## CMA E-Bulletin

VOL 10 | NO. 03 | MARCH 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 Kolkata having four Regional Councils at Kolkata, Delhi, Mumbai and Chennai, 117 Chapters in India and 11 Overseas Centres. The Institute is the largest Cost & Management Accounting body in the world with about 1,00,000 qualified CMAs and over 5,00,000 students pursuing the CMA Course. The Institute is a founder member of International Federation of Accountants (IFAC), Confederation of Asian and Pacific Accountants (CAPA) and South Asian Federation of Accountants (SAFA). The Institute is also an Associate Member of ASEAN Federation of Accountants (AFA) and member in the Council of International Integrated Reporting Council (IIRC), UK.

### **Vision Statement**

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

### Mission Statement

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

### Institute Motto

असतोमा सद्गमय 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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#### **Editorial Office**

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

studies.ebulletin@icmai.in



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## CHAIRMAN'S COMMUNIQUE

Dear CMA Students,

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

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

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

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

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

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

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

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

Warm regards.

CMA Vinayranjan P.

Chairman, Training & Educational Facilities Committee, ICMAI

### CMA FOUNDATION COURSE

Syllabus 2022

Fundamentals of Business Laws -

Module 2: Indian Contracts Act, 1872

**Business** Communication -

Module 5: **Business** Communication

### **FOUNDATION**

Paper-1

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

### SECTION - A: FUNDAMENTALS OF BUSINESS LAWS

### MULTIPLE CHOICE QUESTIONS (MCQ)

		_	
1.	Contracts classified on the basis of performance are-	7.	Quasi contracts in business law are covered in section of the Indian Contract Act.
	(a) Executed contract		(a) 68-72
	(b) Executory contracts		(b) 65-73
	(c) Partly executed or partly executory contracts		(c) 70-74
	(d) All of the above.		(d) 69-75
2.	An agreement which prevents a person from	8.	Quantum Meruit means- as much as
	carrying a lawful business is void under of the Indian Contract Act, 1872.		(a) earned
	(a) Section 27		(b) performed
	(b) Section 28		(c) found
	(c) Section 26		(d) worked
	(d) Section 10	9.	The bailment of as security for payment of a
3.	Which of the following statements is true?		debt or performance of a promise is called
٠.	(a) Contract = agreement + enforceability at law		(a) Goods, pledge
	(b) Agreement = offer + acceptance		(b) rule, void
	(c) Both A and B		(c) product, services
	(d) None of the above		(d) services, void
4.	Amal and Bimal entered into an agreement for the	10.	Gourab went into a restaurant and took a cup of tea. In this case, there is-
	share of profit, among them, which is to be acquired		<ul><li>(a) No contract by Barun to pay for the cup of tea</li></ul>
	by them by fraud. It is not a valid argument because-		(b) An implied contract that he will pay for the cup
	(a) Its object is unlawful		of the tea
	(b) Its considerations is unlawful		(c) An express contract to pay for the cup of the
	(c) Its offer is unlawful		tea
	(d) It is an exceptional agreement		(d) A quasi contract to pay for the cup of tea.
5.	A proposal when accepted becomes a and an agreement enforceable by law is	11.	Every agreement and promise enforceable at law is a contract" - defined by
	(a) Agreement, acceptance		(a) Salmond
	(b) Promise, contract		(b) Pollok
	(c) Contract, promise		(c) Anson
	(d) Acceptance, consideration		(d) Halsey
6.	Mistake of Fact can be two types-	12.	Section 2(a) of Indian Contract Act, 1872 define
	(a) Own and foreign		(a) Proposal
	(b) Unilateral & Bilateral		(b) Agreement
	(c) Unilateral & Foreign		(c) Contract
	(d) Own and bilateral		(d) Consideration

13.	Sectionof the Indian Contract Act, 1872 defined void contract.	19.	An agreement will be unlawful if:
	(a) 2(b)		(a) There is no consent
	(b) 2(j)		(b) Consent is not free
	(c) 2(h)		(c) There is no consideration
	(d) 2(k)	20	(d) The object is forbidden by law
14.	The person to whom the proposal is made is called	20.	In a wagering agreement:
	the -		(a) Both the parties win
	(a) offerer		(b) Both the parties lose
	(b) offeree		(c) None of the parties wins
	(c) proposer		(d) One party wins and the other looses
	(d) promisor	21.	Which one of the following statements is correct?
15.	Consideration can be classified into types.		(a) Void agreements are always illegal
	(a) four		(b) Illegal agreements are voidable
	(b) five		(c) Illegal agreement can be ratified by the parties
	(c) six		(d) Illegal agreements are always void
	(d) three	22.	Which one of the following is not a wagering agreement?
16.	An agreement with a party who is not competent to contract is-		(a) A lottery
	(a) void		(b) An agreement to buy a ticket for a lottery
	(b) voidable		(c) Commercial transaction, the intention of which
	(c) valid		is not to deliver the goods but only to pay the difference in price
	(d) illegal		(d) A contract of insurance
17	Contingent contract is defined in section of	23	A wagering agreement in India is declared by the
1/.	Indian Contract Act	23.	Contract Act as
	(a) 30		(a) Illegal and void
	(b) 31		(b) Void but not illegal
	(c) 32		(c) Voidable at the option of the aggrieved party
	(d) 34		(d) Immoral
18.	Pledge is a special kind of-	24.	Which one of the following is a void agreement?
	(a) Bailment		(a) An agreement without consideration
	(b) Rule		(b) An agreement in restraint of marriage
	(c) Business		(c) An agreement in restraint of trade
	(d) product		(d) All of the above

### **SECTION – B: BUSINESS COMMUNICATION**

- 1. Oral Communication is type of -
  - (a) Upward Communication
  - (b) Diagonal Communication
  - (c) Downward Communication
  - (d) Verbal Communication
- 2. Non verbal Communication in the organizational structure is called-
  - (a) Grapevine Communication
  - (b) Diagonal Communication
  - (c) Lateral Communication
  - (d) Silent Communication
- 3. Which of the following should be avoided in the Group discussion?
  - (a) Positive body language
  - (b) Leadership initiative
  - (c) False statements
  - (d) Confidence

- 4. Which business communication usage provides a bird's eye view on a matter?
  - (a) Speech
  - (b) Group Discussion
  - (c) Debate
  - (d) Presentation
- 5. How many types of communication take place in an organisation?
  - (a) 5
  - (b) 1
  - (c) 3
  - (d) 4
- 6. In which business communication, a speaker has to clearly speak for or against a topic?
  - (a) Presentation
  - (b) Debate
  - (c) Speech
  - (d) Group discussion

#### **Answer:**

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

1	2	3	4	5	6
d	d	c	d	a	b

**Fundamentals** of Financial Accounting -

Module 1: Accounting **Fundamentals** 

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. All revenue receipts and expenditures are shown in
  - (a) Balance Sheet
  - (b) Trading and Profit and Loss Account
  - (c) Cash Flow Statement
  - (d) Statement of Affairs
- 2. A bad debt recovered during the year will be
  - (a) Capital Expenditure
  - (b) Revenue Expenditure
  - (c) Capital Receipt
  - (d) Revenue Receipt
- 3. Insurance claim received on account of machinery damaged completely by fire is
  - (a) Capital Receipt
  - (b) Revenue Receipt
  - (c) Capital Expenditure
  - (d) Revenue Expenditure
- 4. In an Account if debit > credit side, the balance is known as the
  - (a) Negative balance
  - (b) Debit balance
  - (c) Positive balance
  - (d) Credit balance
- 5. Ledger contains various..... in it
  - (a) Transactions
  - (b) Entries
  - (c) Accounts
  - (d) None
- 6. The process of transfer of entries from day book to ledgers is called
  - (a) Simple posting
  - (b) Journal posting
  - (c) Transaction
  - (d) Ledger posting

- 7. Which of the following errors affects the agreement of a Trial Balance?
  - (a) Mistake in balancing an account
  - (b) Omitting to record a transaction entirely in the subsidiary books
  - (c) Recording of a wrong entry in the subsidiary books
  - (d) Posting an entry on the correct side but in the wrong account
- 8. Which of the these errors affect only one account
  - (a) Errors of casting
  - (b) Errors of carry forward
  - (c) Errors of posting
  - (d) All the three
- 9. Which of these errors affect two or more accounts
  - (a) Errors of complete omission
  - (b) Errors of principle
  - (c) Errors of posting to wrong Account
  - (d) All the three
- 10. Trial Balance is used to check the accuracy of
  - (a) Balance Sheet balances
  - (b) Ledger Accounts balances
  - (c) Cash Flow Statement balances
  - (d) Income Statement balances
- 11. When is Trial Balance normally prepared?
  - (a) At the end of an accounting period
  - (b) At the end of a year
  - (c) Frequently during the year
  - (d) At the end of a month
- 12. Which of the following account with normal balance is shown at the debit side
  - (a) Creditors Account
  - (b) Unearned Income Account
  - (c) Rent Income Account
  - (d) Cash Account

- 13. Depreciation refers to the process of
  - (a) Asset valuation
  - (b) Allocation of cost of the assets over the period of its life
  - (c) Verification of assets
  - (d) Increasing or decreasing the value of asset
- 14. In case the depreciable assets are revalued, the provision for depreciation is based on
  - (a) Market value of the assets
  - (b) Historical cost of assets
  - (c) Depreciated value of the assets
  - (d) The revalued amount over the estimate of the remaining useful life of such asset
- 15. Which of the following is the internal causes for depreciation?
  - (a) Wear and tear
  - (b) Depletion or exhaustion
  - (c) Both (a) & (b)
  - (d) None of the above
- 16. Which are the methods of depreciation prescribed by the income tax act
  - (a) Straight Line and Annuity Method
  - (b) Sinking Fund and Double Declining Method
  - (c) Equal Instalment and Written Down Value Method
  - (d) Production Hour and Sum of Year's Digit Method
- 17. Petty Cashier receives money from -
  - (a) Owner
  - (b) General Cashier
  - (c) Bank
  - (d) Different sources
- 18. Imprest System is associated with, which type of Cash Book
  - (a) Single column Cash Book
  - (b) Double column Cash Book
  - (c) Triple column Cash Book
  - (d) Petty Cash Book

- 19. In which Account the loss due to non-realization of any portion of credit sale will be debited?
  - (a) Bad Debt Account
  - (b) Debtors Account
  - (c) Provision for Bad Debt Account
  - (d) Bad Debt Recovery Account
- 20. Amended Balance of Cash Book appears in the -
  - (a) Profit and Loss Account
  - (b) Balance Sheet
  - (c) Pass Book
  - (d) None of these
- 21. Which one is created for unknown liabilities?
  - (a) Provision
  - (b) Reserve for Bad Debts
  - (c) Reserve
  - (d) Provision for outstanding liabilities
- 22. Prime cost plus factory overheads is known as
  - (a) Factory on cost
  - (b) Conversion cost
  - (c) Factory cost
  - (d) Marginal cost
- 23. Which of the following items is excluded from cost Accounts?
  - (a) Income tax
  - (b) interest on debentures
  - (c) Cash discount
  - (d) All of these
- 24. The following is included in financial accounts, but not in cost accounts.
  - (a) Carriage and freight
  - (b) Excise duty
  - (c) Royalty
  - (d) Dividend paid

- 25. Advertisements are treated as
  - (a) Direct expenses
  - (b) Cost of production
  - (c) Selling overheads
  - (d) Distribution overheads
- 26. Direct expenses are also known as
  - (a) Overhead expenses
  - (b) Process expenses
  - (c) Chargeable expenses
  - (d) None
- 27. Indirect material cost is a part of
  - (a) Prime cost
  - (b) Factory overhead
  - (c) Chargeable expenses
  - (d) None of these

- 28. Which of the following is a part of both Prime cost and conversion cost
  - (a) Direct Material
  - (b) Indirect Labour
  - (c) Indirect Material
  - (d) Direct Labour
- 29. Statement showing break-up of costs is known as
  - (a) Cost-sheet
  - (b) Statement of profit
  - (c) Production account
  - (d) Tender
- 30. Interest on own capital is
  - (a) Cash cost
  - (b) Notional cost
  - (c) Sunk cost
  - (d) Part of Prime Cost

### **Answer:**

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

**Fundamentals** of Business Mathematics -

Module 2: Algebra

Fundamentals of **Business Statistics** 

Module 6: Correlation & Regression

### **FOUNDATION**

Paper-3

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

## In this issue we will carry out MCQs on Algebra and Correlation & Regression – refer Module 2 and Module 6 of Study guide.

- 1. How many ways can 6 people get RT-PCR tested from 6 laboratories, assuming no laboratory is closed?
  - (a) 120 ways
  - (b) 4320 ways
  - (c) 5040 ways
  - (d) 720 ways
- When 15 autos are running between Kolkata and Howrah. In how many ways can a passenger travel from Kolkata to Howrah and return by a different auto?
  - (a) 210 ways
  - (b) 225 ways
  - (c) 15 ways
  - (d) 195 ways
- 3. Find the value of 1/13! 8/14! + 1/15!
  - (a) 91 / 15!
  - (b) 90 / 15!
  - (c) 203 / 15!
  - (d) 226 / 15!
- 4. In how many ways can the below mentioned balls be arranged in a row,9 yellow balls, 3 blue balls and 2 red balls?
  - (a) 11460 ways
  - (b) 11550 ways
  - (c) 25220 ways
  - (d) None of the Above
- 5. How many arrangements can be made beginning with M using the letters of the word 'MATHEMATICS'?
  - (a) 907200 ways
  - (b) 972000 ways
  - (c) 450036 ways
  - (d) 360045 ways

- 6. From among 13 members in a bank, one manager, one assistant manager and one deputy manager needs to be appointed. In how many ways could this be done?
  - (a) 1717
  - (b) 1617
  - (c) 1616
  - (d) 1716
- 7. Simplify  $3^{1/8} * 3^{7/8} * 3^{7/8}*3^{-2}*3^{-7/8}$ 
  - (a) -3
  - (b) 1
  - (c) 1/3
  - (d) None of the Above
- 8. Find the value of  $4^{2}*4^{3}*4^{1}$ .
  - (a) 4096
  - (b) 4\*1024
  - (c) 16\*256
  - (d) All of the Above
- 9. Find the value of 29<sup>11</sup> / 29<sup>4</sup>
  - (a) 29<sup>11</sup>
  - (b)  $29^{10}$
  - (c)  $29^3$
  - (d)  $29^7$
- 10. Find the value of  $(13^{13}/13^{12}) (12^{6*}12^{-5})$ ?
  - (a) 1
  - (b) 0
  - (c) 13/12
  - (d) 12/13
- 11. If  $\log_4(t-1)+1=2*\log_4 t$ , find the value of t.
  - (a) 1
  - (b) 0
  - (c)4
  - (d) 2
- 12. Find t when  $\log_3 t = 6$ 
  - (a) 729
  - (b) 27
  - (c) 81
  - (d) 243

13. An inquiry into 50 families to study the relationship between expenditure on accommodation RX and expenditure on food and entertainment RY gave the following results:

$$\Sigma X = 8500$$
,  $\Sigma Y = 9600$ ,  $\sigma_x = 60$ ,  $\sigma_y = 20$ ,  $r = 0.6$ 

When expenditure on accommodation is R200, the expenditure on food and entertainment is

- (a) R100
- (b) R200
- (c) R198
- (d) R195
- 14. The following table shows the mean and standard deviation of the marks of Mathematics and Physics scored by the students of a school

	Mathematics	Physics
Mean	84	81
S.d	7	4

The correlation coefficient between the given marks is 0.86. If the marks in Mathematics are 92 the likely marks in Physics will be around

- (a) 67
- (b) 85
- (c) 92
- (d) 101
- 15. Marks scored by 9 students in mathematics and Economy were as follows:

Mathema tics	48	60	72	62	56	40	38	52	29
Economy	62	75	65	70	38	53	60	32	31

Rank correlation coefficient is

- (a) 0.333
- (b) 0.425
- (c) 0.667
- (d) 0.575
- 16. An examination of 8 applicants for a clerical post was taken by a fir. The marks obtained by the applicants in the reasoning and Aptitude tests are given below:

Applicant	A	В	С	D	Е	F	G	Н
Reasoning	19	28	15	60	40	80	19	12
Aptitude	29	50	40	20	10	60	29	29

Rank correlation coefficient is

- (a) 0.05672
- (b) 0.01459
- (c) 0.03145
- (d) 0.02381
- 17. The coefficient of correlation between the values denoted by X and Y is 0.5. The mean of X is 3 and that of Y is 5. Their standard deviations are 5 and 4 respectively. The expected value of X when Y is given 9
  - (a) 9.4
  - (b) 5.5
  - (c) 6.8
  - (d) 7.3
- 18. For the given lines of regression 3X-2Y=5 & X-4Y=7, the regression coefficient  $b_{vx}$  is
  - (a) 1/2
  - (b) 2/3
  - (c) 3/2
  - (d)  $\frac{1}{4}$
- 19. Ranks obtained by 11 students in two papers paper 1 & paper 2 of CMA exam are as follows:

Candi date	1	2	3	4	5	6	7	8	9	10	11
Paper 1	6	3	8.5	10	1.5	8.5	5	1.5	7	4	11
Paper 2	1	2	9.5	4	5	3	8	7	9.5	11	6

Rank correlation coefficient is

- (a) 0.02955
- (b) 0.03467
- (c) 0.01093
- (d) 0.12678
- 20. In a beauty contest the coefficient of rank Correlation between rankings given by two judges of 10 contestants was found to be 0.5. Later it was discovered that difference in rankings in one case was wrongly taken as 3 instead of 7. The correct Rank correlation coefficient is
  - (a) 0.2576
  - (b) 0.2314
  - (c) 0.1817
  - (d) 0.2671

- 21. The regression equation of profits (X) on sales (Y) of a certain firm is 3Y-5X+108=0. The average sales of the firm were R44000 and the variance of profits is 9/16th of the variance of sales. The coefficient of correlation between sales and profits is
  - (a) 3/5
  - (b) 2/5
  - (c) 4/5
  - (d) 1/5
- 22. We are given Variance of X=9 and the two regression equations are 8X-10Y+66=0 & 40X-18Y=214. Correlation coefficient between two variables X & Y is
  - (a) 0.8
  - (b) 1
  - (c) -1
  - (d) 0.6
- 23. If two regression lines i.e., regression line of variable Y on X & regression line of variable X on Y have equal slope then which one of the following is correct?
  - (a) 0
  - (b) 1
  - (c) +1
  - $(d) \pm 1$
- 24. Two variables gave the following data:

$$\overline{x}=20,\,\overline{y}=15,\,\sigma_{_{X}}=4,\,\sigma_{_{y}}=3,\,r=0.7$$

