	5.50

The Company has forecast the spot rates 180 days hence as follows:

Rate	Probability
\$ 1.91	25%
\$ 1.95	60%
\$ 2.05	15%

Compare the benefits of money market hedge Vs. No hedge and advise JB Ltd. on the choice of the better strategy.

#### **Solution:**

# Money market hedge:

Borrow \$, convert to £, invest £, repay \$ loan in 180 days

Amount in £ to be invested = 3,00,000/(1+i) = 3,00,000/1.045 = £2,87,081

Amount of \$ needed to convert into £ = 2,87,081  $\times$  2 = \$ 5,74,162

Interest and principal on \$ loan after 180 days =  $$5,74,162 \times (1 + 5.5 \%) = $5,74,162 \times 1.055 = $6,05,741$ 

# No hedge option:

Expected future spot rate	Dollar needed	Probability	
(1)	£ $3,00,000 \times (1) = (2)$	(3)	$(2) \times (3) = (4)$
1.91	5,73,000	0.25	1,43,250
1.95	5,85,000	0.60	3,51,000
2.05	6,15,000	0.15	92,250
			5,86,500

Probability distribution of outcomes for no hedge strategy appears to be more preferable because less no. of dollars are needed under this option to arrange £3,00,000.

Module 2:
Tax Management,
Return and
Assessment
Procedure

# **FINAL**

Group III - Paper-15

Direct Tax Laws and International Taxation (DIT)

# **Return of Income**

The return of income is a document filed with the tax authorities that declares the income earned by an individual or entity during a specific period, typically a financial year. This document is crucial because it allows taxpayers to report their earnings, deductions, and tax liabilities. Filing a return of income is mandatory for individuals and entities that meet certain income thresholds, as specified by the tax laws and in case of few individual or entities, it is mandatory to file irrespective of size of income. By submitting this document, taxpayers ensure compliance with legal obligations and contribute to the nation's revenue system.

#### Filing of return

The following person need to file a return of income -

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

- outside India or has signing authority in any account located outside India.
- A person is also required to file a return if he has satisfied either of the prescribed economic conditions.

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

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

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

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

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

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

# Time limit for filing return of income

Assessee	Due date
Assessee (or firm in which he is a partner) who required to furnish Audit Report u/s 92E	30 <sup>th</sup> November
Assessee (or firm in which he is a partner) requires to get his accounts audited (other than referred above)	30 <sup>th</sup> September
Assessee does not require to get his accounts audited	31st July

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

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

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

### Mode of furnishing Income-tax Return

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

#### Compulsory E-Return:

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

### Loss-Return:

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

#### **Belated Return**

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

#### Return of income of Charitable Trust

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

# Return of income of Political Party

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

#### Return of research association, etc.

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

#### **Revised Return**

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

#### Verification of Return u/s 140

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

#### Updated return

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

Module 3: Decision Making Techniques

**FINAL** 

Group III - Paper-16

Strategic Cost Management (SCM)

# **Pricing Decisions and Strategies**

#### 1.00 The Concept

Pricing can make or break a business. Setting prices for the products or services does not simply come down to a simple calculation. Prices can be practical tools for making ends meet. To figure out the best way to set prices, it is worthwhile to examine the idea of what the business wants that its pricing strategy should achieve.

Product prices determine the revenue stream of a business. Prices must be sufficient to cover the costs and profit. Before lowering prices, it is preferable to lower costs to maintain a stable profit margin and a stable cash flow into the business. Any pricing strategy must be chosen to ensure a maximum of profit. Knowing the market and customer base are key elements to choosing the right pricing strategy.

#### 2.00 Key Strategies

The key pricing strategies may, broadly, be understood with the help of following figure 1 and description there after:



Figure 1: Pricing Strategies

- **2.01 Profit-Orientation:** In a sense, all pricing strategies are profit-oriented because, even if the prices are set with other objectives in mind, the entity still needs to earn a profit to stay in business. Profit-oriented pricing makes profit the top priority when figuring out the ideal price to set. A profit-oriented pricing strategy looks for the sweet spot that allows the entity to charge as much as possible for the offerings without charging so much that potential customers are alienated and money is lost through missed sales. This type of pricing objective can either aim to maximize profit per unit relative to cost of goods sold and other operating costs, or it can aim to maximize the overall profit by setting a price that is competitive enough to increase the overall number of units you sell.
- **2.02.** Competitor-Based Pricing: Competitor-based pricing uses the price that is set to appeal to customers and define the niche relative to the entity's competitors. Competitive pricing is charging a price that is comparable to other vendors selling the same item. It does not necessarily rely on setting a lower price than other available options, although this strategy will certainly make the products appeal to customers who shop on the basis of price alone.
- **2.03. Demand Based Pricing:** Demand Based Pricing is a pricing method based on the customer's demand and the perceived value of the product. In this method the customer's responsiveness to purchase the product at different prices is compared and then an acceptable price is set. Demand pricing is determined by establishing the optimal relationship between profit and volume; a smaller per-unit profit is acceptable if volume is increased significantly. Demand based pricing includes Price Skimming, Price Discrimination and Price Penetration.

In case of price skimming, the initial price is set very high so that only the customers with more purchasing power can buy the product. After that the price is reduced gradually so that the price-sensitive customers who were not able to buy the product at first can now buy.

Price Discrimination is where customers are charged differently based on different demand levels. For example, the airline ticket prices increase as the travel date gets closer.

Price Penetration is the exact opposite to the price skimming. In this method the initial price is kept really low to attract more customers and increase the market share. Discounts, inaugural price, first 100 buyers etc are some of the methods.

**2.04.** Cost Plus Pricing: In cost-plus pricing, a set profit margin is added to the total cost of a product -- including materials, labour and overhead. In cost-plus pricing, a company first determines its break-even price for the product. This is done by calculating all the costs involved in the production, marketing and distribution of the product. Then a markup is set for each unit, based on the profit the company needs to make, its sales objectives and the price it believes customers will pay.

Applications of cost-plus pricing include pricing of large development projects, particularly in government contracts, services given to state, logistic support, processing credit card transactions etc.

**2.05.** Mark-up pricing: Mark-up pricing is where a percentage is added to the wholesale cost of a product. Mark up refers to the value that a player adds to the cost price of a product. The value added is called the mark-up. The mark-up added to the cost price usually equals retail price. The difference between cost plus pricing and mark-up pricing is hair-thin and both the terms are used one for the other very often.

### 3.00. Effective Pricing

Effective Pricing is the one that satisfies all the stakeholders, viz. the producer, distributor and the consumer. It fits into the criteria of profit orientation, competition, demand base as also the cost plus and markup. In a way it may be called long run calibrator of price equilibrium over a business cycle. It is the price set by the producer and accepted by all. It is what that all stakeholders can bear.

#### 3.01. Process:

Steps involved in determining an effective price may be listed as:

- i. Analysis of Financial Statements
- ii. Analysis of Cost Behaviour
- iii. Analysis of the Profit Gap
- iv. Evolving Cost Reduction Strategies
- V. Determination of Feasible Prices for different Capacity level
- vi. Determination of Effective Price
- vi. Establishing Cost Controls,
- vii. Review, Revise and Reset

#### 3.02. Tools for Effective Pricing

Three important tolls that can be adopted in relation to effective pricing can be understood with the help of figure 2 and description thereafter:



#### i. Product Differentiation

Product Differentiation is the process of distinguishing a product or service from others, to make it more attractive to a particular target market. This involves differentiating it from competitors' products as well as the firm's own products.

The strategy of Product Differentiation is adopted to build up specific competitive advantages over competitors by tapping the unique resource endowments exclusive to an entity. The major sources of product differentiation may

be traced to differences in quality, differences in functional features, and differences in availability (e.g., timing and

The objective of differentiation is to develop a position that potential customers see it as unique. Many a time product differentiation is driven by the factors of esteem value. The implication of differentiation often enables the possibility of charging a price premium.

#### ii. Cost Leadership

Cost Leadership is a generic strategy adopted to gain competitive advantage. The Strategy aims at the firm winning market share by appealing to cost-conscious or price-sensitive customers. This is achieved by having the lowest prices in the target market segment, or at least the lowest price to value ratio (price compared to what customers receive). To succeed at offering the lowest price while still achieving level and to remain competitive as also profitable. The threefold dimensions are detailed below:

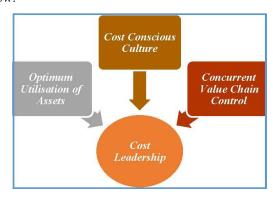


Figure 3: Dimensions of Cost Leadership

- a. Optimum Utilisation of Assets: The first and foremost is achieving a high asset utilization. In manufacturing, it will involve production of high volumes of output. In service industries, this may mean for example a restaurant that turns tables around very quickly, or an airline that turns around flights very fast. These approaches mean fixed costs are spread over a larger number of units of the product or service, resulting in a lower unit cost, i.e., the firm hopes to take advantage of economies of scale and experience curve effects.
- b. Cost Conscious Culture: The second dimension is inculcating a cost-conscious culture across the organisation and achieving low direct and indirect operating costs. This is achieved by offering high volumes of standardized products, offering basic no-frills products and limiting customization and personalization of service. Production costs are kept low by using fewer components, using standard components, and limiting the number of models produced to ensure larger production runs. Overheads are kept low by collective efforts. Maintaining this strategy requires a continuous search for cost reductions in all aspects of the business.
- c. Concurrent Value Chain Control: The third dimension is control over the value chain encompassing all functional groups (finance, supply/procurement, marketing, inventory, information technology etc..) to ensure low costs. For supply/procurement chain this could be achieved by bulk buying to enjoy quantity discounts, squeezing suppliers on price, instituting competitive bidding for contracts, working with vendors to keep inventories low using methods such as Just-in-Time purchasing or Vendor Managed Inventory. Wal-Mart is live example for squeezing its suppliers to ensure low prices for its goods.