The most likely value of y when x = 24 is

- (a) 15.25
- (b) 17.10
- (c) 18.32
- (d) 19.16
- 25. You are given two regression equations as 8x 10y + 66 = 0 & 40x 18y = 214. The mean of y series is
  - (a) 17
  - (b) 13
  - (c) 15
  - (d) 11

- 26. The mean of x & y series are 75 and 115 respectively. If for a value of x = 100, value of y is 134.5, then requisite regression coefficient is
  - (a) 0.46
  - (b) 0.354
  - (c) 0.652
  - (d) 0.78
- 27. If  $\Sigma X=30$ ,  $\Sigma Y=42$ ,  $\Sigma XY=199$ ,  $\Sigma X^2=184$ ,  $\Sigma Y^2=318$  & n=6, then correlation coefficient between X & Y is
  - (a)-0.324
  - (b) 0
  - (c) -0.458
  - (d)-0.385
- 28. Find coefficient of correlation between X & Y for the following data

- (a) -1
- (b) 0
- (c) -0.7
- (d)-0.5
- 29. If the coefficient of correlation between x and y is 0.28, co-variance between x and y is 7.6 and the variance of x is 9, then the S.D. of y series is;
  - (a) 9.8
  - (b) 10.1
  - (c) 9.05
  - (d) 10.05
- 30. Karl Pearson's coefficient of correlation between two variables X and Y is 0.52, their covariance is +7.8. If the variance of X is 16, then the standard deviation of Y series is
  - (a) 1.36
  - (b) 4
  - (c) 3.75
  - (d) 7.8

#### Answer:

1	d	6 people and 6 RT-PCR laboratories
		Hence, possible ways = $6*5*4*3*2*1 = 720$ ways
2	a	First event : Kolkata to Howrah – 15 ways.
		Second Event: Howrah to Kolkata – (15-1) ways
		So, $15*14$ ways = 210 ways.
3	a	1/13!-8/14!+1/15! = (15*14)/15!-(8*15)/15!+1/15!
		= 210/15!-120/15!+1/15! = (210-120+1)/15! = 91/15!
4	d	14! / 9!*2!*3! = 20020 ways.
5	a	10! / (2!*2!) = 907200  ways
6	d	13*12*11 = 1716
7	с	$3^{1/8} * 3^{7/8} * 3^{7/8} * 3^{-2} * 3^{-7/8} = 3^{1/8 + 7/8 + 7/8 - 2 - 7/8} = 3^{-1} = 1/3$
8	d	$4^{2} + 4^{3} + 4^{1} = 4^{2+3+1} = 4^{6} = 4096$
9	d	$29^{11} / 29^4 = 29^{11-4} = 297$
10	a	$13^{13-12} - 12^{6-5} = 13^1 - 12^1 = 13 - 12 = 1$
11	d	$\log_4(t-1) + 1 = 2* \log_4 t$
		$\log_4(t-1) + \log_4 4 = \log_4 t^2$
		$(t-1)*4=t^2$
		$t^2 - 4t + 4 = 0$
		$(t-2)^2 = 0$
		t=2
12	a	$\log_3 t = 6$
		$t = 3^6$
		t = 729

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

### **Suggestions:**

The study guide needs 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.

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 MARCH 2025

he world's largest truck manufacturer, the largest manufacturer of motorcycles in the world, the country with the most FDAapproved drug companies outside the United States, the largest number of Fortune 500 R&D centres, the third largest stock exchange in the world in terms of volume, the second-largest producer of sugarcane, the largest producer of milk and fruits, the third-largest producer of cotton......that is India. India is home to the world's fifth-largest coal reserves and the third-largest bauxite reserves. It is the fourth-largest steel producer in the world, the sixth largest aluminium producer and the third-largest manufacturer of CDs and DVDs. Indians purchase six million cell phones per month. There are 40 million internet users, projected to grow to 200 million by 2015. The middle class comprises of more than 60 million people today and is expected to exceed 583 million people by 2025. 700million Indians own property and 100 million households have bank accounts today. 80 million Indians hold secondary degrees and India is home to the largest number of engineering graduates in the world.

India is a complex and growing country and is on its way to becoming a world economic power. Despite the accomplishments listed here, most Indian business leaders and many of the more progressive politicians are painfully aware of the fact India has a long way to go before the country can become what they would like it to be.(to be continued)

Let us start our usual 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
- 10. 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-the-job 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
- 30. 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
c	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!!

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 4: Negotiable Instrument Act, 1881

### **INTERMEDIATE**

Group I - Paper-5

**Business Laws and** Ethics (BLE)

### **BUSINESS LAWS AND ETHICS**

t is expected that you - the students prepare a time-table with time allotted for each subject and read, write, revise and recapitulate all that you keep on reading. The first important point is that you must read the Bare Act and the Sections and start asking questions to yourself and find your own answers. In this issue we shall deal with The Negotiable Instrument Act, 1881, with special emphasis on the concept of Negotiable Instrument and its different types.

#### **NEGOTIABLE INSTRUMENTS ACT, 1881**

The Negotiable Instruments Act 1881 is based upon the English Common Law relating to Promissory Notes, Bills of Exchange and Cheques. The Act came into force on 1st March, 1882. This Act was enacted with an object to define and amend the law relating to Promissory Notes, Bills of Exchange and Cheque. It extends to the whole of India including the State Jammu and Kashmir.

#### **DEFINITION**

Section 13(1) of the Negotiable Instruments Act 1881, defines a negotiable instrument as, "A negotiable instrument means a Promissory Note, Bills of Exchange or Cheque payable either to order or to bearer."

The term Negotiable Instrument literally means a written document which creates a right in favour of some person and which is freely transferable. A negotiable instrument is one which entitles the holder to the receipt of money. It gives him the right to transfer the same by mere delivery or endorsement thereon. The negotiability of the instrument continues till its maturity.

#### **FEATURES**

Following are the essential characteristics or features of Negotiable Instruments —

- 1. Negotiability: The property in a Negotiable Instrument is freely transferable. In case of order instrument it is transferable by endorsement and delivery, and in case of bearer instrument, it is transferable by mere delivery.
- 2. Title: The holder in due course is not in any way affected by the defective title of the transferor or any party. The term holder in due course means a holder who has accepted a negotiable instrument for value, in good faith and before maturity.

- **3. Rights:** The holder in due course is not affected by certain defenses, which might be available against previous holder.
- **4. Recovery:** The holder in due course is entitled to sue on the instrument in his own name. He need not give any notice of transfer to the person liable for payment on the instrument.
- **5. Remedy:** The holder can sue upon the negotiable instrument in his own name. All prior parties are liable to him; a holder in due course can recover the full amount on the Instrument.
- **6. Payable to order:** A Promissory Note, bill of exchange or Cheque is payable to order which is expressed to be so payable, or which is expressed to be payable to a particular person.
- 7. Payable to bearer: A Promissory Note, Bill of Exchange or Cheque is payable to bearer which is expressed to be so payable or on which the only or last endorsement is an endorsement in bank.
- **8. Payment:** A negotiable instrument may be made payable to two or more payees jointly or it may be made payable in the alternative to one or two or some of several payees.
- Presumptions: A negotiable instrument is always subject to certain presumptions. They will be applicable unless contrary is proved. These are given below—
  - [i] Every negotiable instrument was drawn, accepted and endorsed, made or transferred for consideration.
  - [ii] It was accepted within a reasonable time after being made and before maturity.
  - [iii] That the last instrument was duly signed and stamped.
  - [iv] That the date it bears is the date on which it was made.
  - [v] Every holder of negotiable instrument is a holder in due course

#### PARTIES TO NEGOTIABLE INSTRUMENTS

After careful analysis or study of Negotiable Instruments Act (N.I.ACT) 1881, following are the parties generally observed—

- 1. **Drawer:** The person who draws or makes the Bills i.e., a creditor.
- **2. Drawee:** The person to whom the order or Bill is made, i.e., a debtor.
- **3. Payee:** The person to whom the sum mentioned in the bill is payable.
- **4. Acceptor:** One who accepts the bill is called the acceptor. The drawee and the acceptor may be the same person.
- 5. Drawee in case of need: Sometimes the name of another person is mentioned as the person who will accept the bill if the original drawee does not accept it, such a person is known the 'Drawee in case of need'.
- **6. Holder:** U/s 8 of NI Act—"any person entitled in his own name to the possession there of and to receive or recover the amount due thereon from the parties thereto".
- 7. Holder in Due Course: U/s. 9 of NI Act "The holder in due course is a particular kind of holder. The holder of a Negotiable instrument is called the holder in due course if he satisfies the following conditions—
  - [i] He obtained the instrument for valuable consideration.
  - [ii] He became holder of the instrument before its maturity.
  - [iii] He had no cause to believe that any defect existed in the title of the person from whom he derived his title.
- **8. Maker:** A person who makes the Promissory note is called the maker.
- Endorser: The person who endorses the promissory note, bill of exchange or cheque to another is called Endorser.
- **10. Endorsee:** The person to whom the bill, Promissory note or cheque is endorsed is called the Endorsee.

Few types of negotiable instruments on the basis of various functions are given below—

- 1. Bearer Instrument [Explanation II to Section 13(1)]: A negotiable instrument is a Bearer Instrument if: (a) it is expresses to be payable to bearer or (b) The only or last endorsement is an endorsement in blank. Remember, (i) A promissory note cannot be made payable to the bearer. (ii) A bill of exchange cannot be made payable to bearer on demand. [Section 31 of the RBI Act, 1934] (iii) A bearer instrument can be transferred by mere deliver. Example: "Pay to A or bearer".
- 2. Order Instrument [Explanation I to Section 13(1)]:
  A negotiable instrument is an Order Instrument if:
  (a) It is expressed to be payable to order or (b) It is expressed to be payable to a particular person and it does not contain words which prohibit transfer or indicate an intention that it shall not be transferable. Remember: An order instrument can be transferred by an endorsement on it and then its delivery. Example:
  (i) "Pay to A or order" (ii) "Pay to the order of A" (iii) "Pay to A"
- 3. Inland Instrument [Section 11]: A negotiable instrument is an inland instrument if: (a) It is drawn in India, (b) It is payable in India or it is drawn upon any person resident in India. Remember: (i) Protest of an inland bill is optional. (ii) An inland instrument remains inland even if it has been endorsed in a foreign country. Example: (i) "A bill drawn in Kolkata on a merchant in Delhi and accepted payable in UK" (ii) "A bill drawn in Kolkata on a merchant in UK and accepted payable in Delhi".
- 4. Foreign Instrument [Section 12]: An instrument which is not an inland instrument is deemed to be a foreign instrument. Remember: Foreign bills must be protested for dishonour if such protest is required by the law of the place where they are drawn [Section 104]. Example: (i) "A bill drawn in Kolkata on a merchant in London and accepted payable in London". (ii) "A bill drawn in London on a merchant in Delhi and accepted payable in Delhi".
- 5. Ambiguous Instruments [Section 17]: An ambiguous bill means an instrument which can be constructed either as a promissory note or a bill of exchange. Once he exercises his option, the instrument shall be thence forward treated accordingly. Example: (i) "A bill drawn by an agent acting within his authority upon his principal". (ii) "A bill drawn upon a fictitious person".

Module 2:
Bill of Exchange,
Consignment and
Joint Venture

### **INTERMEDIATE**

Group I - Paper-6

Financial Accounting (FA)

### Bills of Exchange, Consignment & Joint Venture

### **Bills of Exchange**

Bill of Exchange is a written, unconditional order by one party (the drawer) to another (the drawee), directing the drawee to pay a certain sum of money to a specified person (the payee) at a fixed or determinable future date. It is commonly used in trade transactions and serves as a negotiable instrument.

### Features of a Bill of Exchange

- **In Writing:** The bill must be in writing.
- Unconditional Order: It contains an order to pay, which is unconditional.
- **Payment of Money:** The bill only deals with the payment of money, not goods or services.
- **Parties:** There are three parties involved:
  - 1. **Drawer:** The person who creates the bill.
  - 2. **Drawee:** The person upon whom the bill is drawn and who is ordered to pay.
  - 3. **Payee:** The person in whose favour the bill is drawn or who will receive the payment.
- Certainty of Payment: The sum of money to be paid must be certain.
- **Stamping:** The bill must be properly stamped, as per legal requirements.

### Parties to a Bill of Exchange

- Drawer: The party who makes or draws the bill. In a trade transaction, the drawer is typically the seller or creditor.
- Drawee: The party who is ordered to pay the money. In most cases, the drawee is the buyer or debtor.
- **Payee:** The party who will receive the payment. The payee can be the drawer or a third party.

### Additionally, in some cases:

- Acceptor: The drawee becomes the acceptor when they signify their consent to pay the bill by signing it.
- **Endorser:** If the bill is transferred to another party, the original holder who transfers it is called the endorser.
- Endorsee: The person to whom the bill is endorsed.

### Types of Bills of Exchange

- 1. **Inland Bill:** A bill that is drawn and payable within the same country.
- 2. **Foreign Bill:** A bill that is drawn in one country and payable in another.
- 3. **Trade Bill:** A bill drawn and accepted for the purpose of settling trade-related transactions.
- 4. **Accommodation Bill:** A bill drawn and accepted not for a trade transaction, but to provide financial assistance to another party.
- 5. **Demand Bill:** A bill payable on demand or at sight.
- 6. Usance Bill: A bill payable after a specific period.

### Advantages of Bills of Exchange

- Credit Facility: It provides credit to the buyer, allowing them time to pay.
- Legal Proof: It acts as legal evidence of a debt.
- **Negotiable:** It can be transferred to another party, providing liquidity.
- **Risk Management:** It reduces the risk of bad debts as it can be discounted or endorsed.

### Disadvantages of Bills of Exchange

- **Strict Deadlines:** Bills have strict deadlines, and missing them can lead to dishonor.
- **Cost of Discounting:** Discounting a bill involves a cost to the drawer.
- **Legal Formalities:** Certain legal procedures (like noting and protesting) may increase complexity.

### Consignment

Consignment is an arrangement where goods are sent by the owner (called the consignor) to an agent (called the consignee) for the purpose of sale. The ownership of the goods remains with the consignor until the goods are sold by the consignee. The consignee is responsible for selling the goods on behalf of the consignor and earns a commission on the sales made.

The key feature of a consignment is that it differs from a direct sale in that the goods are not sold to the consignee but only entrusted to them for sale. The consignee acts as an intermediary between the consignor and the customers.

### **Features of Consignment**

- **Ownership:** The ownership of goods remains with the consignor until the consignee sells them.
- Risk and Reward: The consignor bears the risk and rewards of the goods (profit or loss) until they are sold.
- **Commission-based:** The consignee earns a commission based on the sales, and there may be different types of commission structures.
- Goods Returnable: Unsold goods may be returned to the consignor, as the consignee has no obligation to purchase them.

### Difference between Consignment and Sale

Aspect	Consignment	Sale		
Ownership of	Ownership remains with the consignor.	Overnoushin is transformed to the hyver		
Goods	Ownership remains with the consignor.	Ownership is transferred to the buyer.		
Risk and	Distruction with the consistence	Risk and rewards are transferred to the buyer.		
Rewards	Risk remains with the consignor.			
Return of Goods	Unsold goods can be returned to the	Goods once sold cannot be returned unless		
Return of Goods	consignor.	defective.		
Revenue	Revenue is recognized when the consignee	Revenue is recognized at the point of sale.		
Recognition	sells the goods.			
Nature of	14:	Taile a main single de main single maladis malais		
Transaction	It is an agency relationship.	It is a principal-to-principal relationship.		

### **Advantages of Consignment**

- Risk Mitigation: The consignor retains ownership and risk until the goods are sold, protecting the consignor from immediate loss.
- Market Reach: Consignment helps the consignor expand into new markets without the need for physical presence.
- **Flexibility:** The consignee does not have to purchase the goods outright, reducing the financial burden on the consignee.
- Commission-Based Payment: The consignee earns income through commission, motivating them to make sales.

#### **Disadvantages of Consignment**

- Risk of Non-Sale: There is no guarantee that the consignee will be able to sell the goods, and unsold goods may need to be returned.
- Delayed Revenue: The consignor does not receive payment until the goods are sold, which may delay cash inflows.
- Control Issues: The consignor has limited control over how the consignee handles the goods or manages sales.

### **Joint Venture**

A joint venture (JV) is a business arrangement in which two or more parties agree to pool their resources for the purpose of accomplishing a specific task. This task can be a new project or any other business activity. Each party in the joint venture is responsible for profits, losses, and costs associated with it. However, the joint venture is its own entity, separate from the participants' other business interests.

#### **Features of a Joint Venture**

- Temporary Partnership: A joint venture is usually formed for a specific project or limited time frame.
   Once the project ends, the venture dissolves.
- **Profit and Loss Sharing:** All parties involved share the profits or losses based on the agreement, which could be proportional or otherwise.
- Shared Control and Management: The parties involved usually share decision-making responsibilities, though one party may assume a leadership role.
- **Separate Legal Entity:** A joint venture may be considered a separate legal entity with its own accounting and reporting obligations.

 Limited Scope: Unlike partnerships or corporations, the scope of a joint venture is typically focused on a particular project or activity.

### **Types of Joint Ventures**

There are several types of joint ventures, depending on the structure and nature of the collaboration:

- Equity-Based Joint Ventures: In this type, both parties contribute capital to a new or existing entity and receive equity in return. Profits and losses are shared according to ownership interests.
- Contract-Based Joint Ventures: Here, the parties enter into a contractual arrangement to collaborate without forming a new entity. This structure is common for short-term projects where forming a new business is not necessary.
- Project-Based Joint Ventures: Common in industries like construction or engineering, projectbased joint ventures are formed to execute a specific project and are dissolved once the project is completed.

### **Differences Between Joint Venture and Partnership**

Though often confused, joint ventures and partnerships have distinct differences:

- **Duration:** A partnership is typically ongoing, while a joint venture is temporary and project-specific.
- Scope: Partnerships involve a broader, ongoing range of business activities, while joint ventures focus on a specific task or project.
- Legal Entity: Partnerships are usually separate legal entities, while joint ventures may or may not create a new entity.
- Regulation: Partnerships are generally regulated under specific partnership laws, whereas joint ventures are governed by contract law and the terms of the joint venture agreement.

### **Advantages of Joint Ventures**

- **Shared Risks:** The risks of the business are shared between the parties, reducing individual exposure to loss.
- Access to New Knowledge and Expertise: Parties gain access to the specialized knowledge, skills, and resources of the other party.

- Financial Synergy: Joint ventures provide access to additional financial resources and capital.
- Market Expansion: Partners can enter new markets or expand their reach more effectively than they could individually.
- Efficiency: A joint venture can create operational efficiencies by pooling resources, technology, or infrastructure.

### **Disadvantages of Joint Ventures**

- Complex Decision-Making: As multiple parties are involved, decision-making may be more complex and slower.
- **Potential Conflicts:** Conflicts can arise if the objectives or strategies of the parties differ.
- Unequal Efforts: One partner may contribute more effort or resources, leading to disputes over profit distribution.
- Limited Flexibility: Once a joint venture is established, partners may find it difficult to exit or change their roles.
- Risk of Failure: If the joint venture fails, all parties share the financial loss.

#### **Questions:**

- 1. Who is the person that is required to pay the amount of the Bill of Exchange?
  - a) Drawer
  - b) Drawee
  - c) Payee
  - d) Endorser
- 2. What is the maximum number of days allowed as "Days of Grace" in a Bill of Exchange?
  - a) 2 days
  - b) 5 days
  - c) 3 days
  - d) 7 days

- 3. Which of the following is true about a Demand Bill?
  - a) It is payable on demand or sight.
  - b) It is payable after a fixed period.
  - c) It is only used in foreign trade.
  - d) It is used for securing loans.
- 4. Who is responsible for selling goods on behalf of the consignor in a consignment transaction?
  - a) Consignee
  - b) Customer
  - c) Debtor
  - d) Creditor
- 5. Which of the following is true about consignment transactions?
  - a) Goods are sold to the consignee
  - b) Consignee purchases goods from the consignor
  - c) Goods are sent for sale, and ownership remains with the consignor
  - d) Ownership is transferred to the consignee at the time of consignment
- 6. What type of commission is paid when the consignee takes responsibility for bad debts?
  - a) Ordinary Commission
  - b) Del-credere Commission
  - c) Overriding Commission
  - d) Trade Commission
- 7. A joint venture is typically formed for:
  - a) A long-term, ongoing partnership

- b) A specific project or limited duration
- c) Tax-saving purposes
- d) Merging two companies permanently
- 8. In a joint venture, the amount of profit to be shared by each party is usually based on:
  - a) A fixed rate set by the government
  - b) The amount of time invested by each party
  - c) An agreement between the parties
  - d) Market share percentages
- 9. Which of the following is true about the difference between a partnership and a joint venture?
  - a) Both are formed for ongoing business activities
  - b) A partnership is for ongoing activities, while a joint venture is for a specific project
  - c) Joint ventures have fewer legal formalities compared to partnerships
  - d) Partnerships do not share profits, while joint ventures do
- 10. Which of the following statements about joint ventures is incorrect?
  - a) Joint ventures are formed to undertake specific projects
  - b) Joint ventures are usually dissolved after the project is completed
  - c) Joint ventures must always result in the formation of a new entity
  - d) The profits of a joint venture are shared among participants as agreed

#### **Answer:**

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

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

### **INTERMEDIATE**

Group I - Paper-7A

Direct Taxation (DT)

### **Clubbing of Income**

lubbing of income refers to the inclusion of another person's income into the taxpayer's total income for tax purposes. This can occur in various situations under tax laws, primarily to prevent tax evasion through income splitting or transfers. Generally, an assessee is taxed on income accruing to him only and he is not liable to tax for income of another person. However, there are certain exceptions to the above rule (mentioned u/s 60 to 64). Sec. 60 to 64 deals with the provisions of clubbing of income, under which an assessee may be taxed in respect of income accrued to other person, e.g. certain income of minor child shall be clubbed in the hands of his parents, income from asset transferred to spouse for inadequate consideration shall be clubbed in the hands of the transferor, etc. These provisions have been enacted to counteract the tendency on the part of the taxpayers to dispose off their income or income generating assets to escape tax liability. Various provisions relating to clubbing are enumerated here in below:

Section		Particulars								
60		income is transferred without transferring the asset yielding such income, the	en income so							
		ed shall be clubbed in the hands of the transferor.								
61		n assessee transfers an asset under a revocable transfer, then income generated from such asset, shall be obed in the hands of the transferor.								
	assets to t	Revocable transfer means, there is any provision for the retransfer of any part or whole of the income/ssets to the transferor or gives the transferor a right to re-assume power over any part or whole of the ncome/assets.								
	<i>Exceptions:</i> a) A transfer by way of creation of a trust which is irrevocable during the lifetime of the beneficiary; b) Any transfer which is irrevocable during the lifetime of the transferee; or c) Any transfer made before 1.4.61, which is not revocable for a period of 6 years or more.									
64(1) (ii)	Salary, commission, fees or any other remuneration to the spouse from a concern in which assessee has substantial interest. An individual shall be deemed to have substantial interest in a concern if he shares 20% profits of that concern or holds 20% voting power of that company.									
	Exception	Exception: If income to spouse generated due to his/her technical or professional qualification, skill etc.								
	Where both, husband and wife, have substantial interest in a concern, remuneration will be included in									
	hands of spouse, whose total income excluding such remuneration, is higher.									
64(1)	Subject to sec. 27(i), any income arising from assets transferred (directly or indirectly) to spouse otherwise									
(iv)		nnection with an agreement to live apart without adequate consideration, shall be in	ncluded in the							
		the transferor.								
64(1)		transferred to other person or an AOP, for inadequate consideration, for immedia								
(vii)		spouse, then income on asset so transferred shall be clubbed in the hands of the tra								
64(1)		ising (directly or indirectly) from assets transferred to son's wife, without adequate	consideration,							
(vi)	shall be included in income of transferor.									
64(1) (viii)		is transferred to other person or an AOP, for inadequate consideration, for immediation's wife, then income on asset so transferred shall be clubbed in the hands of the								
_ `	pplicable	If assets so transferred, is invested in business then tax treatment shall be as under:								
	64(1)(iv),	Income to be clubbed	01.							
	ii), (viii)	Income of such business x Value of such assets as on the 1st day of the P.Y.								
Rus	siness	Total investment in the business by the transferee as on the same day								
		Interest on capital x Value of such assets as on the 1st day of the P.Y.								
Prop	rietary	Total investment in the firm by the transferee as on the same day								
Partı	nership	,								

				_						
64(1A)		Income of a minor child shall be clubbed with income of the parent whose total income								
		(excluding this income) is higher. Once clubbing is made with either parent, then in any								
		subsequent years clubbing shall be made with the same parent, unless the AO is satisfied. If								
		marital relationship does not subsist, income shall be clubbed with that parent who maintains								
		the minor child.								
			Exceptions: a) Income arises or accrues to the minor child due to any manual work, his skill,							
			talent; or b) The minor child is suffering from any disability of nature specified u/s 80U.							
			Exemption u/s 10(32) lower of a) ₹ 1,500; or b) Income so clubbed							
		Such	Such exemption is available only if assessee has opted for old tax regime.							
64(2)		Where	nere an individual has converted his property into property of HUF, for inadequate							
		consid	nsideration, then income derived from such converted property shall be clubbed with							
		indivi	idual as under:							
	Before par	rtition	The entire income from such property							
	After parti	ition	on Income from the assets attributable to the spouse of transferor.							
	65	After application of provisions of clubbing (on transfer of property without adequate								
		consideration as discussed above in several sections), income is taxable and tax liability arises								
		in the hands of the transferor. But sec. 65 empowers the tax authorities to serve demand notice								
		(in respect of tax on clubbed income) upon transferee.								
N	otes	Clubbing of income includes clubbing of negative income								
		The credit of TDS shall be given to the person in whose hands the income is taxable.								
			Income shall be clubbed even when form of the transferred asset is changed.							
		Income arising from the accretion of such property is not to be clubbed.								
		Income on income is not to be clubbed.								
			Income shall be, first, computed in hands of recipient & then clubbing shall be made head wise.							
•			• If the clubbed income is eligible for deduction u/s 80C to 80U, then such deduction shall							
			be allowed to the assessee in whose hands such income is clubbed.							

### Illustration

Mr. A owned a residential house for his own residential purpose, details of which are as follows -

Particulars	Amount		
Gross Annual value	5,00,000		
Municipal tax (paid)			
Interest on loan taken for construction of house			

On 1/4/2024, Mr. A gifted ₹ 10,00,000 to her wife. Out of such money, she acquired a house property for her own residential purpose. New house has gross municipal value of ₹ 50,000. She paid corporation tax of ₹ 2,000. Compute income from house property of Mr. & Mrs. A under both tax regimes. (Assume that Mrs. A does not own any other property).

**Solution**Computation of income from house property of Mr. A for the A.Y. 2025-26

Particulars	Old Regime (₹)	Default Regime (₹)
Self-occupied house		
Net Annual Value	Nil	Nil
Less: Deduction u/s		
24(b) Interest on loan	25,000	NA
	(25,000)	Nil
Add: Income of Mrs. A clubbed u/s 64(1)(iv)	Nil	Nil
Income from house property	(25,000)	Nil

Computation of income from house property of Mrs. A for the A.Y. 2025-26

Particulars	Amount
Self-occupied house	
Net Annual Value	Nil
Less: Deduction u/s	
24(b) Interest on loan	Nil
	Nil
Less: Income clubbed u/s 64(1)(iv) with the income of Mr. A	Nil
Income from house property	Nil

#### **Choose the correct answer:**

- 1. Mr. X's minor daughter earned ₹50,000 from his special talent. This income will be clubbed with
  - (a) The income of Mr. X
  - (b) The income of Mrs. X
  - (c) Mr. X or Mrs. X, whoever's income is higher
  - (d) It will not be clubbed
- 2. Maximum exemption available, under old tax regime, where income of minor child is clubbed with income of mother or father is
  - (a) ₹1,500
  - (b) ₹ 1,500 per child
  - (c) ₹ 1,200 per child
  - (d) ₹ 100 per month per child
- 3. Mr. A gifted debenture of ₹ 1,00,000 to his wife. She received ₹ 10,000 interest which she reinvests and earns ₹ 1,000. This ₹ 1,000 will be taxable in the hands of
  - (a) Mr. A

- (b) Mrs. A
- (c) Not Taxable
- (d) Mr. A or Mrs. A, at the choice of the Assessing Officer
- 4. Income arising to a minor married daughter shall be
  - (a) assessed in the hands of minor married daughter
  - (b) clubbed with the income of that parent whose total income is higher
  - (c) Exempt from tax
  - (d) clubbed with the income of her spouse
- 5. Income of a minor child suffering from any disability of the nature specified in section 80U shall be
  - (a) assessed in the hands of minor
  - (b) clubbed with the income of that parent whose total income is higher
  - (c) Exempt from tax
  - (d) taxable in hands of provider of income like reverse charge

- Mr. X gives ₹2,00,000 to Mrs. X as gift. She invests in a proprietary concern and incurs a loss of ₹40,000.
  - (a) This loss shall be clubbed in the hands of Mr. X
  - (b) The loss shall be borne by Mrs. X
  - (c) The loss shall not be clubbed
  - (d) The loss shall be ignored while computing income of both Mr. and Mrs. X
- 7. In certain cases, income of other person is included in the income of assessee. It is called
  - (a) Clubbing of income
  - (b) Addition to income
  - (c) Increase in income
  - (d) Set-off of income
- 8. In whose total income, the income of a minor child is included
  - (a) Father
  - (b) Mother

- (c) Father & Mother both
- (d) Parent whose total income is greater
- 9. When the income of an individual includes ₹20,000 as the income of his minor child in terms of section 64(1A), taxable income in this respect will be, if he has opted for the old tax regime
  - (a) Nil
  - (b) ₹ 20,000
  - (c) ₹ 18,500
  - (d) ₹ 15,000
- 10. Mr. A has three minor children deriving interest from bank deposits to the tune of ₹ 2,000, ₹ 1,300, ₹ 1,600 respectively. Exemption available u/s 10(32) of the Income Tax is under the old tax regime:
  - (a) ₹4,900
  - (b) ₹4,300
  - (c) ₹4,500
  - (d) ₹ 5,000

#### **Answer:**

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

Module 5: Goods and Services Tax (GST) Laws

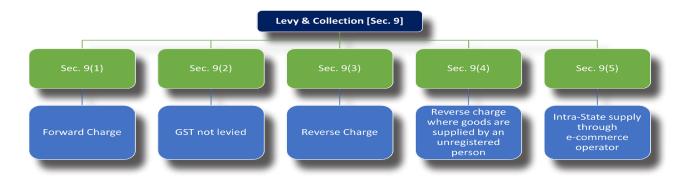
## **INTERMEDIATE**

Group I - Paper-7B

Indirect Taxation (IDT)

### Levy and Collection

rticle 265 of the Constitution of India mandates that no tax shall be levied or collected except by the authority of law. The charging section is a must in any tax law for levy and collection of tax. Before imposing any tax, it must be shown that the transaction falls within the ambit of the taxable event and that the person on whom the tax is so imposed also gets covered within the scope and ambit of the charging section. The scope of the taxable event being 'supply' has been discussed in the earlier Chapter. This chapter will provide an insight into the chargeability of tax on a supply. Sec. 91 is the charging provision of the CGST Act. It provides the maximum rate of tax that can be levied on supplies leviable to tax under this law, the manner of collection of tax and the person responsible for paying such tax. There are four aspects of levy viz taxable event, tax rate, collection or levy, and the person liable to pay. Sec. 9 of the CGST Act covers all these aspects.



The levy of CGST is governed by the Central Goods and Services Tax Act, 2017. The key provisions related to the levy of CGST are as follows:

Charging Section: Section 9 of the CGST Act is the charging section that empowers the Central Government to
levy CGST on all intra-state supplies of goods and services, except for the supply of alcoholic liquor for human
consumption or un-denatured extra neutral alcohol or rectified spirit used for the manufacture of alcoholic liquor,
for human consumption. The tax is levied on the value of the supply as determined under Section 15 of the CGST
Act.

Alcohol for human consumption	Power to tax remains with the State
Five petroleum products – crude oil , diesel, petrol, natural gas and ATF	GST Council to decide the date from which GST will be applicable
Tobacco	Part of GST but power to levy additional excise duty with Central Government
Entertainment tax levied by local bodies	Power to tax remains with the State

<sup>1</sup> Sec. 5 in case of IGST Act

- 2. Taxable Event: The taxable event under CGST is the supply of goods or services or both. The term "supply" is defined broadly to include all forms of supply such as sale, transfer, barter, exchange, license, rental, lease, or disposal made for consideration in the course or furtherance of business. Additionally, certain activities specified in Schedule I of the CGST Act are treated as supplies even if made without consideration.
- 3. Rate of Tax: The rate of CGST is notified by the Central Government and cannot exceed 20%. The rates are determined based on the recommendations of the GST Council, which is a constitutional body comprising representatives from the Central and State Governments. The rates vary depending on the type of goods or services supplied.
- 4. Reverse Charge Mechanism (RCM): In certain cases, the recipient of goods or services is liable to pay CGST instead of the supplier. This is known as the reverse charge mechanism. The government notifies the specific categories of supplies and recipients to whom RCM applies.
- 5. Composition Scheme: To simplify compliance for small taxpayers, the CGST Act provides for a composition scheme. Under this scheme, eligible taxpayers can pay tax at a reduced rate based on their turnover. However, composition taxpayers are not allowed to claim input tax credit and cannot collect tax from their customers.
- 6. Exemptions: The Central Government has the power to exempt certain supplies from the levy of CGST through notifications. These exemptions are provided to reduce the tax burden on essential goods and services and to promote social welfare. Examples of exempt supplies include healthcare services, educational services, and certain agricultural products.

#### Collection of CGST

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The collection of CGST involves several steps, including registration, issuance of tax invoices, payment of tax, and filing of returns. The key provisions related to the collection of CGST are as follows:

**1. Registration**: Every supplier who makes a taxable supply of goods or services and whose aggregate

- turnover exceeds the threshold limit is required to register under the GST regime. The threshold limit varies based on the type of supply and the state in which the supplier operates. For example, the threshold limit for registration is ₹ 20 lakhs (₹ 40 lakhs if supplying goods) for most states, but it is ₹ 10 lakhs for certain special category states. Registration under GST is mandatory for certain categories of persons, such as inter-state suppliers and casual taxable persons, irrespective of their turnover.
- 2. Tax Invoice: A registered supplier must issue a tax invoice for every taxable supply made. The tax invoice must contain details such as the description of goods or services, quantity, value, rate of tax, and amount of tax charged. The invoice must be issued within the prescribed time frame, which varies depending on the type of supply. For example, in the case of the supply of goods, the invoice must be issued before or at the time of removal of goods for supply. In the case of the supply of services, the invoice must be issued within 30 days from the date of supply.
- 3. Payment of Tax: The supplier is required to pay the CGST collected from the recipient to the Central Government. The payment is made through electronic cash ledger or electronic credit ledger maintained on the GST portal. The due date for payment of tax is the 20th of the following month.
- 4. Filing of Returns: Registered suppliers must file periodic returns with the GST authorities. These returns provide details of outward supplies, inward supplies, input tax credit availed, and tax paid. The returns are filed monthly, quarterly, or annually, depending on the type of taxpayer. For example, regular taxpayers are required to file monthly returns in Form GSTR-1 (details of outward supplies) and Form GSTR-3B (summary return). Composition taxpayers are required to file annual returns in Form GSTR-4. Additionally, an annual return must be filed in Form GSTR-9.
- 5. Input Tax Credit (ITC): One of the key features of the GST regime is the seamless flow of input tax credit across the supply chain. Input tax credit refers to the credit that a taxpayer can claim for

the tax paid on inputs (goods or services) used in the course of business. The CGST Act allows taxpayers to claim input tax credit for CGST paid on inward supplies, subject to certain conditions. For example, the recipient must possess a valid tax invoice, and the supplier must have paid the tax to the government. Input tax credit can be utilized to pay output tax liability under CGST.

6. Compliance and Audit: To ensure compliance with the provisions of the CGST Act, the GST authorities have the power to conduct audits, inspections, and assessments. The authorities can also issue notices for non-compliance and impose penalties for violations. For example, if a taxpayer fails to pay tax within the prescribed time, interest is payable on the outstanding amount. In case of wilful suppression of facts or fraud, a penalty equal to the tax amount is leviable.

#### Conclusion

The levy and collection of CGST are essential components of the GST regime in India. The CGST Act, 2017 provides a comprehensive framework for the levy, collection, and administration of CGST on intra-state supplies of goods and services. By replacing multiple indirect taxes with a single tax, the CGST Act has created a unified market and reduced the cascading effect of taxes. However, the success of the GST regime depends on effective compliance and enforcement, as well as addressing the challenges and issues faced by taxpayers. Continuous efforts to simplify procedures, resolve technical issues, and provide clarity on legal provisions are contributing to the smooth functioning of the GST system and ensure its long-term sustainability.