Concluding, it can be said that Cost leadership strategies are certainly viable for large firms with the opportunity to enjoy economies of scale and large production volumes and big market share. Small businesses can be "cost focused", but not "cost leaders" if they enjoy any advantages conducive to low costs.

#### iii. Yield Management

Yield Management is a set of revenue maximization strategies and tactics meant to improve the business profitability. It is a technique that determines the best pricing policy for optimising profits. It adopts the principle of pricing the products and services at what the market can bear. In the process, it facilitates optimum utilisation of the resources. The demonstrative examples include lower tariffs for advance reservation by airlines; weekend discounts by hotels; time sensitive tariffs by power generation & distribution companies; the differential pricings adopted by Telecom Services, Broadcasting Media, Railways, and so on.

Concluding, it can be said that by adopting Effective Pricing practices, an enterprise can easily attain its objectives.

Module 12: Evaluation of Corporate Image Module 17: Forensic Audit

# **FINAL**

Group IV - Paper-17

Cost and Management Audit (CMAD)

# **COST AND MANAGEMENT AUDIT**

# **Evaluation of Corporate Image**

Corporate image refers to the overall perception of a company's values, mission, products, services, brand value, behaviour, social responsibility and good governance practices. It encompasses various aspects, including visual identity, communication, customer service, and commitment to society at large and compliance to regulatory affairs. A positive corporate image can foster trust, loyalty, and advocacy among customers, employees, investors, and the wider community.

# **Methods for Evaluating Corporate Image**

- 1. Surveys and Feedback: Collecting feedback from customers, employees, and other stakeholders through surveys, focus groups, or online reviews.
- **2. Media Monitoring**: Analysing media coverage, including news articles, social media, and blogs, to gauge the tone and frequency of coverage.
- **3. Financial Performance**: Examining financial metrics, such as revenue growth, profitability, and market share, to assess the company's overall health.
- **4. Awards and Recognition**: Tracking awards, certifications, and recognition received by the company, which can indicate excellence in specific areas e.g 'best place to work' etc.
- 5. Social Media Analytics: Monitoring social media metrics, such as engagement rates, follower growth, and sentiment analysis.
- **6. Transparency**: Reporting and sharing significant information in a timely manner within and outside the entity (disclosable ones).

# **Benefits of a Positive Corporate Image**

- 1. Increased Customer Loyalty: A positive corporate image can foster trust and loyalty among customers.
- 2. Improved Brand Recognition: A strong corporate image can enhance brand recognition and differentiation.
- 3. Talent Attraction and Retention: A positive

- corporate image can attract top talent and reduce employee turnover.
- **4. Increased Investor Confidence**: A strong corporate image can boost investor confidence and attract investments.
- **5. High reputation**: Society always having a soft corner for the companies with positive image e.g house of Tata due to their reputation for social and philanthropic activities.

# Challenges in Maintaining a Positive Corporate Image

- 1. Reputation Risk: A single incident or crisis can damage a company's reputation and corporate image. (Reported in MINT In June 2015, Nestle India's nett sales fell 20.1% to ₹ 1,933.8 crore. The firm withdrew about 30,000 tonnes of Maggi from the market, reversing sales worth ₹ 288.4 crore in the June quarter. The company incurred a one-time cost of ₹ 451.6 crore related to the removal of Maggi noodles from the Indian market. 'Lead found in Maggi', was the incident.
- 2. Changing Stakeholder Expectations: Companies must adapt to evolving stakeholder expectations, such as increasing demands for sustainability and social responsibility.
- **3. Intense Media Scrutiny**: Companies are under constant media scrutiny, which can amplify mistakes or controversies.
- **4. Globalization and Cultural Differences:**Companies operating globally must navigate diverse cultural norms and expectations to be 'social' in a particular geography.

In conclusion, evaluating a corporation's image is essential to understand its reputation, brand identity and credibility. By using various methods, such as surveys, media monitoring, and financial performance analysis, companies can assess their corporate image and identify areas for improvement. A positive corporate image can bring numerous benefits, including increased customer loyalty, improved brand recognition, and increased investor confidence.

#### **Forensic Audit**

A **forensic audit** is a detailed examination and analysis of an organization's financial records and transactions to identify potential financial crimes, such as fraud, embezzlement, or money laundering. The primary goal of a forensic audit is to gather evidence and provide expert opinions to support or refute allegations of financial wrong doing (irregularities or mismanagement).

# .Types of Forensic Audits

**Financial statement audit**: Examining financial statements to identify misrepresentations or omissions.

**Fraud investigation**: Investigating allegations of fraud, such as embezzlement or bribery.

**Asset tracing**: Identifying and tracking assets that may have been misappropriated or hidden.

A forensic audit can be ordered by various stakeholders, including:

- 1. Shareholders: Shareholders can request a forensic audit if they suspect financial irregularities or mismanagement.
- **2. Board of Directors**: The board of directors can initiate a forensic audit to investigate allegations of financial misconduct or to ensure compliance with regulatory requirements.
- **3. Management**: Management can request a forensic audit to investigate specific financial transactions or to identify control weaknesses.
- 4. Regulatory Bodies: Regulatory bodies, such as the Securities and Exchange Board of India (SEBI) or the Reserve Bank of India (RBI), can order a forensic audit to investigate suspected financial irregularities or non-compliance with regulatory requirements.
- 5. Law Enforcement Agencies: Law enforcement agencies, such as the Central Bureau of Investigation (CBI) or the Enforcement Directorate (ED), can order a forensic audit as part of a criminal investigation.
- **6. Courts**: Courts can order a forensic audit as part of a legal proceeding, such as a bankruptcy or insolvency case.

- 7. Lenders: Lenders, such as banks or financial institutions, can request a forensic audit to assess the creditworthiness of a borrower or to investigate suspected financial irregularities.
- **8. Auditors**: Auditors can recommend a forensic audit if they identify suspicious transactions or control weaknesses during a regular audit.

These stakeholders can order a forensic audit to:

- Investigate suspected financial irregularities or misconduct
- Ensure compliance with regulatory requirements
- Identify control weaknesses and improve internal controls
- Assess the creditworthiness of a borrower, 'redflags'
- Support a criminal investigation or legal proceedings

# Difference between Financial audit and Forensic audit

Financial audits and forensic audits are two distinct types of audits with different objectives, scopes, and methodologies.

#### Financial Audit:

- 1. Objective: To express an opinion on the 'true and fair view' of an organization's financial statements.
- 2. Scope: Limited to reviewing financial statements, accounting records, internal financial controls.
- 3. Methodology: Involves testing transactions, balances, and disclosures to ensure compliance with accounting standards and regulatory requirements.
- 4. Focus: Historical financial data and compliance with accounting standards.

#### Forensic Audit:

- Objective: To investigate and gather evidence of financial irregularities, fraud, or other illegal activities.
- 2. Scope: Broader than financial audits, encompassing financial and non-financial data, as well as interviews and investigations.
- 3. Methodology: Involves specialized techniques,

- such as data mining, data visualization, and digital forensics, to identify patterns and anomalies.
- 4. Focus: Identifying and investigating financial irregularities, fraud, or other illegal activities.

#### Key differences:

- Purpose: Financial audits focus on expressing an opinion on financial statements, while forensic audits aim to investigate and gather evidence of financial irregularities.
- 2. Outcome: Financial audits result in an audit opinion, while forensic audits result in a detailed report outlining findings and recommendations.

In summary, financial audits provide assurance on the accuracy and fairness of financial statements, while forensic audits investigate and gather evidence of financial irregularities and fraud.

#### **Oualities of a Forensic Auditor**

A forensic auditor should possess a combination of technical, business, and soft skills to effectively investigate financial irregularities and provide expert testimony. Barring requisite professional qualifications, training in the related field and continuous effort to stay up-to-date with changing laws, regulations, and industry standards through ongoing education is a prerequisite for forensic auditor. Some key qualities of a Forensic Auditor is given hereunder:

## **Technical Skills:**

- 1. Accounting and Auditing Knowledge: Strong understanding of accounting principles, auditing standards, and financial reporting requirements.
- **2. Financial Analysis**: Ability to analyse financial data, identify trends, and detect anomalies.
- **3. Forensic Accounting Techniques:** Familiarity with specialized techniques, such as data mining, data visualization, and digital forensics.
- **4. Knowledge of Laws and Regulations**: Understanding of relevant laws, regulations, and industry standards.