Module 5: Methods of Costing

## **INTERMEDIATE**

Group I - Paper-8

Cost Accounting (CA)

### **METHODS OF COSTING**

### IOB COSTING AND BATCH COSTING

enerally one question either from Job/ Batch is being set from this chapter for all examinations. Distinction between Job and Batch is an important factor. Adjustment of opening and closing stock of raw materials, WIP, and finished goods is vital in case of Job or Batch Costing. You should be very careful in determining the profit of specific Job. Further, you should know how to show the balance of WIP in Balance Sheet.

#### Job Costing

It is a particular form of specific-order-costing which applies where work is undertaken to consumer's specific requirements and each order is completely shorter duration than contract costing. Under the method costs are collected in respect separately. the method is used in such industries ,like, printing, foundry, repair shop, engineering readymade garments, shoes etc.

#### **Batch Costing**

It is a special type of job costing. Here a batch of similar products is Treated as a job. This type of costing applies where similar articles are manufactured in batches is either for sale or for use within the undertaking. Under this method costs are collected and analysed according to batch numbers allotted. The method is suitable for making component parts, pharmaceutical industries, Spare parts, watches, radio-sets, cycles etc. For easy understanding a Problem and it's solution is given below.

#### Problem:

A manufacturing unit has predetermined the overhead rates as 400% on direct wages, 20% on works cost and 25% on cost of production for work expenses, management expenses and commercial expenses, respectively. At the end of the year, it has been found that the works overhead stand under-absorbed to the extent of 30% of the total productive wages. Management overheads show under-recovery of 18th of the absorbed amount, and the recovery of the commercial expenses results in an over-absorption of 1/3rd of the total amount absorbed.

If the prime costs of three jobs are as under, find the profit / loss on the respective selling prices (both on the basis of standard cost and on the basis of full absorption of overheads):-

	Job – A (₹)	Job – B (₹)	Job – C (₹)
Direct Materials	45.50	32.60	26.80
Direct Wage	15.20	8.60	7.20
	60.70	41.20	34.00
Selling Price	200.00	130.00	90.00

#### **Solution**

Under-absorption in works overheads is 30% on wages. Under-absorption in management overheads is 1/8th of the absorbed amount and over-absorption in commercial expenses is 1/3rd of the total amount absorbed.

т 1 .	T 1 D	T 1 ~
		Job – C
` '		(₹)
45.50	32.60	26.80
15.20	8.60	7.20
60.80	34.40	28.80
121.50	75.60	62.80
24.30	15.12	12.56
145.80	90.72	75.36
36.45	22.68	18.84
182.25	113.40	94.20
4.56	2.58	2.16
3.04	1.89	1.57
189.85	117.87	97.93
12.15	7.56	6.28
177.70	110.31	91.65
	15.20 60.80 121.50 24.30 145.80 36.45 182.25 4.56 3.04	(₹)     (₹)       45.50     32.60       15.20     8.60       60.80     34.40       121.50     75.60       24.30     15.12       145.80     90.72       36.45     22.68       182.25     113.40       4.56     2.58       3.04     1.89       189.85     117.87       12.15     7.56

#### Statement of Profit / Loss

	Job – A	Job – B	Job – C
	(₹)	(₹)	(₹)
Selling price	200.00	130.00	90.00
Cost of sales	182.25	113.40	94.20
Profit at Standard Cost	17.75	16.60	4.20

### **Operating Costing / Service Costing**

#### **Operating 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.

#### **Transport Costing**

Costing in a transport undertaking consists of determining the operating cost of each vehicle and applying this cost to find out the cost per unit of service rendered by a vehicle. The cost unit is selected by taking into account factors like weight, bulk of goods carried and distance covered etc. In most cases composite units are chosen. The example of composite units are pertonne-kilometre, passenger-km etc.

#### **Operating Cost and Management Decision**

Sometimes service costs are used for decisional purpose. In such a case, the decision has to be taken on the basis of unit service cost, when the total units remain constant under different alternatives, but if units are subject to fluctuation from alternative to alternative, decision will be on the basis of total service cost, i.e., total cost under each of the alternatives should be considered and the alternative having lowest cost should be the profitable one. But there are certain circumstances, where comparative cost may not be the only decisive factor, in such case, other non-cost factors like necessity, public service, customer's satisfaction etc. may influence a particular decision irrespective of its costs.

#### **Boiler House Costing**

The main purpose of boiler-house costing is to ascertain the cost per unit of steam produced in the boiler-house. The fundamental principles remain the same.

A Problem and it's Solution, given below, can easily understand the concept of Operating Costing.

#### Problem :-

The K. Transport Limited operates a fleet of Lorries. The records for lorry L-14 reveal following information for January 2025:-

Days maintained 30; Days operated 25; Days idle 5; Total hours operated 300; Total kms. Covered 2,500; Total tonnage carried 200 (4 tonne load per trip, return journey empty).

The following further information is made available:

- (A) Operating cost for the month: Petrol ₹ 400; Oil ₹ 170; Grease ₹ 90; Wages to drivers ₹ 550; Wages to khalasis ₹ 350.
- (B) Maintenance cost for the month : Repairs ₹ 170; Overhaul ₹ 60 ; Tyres ₹ 150 ; Garage charges ₹ 100.
- (C) Fixed cost for the month based on the estimates of the year: Insurance ₹ 50; Licence tax etc. ₹ 80; Interest ₹ 40; Other Overhead ₹ 190.
- (D) Capital cost: Cost of acquisition: ₹54,000; Residual value at the end of the 5 years life is ₹36,000.

Prepare a cost sheet and Performance Statement showing: (a) cost per day maintained (b) cost per day operated (c) cost per kilometre (d) cost per hour (e) cost per commercial ton—km.

#### **Solution:**

# In the books of K. Transport Ltd. Operating Cost Sheet for the month of January 2025

	Amount (₹)	Amount (₹)
(A) Operating Cost:		
Petrol	400.00	
Oil	170.00	
Grease	90.00	
Driver's wages	550.00	
Khalasis's wages	350.00	
Total (A)		1,560.00

(B) Maintenance Cost:		
Repairs	170.00	
Overhauls	60.00	
Tyres	150.00	
Garage charges	100.00	
Total (B)		480.00
(C) Fixed Cost:		
Insurance	50.00	
License, Taxes, etc.	80.00	
Interest	40.00	
Other Overhead	190.00	
Depreciation	300.00	
Total (C)		660.00
(D) Total Operating cost of the month (A+B+C)		2,700.00

#### Note:-

Depreciation calculated on fixed instalment basis is ₹300 as per calculation :-

$$(54000-36000)/(5 \times 12) = ₹300/-$$

- Cost per day maintained = Total Operating cost/ no of days.= 2700/30 days = ₹ 90/-
- b) Cost per kilometer = ₹ 2700/2500 km = ₹ 108/-
- c) Cost per day operated = Operating cost / No of days operated = 2700/25 days = ₹108/-
- d) Cost per hour = Operating cost / hours operated ₹2700/300 = ₹ 9/-
- e) Cost per commercial ton-km = Operating cost/ commercial ton-km = ₹2700/ 5000km = 0.54/-
- f) Calculation of Commercial-ton-km. in January 2025:
  - = ton-km covered per trip  $\times$  Carried per trip  $\times$  Days operated
  - = 50km.  $\times 4$ ton  $\times 25$  days = 5000 ton-km.

No of trips (one trip includes return journey) = Total ton/ ton per trip = 200tons / 4 ton = 50 trips.

Therefore, km. covered per trip = Total km / No of trip = 2500/50 = 50 km. per trip.

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

## **INTERMEDIATE**

Group II - Paper-9

Operations
Management
and Strategic
Management
(OMSM)

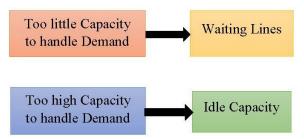
### **Operations Management**

In this issue let me extend our discussions on Queuing Models on waiting lines.

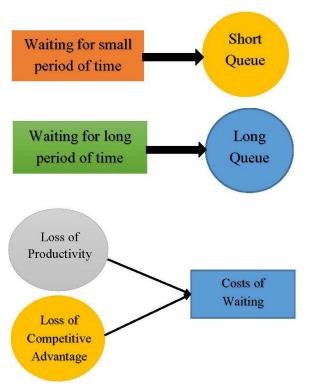
Waiting lines occur when there is a temporary imbalance between supply of capacity and demand for capacity.

Waiting lines have impact on cost of operation and they reflect negatively on service to customers.

Therefore it is important to balance the cost of having customers wait with the cost of providing service capacity.

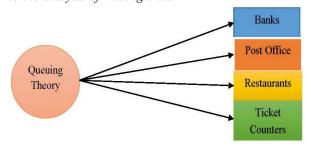


The key to Management of waiting lines is to determine the balance that will provide an adequate level of service at a reasonable cost.



Hence it is important for system designers and managers of existing service systems to design and operate the system after clear assessment of impact of waiting lines.

Designers must weigh the cost of providing a given level of service capacity against the implicit (inherent, hidden) cost of having customers wait for service. This planning and analysis of service capacity is mathematically called Queuing Theory - an approach to the analysis of waiting lines.



Some Applicability of Queuing Theory

From above waiting lines are commonly found wherever customers arrive randomly for services. In many situations the CUSTOMERS are not people but ORDERS waiting to be filled e.g. Trucks waiting to be unloaded, Jobs waiting to be processed etc.

It is already mentioned that if Capacity of the system < Demand, waiting line forms. But surprisingly on many occasions waiting lines form even with adequate capacity of the system. Suppose a restaurant has a seating capacity of 50. On an average the restaurant faces a demand from 40 customers per hour. The restaurant operates for 6 hours a day. Say on a day no of customers in respective hours are

1 <sup>st</sup>	$2^{\text{nd}}$	$3^{\rm rd}$	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>
hour	hour	hour	hour	hour	hour
20	35	40	80	55	10

Average demand /hour is maintained at = 240/6 = 40 <Seating Capacity of the restaurant (50). So as per our discussions in previous para there should not be any waiting (Queue). But in 4th hour there were 80 no of arrivals which is more than the seating capacity. So in that particular hour restaurants could not serve all arrivals at a time and that creates a queue. Same thing happens in 5th hour. Therefore, waiting line formation is there in 4th and 5th hour.

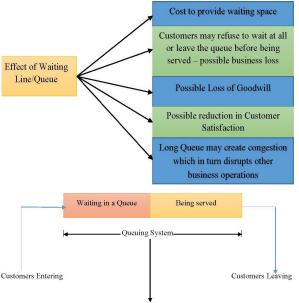
In 4th hour-----There will be Long Queue;

In 5th hour-----There will be Short Queue;

Here we have not yet considered the service time variability. Customers' choice of menu items are different and those require variable service time. So it can't be said that arrivals in a particular hour will get their service in that hour only. Normally customers' arrive in a particular hour leave the restaurant in a different hour succeeding to the hour of arrival.

Therefore it could be concluded that both arrivals and service times exhibit a high degree of variability. And because services cannot be performed ahead of time and stored until needed, the system at time becomes temporarily overloaded, giving rise to waiting lines.

If arrivals can be predetermined (Scheduled) and service time is constant ----there will be no waiting lines.



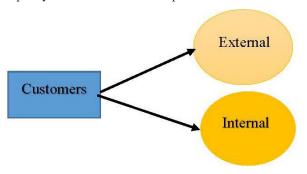
No of customers in the system (in queue or being served) will vary randomly over time.

The goal of waiting line management is to minimize total costs associated with the queuing system:

- Customer waiting cost (in box above)--- already mentioned in previous page;
- Capacity cost (in box above);

So total cost (TC) of a queuing system = Customer waiting cost + Capacity Cost

Capacity costs are the costs of maintaining the ability to provide service ---- costs of maintaining 50 seating capacity in our restaurant example.



Internal customers include employees of the organization. Customer waiting costs to internal customers mainly include --- wages & salaries paid

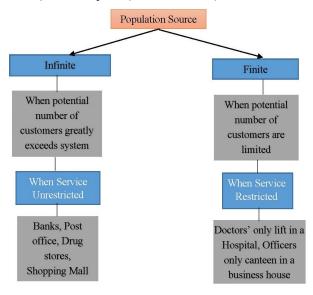
during waiting time --- Machine operators are waiting for tools, truck drivers waiting for unloading their trucks

The goal of waiting line management is to balance the cost of providing a level of service capacity with the cost of customers. As capacity increases, capacity cost increases. Cost required to create a restaurant with seating capacity of 80 is more than that with a capacity of 50. But with more seating capacity the length of queue could be reduced in 4th hour or could be avoided in 5th year in our example and thereby reduction of customer waiting cost would be the result. So as capacity increases the number of customers waiting and the time they wait tend to decrease, thereby decreasing waiting costs. As is typical in trade off relationships, total costs can be represented as a U-shaped curve.



There are numerous queuing models to choose for successful analysis. Model choice is dependent on the characteristics of the system under investigation. The main characteristics are:

- Population Source;
- Number of servers (Channels);
- Arrival and Service pattern;
- Queue discipline (order of service);

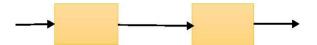


The capacity of queuing system is a function of the capacity of each server. Server and Channel are synonymous. It is assumed that one server could serve only one customer at a time.

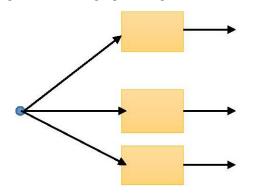
Single Channel Single phase



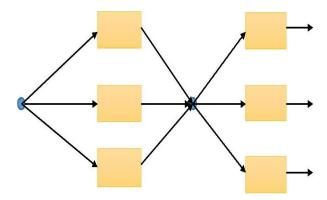
Single Channel Multiple phase



Multiple Channel Single phase e.g Bank tellers



Multiple channel multiple phase



Phase indicates steps to get a service.

Waiting lines are direct result of arrival and service variability. As discussed earlier, random highly variable arrival and service patterns cause overloading of the system on some occasions.

In commonly used queuing model

- Arrivals and services rates are described by a Poisson distribution:
- Interarrival time and service time can be described by a negative exponential distribution;

A Poisson distribution is a statistical distribution showing the likely number of times that an event will occur within a specified period of time. e.g. 12 customers arrive at a service facility in an hour. Here arrival of a customer is the event. 12 is the likely number of times of the event. And one hour is the specified period of time.

The exponential distribution (also called the negative exponential distribution) is a probability distribution that describes time between events in a Poisson process. In our example of Poisson inter arrival time (time between events) is 5 minute.

As already told many queuing models are available to choose from. The following is the list of symbols used in doing analysis with queuing models:

Symbol	Represents		Diagramma	atic Represe	entation	l
λ	Customer arrival rate					
μ	Service rate per server					
$L_{_{ m q}}$	The average number of customers waiting for service	Customers	Line +	Service	=	System
$L_{s}$	The average number of customers in the system (waiting and/or being served)	Customers	(3) Lq	(1) + r	=	(4) Ls
r	Average number of customers being served					
ρ	The system utilization					

W <sub>q</sub>	The average time customers wait in line	Line + Service = System
W <sub>s</sub>	The average time customers spend in the system (waiting in line and service time)	Customers $(3)$ $(1)$ $(4)$
M	No of servers	
L <sub>max</sub>	The maximum expected number waiting in line	
$L_{q}$	Expected length of non-empty queues	$\frac{1}{1-\rho}$ or $\frac{\mu}{\mu-\lambda}$

#### **Basic relationship--**

(a) System utilisation: This reflects the ratio of demand (as measured by the arrival rate) to supply or capacity (as measured by the product of the number of servers, M and the service rate,  $\mu$ )

$$\rho = \frac{\lambda}{Mu} \qquad (1)$$

- $\rho = \frac{\lambda}{M\mu} \qquad \qquad (1)$  (b) Average number of customers being served:  $r = \frac{\lambda}{\mu} \qquad (2)$
- (c) For a stable system average number of customers in line or in the system is equal to the average customer arrival rate multiplied by the average time in line or in the system. That is

The multiplied by the average time in fine of in the system. That is 
$$L_s = \lambda * W_s = \frac{\lambda}{\mu - \lambda} \& L_q = \lambda * W_q = \frac{\lambda^2}{\mu(\mu - \lambda)} \tag{3}$$
 (d) The average time customers are waiting in line  $W_q = \frac{L_q}{\lambda} \tag{4}$  (e) The average time customers are in the system  $W_s = W_q + \frac{1}{\mu} = \frac{L_s}{\lambda} \tag{5}$ 

#### Suggestions:

This lesson could be used as an aid to teaching on queuing models in study notes. Concept of waiting line is vital for analysis of queuing models under chapter Production, Planning and control. With the help of discussions in this issue along with knowledge imparted by study guide, analysis of queuing models would be easy. For Proper understanding of waiting line emphasis is given in this issue on pictorial presentation. Attempts are made here to indicate few important symbols used in model on infinite source. For supplementary readings one can refer Operations Management by R.S. Russell & B.W. Taylor, Operations Management by J Stevenson, Productions and Operations management by R.B. Khanna..

Best Wishes.

Module 3: Cash flow statement

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

## **INTERMEDIATE**

Group II - Paper-10

Corporate Accounting and Auditing (ČAA)

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

### **Topic: Cash Flow Statement**

#### • Multiple Choice Questions

- GST paid is classified under \_\_\_\_\_ under direct method.
  - A. Cash flow from operating activities
  - B. Cash flow from investing activities
  - C. Cash flow from financing activities
  - D. None of the above
- In case of a furniture company, misc. charges received from customers for repairs of furniture is classified under \_\_\_\_\_under direct method.
  - A. Cash flow from operating activities
  - B. Cash flow from investing activities
  - C. Cash flow from financing activities
  - D. None of the above

- 3. Bonus shares issued is classified under
  - A. Cash flow from operating activities
  - B. Cash flow from investing activities
  - C. Cash flow from financing activities
  - D. None of the above
- 4. Dividend received from subsidiaries is classified under \_\_\_\_\_.
  - A. Cash flow from operating activities
  - B. Cash flow from investing activities
  - C. Cash flow from financing activities
  - D. None of the above

Answer: 1-A; 2-A; 3-D; 4-B

### **Comprehensive Problems**

#### Problem 1

From the following Summary Cash Account of B Ltd., prepare a Cash Flow Statement for the year ended 31st March 2024 in accordance with AS 3 (Revised) using direct method.