#### **Business Skills:**

**1. Business Acumen**: Understanding of business operations, processes, and systems.

- **2. Industry Knowledge**: Familiarity with specific industries, such as healthcare, finance, or construction.
- Risk Management: Ability to identify and assess risks, as well as develop strategies to mitigate them.
- **4. Communication**: Effective communication skills to present complex findings to stakeholders.

#### **Soft Skills:**

- 1. **Analytical Thinking**: Ability to analyse complex data, identify patterns, and draw conclusions.
- **2. Attention to Detail**: Meticulous attention to detail to ensure accuracy and thoroughness.
- **3. Objectivity**: Ability to remain impartial and unbiased in investigations.
- **4. Integrity**: Strong moral principles and ethics to maintain confidentiality and handle sensitive information.
- Time Management: Ability to manage time effectively to meet deadlines and handle multiple cases.
- **6. Collaboration**: Ability to work effectively with others, including law enforcement, legal counsel, and other stakeholders.

# **Personal Qualities:**

- **1.** Curiosity: Desire to learn and understand complex financial transactions and systems.
- **2. Persistence**: Ability to persevere through complex and challenging investigations.
- **3. Flexibility**: Ability to adapt to changing circumstances and priorities.
- **4. Discretion**: Ability to maintain confidentiality and handle sensitive information.
- **5. Professionalism**: Commitment to maintaining a professional image and upholding the highest standards of integrity and ethics.

Module 6:
Consolidated
Financial
Statements and
Separate Financial
Statements.

Module 7:

Recent Developments in Financial Reporting **FINAL** 

Group IV - Paper-18

Corporate Financial Reporting (CFR)

# Topic 1: Consolidated Financial Statements and Separate Financial Statements

#### Problem 1

Prepare the Consolidated Balance Sheet as on 31.03.2023, of a group of companies comprising A Limited, B Limited and C Limited. Their summarized balance sheets on that date are given below: (₹ in lakhs)

Particulars	A Ltd.	B Ltd.	C Ltd.
I. Assets			
Non-Current Assets			
Property, Plant and Equipment	160	180	150
Investment:			
16 lakh shares in B Ltd.	170	-	-
12 lakh shares in C Ltd.	-	140	-
<u>Current Assets</u>			
Inventories	110	35	25
Trade Receivables	130	50	110
Bills Receivable	36	-	15
Cash in hand and at Bank	114	20	20
Total	720	425	320
II. Equity and Liabilities			
<u>Equity</u>			
Share capital (₹10 per share)	300	200	160
Other Equity: Reserves	90	50	40
Retained earnings	80	25	30
Non-current Liabilities	-	-	-
Current Liabilities			
Trade Payables	235	115	90
Bills Payable			
A Ltd.		35	-
C Ltd.	15	-	-
Total	720	425	320

The following additional information is available:

(i). A Ltd. holds 80% shares in B Ltd. and B Ltd. holds 75% shares in C Ltd. Their holdings were acquired on 30th September, 2022.

(ii). On 01.04.2022, the following balances stood in the books of B Ltd. and C Ltd.

(₹in lakh)

	B Ltd.	C Ltd.
Reserves	40	30
Retained earnings	10	15

- (iii). ₹ 5 Lakh included in the inventory figure of B Limited, is inventory which has been purchased from C Ltd. at cost plus 25%. Assume that the sale of goods by C Ltd. is done after acquisition of shares by B Ltd.
- (iv). The parent company has adopted an accounting policy to measure non-controlling interest at fair value (quoted market price) applying Ind AS 103. Assume market prices of B Ltd. and C Ltd. are the same as respective face values.

# **Solution:**

# Consolidated Balance Sheet of the Group as on 31.03.2023

Particulars	Note No.	(₹ in lakh)
ASSETS		
Non-current assets		
Property, plant and equipment Current assets	1	490
(a) Inventories		
(b) Financial assets	2	169
Trade receivables	3	290
Bills receivable	4	1
(c) Cash and cash equivalents	5	<u>154</u>
Total assets		<u>1,104</u>
EQUITY & LIABILITIES		
Equity attributable to owners of the parent		
Share capital		300
Other Equity		
Reserves (W.N.5)		97
Retained Earnings (W.N.5)		89.9
Capital Reserve (W.N.3)		94
Non-controlling interests (W.N.4)		<u>83.10</u>
Total equity		<u>664</u>
LIABILITIES		
Non-current liabilities		Nil
Current liabilities		
(a) Financial Liabilities		
(i) Trade payables	6	<u>440</u>
Total liabilities		<u>440</u>
Total equity and liabilities		<u>1,104</u>

Notes to Accounts (₹ in lakh)

1.	Property Plant & Equipment		
	Parent	160	
	B Ltd.	180	
	C Ltd. Inventories Parent	<u>150</u>	490
2.	B Ltd. (35-1)	110	
	C Ltd.	34	
	Trade Receivables	<u>25</u>	169
	Parent	130	
3.	B Ltd.	50	
	C Ltd.	<u>110</u>	290

4.	Bills Receivable		
	Parent (36-35)	1	
	C Ltd. (15-15)	<u>Nil</u>	1
5.	Cash & Cash equivalents Parent	114	
	B Ltd.	20	
	C Ltd.	_20	154
	Trade Payables Parent	235	
6.	B Ltd.	115	
	C Ltd.	_90	440

# **Working Notes:**

# 1. Analysis of Other Equity

(₹ in lakh)

		B Ltd.		C Ltd.
Reserves as on 31.3.2022		40		30
Increase during the year 2022-23	10		10	
Increase for the half year till 30.09.2022		<u>5</u>		<u>_5</u>
Balance as on 30.9.2022 (A)		45		35
Total balance as on 31.3.2022		<u>50</u>		<u>40</u>
Post-acquisition balance		<u>5</u>		<u>5</u>

		B Ltd.		C Ltd.
Retained Earnings as on 31.3.2022		10		15
Increase during the year 2022-2023	15		15	
Increase for the half year till 30.9.2022		<u>7.5</u>		<u>7.5</u>
Balance ason30.9.2022 (B)		17.5		22.5
Total balance as on 31.3.2023		_25		_30
Post-acquisition balance		7.5		7.5
Less: Unrealized gain on inventories (5 x25/125)				<u>(1)</u>
Post-acquisition balance for CFS		<u>7.5</u>		<u>6.5</u>
Total balance on the acquisition date i.e., 30.9.2022 (A+B)		62.5		57.5

Calculation of Effective Interest of Parent company i.e., A Ltd. in C Ltd.

Acquisition by A Ltd. In B Ltd. = 80%

Acquisition by B Ltd. In C Ltd. = 75%

Acquisition by Group in C Ltd. (80% x 75%) =60%

Non-controlling Interest = 40%

3. Calculation of Goodwill / Capital Reserve on the acquisition date

	B Ltd.	C Ltd.
Investment or consideration	170	(140 × 80%)112
Add: NCI at Fair value		
(200 x 20%)	40	
(160 x 40%)		<u>64</u>
Less: Identifiable net assets (Share capital + Increase in the Other Equity till acquisition date)	210	176
	(200+62.5) (262.5)	(160+57.5) ( <u>217.5</u> )
Capital Reserve	<u>52.5</u>	41.5
Total Capital Reserve (52.5 + 41.5)	<u>94</u>	

# **4.**Calculation of Non-Controlling Interest

	B Ltd.	C Ltd.
At Fair Value (See Note 3)	40	64
Add: Post Acquisition Reserves (See Note1)	(5× 20%) 1	(5 × 40%) 2
Add: Post Acquisition Retained Earnings (See Note 1)	$(7.5 \times 20\%) 1.5$	(6.5 × 40%) 2.6
Less: NCI share of investment in C Ltd. *	(140x20%) (28) *	
	<u>14.5</u>	68.6
Total (14.5 + 68.6)	83.1	

<sup>\*</sup>Note: The Non-controlling interest in B Ltd. will take its proportion in C Ltd. So, they have to bear their proportion in the investment made by B Ltd. (as a whole) in C Ltd.

# 5. Calculation of Consolidated Other Equity

	Reserves	Retained Earnings
A Ltd.	90	80
Add: Share in B Ltd.	(5 x 80%) 4	$(7.5 \times 80\%) 6$
Add: Share in C Ltd.	(5 ×60%) <u>3</u>	(6.5 × 60%) <u>3.9</u>
	<u>97</u>	<u>89.9</u>

# Topic 2: Recent Developments in Financial Reporting

# Corporate Social Responsibility Reporting

#### Role of the Board

Board shall disclose-

- The composition of CSR Committee in its report.
- Approve the recommended CSR Policy for the company.
- c) Disclose the contents of such Policy in its report and place it on the company's website.
- d) Ensure that the activities included in CSR Policy of the company are duly executed by the company.
- e) Ensure that the company spends, in every financial year, at least two per cent of the average net profits of the company made during the three immediately preceding financial years [or where the company has not completed the period of three financial years since its incorporation, during such immediately preceding financial years], by giving preference to the local area and areas around it where it operates. [Sec.135(5)]
- If the company spends an amount in excess of the requirements, then it may set off such excess amount against the requirement to spend for such number of succeeding financial years and in such manner, as may be prescribed. [Sec. 135(5)]
- g) If the company fails to spend such amount, the Board shall, in its report made under clause (o) of sub-section (3) of section 134, specify the reasons for not spending the amount and, unless the unspent amount relates to any ongoing project referred to in sub-section (6), transfer such unspent amount to

- a Fund specified in Schedule VII, within a period of six months of the expiry of the financial year. . [Sec.135(5)]
- h) Any amount remaining unspent, pursuant to any ongoing project, undertaken by a company in pursuance of its Corporate Social Responsibility Policy, shall be transferred by the company within thirty days from the end of the financial year to a special account (opened by the company in that behalf for that financial year in any scheduled bank) to be called the Unspent Corporate Social Responsibility Account. [Sec. 135(6)]
  - Such amount shall be spent by the company in pursuance of its obligation towards the Corporate Social Responsibility Policy within three financial years from the date of such transfer, failing which, the company shall transfer the same to a Fund specified in Schedule VII, within thirty days from the date of completion of the third financial year.
- i) If a company defaults in complying with section 135(5) and 135(6), the company shall be liable to a penalty of twice the amount required to be transferred by the company to the Fund specified in Schedule VII or the Unspent Corporate Social Responsibility Account, as the case may be, or one crore rupees, whichever is less.

In addition to it, every officer of the company who is in default shall be liable to a penalty of one-tenth of the amount required to be transferred by the company to such Fund specified in Schedule VII, or the Unspent Corporate Social Responsibility Account, as the case may be, or two lakh rupees, whichever is less.

Module 10: GST Returns

# **FINAL**

Group IV - Paper-19

Indirect Tax Laws and Practice (ITLP)

## **GST** Returns

The introduction of the Goods and Services Tax (GST) has significantly reformed the indirect tax structure across several countries by replacing multiple levies with a unified tax regime. A cornerstone of this framework is the filing of GST returns, which serve as a critical tool for ensuring compliance, facilitating revenue collection, and enhancing taxpayer transparency. This guide delves into the essentials of GST returns—outlining their objectives and filing requirements.

The GST return mechanism is built on several key features:

- Electronic filing of returns
- Invoice-wise data reporting
- Auto-population of Input Tax Credit (ITC) based on supplier data
- Matching of invoice details between supplier and recipient
- Auto-reversal of ITC in cases of mismatches

These features aim to simplify compliance, enable accurate reporting, and ensure seamless credit flow. A GST return must be filed for various administrative and fiscal purposes, including:

Communication of transactional data to the tax authorities:

- Verification of tax compliance by the authorities;
- Finalization of the taxpayer's liability within the prescribed timelines;
- Facilitating informed policy-making; and
- Supporting audit and anti-evasion functions of the tax administration.

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

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

#### **Returns under GST Laws**

Form Particulars Due Date Applic	able to
GSTR- 3B    Monthly/ Quarterly summary return   As per sec. 2(92), "quarter" shall mean a period comprising three consecutive calendar months, ending on the last day of March, June, September and December of a calendar year;    September and December of a calendar year;   Dobe filed as under:	service tor (ISD), resident person, paying tax  mposition y Tax duction at

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

<sup>2</sup> Category – 2: States of Himachal Pradesh, Punjab, Uttarakhand, Haryana, Rajasthan, Uttar Pradesh, Bihar, Sikkim, Arunachal Pradesh, Na-

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

galand, Manipur, Mizoram, Tripura, Meghalaya, West Bengal, Jharkhand or Odisha, the Union territories of Jammu and Ka**shmir, Ladakh,** Chandigarh or Delhi

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

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

Module 3: Economic Efficiency of the Firm – Performance Analysis

Module: 5
Fundamentals of
Business Valuation

# **ELECTIVES**

Paper-20A

Strategic Performance Management and Business Valuation (SPMBV)

# Module 3: Economic Efficiency of the Firm – Performance Analysis

Economic efficiency is a fundamental concept in business economics that informs how a firm uses its resources to maximize output and minimize costs while responding to market signals. The analysis of economic efficiency involves assessing a firm's performance in various aspects such as productive efficiency, allocative efficiency, and dynamic efficiency. These elements help to measure how well a firm optimizes its input-output relationship to achieve the most favorable outcomes. The following article explores the concept of economic efficiency and presents a case study of a leading firm to illustrate how such efficiency impacts performance in real-world settings.

# 1. Understanding Economic Efficiency

Economic efficiency is an overarching term that includes several subtypes, each of which provides insight into how a firm can better utilize its resources. Understanding these forms of efficiency is critical in performance analysis.

# Productive Efficiency

Productive efficiency refers to a firm's ability to produce the highest quantity of output with the least quantity of input, given the available resources and technology. A firm achieves productive efficiency when it operates along its production possibility frontier (PPF). This is the point at which no additional output can be obtained without increasing the amount of input.

For example, if a firm uses outdated technology or inefficient production methods, its productivity will be low compared to firms employing modern technology and processes. Therefore, achieving productive efficiency is closely tied to minimizing costs while maintaining output levels, often by adopting innovations and best practices.

# Allocative Efficiency

Allocative efficiency occurs when a firm produces goods or services that align with consumer preferences, ensuring that resources are not wasted on unneeded products. This type of efficiency is achieved when the firm sets the price of its product equal to its marginal cost (MC). In a perfectly competitive market, allocative efficiency ensures that the marginal benefit to consumers (the price they are willing to pay) equals the marginal cost of production, ensuring an optimal allocation of resources.

Allocative efficiency is central to the concept of Pareto optimality, where no reallocation of resources can make

someone better off without making someone else worse off. For firms, achieving allocative efficiency involves responding to market demands and shifting production focus as consumer preferences change.

## Dynamic Efficiency

Dynamic efficiency, often overlooked in traditional economic analysis, refers to a firm's ability to innovate, improve over time, and adapt to market and technological changes. This form of efficiency is concerned not just with the current allocation of resources but with investing in the future, primarily through technological advancements, R&D activities, and market expansion strategies.

Firms with high dynamic efficiency continuously improve their processes, introduce new products, and embrace technological breakthroughs, often resulting in a long-term competitive advantage.

2. The Importance of Economic Efficiency in Performance Analysis

A firm's ability to maintain economic efficiency is crucial for its competitiveness and long-term sustainability. Economic efficiency directly affects a firm's profitability, market share, and ability to respond to changing economic conditions. The key indicators of performance based on economic efficiency include:

- Cost-effectiveness: Minimizing costs without sacrificing quality is the essence of productive efficiency.
- Consumer satisfaction: Achieving allocative efficiency ensures that consumer preferences are met, which in turn boosts demand.
- Sustainability and growth: Dynamic efficiency ensures that a firm remains competitive in the long term by innovating and adapting to external changes.

By analyzing these elements, businesses and policymakers can better understand the factors driving success or failure in the market, enabling them to make informed decisions.

3. Case Study: The Economic Efficiency of Toyota Motor Corporation

Toyota Motor Corporation provides an excellent case study in understanding economic efficiency and performance analysis. As one of the largest and most successful automotive manufacturers in the world, Toyota's operational strategies are deeply rooted in achieving high levels of efficiency across its production processes, pricing mechanisms, and innovation strategies.

#### Productive Efficiency at Toyota

Toyota's approach to achieving productive efficiency can be largely attributed to its Toyota Production System (TPS), which emphasizes lean manufacturing principles, the elimination of waste (known as *muda*), and continuous improvement (*kaizen*). By standardizing production methods, ensuring a consistent flow of materials, and implementing just-in-time (JIT) inventory management, Toyota has been able to minimize waste and reduce costs. This efficiency in production allows the company to offer vehicles at competitive prices while maintaining high levels of quality.

One notable example of Toyota's productive efficiency is the development of the Prius, the world's first mass-produced hybrid car. By combining innovative technology with lean production methods, Toyota was able to produce a car that not only reduced fuel consumption but also minimized production costs. The firm's ability to maintain low production costs while introducing environmentally friendly products is a direct reflection of its productive efficiency.

#### Allocative Efficiency at Toyota

In terms of allocative efficiency, Toyota has effectively aligned its production to meet consumer demands, particularly with the growing shift toward environmentally conscious products. The company's ability to anticipate consumer preferences and develop vehicles that cater to these needs has been crucial to its market success. For instance, Toyota capitalized on the growing environmental awareness in the late 1990s and early 2000s by introducing the Prius, tapping into a market that demanded more fuel-efficient and ecofriendly vehicles.

By setting prices close to the marginal cost of production while ensuring that its vehicles met the needs of eco-conscious consumers, Toyota achieved allocative efficiency in a highly competitive market. The introduction of electric vehicles and the focus on hybrid technology is another example of Toyota aligning its product offerings with shifting consumer preferences for sustainability.

### Dynamic Efficiency at Toyota

Dynamic efficiency has been a central factor in Toyota's long-term growth. Toyota invests heavily in Research and Development (R&D) to stay ahead of technological advancements and future automotive trends. The

company's focus on hybrid technology, autonomous vehicles, and the transition to electric vehicles demonstrates its commitment to continuous innovation.

For instance, Toyota has invested billions of dollars in developing hydrogen fuel cell technology and electric vehicle platforms. The firm's dedication to R&D ensures that it remains at the forefront of industry innovation, positioning itself as a leader in the global automotive market. This dynamic efficiency enables Toyota to respond to changing regulations, consumer preferences, and technological disruptions, ensuring that it remains competitive over time.