Summary Cash Account for the year ended 31-3-2024

Particulars	₹	Particulars	₹
Balance on 1-4-2023	100	Payment of suppliers	4,000
Issue of equity shares	600	Purchase of fixed assets	400
Receipts from customers	5,600	Overhead expense	400
Sale of fixed assets	200	Wages and salaries	200
		Taxation	500
		Dividend	100
		Repayment of bank loan	600
		Balance on 31-3-2006	300
	6,500		6,500

### **Solution:**

#### Cashflow Statement of X Ltd. for the year ended 31st March, 2024 (Direct Method)

Particulars	₹('000)
Cashflows from Operating Activities	
Cash receipts from customers	5,600
Cash paid to suppliers and employees (4,000+400+200)	(4,600)
Cash generated from operations	1,000
Income Tax paid	(500)
Net Cash Inflow from Operating Activities (a)	500
Cashflows from Investing Activities	
Purchase of fixed assets	(400)
Proceeds from sale of fixed assets	200
Net Cash Outflow in Investing Activities (b)	(200)
Cashflows from Financing Activities	
Issue of Equity Shares	600
Repayment of Bank loan	(600)
Dividend paid	(100)
Net Cash Outflow in Financing Activities (c)	(100)
Net Increase in Cash and Cash equivalents during the period $(a + b + c)$	200
Cash and Cash equivalents at the beginning	100
Cash and Cash equivalents at the end	300

## Problem 2 From the following prepare a Cashflow statement for ABC Ltd. for the year ended 31 March, 2024.

#### Balance sheet as at 31 March, 2024

₹		₹	₹		₹
31.03.2023	Liabilities	31.03.2024	31.03.2023	Assets	31.03.2024
50,000	Paid-up capital	50,000	10,00,000	Gross fixed assets	11,25,000
3,50,000	Retained earnings	4,15,000	1,00,000	Less: Accu. Dep.	1,75,000
5,80,000	Long-term debts	6,50,000	9,00,000 1,00,000	Inventories	9,50,000 1,10,000
80,000	Current liabilities: Sundry creditors	90,000	50,000 10,000	Debtors Cash balance	60,000 85,000
10,60,000		12,05,000	10,60,000		12,05,000

The company has earned profit after tax of ₹ 1 lakh out of which ₹ 35,000 was paid as dividend and balance retained.

#### **Solution:**

### Cashflow Statement of ABC Ltd. for the year ended 31st March, 2024

Particulars	₹ ('000)
Cashflows from Operating Activities	
Profit after tax	1,00,000
Add: Depreciation	75,000
	1,75,000
Less: Increase in inventory	10,000
Less: Increase in debtors	10,000
Add: Increase in creditors	10,000
Cash flow from operating activities (a)	1,65,000
Cashflows from Investing Activities	(1.25.000)
Purchase of fixed assets	(1,25,000)
Net Cash Outflow in Investing Activities (b)	(1,25,000)
Cashflows from Financing Activities	
Increase in long term debt	70,000
Dividend paid	(35,000)
Net Cash Outflow in Financing Activities (c)	35,000
Net Increase in Cash and Cash equivalents during the period $(a + b + c)$	75,000
Cash and Cash equivalents at the beginning	10,000
Cash and Cash equivalents at the end	85,000

# **Problem 3**Following information is available from the books of X Ltd.

Particulars	31.03.2005	31.03.2006
	₹	₹
Profit made during the year		2,50,000
Income received in advance	500	600
Prepaid expenses	1,600	1,400
Debtors	80,000	95,000
Bills receivable	25,000	20,000
Creditors	45,000	40,000
Bills payable	13,000	15,000
Outstanding expenses	2,500	2,000
Accrued income	1,500	1,200

Calculate cashflow from operations.

### **Solution:**

### **Statement Showing Cashflow from Operations**

Particulars	₹	₹
Profit made during the year		2,50,000
Add: Decrease in Debtors	15,000	
Increase in Creditors	5,000	
Increase in Outstanding expenses	500	20,500
		2,70,500
Less: Decrease in Income received in advance	100	
Increase in Prepaid expenses	200	
Increase in Bills receivable	5,000	
Decrease in Bills payable	2,000	
Increase in Accrued income	300	7,600
Cash generated from operations		2,62,900

#### **Section: B**

### **Topic - Auditing**

#### • Comprehensive Questions

#### **Ouestion 1:**

#### What are the qualifications of a statutory auditor?

#### Answer:

As per Section 141 of the Companies Act 2013, the qualifications of a statutory auditor are as follows:

(1) A person shall be eligible for appointment as an auditor of a company only if he is a chartered accountant within the meaning of the Chartered Accountants Act, 1949. As per the Chartered Accountants Act 1949, a Chartered Accountant is a person who holds valid Certificate of Practice as per Section 2(17) of the Act.

A firm in which majority of the partners practising in India are qualified for appointment as aforesaid, may be appointed by its firm name to be the auditor of a company. It is to be remembered that in case of a partnership firm, the company appoints the "Firm" and not any partner in his individual capacity.

(2) Where a firm including a limited liability partnership (LLP) is appointed as an auditor of a company, only the partners who are chartered accountants shall be authorised to act and sign on behalf of the firm.

#### **Question 2:**

#### What are the disqualifications of a statutory auditor?

#### **Answer:**

As per Section 141(3) of the Companies Act 2013 and Rule 10 of Companies (Audit and Auditors) Rules, 2014, the following persons shall not be eligible for appointment as an auditor of a company, namely:

- (a) "a body corporate other than a limited liability partnership (LLP) registered under the Limited Liability Partnership Act, 2008";
- (b) an officer or employee of the company;
- (c) a person who is a partner, or who is in the employment (employee), of an officer or employee of the company;

- (d) a person who, or his relative or partner
  - (i) is holding any security of or interest in the company or its subsidiary, or of its holding or associate company or a subsidiary of such holding company;
  - (ii) is indebted to the company, or its subsidiary, or its holding or associate company or a subsidiary of such holding company, in excess of ₹ 5 Lacs; or
  - (iii) has given a guarantee or provided any security in connection with the indebtedness of any third person to the company, or its subsidiary, or its holding or associate company or a subsidiary of such holding company, in excess of ₹ 1 Lac:
- (e) a person (auditor) or a firm who, whether directly or indirectly (through agent/relation), has business relationship with the company, or its subsidiary, or its holding or associate company or subsidiary of such holding company or associate company;
- (f) a person whose relative is a director or is in the employment of the company as a director or key managerial personnel;
- (g) a person who is in full time employment elsewhere or a person or a partner of a firm holding appointment as its auditor, if such persons or partner is at the date of such appointment or reappointment holding appointment as auditor of more than twenty companies;
- (h) a person who has been convicted by a court of an offence involving fraud and a period of ten years has not elapsed from the date of such conviction;
- (i) a person who, directly or indirectly, renders any service referred to in Section 144 to the company or its holding company or its subsidiary company.

Module 3: **Tools for Financial Analyses** 

Module 10: Data Presentation: Visualisation and Graphical Presentation

## **INTERMEDIATE**

Group II - Paper-11

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

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

#### **Common Size Analysis**

Common size statement analysis, also known as vertical analysis, is a financial tool that expresses financial data as percentages of a base amount. This method helps compare financial statements over time or between companies. Common size statements use only percentages for comparison.

#### **Benefits**

- (a) Compares across time: It tracks changes over time and identifies trends
- (b) Compares between companies: It compares companies of different sizes, in different industries, or across time.
- (c) **Benchmarks**: It compares a company to its competitors or industry standards.
- (d) **Decision-making**: It helps make informed investment choices and identify areas of strength or weakness.

#### **Comparative Statement Analysis**

A comparative statement compares financial performance over time, while a common size statement expresses financial information as percentages. Comparative statements use both absolute figures and percentages for comparison.

- It compares a company's financial performance over time.
- It presents financial data for multiple years side by side.
- It helps investors identify trends and make investment decisions.
- It is also known as horizontal analysis.

#### **Trend Analysis**

Trend analysis evaluates an organization's financial information over a period of time. Periods may be measured in months, quarters, or years, depending on the circumstances. The goal is to calculate and analyze the amount change and percent change from one period to the next.

#### **Key Equation**

Amount of change = Current year amount – Base year amount

#### **Key Equation**

Percent change = (Current year amount – Base year amount) ÷ Base year amount

#### Example 1

The accompanying balance sheet and profit and loss account relate to Bombay Ltd. You are requested to prepare common-size income statements and balance sheets. Also interpret the results.

Balance sheet as on 31st March

(Rs. in Crore)

Particulars	Previous Year	Current Year
Liabilities		
Equity share capital (of Rs. 10 each)	240	240
General reserves	96	182
Long-term loans	182	169.5
Creditors	67	52
Outstanding expenses	6	0
Other current liabilities	9	6.5
	600	650
Assets		
Plant [net of accumulated depreciation]	402	390
Cash	54	78
Debtors	60	65
Inventories	84	117
	600	650

Income Statement for the year ended 31st March

Particulars	Previous Year	Current Year
Gross sales	370	480
Less: Returns	20	30
Net sales	350	450
Less: Cost of goods sold	190	215
Gross profit	160	235
Less: Selling, general and administrative expenses	50	72
Operating profit	110	163
Less: Interest expenses	20	17
Earnings before taxes (EBT)	90	146
Less: Taxes	31.5	51.5
Earnings after taxes (EAT)	58.5	94.9

#### Answer

Income Statement for the year ended 31st March (Common size)

Particulars	Previous Year	Current Year
Net sales	100.00	100.00
Cost of goods sold	54.3	47.8
Gross profit	45.7	52.2
Selling, general and administrative cost	14.3	16.00
Operating profit	31.4	36.2
Interest expenses	5.7	3.8
Earnings before taxes	25.7	32.4
Less: Taxes	9.00	11.4
Earnings after taxes	16.7	21.0

Balance sheet as on 31st March

(Common Size)

Owners' Equity		
Equity Share capital (of Rs 10 each)	40.00	36.90
General reserves	16.00	28.00
	56.00	64.90
Long-term borrowings		
Loans	30.30	26.10
Current liabilities		
Creditors	11.20	8.00
Outstanding expenses	1.00	0.00
Other current liabilities	1.50	1.00
	13.70	9.00
Total Liabilities	100.00	100.00
Fixed Assets		
Plant [net of accumulated depreciation]	67.0	60.0
Current Assets		

Cash	9.00	12.00
Debtors	10.00	10.00
Inventories	14.00	18.00
	33.00	40.00
Total Assets	100.00	100.00

#### **Interpretation:**

These percentage figures bring out clearly the relative significance of each group of items in the aggregative position of the firm.

#### **Income Statements**

It is found that in the current year the EAT of the company has increased to 21% from 16.7 % in the previous year. This improvement in profitability can mainly be traced to the decrease of 6.5% in the cost of goods sold, reflecting improvement in efficiency of manufacturing operations. The decrease in financial overheads (interest) by 1.9% during the current year can be traced to the repayment of a part of long-term loans. Further analysis indicates that profitability would have been more but for an increase in operating expenses ratio by 1.7%.

#### **Balance Sheets**

The common-size balance sheets show that current assets as a percentage of total assets have increased by 7% over previous year. This increase was shared by inventories (4%) and cash (3%); the share of debtors remained unchanged at 10%. The proportion of current liabilities (mainly due to creditors) was also lower at 9% in the current year compared to 13.7% in the previous year. These facts signal overall increase in the liquidity position of the firm. Further, the share of long-term debt has also declined and owners' equity has gone up from 56% in the previous year to 64.9% in the current year.

## **Business Data Analytics Data Presentation**

Graphical representation of data is a visual way to show numerical data using charts, graphs, and plots. It is a more effective way to understand and compare data than just looking at numbers.

#### **Importance**

- 1. **Easy to understand:** Visuals are naturally processed faster by the human brain than raw numbers, making it easier to grasp complex data at a glance.
- 2. **Identifies patterns and trends:** By plotting data points on a graph, you can easily visualize trends, fluctuations, and correlations between variables.
- 3. **Comparison capability:** Graphs allow for quick comparison between different data sets or time periods, facilitating analysis and decision-making.
- 4. **Effective communication:** Visual representations are powerful for communicating data insights to a wider audience, including those with limited technical knowledge.
- 5. **Data exploration:** Graphs can be used to explore data and identify potential outliers or anomalies that may not be obvious in raw numerical data.

#### **Data presentation methods**

- 1. Bar charts: A bar chart or bar graph is a chart or graph that presents categorical data with rectangular bars with heights or lengths proportional to the values that they represent. The bars can be plotted vertically or horizontally. It is used to compare discrete categories with rectangular bars representing the values, ideal for simple comparisons between groups. Bar charts are of three types:
  - (a) Vertical Bar Graph: It represents the grouped data vertically.

- (b) Horizontal Bar Graph: It represents the grouped data horizontally.
- (c) Stacked Bar Graph: Each bar in the graph is a whole, and the segments or breaks in the bar are the different parts of that whole.
- 2. Histograms: A histogram is a chart that plots the distribution of a numeric variable's values as a series of bars. Each bar typically covers a range of numeric values called a bin or class; a bar's height indicates the frequency of data points with a value within the corresponding bin.
- 3. Pie charts: Pie chart is a popular and visually intuitive tool used in data representation, making complex information easier to understand at a glance. This circular graph divides data into slices, each representing a proportion of the whole, allowing for a clear comparison of different categories making it easier to digest complex information through a straightforward, intuitive format.
- **4. Line graphs:** A line graph or line chart is a graphical representation of the data that displays the relationship between two or more variables concerning time. It is made by connecting data points with straight-line segments.
- **5. Scatter plots:** A scatter plot is used to plot the relationship between two variables, on a two-dimensional graph that is known as Cartesian Plane on mathematical grounds.
- **6. Box and whisker plots:** A box and whisker plot or diagram (otherwise known as a boxplot), is a graph summarising a set of data. The shape of the boxplot shows how the data is distributed and it also shows any outliers.

Module 6: **Standard Costing** and Variance analysis

## **INTERMEDIATE**

Group II - Paper-12

Management Accounting (MA)

### **Module 6: Standard Costing**

tandard costing is an essential tool in cost accounting, helping organizations to assess the efficiency and performance of their manufacturing processes. It involves predetermining costs for producing goods or services over a specific period, providing a benchmark against which actual costs can be compared. By setting standards for materials, labor, and overheads, standard costing enables companies to evaluate their performance through variance analysis.

The primary goal of standard costing is to determine what the cost should be. By establishing predetermined costs based on technical information and current conditions, standard costing provides a realistic estimate of production costs. These standards act as a benchmark for measuring efficiency, assisting management in evaluating performance and identifying areas for improvement.

Standard costing is particularly beneficial for organizations engaged in repetitive manufacturing processes, where the inputs required for each unit of output can be specified. In such environments, standard costing enables companies to predict costs accurately and assess performance over time.

The comparison between standard costs and actual costs forms the basis of variance analysis, a key component of standard costing. Variances, or differences between standard and actual costs, are calculated for each cost element, allowing management to identify inefficiencies and take corrective action when necessary.

Overall, standard costing provides a structured framework for cost control and performance evaluation within an organization. By establishing clear benchmarks and enabling systematic analysis of variances, standard costing helps companies achieve greater efficiency and profitability in their operations.

Standard Costing vs. Budgetary Control Budgetary control involves planning and controlling using predetermined targets to assess departmental performance. Standard costing determines efficiency by comparing standards with actual performance, which is essential for budget planning. Budgets cover the overall organization, while standard costing focuses on specific products or services. Budgets rely on past data and future forecasts, while standard costs are based on technical information. Budgetary control has a broader scope, encompassing incomes, expenditures, and departmental

functions, while standard costing mainly focuses on manufacturing costs. Budgets set expenditure targets to avoid exceeding limits, while standard costing aims to achieve set standards. Budgetary control can be applied partially, but standard costing must be implemented wholly for all cost elements. Both systems complement each other, operating in different spheres.

**Definition of Standard Cost:** Standard cost is a predetermined estimate of the cost of producing goods or services, expressed in monetary terms. It serves as a benchmark for comparison with actual costs.

Concept of Standards: Standards are set for units to be produced, standard quantities of materials, standard labor rates, and standard overhead rates. They need regular review and updating to reflect changing conditions.

**Standard Costing:** Standard costing is an accounting system used by manufacturers to identify variances between actual costs and predetermined standard costs. It involves establishing standard costs, collecting actual costs, and comparing the two to analyze variances.

**Purpose of Standard Costing:** Standard costing serves two primary purposes:

- Valuing inventories and production costs for cost accounting purposes.
- Acting as a control mechanism by highlighting variances and areas needing corrective action through management by exception.

#### **Advantages of Standard Costing:**

- (i) Guides management in evaluating production performance.
- (ii) Helps management in setting standards.
- (iii) Useful in formulating production planning and price policies.
- (iv) Serves as a benchmark for determining variances.

#### **Limitations of Standard Costing:**

- (i) Expensive for small organizations.
- (ii) Difficult to establish standards due to technical aspects.
- (iii) Inapplicable for non-standardized products.
- (iv) Responsibility for uncontrollable variances cannot be easily fixed.

#### **Types of Standards:**

#### 1. Current Standard:

- Established for a short period, typically one year, based on current conditions.
- Can be an ideal standard (assuming perfect conditions) or an expected standard (considering realistic conditions and allowances for human error).

#### 2. Basic Standard:

 Set for an indefinite or long period and revised only with changes in material specifications or production technology.

#### 3. Normal Standard:

 Projected for a future period, covering a trade cycle of, for example, 5 to 10 years, to anticipate average sales and production levels.