### Results and Impact on Performance

The impact of Toyota's economic efficiency is evident in its financial performance. By maintaining a high level of productive, allocative, and dynamic efficiency, Toyota has consistently reported strong profit margins, a robust market share, and a global reputation for quality and innovation. Its approach to economic efficiency has allowed the company to sustain growth even during challenging economic conditions, such as the global financial crisis of 2008 and the ongoing shifts towards green energy in the automotive sector.

In terms of performance analysis, Toyota's success underscores the importance of balancing cost minimization, consumer satisfaction, and innovation. By maintaining a focus on efficiency in all aspects of its operations, Toyota has been able to achieve superior market performance while adapting to changing economic and consumer conditions.

#### 4. Conclusion

Economic efficiency remains a critical determinant of a firm's performance in the marketplace. By achieving productive, allocative, and dynamic efficiency, firms can maximize output, reduce costs, and adapt to changing economic environments. Toyota's case study demonstrates the importance of adopting efficiency-driven strategies, such as lean production methods, consumer-oriented product offerings, and ongoing investment in innovation. As firms continue to navigate complex global markets, their ability to maintain high levels of economic efficiency will be vital for ensuring long-term sustainability and success.

For firms aiming to enhance their performance, an in-depth analysis of their economic efficiency across the three dimensions—productive, allocative, and dynamic—is essential. Through such analysis, companies can identify opportunities to optimize operations, align products with consumer needs, and invest in future growth, thereby ensuring competitive advantage in an ever-changing marketplace.

# Module 5: Fundamentals of Business Valuation

The valuation of assets and liabilities is a cornerstone of financial analysis, providing essential insights into the financial health, performance, and risk profile of a firm. Accurate valuation helps investors, managers, and analysts make informed decisions, facilitating effective financial reporting, strategic planning, and risk management. In the world of finance, the ability to determine the true value of assets and liabilities is crucial for understanding a firm's market position, profitability, and overall financial stability.

The process of asset and liability valuation involves various methods, each tailored to different types of assets or liabilities, with a focus on assessing their fair value, intrinsic value, or market value. This article examines the key methods of asset and liability valuation, their relevance in different contexts, and how they contribute to the performance analysis of firms. Furthermore, we will explore a case study of a prominent firm, illustrating the practical application of valuation techniques in real-world financial scenarios.

# 1. Understanding Asset and Liability Valuation

The concept of valuation refers to determining the monetary worth of assets and liabilities on a firm's balance sheet. Assets represent resources owned by a firm that are expected to generate future economic benefits, while liabilities are obligations that the firm must settle, typically through the payment of money or transfer of goods and services. The accurate valuation of these elements is essential for producing reliable financial statements and making informed investment or strategic decisions.

### Valuation of Assets

Assets can be classified into various categories, each requiring different approaches for valuation. Broadly, assets are divided into two main groups: tangible and intangible.

- Tangible Assets: These are physical resources such as property, plant, equipment, and inventories. Their valuation typically relies on cost-based methods, market approaches, or income approaches.
- o Cost Approach: The cost approach values tangible assets based on the historical cost of acquisition,

- adjusted for depreciation, impairment, or obsolescence. This method is particularly useful for fixed assets, such as buildings and machinery.
- o Market Approach: This method uses market prices of similar assets or transactions to estimate the value of an asset. The market approach is commonly applied in the valuation of real estate and financial securities, where market prices are readily available.
- o Income Approach: In cases where assets generate income, such as real estate properties or intellectual property, the income approach estimates value based on the present value of future income streams that the asset is expected to generate.
- Intangible Assets: These include patents, trademarks, goodwill, and brand equity, among others. Intangible assets are often difficult to value because they do not have a physical presence and may not have a clear market price. Common valuation methods for intangible assets include the cost approach (based on R&D or development costs), the market approach (based on comparable sales of similar intangible assets), and the income approach (based on the discounted cash flows generated by the asset).

#### Valuation of Liabilities

Liabilities, representing obligations or debts, also require careful valuation to assess their impact on the financial stability of a firm. Similar to assets, liabilities can be classified as either current or non-current, depending on when they are expected to be settled.

- Current Liabilities: These are short-term obligations that must be settled within one year, such as accounts payable, short-term loans, and accrued expenses. The valuation of current liabilities typically involves determining their face value, which is the amount the firm is required to pay in the short term. The market value of current liabilities is usually close to their book value, as the settlement period is short.
- Non-current Liabilities: These are long-term obligations, such as long-term debt and pension

liabilities, that extend beyond one year. The valuation of non-current liabilities often involves discounting future cash flows associated with these obligations to their present value. This can be done using a discount rate that reflects the firm's cost of capital or the risk associated with the liability. For example, long-term debt is typically valued by discounting the expected payments using the firm's borrowing rate.

• Contingent Liabilities: These are potential liabilities that may arise in the future depending on the outcome of uncertain events, such as lawsuits or warranties. The valuation of contingent liabilities is more complex, often requiring judgment and estimation. Generally, these liabilities are disclosed in financial statements but are not recognized on the balance sheet unless the probability of the liability occurring is high, and the amount can be reasonably estimated.

#### 2. Methods of Valuation

The valuation of both assets and liabilities involves several techniques, each applicable in different circumstances. The three primary approaches to valuation are:

#### 1) Cost-Based Valuation

Cost-based valuation, also known as the historical cost approach, is one of the most commonly used methods. It involves valuing assets and liabilities based on the original cost incurred during their acquisition or creation. This approach is especially useful for fixed assets such as machinery, equipment, and land, where the historical cost reflects the amount that was paid for the asset at the time of acquisition. However, this method can become outdated over time due to factors such as inflation, depreciation, and obsolescence.

For liabilities, the cost-based method involves using the book value of the liability, which represents the amount the firm owes at a given point in time, adjusted for any repayments or changes in interest rates.

#### 2) Market-Based Valuation

Market-based valuation is based on the principle of comparing the asset or liability in question with similar assets or liabilities in the market. This method is most commonly used for securities, real estate, and other assets that are traded in active markets. The market value of an asset is determined by the price at which it can be bought or sold in a competitive market.

For liabilities, market-based valuation may involve the current market price of a debt instrument, such as a bond, which reflects the present value of the liability based on the terms of the bond, such as the coupon rate and maturity.

## 3) Income-Based Valuation

Income-based valuation methods estimate the value of an asset or liability by determining the present value of its expected future cash flows. This is particularly relevant for income-generating assets such as patents, franchises, and investments. The most common technique used in this approach is the Discounted Cash Flow (DCF) method, where future cash flows are discounted to their present value using an appropriate discount rate.

For liabilities, this method may be used to assess the present value of future obligations, such as long-term debt or pension liabilities. The valuation is based on the amount the firm will need to pay in the future, discounted by the firm's cost of capital or the market interest rate.

3. Case Study: Valuation of Assets and Liabilities at Apple Inc.

To understand the practical application of asset and liability valuation, we examine Apple Inc., one of the world's leading technology firms. Apple's financial statements offer a wealth of information about its assets, liabilities, and the methods used to value them.

# Valuation of Assets at Apple

Apple's assets primarily consist of tangible assets (such as property, plant, and equipment) and intangible assets (such as patents, trademarks, and goodwill). For tangible assets, Apple uses the cost-based approach, with significant depreciation adjustments reflecting the wear and tear on physical assets. For instance, Apple's manufacturing plants and retail stores are valued based on their historical cost, adjusted for depreciation. In the case of intangible assets, Apple utilizes the incomebased approach, particularly for its intellectual property. The value of Apple's patents, for example, is based on the expected income they generate through licensing or

integration into products like the iPhone.

### Valuation of Liabilities at Apple

Apple's liabilities primarily include long-term debt, accounts payable, and other obligations. For long-term debt, Apple uses the market-based approach, reflecting the current value of its outstanding bonds based on prevailing interest rates. Given the firm's solid credit rating, its debt instruments trade at values close to their face value. Apple's accounts payable, which include short-term obligations, are valued at their book value since these liabilities are expected to be settled in the near term.

In the case of contingent liabilities, such as lawsuits or warranty claims, Apple discloses these in its financial statements but only recognizes them as liabilities when the probability of the event occurring is high and the potential costs can be reasonably estimated.

# Impact on Performance Analysis

The accurate valuation of Apple's assets and liabilities is vital for understanding its financial strength. For investors, this information informs decisions on whether to invest in the company's stocks or bonds. For analysts, it helps in assessing the company's profitability, liquidity, and overall risk exposure. Apple's consistent investment in intellectual property, for instance, ensures that its intangible assets are continually growing in value, contributing to its competitive advantage in the market.

#### 4 Conclusion

The valuation of assets and liabilities is a critical component of financial analysis, providing valuable insights into the true financial position of a firm. By employing various valuation methods, businesses can accurately report the value of their assets and liabilities, helping investors, managers, and policymakers make informed decisions. The case study of Apple Inc. demonstrates how firms effectively apply different valuation methods to understand their financial standing, manage risks, and ensure long-term sustainability.

For analysts and decision-makers, it is essential to choose the appropriate valuation method depending on the type of asset or liability being assessed. Whether using costbased, market-based, or income-based approaches, the goal is to produce an accurate representation of a firm's financial position, which is crucial for effective financial management and decision-making. As the global business landscape continues to evolve, the ability to accurately value assets and liabilities will remain a key determinant of a firm's success in the marketplace.