#### **Multiple Choice Questions (MCQs):**

- 1. What is the primary purpose of standard costing?
  - a) To determine the selling price
  - b) To control and analyze costs
  - c) To replace financial accounting
  - d) To calculate tax liabilities
- 2. What is the key difference between standard costing and historical costing?
  - a) Standard costing is applied after production, while historical costing is applied before
  - b) Standard costing does not allow variance analysis, whereas historical costing does
  - c) Standard costing is predetermined, whereas historical costing is based on past data
  - d) Historical costing is only applicable in service industries
- 3. Which of the following is NOT a type of standard?
  - a) Basic standard
  - b) Expected standard
  - c) Mixed standard
  - d) Ideal standard

- 4. Which of the following is used to analyze the difference between actual costs and standard costs?
  - a) Variance analysis
  - b) Break-even analysis
  - c) Marginal costing
  - d) Cash flow analysis
- 5. What does the term "favorable variance" mean?
  - a) Actual costs exceed standard costs
  - b) Standard costs exceed actual costs
  - c) There is no difference between actual and standard costs
  - d) Costs remain unchanged over time
- 6. What is the main function of responsibility accounting in standard costing?
  - a) Assigning blame for inefficiencies
  - b) Ensuring adherence to tax laws
  - c) Evaluating performance of cost centers
  - d) Increasing production capacity
- 7. Budgetary control is broader in scope than standard costing because:
  - a) It includes both revenue and expenditure planning
  - b) It focuses only on cost reduction
  - c) It does not require pre-determined targets
  - d) It does not use variance analysis
- 8. In standard costing, the difference between standard and actual labor hours is known as:
  - a) Labour rate variance
  - b) Labour mix variance
  - c) Labour efficiency variance
  - d) Calendar variance
- 9. What is the primary role of variance analysis in cost control?
  - a) To determine tax liabilities
  - b) To measure production efficiency
  - c) To allocate direct costs
  - d) To control financial investments

- 10. What is the first step in implementing a standard costing system?
  - a) Setting up variance analysis
  - b) Determining cost centers
  - c) Recording actual costs
  - d) Calculating efficiency ratios
- 11. Which department is responsible for material price variance?
  - a) Sales department
  - b) Purchase department
  - c) Production department
  - d) Accounts department

#### **Answers:**

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

#### True and False

- 1. Variance analysis is not useful in managerial decision-making.
- 2. Standard costing can be used for controlling material, labor, and overhead costs.

- 3. Ideal standards assume perfect operating conditions.
- 4. Standard costing is suitable for businesses with non-repetitive production processes.
- 5. Standard costing is primarily used for financial reporting.

#### **Answers:**

1	2	3	4	5
F	T	T	F	F

#### Fill in the blanks

- 1. The difference between standard cost and actual cost is called \_\_\_\_\_.
- 2. Standard costing is most applicable to \_\_\_\_\_ companies.
- 3. Unfavorable variance means the actual cost is than the standard cost.
- 4. The main advantage of standard costing is cost
- 5. A standard is a norm against which the \_\_\_\_\_\_ performance can be measured

#### **Answer:**

1	Variance	2	Manufacturing
3	Higher	4	Control
5	Actual		

## **Module 6.2: Variance Analysis**

#### Variance Analysis

According to CIMA, variance refers to the deviation between planned or standard costs and actual costs. Analysing these variances enables managers to pinpoint areas that require corrective action, ultimately supporting effective decision-making. The primary purpose of standard costing is to facilitate variance analysis, which aids in informed managerial decisions aimed at enhancing efficiency and control.

#### Classification of Variances

#### A. Material Variances:

1. Material Cost Variance – Represents the difference between the standard cost of materials designated for actual output and the actual material cost incurred.

- **2. Material Price Variance** Occurs due to a discrepancy between the predetermined standard price and the actual price paid for materials.
- **3. Material Quantity or Usage Variance** Assesses material utilization efficiency, highlighting whether resources were effectively used.
- **4. Material Mix Variance** Captures the difference between the standard material composition and the actual composition used in production.
- **5. Material Yield Variance** A subset of the Material Usage Variance, this arises from factors such as spoilage, inferior material quality, or suboptimal production planning.

#### B. Direct Labour Variances:

- 1. Labour Cost Variance Measures the difference between the standard labour cost permitted for actual output and the actual wages paid.
- Labour Rate Variance Results from variations between the standard and actual hourly wage rates for the hours worked.
- **3. Labour Efficiency Variance** Evaluates labour utilization efficiency and determines if workforce productivity aligns with expectations.
- **4. Labour Idle Time Variance** Reflects the discrepancy between the standard cost of productive labour hours and the actual wages paid.
- **5. Labour Mix Variance** Arises from differences between the standard labour composition for actual hours worked and the actual composition used.
- **6. Labour Yield Variance** Captures variations in labour cost due to changes in yield or output compared to the standard expectations.

#### C. Variable Overhead Variances:

- Variable Overhead Cost Variance Compares the allocated standard variable overhead for actual output with the actual variable overhead expenses incurred.
- **2. Expenditure Variance** Represents the difference between the standard variable overhead cost for actual output and the actual overhead incurred.
- **3. Efficiency Variance** Arises from deviations in actual hours worked compared to the standard hours allowed, adjusted by the standard variable overhead rate per hour.
- 4. Variable Overhead Rate or Expenditure Variance Measures the difference between budgeted overheads for actual hours worked and actual overheads incurred.
- 5. Variable Overhead Efficiency Variance Highlights discrepancies between the standard variable overhead assigned to actual output and the actual hours worked at the standard rate.

#### D. Fixed Overhead Variances:

- **1. Expenditure Variance** Reflects an increase or decrease in fixed overhead costs.
- **2. Efficiency Variance** Indicates deviations in budgeted output per hours worked.

- **3.** Capacity Variance Measures variations in production output.
- **4. Idle Time Variance** Represents unabsorbed standard fixed overheads.
- **5.** Calendar Variance Accounts for the difference between budgeted and actual working days, often considered uncontrollable.

#### E. Sales Variances:

- **1. Sales Value Variance** Measures the difference between budgeted and actual sales revenue.
- **2. Sales Price Variance** Results from fluctuations between standard and actual sales prices.
- **3. Sales Volume Variance** Captures the difference between budgeted and actual sales quantities.
- **4. Sales Mix Variance** Compares revised standard sales with the original standard sales mix.

#### **Multiple Choice Questions (MCQs):**

- 1. Which of the following equations can be used to calculate a material quantity variance?
  - a) (AQ X AP) (AQ X SP)
  - b) (AP X SP) (AQ X SP)
  - c) (AQ X SP) (SQ X SP)
  - d) (AQ X SP) (AQ X AP)
- 2. To produce a particular batch of product, Foster Corporation paid its workers ₹12.00 per hour for 4,000 hours of work. The standards for the quantity of work represented by the batch were ₹12.50 per hour and 4,400 hours. What was the labor efficiency variance?
  - a) ₹2,000 favorable
  - b) ₹5,000 favorable
  - c) ₹5.000 unfavorable
  - d) ₹4000 unfavorable
- 3. Which of the following variance arises when more than one material is used in the manufacture of a product:
  - a) Material price variance
  - b) Material usage variance
  - c) Material yield variance
  - d) Material mix variance

- 4. The formula to estimate Labour Mix variance is
  - Total standard labour cost of actual output -Total actual cost of actual output
  - b) (Standard rate per hour Actual rate per hour)\* Actual Hours
  - c) (Revised standard time Actual time) \*
     Standard rate
  - d) Abnormal idle hours \* Standard hourly rate
- 5. ABC Ltd is operating a system of standard costing with closing of books done every quarter. The budgeted overheads are ₹2,55,000. Also, the overhead rate was pre-decided @ ₹ 5.1 per labour hours and during a quarter actually used 52,000 labour hours, instead of 51,000 hours. The actual overheads resulted in a rate of ₹ 4.9 per labour hours. What is volume variance?
  - a) ₹ 5,100 favorable
  - b) ₹ 5,200 favorable
  - c) ₹ 5,200 unfavorable
  - d) ₹ 5,100 unfavorable
- 6. Controllable variances are best disposed-off by transferring to:
  - a) Cost of goods sold
  - b) Cost of goods sold and inventories
  - Inventories of work-in-progress and finished goods
  - d) Costing profit and loss account
- 7. The firm's direct-labour rate variance was ₹ 4,800 unfavourable. Actual labour was 24,000 direct labour hours, at a cost of ₹ 168,000 for 25,000 units of finished product requiring 1 hour of direct labour each, at standard. What is the standard rate per direct labour hour?
  - a) ₹ 7.20
  - b) ₹ 6.80
  - c) ₹7.00
  - d) Cannot be determined from the information given

- 8. XYZ factory working for 50 hours per week employs hundred workers on a job work. The standard output is 200 units per gang hour and standard rate is ₹ 1 per hour. During a week in June, five employees were paid @ ₹ 1.20 per hour and ten employees were paid @ 80 paise per hour. Rest of the employees were paid @ standard hour rate. The actual number of units produced was 10,200. Determine labour cost variance
  - a) ₹ 100 favorable
  - b) ₹ 150 unfavorable
  - c) ₹ 150 favorable
  - d) ₹ 100 unfavorable
- 9. The data related to Production of T are for material X standard data and actual data are 40 kgs @ ₹ 10 and 55 kgs @ ₹ 9, respectively. The standard data and actual data for material Y are 50 kgs @ ₹ 5 and 35 kgs @ ₹ 7. Determine material usage variance.
  - a) ₹ 75 favorable
  - b) ₹ 75 unfavorable
  - c) ₹ 90 unfavorable
  - d) ₹ 90 favorable
- 10. While calculating material yield variance if Standard loss on actual mix is more than actual loss on actual mix then the variance is
  - a) Favorable
  - b) Unfavorable
  - c) Neither favorable nor unfavorable
  - d) None of the above
- 11. Which of the following equations can be used to calculate a material price variance?
  - a) (AQ X AP) (AQ X SP)
  - b) (AP X SP) (AQ X SP)
  - c) (AQ X SP) (SQ X SP)
  - d) (AQ X SP) (AQ X AP)

- 12. To produce a particular batch of product, Foster Corporation paid its workers \$12.00 per hour for 4,000 hours of work. The standards for the quantity of work represented by the batch were \$12.50 per hour and 4,400 hours. What was the labor efficiency variance?
  - a) 2,000 favorable
  - b) 5,000 favorable
  - c) 5,000 unfavorable
  - d) 7.000 unfavorable

#### **Answers:**

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

#### True and False

- 1. Variance analysis helps managers identify areas that require intervention for better decision-making.
- 2. Material Price Variance arises due to differences in the quantity of materials used.
- 3. Labour Efficiency Variance measures how effectively labour is utilized in production.
- 4. Sales Price Variance occurs when there is a difference between the actual sales price and the standard sales price.
- 5. Fixed Overhead Capacity Variance is calculated based on differences in labour rates.

#### Answers:

1	2	3	4	5
T	F	T	T	F

#### Fill in the blanks

- 1. The knowledge of may prompt the management to change product price, use substitute materials or find other offsetting sources of cost reduction.
- 2. is to be held responsible if they delayed in making purchase of unnecessarily expensive substitutes.
- is due to the difference between the standard rate specified and the actual rate paid for actual hours.
- may arise due to ability of the workers, inappropriate team of workers, inefficiency of production manager or foreman etc.
- is the difference between 5. the allowed/budgeted variable overheads based on the actual hours worked and the actual variable overheads incurred.

#### Answer:

1	Material Price Variance	2	Production department
3	Labour Rate Variance	4	Efficiency variance
5	Variable Overhead Rate		
-	or Expenditure Variance		

CMA FINAL COURSE

Syllabus 2022

Module 1: The Companies Act, 2013

**FINAL** 

Group III - Paper-13

Corporate and **Economic Laws** (CEL)

#### **ACCOUNTS AND AUDIT**

#### 1.0 ACCOUNTS:

Accounts are record of financial transaction of a company and needs to be finalised every year for a particular period commonly known as "accounting period". As per Companies Act, all companies shall follow an accounting year commencing from 1<sup>st</sup> April to 31<sup>st</sup> March.

#### 1.1 The proper books of account.

Every company shall maintain proper books of accounts which must satisfy the following:

- (i) True and fair view should be recorded.
- (ii) Accrual basis accounting: the income and expenditure should relate to particular period year even when they are received paid in the same year.
- (iii) Shall exhibit and explain the financial position.
- (iv) These shall disclosure relating to goods, i.e. goods sold, purchased etc.
- (v) Shall be prepared in ink and not in pencil.
- (vi) Shall be as per the accounting standard prescribed by the Central Government. It may be mentioned that Central Govt. has the power to prescribe accounting standards i.e. all companies should have uniform method of interpretation and calculation of profit valuation of assets, depreciation etc. Presently the standards issued by the Institute of Chartered Accountants of India is the applicable accounting standards.

(vii)Shall be kept in electronic form also.

#### 1.2 Keeping of books of account:

Books of accounts may be kept at the registered office of the company or any other place(s) in India as decided by the Board of Directors. The company shall within 7 days file with the Registrar a notice in writing giving the full address of the place. If the company has any branch office within or outside India proper returns of such branch offices shall be sent periodically to head office.

#### 1.3 Contents of books of account.

As per section 128 of the Companies Act, 2013, every company shall keep proper books of account in respect of the following:

- (i) All receipts and expenditures made by the company.
- (ii) The sale and purchase of the goods by the company.

- (iii) The assets and liabilities of the company.
- (iv) If the company is engaged in manufacturing, processing, production or mining activities the cost accounting records as prescribed by the Central Govt.

#### 1.4 Consolidation of Accounts:

As per section 129(3) of the new Act, Every company having more than one subsidiary shall prepare a consolidated financial statement of the company with all its subsidiaries in the same form and manner as that of its own which shall also be laid in the before the annual general meeting of the company along with the standalone financial statement of the company. The consolidated financial statement should contain the financial information relating to its subsidiaries, its associates companies and its joint ventures. The consolidated financial statement should be in Form AOC-1.

## 1.5 Annual accounts and legal requirements (Section 129 and 130)

- (1) Laying of annual accounts in the AGM: A balance sheet as at the end of the financial year and a profit and loss account along with the cash flow statement and statement showing changes in equity of the company for the financial year shall be laid before the AGM for the approval and adoption of the shareholders. Along with financial Statements consolidated financial statements of all the subsidiaries including Associate Companies and joint ventures of the company shall be laid before the Annual General Meeting.
- (2) The Forms and contents of the financial statements will be as per Schedule III.

## 1.6 Authentication of Balance sheet and Profit & loss account (section 134)

As per the new Companies Act, 2013 all the financial statements including the consolidated financial statement shall be required to be signed by the following persons:

- (i) By the Chairperson of the Company, where he is authorised by the Board.
- (ii) By two Directors out of which one shall be Managing Director, if any.
- (iii) Chief Financial Officer and Company Secretary of the Company, if required.

#### 1.7 Circulation of Annual accounts (section 136)

The company shall send the copies of the financial statements including consolidated financial statements to the members and every trustee for the debenture holder.

In addition to the above the company is required to place its financial statements including consolidated financial statements, if any, and all other documents required to be attached, thereto on the website of the company.

Further every company is also required to place separate audited accounts in respect of each of its subsidiary, if there is any.

Every company is required to keep its financial statements at the registered office of the company for inspection by any member and debenture trustee during business hours. A listed company may send only the salient features of the documents and keep the document for inspection as above.

# 1.8 Filling of Financial Statements (including consolidated financial statements) with Registrar of Companies (section 137)

- (a) within 30 days of Annual General Meeting.
- (b) If AGM is not held within 30 days of the day on which the AGM is ought have been held. The Registrar shall take on record the un-adopted financial statements as provisional statements till the accounts are adopted in the Annual General Meeting.
- (c) If the AGM held but the annual accounts are not prepared on that date the AGM shall be adjourned till the accounts shall prepared but such adjournment shall not be beyond the statutory period of AGM i.e. 18 months.
- (d) If the AGM is held but did not approve the annual accounts the accounts shall be filed within 30 days of the AGM specifying the reason of disapproval.
- (e) One person company shall file its financial statements along with all its necessary documents required to be attached with its financial statements to the registrar within 180 days of the closure of financial Year.
- (f) As per the new Act every company from now on shall attach financial statements of each of its subsidiary which are established outside India and do not have any place of business in India.

#### 1.9 Accounts of Holding and Subsidiary companies

Along with the balance sheet of the holding company the following documents of the subsidiary company shall be attached:

- (a) a copy of the balance sheet, profit & loss account, director's report.
- (b) A copy of the auditor's report.
- (c) A statement of the holding company's interest in the subsidiary.

#### 2.0 AUDIT (Section 139-148)

### 2.1 Meaning of Audit.

An audit is the independent examination of financial information of any entity, whether profit oriented or not, and irrespective of its size or legal form, when such an examination is conducted with a view to expressing an opinion thereon.

#### 2.2 qualification of an auditor

The following entities can be appointed as an auditor of the company.

- (a) A chartered Accountant in practice within the meaning of Chartered Accountants Act, 1949.
- (b) A firm where all the partners practicing in India as Chartered Accountants.
- (c) A holder of certificate in part B State entitling him to act as an Auditor of companies.

#### 2.3 Disqualification of an Auditor [section 141(3)]

The following persons shall be disqualified from being appointed as Auditors of a company:

- (i) A person who by himself, or his relative or partner-
  - (a) Is holding any security of the company or its subsidiary, or of its Holding or Associate Company or a subsidiary of such Holding Company. (Provide the relative may hold security or interest of not more than one thousand in the company).
  - (b) is indebted to the company or its Subsidiary, or its Holding or Associate Company or a Subsidiary of such Holding company in excess of such amount as may be prescribed.
  - (c) has given a guarantee or provided any security in connection with the indebtedness of any third person to the Company, or its Subsidiary,

or its Holding or Associate Company or a Subsidiary of such holding company for such amount as may be prescribed;

- (ii) a person or a firm who whether directly or indirectly has business relationship with the Company, or its Subsidiary, or its Holding or Associate Company or Subsidiary of such holding company or associate company of such nature as may be prescribed;
- (iii) a person whose relative is a director or is in employment of the company as a director or Key Managerial Personnel.
- (iv) A person who has been convicted by a Court of an offence involving fraud and a period of ten years has not elapsed from the date of such conviction.

#### 2.4 Number of audits [ section 141(g)]

The specified number of audit which one auditor can undertake is 20 companies out of which not more than 10 companies shall have the paid up capital of rupees twenty five lakhs or more. The aforesaid restriction is not applicable to One Person Company, Private Companies and small companies. However, the following audits of such auditor shall not be taken into account for computing the aforesaid limit:

- (a) Audit of an private company.
- (b) Audit of a guarantee company having no share capital.
- (c) Audit of a foreign company.
- (d) Internal audit undertake by him.
- (e) Audit of a co-operative society, trust and corporations that do not fall within the ambit of the Companies Act, 1956.
- (f) Tax audits.
- (g) Special audits and investigations.
- (h) A branch audit.

#### 2.5 Appointment of Auditors

# 2.5.1 Appointment of First auditors [section 139(1) & 140(1)]

- Shall be appointed by the Board of Directors within one month of the registration and on failure to do so the members shall appoint the auditors within 90 days of the incorporation of the company.
- (2) Shall hold office until the conclusion of the 1st AGM.

- (3) Notice of appointment should be given by the company to the auditor and the Registrar within 15 days of the appointment of the Auditor.
- (4) Shareholders can remove the 1<sup>st</sup> auditors before the conclusion of the 1<sup>st</sup> AGM by passing a special resolution and after obtaining the previous approval of Central Govt.

# 2.5.2 Appointment of subsequent auditors [section 139 & 140]

- (1) Appointment to be made in the AGM by the shareholders.
- (2) Shall hold the office from the conclusion of the first Annual General Meeting till the conclusion of its 6<sup>th</sup> Annual General meeting and thereafter till the conclusion of every 6<sup>th</sup> meeting.

No listed company and any other company as may be prescribed by the act shall appoint or re-appoint

- (i) an individual as Auditor in the same company for more than one term of 5 consecutive years.
- (ii) An audit firm as auditor for more than two terms of five consecutive terms.
- (3) After appointment the company shall intimate such information to the Auditors and Registrar within 15 days of the appointment of the Auditor.
- (4) Company can remove the auditors after obtaining the approval from the Central Govt. and with the permission of shareholders by way of a special resolution.

# 2.5.3 Automatic re-appointment of retiring auditors [section 139(9)].

Subject to the provisions and rules there under the retiring auditors shall be reappointed automatically at an Annual General meeting except in the following cases:

- (a) Where he is not disqualified for re-appointment.
- (b) Where he has not given the company or expressed his unwillingness to be re-appointed and act as an auditor.
- (c) A special resolution has not been passed to appoint some other auditor or providing expressly that he shall not be re-appointed.

#### 2.5.4 Appointment of auditors in casual vacancy [section 139(8)].

- (1) Shall be filled up by the Board of Directors except in the case where the casual vacancy is due to resignation of the auditor from the office. In such a case the casual vacancy shall be filled up by the shareholders in the general meeting held within 3 months of the recommendation of the Board.
- (2) During the vacancy co-auditors to continue audit.
- (3) Auditor appointed in the casual vacancy shall hold office until the conclusion of the next AGM.

#### 2.6 Remuneration to auditors

- (1) The Remuneration payable to an auditor shall be fixed by the shareholders in its general meeting.
- (2) The Board of Directors may fix by the remuneration of the first auditor appointed by it.

(It shall not include any expense incurred by the auditor in connection with the audit or any facility given to him by the company in connection with the audit and any remuneration for any service rendered by him to the company for any service at the request of the company.

#### 2.7 Cost Audit (section 148)

Cost audit when required.

- (1) The company is engaged in production, processing, manufacturing or mining activities.
- (2) The company pertains to the class of companies that are required by the Central Government to maintain the cost records.
- (3) An order is issued by the Central Government directing the company to conduct cost audit.
- (4) Under the new Act the Central Govt. can direct particulars relating to utilization of material or labour or such other items of cost to be included in books of accounts by such class of companies which are engaged in production of goods or providing such services.
- (5) The cost audit is required only for that particular year in respect of which the cost audit order has been issued.

Module 2: Evaluation of Risky Proposals for Investment Decisions

Module 13:
Financial
Derivatives –
Instruments for
Risk Management

**FINAL** 

Group III - Paper-14

Strategic Financial Management (SFM)

### Topic: Evaluation of Risky Proposals for Investment Decisions

#### • Certainty Equivalent Approach

The certainty equivalent coefficient (CEC) is a ratio that measures how much a risky cash flow is worth to a risk-averse investor. The CEC is the fraction of the expected cash flow that the investor would accept for sure instead of taking the risk. For example, if the expected cash flow of a project is ₹1,00,000 and the investor's CEC is 0.8, then the investor would be indifferent between receiving ₹80,000 for sure or taking the chance of getting ₹100,000. The CEC depends on the investor's risk preferences, the variability of the cash flow, and the opportunity cost of capital. The Certainty Equivalent (CE) approach in capital budgeting is used by replacing uncertain cash flows with guaranteed values based on risk tolerance. Consider the following illustration.

#### Problem

A Ltd. is considering one of two mutually exclusive proposals, Projects M and N, which require cash outlays of ₹8,50,000 and ₹8,25,000 respectively. The certainty-equivalent (C.E.) approach is used in incorporating risk in capital budgeting decisions. The current yield on government bonds is 6% and this is used as the risk-free rate. The expected net cash flows and their certainty equivalents are as follows:

	Project 1		Project 2	
Year-ended	Cash flow (₹)	C.E.	Cash flow (₹)	C.E.
1	4,50,000	0.8	4,50,000	0.9
2	5,00,000	0.7	4,50,000	0.8
3	5,00,000	0.5	5,00,000	0.7

Present value factors of Re. l discounted at 6% at the end of year 1, 2, and 3 are 0.943, 0.890 and 0.840 respectively. Required:

- (i) Which project should be accepted?
- (ii) If risk adjusted discount rate method is used, which project would be appraised with a higher rate and why?

#### **Solution**

#### (i) Calculation of NPV

#### **Project 1**

Year-ended	Cash flow (₹)	C.E.	Adjusted cash flow (₹)	PV factor @ 6%	Total PV (₹)
1	4,50,000	0.8	3,60,000	0.943	3,39,480
2	5,00,000	0.7	3,50,000	0.890	3,11,500
3	5,00,000	0.5	2,50,000	0.840	2,10,000
					8,60,980
Less: Initial Investment					8,50,000
Net Present V	10,980				

#### **Project 2**

Year-ended	Cash flow (₹)	C.E.	Adjusted cash flow (₹)	PV factor @ 6%	Total PV (₹)
1	4,50,000	0.9	4,05,000	0.943	3,81,915
2	4,50,000	0.8	3,60,000	0.890	3,20,400
3	5,00,000	0.7	3,50,000	0.840	2,94,000
					9,96,315
Less: Initial Investment					8,25,000
Net Present Value					1,71,315

**Comment:** The NPV of Project 2 is higher than Project 1. Hence, Project 2 is suggested to accept.

(ii) The certainty-equivalent of Project 1 and Project 2 are 2.0 and 2.4 respectively and it gives an indication that Project 1 is riskier than Project 2. Therefore, if risk adjusted discount rate method is used, Project 1 would be analyzed with a higher rate.

#### · Risk Adjusted Discount Rate

A Risk Adjusted Discount Rate (RADR) is a rate that adds a risk premium to the risk-free rate to take into account the risk associated with future cash flows the firm expects from an investment project. Every financial investment or business project comes with inherent risks. These risks, if not adequately accounted for, may lead to inaccurate analyses and potentially problematic financial decisions. The Risk Adjusted Discount Rate serves as a solution, ensuring that the "riskiness" or uncertainty of an investment is adequately reflected in the decision-making process. Consider the following illustration.

#### Problem

XL Automobile Ltd. is considering investment in one of three mutually exclusive projects A, B and C. The company's cost of capital is 15% and the risk-free rate of return is 10%. The income-tax rate for the company is 40%. FASL has gathered the following basic cashflow and risk index data for each project.

Project	A	В	С
Initial investment (₹)	15,00,000	11,00,000	19,00,000
Cash inflows after-tax for year (₹):			
1	6,00,000	6,00,000	4,00,000
2	6,00,000	4,00,000	6,00,000
3	6,00,000	5,00,000	8,00,000
4	6,00,000	2,00,000	12,00,000
Risk index	1.80	1.00	0.60

Using the risk adjusted discount rate, determine the risk adjusted NPV for each of the project. Which project should be accepted *by* the company? Give reasons.

Note. Present value of Re. 1 for five years:

Rate	Year 1	Year 2	Year 3	Year 4	Year 5
9%	0.9174	0.8417	0.7722	0.7084	0.6499
11%	0.9009	0.8116	0.7312	0.6587	0.5935
13%	0.8850	0.7831	0.6931	0.6133	0.5428
15%	0.8696	0.7561	0.6575	0.5718	0.4972
17%	0.8547	0.7305	0.6244	0.5337	0.4561
19%	0.8403	0.7062	0.5934	0.4987	0.4190

#### **Solution:**

The Risk Adjusted Discount Rate (RADR) is determined by the following formula:

$$RADR = R_f + [R_i \times (K_0 - R_f)]$$

Where,  $R_f = Risk$  free rate

 $K_0 = \text{Cost of capital}$ 

 $R_i = Risk index for the project$ 

$$A = 10 + [1.80 \times (0.15 - 0.10)] = 0.19 \text{ or } 19\%$$

$$B = 10 + [1.00 \times (0.15 - 0.10)] = 0.15 \text{ or } 1596$$

$$C = 10 + [0.60 \times (0.15 - 0.10)] = 0.13 \text{ or } 13\%$$

### Calculation of Risk Adjusted NPV of Three Projects (₹ in lakh)

#### Project A

Year	Cash inflows after tax	P.V. factor @ 19%	Present Value
1	6	0.8403	5.0418
2	6	0.7062	4.2372
3	6	0.5934	3.5604
4	6	0.4987	2.9922
Total PV			15.8316
(-) Investment			15.0000
NPV			0.8316

#### Project B

Year	Cash inflows after tax	P.V. factor @ 19%	Present Value
1	6	0.8696	5.2176
2	4	0.7561	3.0244
3	5	0.6575	3.2875
4	2	0.5718	1.1436
Total PV			12.6731
(-) Investment			11.0000
NPV			1.6732

#### Project C

Year	Cash inflows after tax	P.V. factor @ 19%	Present Value
1	4	0.8850	3.5400
2	6	0.7831	4.6986
3	8	0.6931	5.5448
4	12	0.6133	7.3596
Total PV			21.1430
(-) Investment			19.0000
NPV			2.143

**Comment:** From the above calculations it is observed that NPV of C is highest and hence project C is suggested to be implemented.

### Topic: Financial Derivatives – Instruments for Risk Management

#### • Multiple Choice Questions

- 1. M buys a call option contract for a premium of ₹ 200. The exercise price is ₹ 25 and the current market price of the share is ₹ 22. If the share price after three months reaches ₹ 30, what is the profit made by M on exercising the option? A contract is for 100 shares. Ignore transaction charges.
  - (A) ₹200
  - (B) ₹ 300
  - (C) ₹ 100
  - (D) ₹ 600

#### Answer: (B)

Strike price – price after 3 m = 25-30 = ₹ 5 increase. Hence gain by exercising call option is 5 x 100 shares = ₹500. Less premium = ₹ 200. Net gain = 500 - 200 = 300

- 2. Presently, a company's share price is ₹ 120. After 6 months, the price will be either ₹ 150 with a probability of 0.8 or ₹ 110 with a probability of 0.2. A call option exists with an exercise price of ₹ 130. What will be the expected value of call option at maturity date?
  - (A) ₹20
  - (B) ₹ 16
  - (C) ₹ 12
  - (D) ₹ 10

#### Answer: (B)

Expected value of call option:

Expected share price (₹)	Exercise price (₹)	Call value (₹)	Probability	Call option value (₹)
150	130	20	0.8	16
110	130	0	0.2	0
				16

- 3. A stock is currently selling at ₹ 270. The call option to buy the stock at ₹ 265 costs ₹ 12. What is the Time Value of the option?
  - (A) ₹5
  - (B) ₹17
  - (C) ₹ 7
  - (D) None of (A), (B) or (C)

#### Answer: (C)

Time Value of option = Call premium – Intrinsic Value = ₹ (265+12)- (₹270)=₹ 7

#### • Comprehensive Problems

#### Problem 1

The equity shares of B Ltd. are being sold at  $\stackrel{?}{\stackrel{?}{?}}$  315. A 3-month call option is available for a premium of  $\stackrel{?}{\stackrel{?}{?}}$  9 per share and a 3-month put option is available for a premium of  $\stackrel{?}{\stackrel{?}{?}}$  8 per share. Find out the net pay off of the holder of the call option and put option given that:

- (i) The strike price in both cases is ₹ 330 and
- (ii) The share price on the exercise day is ₹ 300 or ₹ 315 or ₹ 345 or ₹ 360.

#### **Solution**

Call option holder:

Exercise Price	330	330	330	330
Spot Price	300	315	345	360
Option	Lapse	Lapse	Exercise	Exercise
Gain	-	-	15	30
Premium	-9	-9	-9	-9
Net Pay off	(9)	(9)	+6	+21

#### Put option holder

Option	Exercise	Exercise	Lapse	Lapse
Gain	30	15	-	-
Premium	-8	-8	-8	-8
Net Pay off	+22	+7	(8)	(8)

Module 3: Grievance redressal

# **FINAL**

Group III - Paper-15

**Direct Tax Laws** and International Taxation (DIT)

### Appeal before JCIT (Appeals)

he Income Tax Act, 1961, provides comprehensive mechanisms for addressing grievances related to tax assessments and other orders passed by tax authorities. Two key mechanisms are appeals and revisions, which ensure that errors can be rectified and that justice is served. An appeal is a statutory remedy provided to taxpayers who are aggrieved by any order of the tax authorities. The appeal process ensures that taxpayers have the opportunity to have their case reviewed and decided upon by higher authorities, thereby maintaining fairness in tax administration. The multi-tiered appeal structure allows for thorough scrutiny and correction of errors, ensuring that taxpayers are treated fairly.

Revisions are another mechanism provided under the Income Tax Act to correct errors in tax orders. They allow tax authorities to correct errors that may adversely affect revenue collection and provide taxpayers with a means to rectify mistakes and seek justice. Unlike appeals, revisions can be initiated either by the tax authorities on their own motion or by the taxpayer through an application.

The right to appeal under income tax law is a creation of statute and not an inherent right. Appeal can be filed only against orders listed in the Income Tax Act and not any order.

Initially, the following course of action is available in the Income-tax Act:

# Assessee Rectification u/s 154 Appeals Revision u/s 264

# Rectification u/s 154 Revision u/s 263 Reassessment u/s 147

In general, any cases being filed and heard first in Civil Court, thereafter aggrieved parties may file a case in High Court and for further relief or justice, aggrieved party finally file case in Supreme Court. However, the route of revenue cases is different. Any Assessee or any deductor or any collector of tax at source, who is aggrieved from the order passed by the Assessing officer, shall first file an appeal to the Joint Commissioner (Appeal) / Commissioner (Appeals). Then case shall be moved and an appeal shall be filed to Appellate tribunal, by the assessee or Deductor or Collector of tax at source or the department, if they are aggrieved with the order passed by the Commissioner (Appeal). Thereafter case shall be moved to High Court, if assessee or Deductor or Collector of tax at source or the department is aggrieved to the order passed by the Appellate tribunal and at last to Supreme Court, if Assessee or Deductor or Collector of tax at source or the department is aggrieved to the order passed by the High court.

### Appeals before Joint Commissioner (Appeals) [JCIT (A)] [Sec. 246]

As per the existing scheme for appeals, the first appellate authority for an assessee aggrieved by any order issued under the Act is the Commissioner (Appeals). Such Commissioner (Appeals) has the powers to confirm, reduce, enhance or annul/cancel an order of assessment or an order of penalty, after providing an opportunity of being heard to the assessee and the AO. The order passed by the Commissioner (Appeals) are appealable before the Appellate Tribunal.

However, as the first authority for appeal, Commissioner (Appeals) were overburdened due to the huge number of appeals and the pendency being carried forward every year. In order to clear this bottleneck, a new authority for appeals is created at Joint Commissioner/ Additional Commissioner level to handle certain class of cases involving small amount of disputed demand. Such authority has all powers, responsibilities and accountability similar to that of Commissioner (Appeals) with respect to the procedure for disposal of appeals

Any assessee aggrieved by any of the following orders of an Assessing Officer (below the rank of Joint Commissioner) may appeal to the Joint Commissioner (Appeals) against:

- a. an intimation u/s 143(1), where the assessee objects to the making of adjustments; or
- b. Any order of assessment u/s 143(3) or sec. 144, where the assessee objects to the amount of income assessed, or to the amount of tax determined, or to the amount of loss computed, or to the status (Status means the category under which the assessee is assessed as "individual", "Hindu undivided family" and so on) under which he is assessed;
- an order of assessment, reassessment or recomputation u/s 147;
- d. an intimation u/s 200A(1);
- e. an order u/s 201;
- f. an intimation u/s 206C(6A);
- g. an order u/s 206CB(1);
- h. an order imposing a penalty under Chapter XXI; and
- i. an order u/s 154 or sec. 155 amending any of the orders mentioned above

#### **Exception**

No appeal shall be filed before the Joint Commissioner (Appeals) if any of the aforesaid order is passed by or with the prior approval of, an income-tax authority above the rank of Deputy Commissioner.

#### **Taxpoint**

Transfer of appeals: Where any appeal filed against any of the aforesaid order is pending before the Commissioner (Appeals), the Board or authorised income-tax authority may transfer such appeal and any matter arising out of or connected with such appeal and which is so pending, to the Joint Commissioner (Appeals) who may proceed with such appeal or matter, from the stage at which it was before, it was so transferred.

The Board or authorised income-tax authority may transfer any appeal which is pending before a Joint Commissioner (Appeals) and any matter arising out of or connected with such appeal and which is so pending, to the Commissioner (Appeals) who may proceed with such appeal or matter, from the stage at which it was before, it was so transferred.

- After such transfer of an appeal, the appellant shall be given an opportunity of being reheard.
- The provision shall not apply to any case or any class of cases as specified by the Board.
- Scheme for disposal of the appeal: For the purposes of disposal of appeal by the Joint Commissioner (Appeals), the Central Government may make a scheme so as to dispose of appeals in an expedient manner with transparency and accountability, by eliminating the interface between the Joint Commissioner (Appeals) and the appellant, in the course of appellate proceedings to the extent technologically feasible and direct that any of the provisions of this Act relating to jurisdiction and procedure for disposal of appeals by the Joint Commissioner (Appeals), shall not apply or shall apply with such exceptions, modifications and adaptations as may be specified in the notification.

### Revision u/s 263 -vs.- Revision u/s 264

Sec. 263 of the Income Tax Act, 1961, stands as a custodian, guarding the integrity of the tax assessment process in India. It is a mechanism to rectify orders perceived as both erroneous and prejudicial to the interests of the revenue. There is a virtually parallel provision – Section 264 of the Act, which also empowers the Commissioner to revise any order other than the order under Section 263, passed by an authority subordinate to him, on his own motion or on an application by the assessee for revision.