Module 4: Sovereign Risk and Insolvency Risk

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

# **ELECTIVES**

Paper-20B

Risk Management In Banking and Insurance (RMBI)

# Sovereign Risk and Its Implications

## Sovereign Risk and Its Implications

Sovereign Risk is the chance that a National Government's Treasury or Central Bank will default on their Sovereign Debt, or else implement Foreign Exchange Rules or Restrictions that will significantly reduce or negate the worth of its Forex Contracts.

Sovereign Risk is the Probability that a foreign nation will either fail to meet debt repayments or not honour sovereign debt payments or obligations. In addition to the risk to bondholders of sovereign debt, sovereign risk is one of many unique risks that an investor faces when holding forex contracts (other such risks including currency exchange risk, interest rate risk, price risk, and liquidity risk).

Sovereign Risk comes in many forms, although anyone who faces Sovereign Risk is exposed to a foreign country in some way. Foreign exchange traders and investors face the risk that a foreign central bank will change its monetary policy so that it affects currency trades. If, for example, a country decides to change its policy from one of a pegged currency to one of a currency float, it will alter the benefits to currency traders. Sovereign Risk is also made up of Political Risk that arises when a foreign nation refuses to comply with a previous payment agreement, as is the case with sovereign debt.

Sovereign risk also impacts personal investors. There is always risk to owning a financial security if the issuer resides in a foreign country. For example, an American investors faces sovereign risk when they invests in a South American-based company. A situation can arise if that South American country decides to nationalize the business or the entire industry, thus making the investment worthless, unless there is reasonable compensation made to the investors.

# Ability to Pay:

A government's ability to pay is a function of its economic position. A country with strong economic growth, a manageable debt burden, a stable currency, effective tax collection, and favourable demographics will likely have the ability to pay back its debt. This ability will usually be reflected in a high credit rating by the major rating agencies. A country with negative economic growth, a high debt burden, a weak currency, little ability to collect taxes, and unfavourable demographics may be unable to pay back its debt.

# Willingness to Pay:

A Government's willingness to pay back its debt is often a function of its political system or government leadership. A government may decide not to pay back its debt, even if it has the ability to do so. Nonpayment usually occurs following a change of government or in countries with unstable governments. This makes political risk analysis a critical component of investing in sovereign bonds. Rating agencies take into account willingness to pay as well as the ability to pay when evaluating sovereign credit.

### History of Sovereign Risk:

In the Middle Ages, kings would often finance wars and armies by borrowing from the country's lordship or citizenry. When wars became protracted, the realm would default on its debt, leaving many lenders out in the cold. Unfortunately, due to the power of the monarchy, creditors had little recourse to recover their debts.

Sovereign risk of this nature became mutualized in the 17th century for the first time with the establishment of the Bank of England (BoE). The BoE was established as a private institution in 1694, with the power to raise money for the Government through the issuance of Bonds. The original purpose was to help finance the war against France. The BoE also functioned as a deposit-taking commercial bank. In 1844, the Bank Charter Act gave it, for the first time, a monopoly on the issuance of banknotes in England and Wales, thus taking a major step toward being a modern central bank. As a lender to the king, the BoE minimized England's sovereign risk and allowed the nation to borrow at very low interest rates for centuries to come.

# Sovereign Risk in the Modern Era:

Fast forward to the 1960s were a time of reduced financial restrictions. Cross-border currency began to change hands as international banks increased lending to developing countries. These loans helped developing countries increase their exports to the developed world, and large amounts of U.S. dollars were deposited across European banks.

Emerging economies were encouraged to borrow the dollars sitting in European banks to fund additional economic growth. However, most of the developing nations did not obtain the level of economic growth that the banks expected, making it impossible to repay the U.S. dollar-denominated debt borrowings. The lack of repayment caused these emerging economies to refinance their sovereign loans continuously, increasing interest rates.

Many of these developing countries owed more interest and principal than their entire gross domestic products (GDPs) were worth. This led to domestic currency devaluation and decreased imports to the developed world, increasing inflation.

# **Example-Greek Sovereign Debt Crisis:**

There are signs of similar sovereign risk in the 21st century. Greece's economy was suffering under the burden of its high debt levels, leading to the Greek government-debt crisis, which had a ripple effect across the rest of the European Union. International confidence in Greece's ability to repay its sovereign debt dropped, forcing the country to adopt strict austerity measures. The country received two rounds of bailouts, under the express demand that the country would adopt financial reforms and more austerity measures. Greece's debt was, at one point, moved to junk status. Countries receiving bailout funds were required to meet austerity measures designed to slow down the growth of public-

sector debt as part of the loan agreements.

The European sovereign debt crisis was a period when several European countries experienced the collapse of financial institutions, high government debt, and rapidly rising bond yield spreads in government securities. The debt crisis began in 2008 with the collapse of Iceland's Banking System, then spread primarily to Portugal, Italy, Ireland, Greece, and Spain in 2009. It has led to a loss of confidence in European businesses and economies.

The crisis was eventually controlled by the financial guarantees of European countries, who feared the collapse of the euro and financial contagion, and by the International Monetary Fund (IMF). Rating agencies downgraded several Eurozone countries' debts.

**To Conclude**, Sovereign Risk is the potential that a Nation's Government will default on its Sovereign Debt by failing to meet its Interest or Principal Payments. Sovereign Risk is Typically low, but can cause losses for Investors in Bonds whose issuers are experiencing economic woes leading to a Sovereign Debt Crisis.

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# Role of Insurance Intermediaries in Health Insurance

# Role of Insurance Intermediaries in Health Insurance

Health Insurance is an agreement between the Insurance Company and the Insured Customer in which the insurance company agrees to pay a certain amount to the insured customer in case of hospitalization due to any illness or disease in return for a nominal amount known as premium. The insurance company employs different insurance intermediaries to sell the "health

ms	insurance policies such as			
	Insurance Brokers			
	Individual Agents			
	Banks			
	Web Aggregators			
	Direct Call Centers of the Insurance Company etc.			
TI.	1'00 4 1 4 0 1 1 14			

There are different advantages of buying a health insurance policy from different insurance intermediaries are:

- a) Insurance Broker: Insurance broker is a type of insurance intermediary authorized by the insurance company to sell the health insurance policies on its behalf. Here are the advantages of buying a health insurance policy from an insurance broker.
  - Time Saving on Research: Insurance brokers know in and out of the health insurance policies of different insurance companies and can advise the customers accordingly. They would do research and diligence on all the health insurance policies available in the market which saves the time and energy of the customer. All we have to do is state requirement in a health insurance policy to the insurance broker and the best health insurance policy would be suggested by the insurance broker.
  - ☐ Multiple Quotes: Insurance brokers are permitted to deal with multiple insurance companies by the insurance regulatory and development authority of India, IRDA. This means that the insurance brokers can tie-up with all the insurance companies offering health insurance and can provide the health insurance quotes from multiple insurance companies to the customer. Multiple quotes mean multiple options for customers to choose from. Having multiple options leads to comparison and selecting the best one from the lot.

- Negotiation on Premium: Insurance brokers are good at negotiating the price with the insurance companies as they have the business potential to offer to the insurance companies. If we plan to take a group health insurance policy, then the insurance brokers can negotiate hard with the insurance companies on our behalf to reduce the premium payable thereby saving our hard-earned money.
- Legally Liable: Insurance brokers are the only insurance intermediaries who are legally liable for the deficiency in services provided by them to their customers. Insurance brokers can be sued by the customers for suggesting wrong insurance policies which is considered as deficiency in services.
- b) Agent: Individual Agents are the individuals who are permitted to sell the health insurance policies on behalf of the insurance companies. For any insurance company individual agents form a considerable force and generate highest revenue when compared to other insurance intermediaries. There are certain advantages of buying a health insurance policy from an individual agent which are mentioned below:
  - Available at Remote Places: Insurance agents are available even in the remotest areas where the other insurance intermediaries would not be available. In addition to this insurance agents would be well known to the people of the area and can have access to the insurance through the individual agent available in their area.
  - Trust: Health insurance is sold mainly on the trust factor as it is an intangible product. Insurance is not tangible which means that there would be no product to show to customers or give a demo while making the sale of insurance. Health insurance is a service which can be experienced mostly at the time of claim. People trust people more than they trust machines and this is the advantage of individual agents and the reason for agents becoming a huge force in the insurance industry when compared to other insurance intermediaries.
- c) Bank: Bank is a financial institution that deals with lending of money, accepting deposits and other third-party services such as insurance, mutual funds etc. There are certain advantages in purchasing a health insurance policy from the bank as mentioned

below:

- One Place-Many Services: Banks have the advantage of providing all the financial services at a single place which means that the customers need not have to visit different offices for different financial needs. Health insurance policies are available in the banks as banks are tied-up with insurance companies. These insurance companies offer their services to the customers of a bank. Customers can contact the bank staff in case of any claim related query which would be resolved immediately as there would be more than one service point for the customer.
- ☐ Multiple Options: Banks can tie-up with up to 3 health insurance companies, 3 general insurance companies and 3 life insurance companies. This simply means that the customer can have multiple options to take health insurance policy as the bank can provide quotes from multiple insurance companies even though the number of quotes that bank can provide would be less than that of an insurance broker.
- d) Web Aggregator: Insurance web aggregators are the insurance intermediaries which collect, analyse, compile and provide information of different health insurance policies of different insurance companies. Web aggregators operate entirely online and the entire process of health insurance sale is done online without the need to meet offline. Below are

the advantages of taking a health insurance policy from insurance web aggregators

- Save Time & Energy: Insurance web aggregators save time and energy of the customer by allowing them to take the health insurance policy online. There would be no need to visit the insurance office to fill the proposal form or any other details and then get the health insurance policy. All the formalities can be done by sitting at home or office and the health insurance policy would reach the address of the customer without sweating much.
- Readily Available: Insurance web aggregators provide the insurance instantly in most of the cases such as motor insurance. In the case of health insurance, web aggregators do the research and provide comparisons of health insurance policies of different insurance companies on their website. Here the customer would be benefitted as the research is done by the web aggregator and is also displayed on their website. All the customer has to do is give basic details which are required for a health insurance policy and make the purchase.

To Conclude, Intermediaries are an essential area of Supervision in the Insurance Sector and may have a Reputation Risk or a Prudential impact on Insurers. Their Good Conduct is Essential to protect Consumers and Promote Confidence in the Insurance Markets.

# Topic

Module 3: Idea to Action

# **ELECTIVES**

Paper-20C

Entrepreneurship and Start Up (ENTS)

# **Funding Options for Startups**

Startup funding refers to the capital or financial resources required to launch and grow a new business, obtained through various sources. There are multiple sources of funding available for startups. However, the source of funding should typically match the stage of operations of the startup.

# Why funding is required for startups?

A startup might require funding for one, a few, or all of the following purposes. It is important that an entrepreneur is clear about why they are raising funds. Founders should have a detailed financial and business plan before they approach investors.



# Stages of Startups and Source of Funding

# 1. Stage 1: Ideation

This is the stage where the entrepreneur has an idea and is working on bringing it to life. At this stage, the amount of funds needed is usually small. Additionally, at the initial stage in the startup lifecycle, there are very limited and mostly informal channels available for raising funds.

### Pre-Seed Stage

- 1) Bootstrapping/Self-financing: Bootstrapping a startup means growing the business with little or no venture capital or outside investment. It means relying on your savings and revenue to operate and expand. This is the first recourse for most entrepreneurs, as there is no pressure to pay back the funds or dilute control of your startup.
- 2) Friends and Family: This is also a commonly utilised channel of funding by entrepreneurs still in the early stages. The major benefit of this source of investment is that there is an inherent level of trust between the entrepreneurs and the investors.
- 3) Business Plan/Pitching Events: This is the prize money/grants/financial benefits that are provided by institutes or organisations that conduct business plan competitions and challenges. Even though the quantum of money is not generally large, it is usually enough at the idea stage. What makes the difference at these events is having a good business plan.

# 2. Stage 2: Validation

At this stage, a startup has a prototype ready and needs to validate the potential demand of the startup's product or service. This is called conducting a 'Proof of Concept (POC)', after which comes the big market launch.

## Seed Stage

A startup will need to conduct field trials, test the product on a few potential customers, onboard mentors, and build a formal team for which it can explore the following funding sources:

- 1) Incubators: Incubators are organisations set up with the specific goal of assisting entrepreneurs with building and launching their startups. Not only do incubators offer a lot of value-added services (office space, utilities, admin and legal assistance, etc.), they often also make grants/debt/equity investments.
- 2) Government Loan Schemes: The government has initiated a few loan schemes to provide collateral-free debt to aspiring entrepreneurs and help them gain access to low-cost capital, such as the Startup India Seed Fund Scheme and SIDBI Fund of Funds.
- 3) Angel Investors: Angel investors are individuals who invest their money into high-potential startups in return for equity. Reach out to angel networks such as Indian Angel Network, Mumbai Angels, Lead Angels, Chennai Angels, etc., or relevant industrialists for this.
- 4) Crowdfunding: Crowdfunding refers to raising money from a large number of people who each contribute a relatively small amount. This is typically done via online crowdfunding platforms.

# 3. Stage 3: Early Traction

At the Early Traction stage startup's products or services have been launched in the market. Key performance indicators such as customer base, revenue, app downloads, etc. become important at this stage.

# Series A Stage

Funds are raised at this stage to further grow the user base, product offerings, expand to new geographies, etc. Common funding sources utilized by startups in this stage are:

- 1) Venture Capital Funds: Venture capital (VC) funds are professionally managed investment funds that invest exclusively in high-growth startups. Each VC fund has its investment thesis – preferred sectors, stage of the startup, and funding amount – which should align with your startup. VCs take startup equity in return for their investments and actively engage in the mentorship of their investee startups.
- 2) Banks/Non-Banking Financial Companies (NBFCs): Formal debt can be raised from banks and NBFCs at this stage as the startup can show market traction and revenue to validate its ability to finance interest payment obligations. This is especially applicable for working capital. Some entrepreneurs might prefer debt over equity as debt funding does not dilute equity stake.
- 3) Venture Debt Funds: Venture Debt funds are private investment funds that invest money in startups primarily in the form of debt. Debt funds typically invest along with an angel or VC round.

### 4. Stage 4: Scaling

At this stage, the startup is experiencing a fast rate of market growth and increasing revenues.

At this stage, the startup is experiencing a fast rate of market growth and increasing revenues.

# Series B, C, D and E

Common funding sources utilised by startups in this stage are:

- 1) Venture Capital Funds: VC funds with larger ticket sizes in their investment thesis provide funding for late-stage startups. It is recommended to approach these funds only after the startup has generated significant market traction. A pool of VCs may come together and fund a startup as well.
- 2) Private Equity/Investment Firms: Private equity/Investment firms generally do not fund startups however, lately some private equity and investment firms have been providing funds for fast-growing late-stage startups who have maintained a consistent growth record.

# 5. Stage 5: Exit Options

- 1) Mergers & Acquisitions: The investor may decide to sell the portfolio company to another company in the market. In essence, it entails one company combining with another, either by acquiring it (or part of it) or by being acquired (in whole or in part).
- 2) Initial Public Offering (IPO): IPO refers to the event where a startup lists on the stock market for the first time. Since the public listing process is elaborate and replete with statutory formalities, it is generally undertaken by startups with an impressive track record of profits and who are growing at a steady pace.
- 3) Selling Shares: Investors may sell their equity or shares to other venture capital or private equity firms.
- **4) Buybacks:** Founders of the startup may also buy back their shares from the fund/investors if they have liquid assets to make the purchase and wish to regain control of their company.

# Startup India Funding Support

- 1) SIDBI Fund of Funds Scheme: The Government of India formed a fund of INR 10,000 crore to increase capital availability as well as to catalyse private investments and thereby accelerate the growth of the Indian startup ecosystem. The Fund was set up as a Fund of Funds for Startups (FFS) June 2016. FFS does not invest in startups directly but provides capital to SEBI-registered Alternate Investment Funds (AIFs), known as daughter funds, who in turn invest money in high-potential Indian startups. SIDBI has been given the mandate of managing the FFS through the selection of daughter funds and overseeing the disbursal of committed capital. The fund of funds makes downstream investments in venture capital and alternative investment funds that in turn invest in startups. The fund has been formed in a way that creates a catalysing effect. Funding is provided to startups across different life cycles.
- 2) **Startup India Seed Fund Scheme:** The Department for Promotion of Industry and Internal Trade (DPIIT) has created the Startup India Seed Fund Scheme (SISFS) with an outlay of INR **945 CR.**, which aims to provide financial assistance to startups for proof of concept, prototype development, product trials, market entry, and commercialization. This would enable these startups to graduate to a level where they will be able to raise investments from angel investors or venture capitalists or seek loans from commercial banks or financial institutions. The scheme will support an estimated 3,600 entrepreneurs through 300 incubators in the next 4 years. The Seed Fund will be disbursed to eligible startups through eligible incubators across India.
- 3) **Startup India Investor Connect:** Startup India Investor Connect was launched in the sixth meeting of the National Startup Advisory Council (NSAC), convened on 11th March 2023, to serve as a dedicated platform that connects startups to investors, promotes entrepreneurship, and accelerates engagements across diverse sectors, functions, stages, geographies, and backgrounds, which is also the need of the ecosystem. The platform uses Algorithm based Matchmaking to connect startups and investors based on their respective requirements. The platform has created a virtual marketplace for investors to find innovative startups suitable for their needs.
- 4) Credit Guarantee Scheme for Startups: The Government of India established the Credit Guarantee Scheme for Startups with a fixed corpus for providing credit guarantees to loans extended to DPIIT-recognised startups by scheduled commercial banks, non-banking financial companies (NBFCs), and venture debt funds (VDFs) under SEBI-registered alternative investment funds. CGSS is aimed at providing credit guarantee up to a specified limit against loans extended by Member Institutions (MIs) to finance eligible borrowers, viz., Startups, as defined in the Gazette Notification issued by DPIIT and amended from time to time. The credit guarantee coverage under the scheme would be transaction-based and umbrella-based. The exposure to individual cases would be capped at INR 10 crore per case or the actual outstanding credit amount, whichever is less.

Source: https://www.startupindia.gov.in/content/sih/en/funding.html



# THE INSTITUTE OF **COST ACCOUNTANTS OF INDIA** (STATUTORY BODY UNDER AN ACT OF PARLIAMENT) **CMA BHAWAN** 12, SUDDER STREET, KOLKATA - 700 016.

+91 -33-40364779/4721/4726/4777 Telephones:

Date: April 25, 2025

Website : www.icmai.in

Ref. No. DOS/CIRCULAR/04-01/2025

# **CIRCULAR**

Necessary Documents to be submitted to resolve pending requirements for appearing in the June 2025 term examinations.

A good number of students scheduled to take the June-2025 term examinations have few pending requirements. The Directorate of Studies has been actively sending reminders via email to the respective students, emphasizing the submission of essential documents needed for examination clearance, including those for Provisional (Foundation & Intermediate) /Practical Training (Final) /IOTP Training (Final).

It is recommended to check your registered mobile number and/or email on a regular basis for these reminders and ensure the completion of clearance latest by May 15, 2025. Not providing the necessary documents by the designated date could lead to the Examination Department being unable to issue a regular admit card for the June-2025 term examinations.

Students may check their pending requirement through the following web link: https://eicmai.in/Eligibility-Checking/Login.htm

This is for information of all concerned students of the Institute for appearing in the June-2025 term of examinations.

**CMA Avijit Mondal** Joint Director and H.O.D Studies (Academics and Administration)

# e-Distribution:

- 1) President's Office
- 2) Secretary, T&EF Committee.
- 3) All HODs at Headquarters, Delhi Office and Hyderabad Centre of Excellence.
- 4) All Regional Councils of the Institute.
- 5) All Chapters of the Institute.
- 6) All CMA Support Centres of the Institute.
- 7) All Overseas Centres.
- 8) IT Department- for uploading on the website of the Institute.
- 9) Secretariat.
- 10) Notice Board

### Copy to:

- 1) President, The Institute of Cost Accountants of India.
- 2) Vice President, The Institute of Cost Accountants of India
- 3) All Council Members



THE INSTITUTE OF
COST ACCOUNTANTS OF INDIA
(STATUTORY BODY UNDER AN ACT OF PARLIAMENT)
CMA BHAWAN
12. SUDDER STREET, KOLKATA – 700 016.

Telephones: +91-33-4036-4748/4721/4726

Website: www.icmai.in

**Ref. No.:** G/128/04/2025(01) **Date:** April 01, 2025

# **NOTIFICATION**

Sub.: Revised Scholarship Schemes for Meritorious Students for CMA Foundation Course and Economically Challenged-cum-Meritorious Students for CMA Intermediate Course

The Council of the Institute in its 357<sup>th</sup> Meeting, held on 4<sup>th</sup> January, 2025 has revised the existing Scholarship Schemes for Foundation and Intermediate Course students of ICMAI, details of which are annexed herewith.

 Fees waiver scheme for Meritorious Students – 2024 for CMA Foundation Course of the Institute

Foundation Level students can apply for this Scholarship Scheme by fulfilling the eligibility criteria (Annexure - I).

2. Fees waiver scheme for Economically Challenged-cum Meritorious Students – 2024 for CMA Intermediate Course of the Institute

Intermediate Level students can apply for this Scholarship Scheme by fulfilling the eligibility criteria (Annexure - II).

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 concern

Sd/-

CMA (Dr.) Debaprosanna Nandy Secretary (Officiating)



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### <u>Annexure - I</u>

# Fees waiver scheme for Meritorious Students - 2024 for CMA Foundation Course **Students**

Minimum Marks to be obtained	Cut-off Date of Form Submission
	For June Term Starting date of Form submission - 16th August Last Date of Form Submission - 31st October
<b>Class - 12</b> - 80% (Aggregate)	For December Term Starting date of Form submission - 16th February
Candidates who are eligible to avail benefit	Last Date of Form Submission - 30th April s under this scheme, shall have to make an

application in prescribed form along with the prescribed fee for Foundation Course. The fees are one-time payment only and are non-refundable in nature.

Course	Prescribed fee	Nature of payment	
Foundation	Rs.500	Admission Fee	

Max. Allotment Per Exam Term – 500 nos.				
	Western Region – 125	Southern Region – 125	Eastern Region – 125	Northern Region - 125

### Note:

- 1. Application shall be made in the Prescribed Form for the Fees waiver scheme for Meritorious Students – 2024 for CMA Foundation Course Students.
- 2. The hard copy of the duly filled Form, along with photo copy of all supporting documents (Self attested) and original Demand Draft of Rs.500/- for Admission Fee for Foundation Level, 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 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. The Directorate of Studies will verify the relevant documents and grant permission on a firstcome, first-served basis, based on the applications received.
- 6. Selected candidates will be informed over the mail/by post after the cut-off date of the the respective term of examination.
- 7. Selected Candidates shall be exempted from the course fee of Foundation Level (excluding Admission Fee for Foundation Level).
- 8. Candidates, who are not selected under this scheme, their Demand Drafts with all submitted documents shall be returned after the cut-off date. Those students have to take Admission by paying full course fee.
- 9. Contact mail id.: studies@icmai.in



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Website: www.icmai.in

# Annexure - II Fees waiver scheme for Economically Challenged-cum Meritorious Students – 2024 for CMA Intermediate Course

Minimum Marks to be obtained	Income Criteria	Cut-off Date of Form Submission	
Class 12 - 80% (Aggregate) & Foundation - 65 % (Aggregate)	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)	For June Term Starting date of Form submission - 16th August Last Date of Form Submission - 31st October	
Or, Class 12 - 80% (Aggregate) & Graduate /PG - 75 % (Aggregate)	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 December Term Starting date of Form submission - 16th February Last Date of Form Submission - 30th April	
Candidates who are eligible to avail benefits under this scheme, shall have to make an application in prescribed form along with the prescribed fee for Intermediate Course. The fees are one-time payment only and are non-refundable in nature.			
Course	Prescribed fee	Nature of payment	
Intermediate	Rs.500	Registration Fee	

Max. Allotment Per Exam Term – 300 nos.			
Western Region – 75	Southern Region – 75	Eastern Region – 75	Northern Region – 75

## Note:

- Application shall be made in the Prescribed Form for the Fees waiver scheme for Economically Challenged-cum Meritorious Students – 2024 for CMA Intermediate Course.
- 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 Registration Fee for Intermediate Level, 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 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/by post after the cut-off date of the the respective term of examination.
- 6. Selected Candidates shall be exempted from the course fee of Intermediate Level (excluding Registration Fee for Intermediate Level).
- 7. Candidates, who are not selected under this scheme, their Demand Drafts with all submitted documents shall be returned after the cut-off date. Those students have to take Registration by paying full course fee.
- 8. Contact mail id.: <a href="mailto:studies@icmai.in">studies@icmai.in</a>

# **Invitation to Contribute Articles for** CMA Student E-Bulletin - Showcasing Your Expertise!

Dear CMA Student,

e 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 knowledgesharing 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





Statutory Body under an Act of Parliament
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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 Check the status of their online applications Request Conversion from Old Syllabus to New Syllabus Request changes in Oral / Postal Coaching and opt for Chapter-to-Chapter Conversion Convert from Provisional to Regular status

Additional services for students will be seamlessly incorporated in the near future.

Behind every successful business decision, there is always a CMA



# CMA Leαds

4 Regional Councils

11 Overseas Centers

117 Chapters across India

61 CMA SC & 401 ROCC

1,00,000<sup>+</sup> Alumni

5,00,000<sup>+</sup> Students

# the CMA Students Value Added Services for

- Study Materials
- Students E-Bulletin
- Knowledge Web Series
- E-Library
- • Webinars
- Model Question Papers
- • MCQ Portal
- Tutorial Workshops

•

• Skills Training Coaching - Oral/Postal (E-learning)

•

- **Industry Oriented Training Practical Training**
- Programme

# **Admission Deadlines**

- For June Exam 31st January of same Calendar Year
- For December Exam 31st July of same Calendar Year

# IA BODY

Under the administrative control of Ministry of Corporate Affairs (MCA), Government of India

# IVIA COURSE GOING GLOBAL

Mentoring Future-Ready Professionals

# Eligibility

# **Admission in Foundation Course**

- Passed Class 10 (Require to pass 10+2 before appearing in CMA Examination)
- 10+2 Pass or its equivalent (Students appearing for 10+2 also apply on provisional basis)

# **Registration to Intermediate Course**

- Passed CMA Foundation Examination
- Graduates of any discipline (Students awaiting final result also apply on provisional basis)
- Qualified CAT Level I of The Institute of Cost Accountants of India
- Qualified CA Intermediate
- **Qualified Engineers**

# Course Fees



Intermediate - ₹23,100/-\*

Final - ₹25,000/-\*

\*Installment facility available



# Skills Training Partner

# Online Admission

https://eicmai.in/studentportal/Home

# **Prominent Recruiters in** CMA Campus Placement Drives



And many more.

# Headquarters

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CMA Bhawan, 3, Institutional Area, Lodhi Road

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NOTES					





# CMA THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

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