A comparative study of revision u/s 263 & revision u/s 264 are given here in below:

Basis	Sec. 263	Sec. 264
Which order can be revised	Order, which is prejudicial to the interest of revenue.	Order, which is prejudicial to the interest of assessee.
Proceedings at the motion of	At the own motion of the authorities.	At the own motion of the authorities or on the application of the assessee.
Scope	Revision is possible of the issues which have not been considered and decided in an appeal, i.e., doctrine of partial merger is applicable	Revision u/s 264 is not possible on any issue if an appeal has been filed, i.e., doctrine of total merger is applicable
Time limit for application	Assessee does not apply	Within 1 year from the date on which the order in question was communicated to the assessee
	2 years from the end of the financial year in which the order sought to be revised was passed.	<ul> <li>Where the authorities act on his own motion: within 1 year from the date of original order.</li> <li>Where the application is made by the assessee: within 1 year from the end of the financial year in which such application is made.</li> </ul>
Fee	Not applicable	₹ 500 where the application for revision is made by the assessee.
Appeal against order	Appeal can be filed to the Tribunal	No appeal can be filed.
Beneficial to	Revenue	Assessee

Appeals and revisions are fundamental aspects of the income tax system that uphold the principles of fairness and justice. The appeal process provides a structured approach for taxpayers to challenge adverse orders and seek redressal. Revisions, on the other hand, ensure that errors in tax orders are corrected, whether initiated by the tax authorities or the taxpayers. Understanding these mechanisms is crucial for both taxpayers and tax professionals to navigate the complexities of the income tax system and safeguard their rights and interests. By providing avenues for review and correction, the Income Tax Act ensures that the tax administration process remains transparent, accountable and just.

Module 8: Assignment

**FINAL** 

Group III - Paper-16

Strategic Cost Management (SCM)

### **Assignment**

#### 1.0 Introduction:

Assignment is a special kind of linear programming problem. There are many situations where the assignment of people or machines etc. may be called for. Assignment of workers to machines, clerks to various check-out counters, salesmen to different sales areas are typical examples of these. The Assignment is a problem because people possess varying abilities for performing different jobs and therefore the costs of performing jobs by different people are different. Thus, in an assignment problem, the question is how the assignments should be made in order that the total cost involved is minimized or profit earned is maximised.

There are four methods of solving an assignment problem. These are:

- i. Complete Enumeration Method
- ii. Simplex Method
- iii. Transportation Method and
- iv. Hungarian Method

Here we will discuss mainly the Hungarian Method to solve assignment problems.

# 1.1 Steps involved to solve assignment problem through Hungarian method:

The following steps are involved in minimization of an assignment problem under this method:

**Step 1: Row Operation:** Locate the smallest cost element in each row of the given cost table. Now subtract this smallest element from each element in that row. As a result, there shall be at least one zero in each row of this new table, called the reduced cost table.

**Step 2: Column Operation:** In the reduced cost table obtained, consider each column and locate the smallest element in it. Subtract the smallest value from every entry in the column. As a consequence of this action, there would be at least one zero in each of the rows and columns of the second reduced cost table.

**Step 3: Test of Optimality:** Draw the minimum no. of horizontal and vertical lines (not the diagonal ones) that are required to cover all the zero elements. If the no.

of lines drawn is equal to 'n' (the no. of rows/columns of the given Cost Matrix) the solution is optimal and proceed to step 6. If the no. of lines drawn is smaller than 'n' go to step 4.

**Step 4: Improved Matrix:** Select the smallest uncovered (by the lines) cost element. Subtract this element from all uncovered elements including itself and add this element to each value located at the intersection of any two lines. The cost elements through which only one line passes remain unaltered.

# Step 5: Repeat Step 3 and 4 until an optimal solution is obtained.

#### **Step 6: Optimal solution making Job Assignment:**

- (a) Locate a row which contains only one zero element. Assign the job corresponding to this element to its corresponding person. Cross out the zero's if any in the column corresponding to the element, which is indicative of the fact that the particular job and person are no more available.
- (b) Repeat (a) for each of such rows which contain only one zero. Similarly, perform the same operation in respect of each column containing only one 'zero' element, crossing out the zero(s), if any, in the row in which the elements lies.
- (c) If there is no row or column with only a single 'zero' element left, then select a row/column arbitrarily and choose one of the jobs (or persons) and make the assignment. Thus in such a case, alternative solutions exist.

#### 1.2 Special cases in Assignment Problem:

Some special cases of Assignment problem which are explained as under:

- Maximization Problem: Such problems arise
  when it is a case of revenue maximisation or profit
  maximisation. Methodology adopted for such
  problem is as follows:
  - Convert the supplied profit matrix to a Relative loss Matrix by subtracting the entry of each cell from the highest one among all entries of matrix,

- Now use Hungarian method to minimize the relative loss by using steps for minimisation problem,
- Once assignments are available, find out maximum value of the total profit by considering the supplied values of profits against the assigned cells.
- 2. Unbalanced Assignment problem: A problem is said to be unbalanced if number of its rows and columns are unequal. To solve such problems additional row or columns has to be introduced with all zero entries that is known as Dummy Row or Dummy Column. After inserting dummy row or column, problem can be solved like a balanced problem.
- 3. Problems with Multiple Optimum Solution:
  Such solutions exist if while assigning it is seen that neither any rows nor column is having single zero.
  In this case one has to firstly check the rows and columns to find one with two zeros. One of these should be chosen arbitrarily and a square to be drawn around it to mark an assignment at that cell.
  The other zero in the same row or column should be crossed out (same for situations with more than two zeros). Alternatively the cell whose zero is bounded by drawing a square around it should be crossed out and other one should be assigned. This will lead to two alternative solutions. This kind of solution can be understood with the help of Illustration given below.
- 4. Problems with Restriction on Assignment or Prohibited Assignment: Sometimes in an assignment problem there is a case where particular person or a resource cannot be assigned to a particular activity or job. To handle such problem a very high cost (or time which is to be minimized) is assigned to that cell of the matrix which is meant for this restricted or prohibited assignment. This automatically restricts any assignment at that cell. Very high cost or infeasible assignment is generally represented by ∞ or M.

#### 1.3 Illustration: Problem Multiple Assignments

Find the optimal solution for the assignment problem with the following cost matrix

	Sales Territories (Cost in ₹ Lakhs)				
		I	II	III	IV
Salesmen	A	30	25	26	28
	В	26	32	24	20
	С	20	22	18	27
	D	23	20	21	19

#### **Solution:**

#### **Step 1: Row Operation:**

	Sales Territories (Cost in ₹ Lakhs)				
		I	II	III	IV
Salesmen	A	5	0	1	3
	В	6	12	4	0
	С	2	4	0	9
	D	4	1	2	0

**Step 2: Column Operation:** 

	Sales Territories (Cost in ₹ Lakhs)				
		I	II	III	IV
Salesmen	A	3	0	1	3
	В	4	12	4	0
	С	0	4	0	9
	D	2	1	2	0

**Step 3: Optimality:** 

	Sales Territories (Cost in ₹ Lakhs)				
		I	II	III	ΙV
Salesmen	A	3	Q	1	3
	В	4	12	4	•
	С	0	4	0	•
		Ľ			1
	D	2	1	2	Ф

Here the number of rows or columns is 4, and no of lines are 3, this solution is not optimal.

#### **Step 4: Improved Matrix**

The smallest uncovered element is 1. Subtract 1 from all those elements which are not covered. Add 1 in all elements which are at the intersection of two lines.

Then proceed with the new matrix.

	Sales Territories (Cost in ₹ Lakhs)				
		I	II	III	ΙV
		2		0	1
	71		U	U	4
Salesmen	В	3	12	3	•
Salesilleli			5	0	10
		U	3	U	10
	D	1	1	1	ø

Here the number of rows or columns is 4, and no of lines are 3, this solution is not optimal.

Step 5: Repetition of Step 3 and 4 until an optimal solution is obtained.

#### **Improved Matrix 2**

The smallest uncovered element is 1. Subtract 1 from all those elements which are not covered. Add 1in all elements which are at the intersection of two lines. Then proceed with the new matrix.

Here improved matrix is being arise in the form of three matrices mentioned as below:

	Sales Territories (Cost in ₹ Lakhs)				
		I	II	III	ΙV
G.1	<del>- A -</del>	2	0	0	4
Salesmen	В	2	11	2	•
	_C	0	5	0	11
	<del>-D-</del>	0	0	0	•

OR

	Sales Territories (Cost in ₹ Lakhs)				
		I	II	III	ΙV
	A	2	[0]	0	4
Salesmen	В	2	11	2	0
	_C	[0]	5	0	11
	_D		0	ГО	
	D	Ü	0	U	Ч

OR

	Sales Territories (Cost in ₹ Lakhs)				
		I	II	III	IV
~ .	Λ.	2	Λ		4
Salesmen	Λ		U	U	,
	В	2	11	2	Ф
	C	Ω	5	0	1 1
		U		U	11
		Λ	П	0	h
	ט	U	U	0	P

In all 3 matrices, the number of rows or columns is 4, and number of lines covering zeros are also 4. Hence the solution is optimal. Now assignments can be made as follows:

Step 6: Optimal solution making Job Assignment: **Option 1** 

Salesmen	Sales Territories	Minimum Cost in ₹ Lakhs
A	II	₹ 25
В	IV	₹ 20
С	III	₹ 18
D	I	₹ 23
Total Minimum Cost in ₹ is		₹86

OR

#### **Optimal solution making Job Assignment:**

#### Option 2

Salesmen	Sales Territories	Minimum Cost in ₹ Lakhs	
A	II	₹ 25	
В	IV	₹ 20	
С	I	₹ 20	
D	III	₹21	
Total Minimum	Total Minimum Cost in ₹ is		

OR

#### **Optimal solution making Job Assignment:**

#### **Option 3**

Salesmen	Sales Territories	Minimum Cost in ₹ Lakhs
A	III	₹ 26
В	IV	₹ 20
С	I	₹ 20
D	II	₹ 20
Total Minimum	₹ 86	

Learning Take: In case of multiple assignments, total minimum cost or maximum profit will be same for all alternative options.

Module 8: Audit of Different Service Organisations

## **FINAL**

Group IV - Paper-17

Cost and Management Audit (CMAD)

### COST AND MANAGEMENT AUDIT Topic covered: Audit of Different Service Organisations

#### 1. Some important tips for Management Audit in **Different Organisations**

- ▲ Documents with respect to Organization structure and type of Organization
- ▲ Legislative bindings i.e., governing laws of the Organization
- Organizational guidelines for day to day operations
- ▲ Management and structure for authorization and supervision of activities
- ▲ Alignment of activities with organizational goals, Objectives, Mission and Vision
- ▲ Activity-wise internal control structure
- Internal checks over approval mechanism
- Documentation, evidence and supporting records to validate accounting entries
- Procurement of Assets, physical existence, movement and maintenance
- Payables, liabilities and payments made
- Recoveries scheduled and actuals
- Timelines and actions of accounting recognitions
- Review and monitoring process for activities
- Compliance status
- 2. The Scope of Management Audit, depend on the requirement and expectation of Management from the Team. It is pertinent to mention here, the knowledge about entity's business and operation is the prime factor to deliver quality guidance by the Management Audit Team. In this issue we will cover important Management Audit review areas and related standard scope for the following service organizations.

#### **Electricity Distribution/Supply**

- ▲ Applicable provisions of Indian Electricity Act and Electricity Supply Act with respect to maintenance of Accounts, Reserves etc.
- A Recording of consumption of electricity by Consumers
- ▲ Applicable tariff for different category of consumers
- ▲ Collection from consumers at collection points from collection Agents, online credits etc.

- ▲ Consumer number-wise collection reconciliation
- Installation and Equipment/Meter sale, reconnection proceeds and reconciliation
- ▲ Overdue consumer numbers and necessary steps
- Reconciliation of Rebates, applicability/ eligibility and availing the same
- ▲ Accounting of Security Deposits (SD) received and up-dation due to higher consumption
- Collection of enhanced SD
- Expense booking (all expenses) and payments
- Stores, issue procedure and consumption
- ▲ Fund allocation for capital expenditure and Capex spent
- ▲ Fuel surcharge and computations, claims
- ▲ Depreciation and other applicable charges

#### b. Shipping Agency

- ▲ Fleet size including owned Vessels and Chartered Vessels
- ▲ Flag of Chartered Vessels and related fees
- Third Party Chartering Agreements (Time Charter and Cargo Charter) with financial exposure
- ▲ Type /Capacity of Vessels/Tankers (Suez Max, Panamax, VLCC etc.) and related capacity with cargo specification
- ▲ Vessel Registration and charges
- Insurance and Depreciation
- Computation of 'Demurrage and Detention' vs 'Dispatch' as per lay can period & Force majure and delays (without penalty)
- Loading and Unloading operation
- Portage and other charges payable
- Benchmarking of freight against Baltic freight
- Ballasting and Fuelling cost
- ▲ On board crew and legal formalities

#### **Mining Organization**

- A Participation in bidding process acquire 'mining rights'
- ▲ Documentation as to 'right to carry out mining operations'

- ▲ Conditions as to stowing and plantations during mining operations
- A Permission for operations with specific conditions e.g digging instead of blasting
- ▲ Lifting volume and royalty and Govt. levies as maintained in lifting Register
- Expenses on removal of overburdens, stowing operations and greenery
- ▲ Contractual arrangements for lifting and transportation from pit to weigh bridge and further
- ▲ Listing of owned capital assets used in operation and depreciation there on
- ▲ Maintenance expenditure and fuel cost for equipment and vehicles
- A Payments made to Contractors (lifting basis and/or manpower basis)
- A Payment for Equipment hiring charges (volume based and/or period based)
- Lestimation of mined product lying near pit (ot removed)
- ▲ Safety measures at site
- Appointment for Statutory positions e.g., Mines Safety Officer, Mines Manager etc.
- ▲ Quality assessment (exclusion of offspecification) of lifted material
- ▲ Lifted volume certification and reconciliation

#### d. Passenger Transport Organization

- Capital Budget for Vehicle purchases
- Budget for major overhauling and actual spent
- Vehicles Registration and Ownership right
- Obtaining rout permits for operating in State/ National destinations
- Monitoring of running expenses like fuel, tyres replacement, spare parts life cycle etc.
- Operators (Driver, Helper etc.) attendance and payments
- Sale of Tickets (number control over tickets) and booking charges
- Passenger per Km. cost and Revenue (guide to fix Ticket /Revenue)
- Vehicle-wise Log Book maintenance and checking for mileage, fuel performance etc.
- Finance cost and allocation to Vehicles for cost accumulation purposes

- Compliance w.r.t PUC (Pollution Under Control) certification, Certificate of Fitness etc.
- Cash, petty cash physical count against Cash Collection Statement

#### e. Port/Bulk Terminal Service

- Available facilities (Loading, Unloading, Anchoring, Dry-docking etc.) and applicable tariff structure against each
- Agency agreements for specified period and with facility-wise tariff structure
- Pass-on cost and inclusion in agreement
- Accounting for services delivered and billing
- Cost for dredging and creek cleaning for maintaining floatation
- Maintenance expenses for capital assets like floating cranes, mechanical berths, weigh facilities, storage areas etc.
- Pilotage facilities and cost
- Force majure and it's inclusion in Agreements
- Adequate Security arrangements to protect goods and facilities and cost therefor
- Sourcing of technical grade employees like swimmer, anchoring staff etc.
- Financing arrangement and cost thereon
- Tracking performance with gestation period of the Project

#### f. Newspaper Printers (except electronic media)

- Circulation statistics
- Distribution and reach strategy
- Commission structure of Agents engaged in distribution
- Cost on Permanent News Reporter, Photographer and news collected through freelancers
- Newsroom activities and editing before printing the news item
- Advertisement tariff applicable for different days based on visibility (size) and prominence of news page
- Advertisement booking, date of insertion and collection
- Co-ordination and cost for printing newspaper in different presses (capacity constraint at a single place)

- Newspaper return from Stands, acknowledgement of receipts and value adjustment
- Honorarium agreed and paid to Guest Column writers
- Purchase Orders for Newsprint, Ink etc., Receipt of Material and payment for such Expenses
- Maintenance of Printer and Depreciation of equipment
- Cost of preserving Published copies (preferable electronic mode) for future reference

#### Real Estate Developer

- Development right over the Land ( purchase or joint development)
- Project approval from appropriate authority
- Land Sketch and development plan
- Project cost estimation and financial arrangement/tie-ups
- Procurement of necessary materials for construction /development
- Number of Units and budgeted Cost for each
- Specific inclusions and exclusions in Sale agreements with the Buyer to suit their purpose
- Cost plus Contract
- Partial completions and recognition of revenue
- Obtaining necessary certification for part /full completion of the Project
- Sale deeds and handover of ownership rights
- Collection of proceeds
- Update and completion of accounting process

#### 3. Management Audit Scope based on perceived risk of a multiproduct retail business Risks-

- Non-conversion of foot falls into foot print ( cash bell not ringing)
- Shop lifting (about 1 % of sales)
- Lack of tracking competition and their strategy
- Lower allocation on spent of household
- Product boycott

- Supply chain management
- Economic recession
- **Inventory Management**
- Non-leveraging Brand for penetration
- Price Mix Branded and unbranded (own)
- Shelf Product mismatch
- City Tier and Product mismatch
- High operating cost
- Failure in ambience creation
- Data theft

To address the above risk, the following need to form part of Scope-

- Customer conversion, Non-leveraging Brand for penetration, City Tier and Product mismatch (Shop visit data-Sales Invoices of Customers-Repeat Customers- Product range)
- Shop lifting (CC TV Camera positioning & shots to identify theft-recovery-staff positioning & responsibility)
- Lack of tracking competition and their strategy (Business Goals and roles, Competitor pricing and penetration, cost, Operational areas and Products)
- Economic recession, Lower allocation on spent of household (For Posh, Urban, Semi-urban and Tier of Cities authentic datum, turnover and trend, micro economic scenario)
- Product boycott (Banned or poor service by Producer, non-servicing of shelf by supplier/ producer, category success product identification, loss of revenue)
- Supply chain management, Inventory Management ,Shelf Product mismatch (JIT Inventory, shelf strategy, Warehouse management, supply time lag)
- Product Mix-Branded and unbranded (own), Price war (Schemes for sale, timeliness of product placement, gross margin and impacted turnover, role of brand partners, price discovery)
- High operational cost (Rental, Staff cost, Operating expenses; benchmarking with competition, EBIT)
- Data theft (IT, Service, Data privacy, vulnerability of IT System, Master maintenance)

Module 4:
NBFCs –
Provisioning Norms,
Accounting and
Reporting

Module 5:
Accounting
for Business
Combinations and
Restructuring

# **FINAL**

Group IV - Paper-18

Corporate Financial Reporting (CFR)

### Topic: NBFCs - Provisioning Norms, Accounting and Reporting

#### · Provision for Loans, advances and other credit facilities including bills purchased and discounted

The provisioning requirement in respect of loans, advances and other credit facilities including bills purchased and discounted shall be as under:

Type of Assets	Provision Required			
	As per the "Non-systemically Important Non-Banking Financial	l (Non-Deposit Accepting		
Standard Assets	or Holding) Companies Prudential Norms (Reserve Bank) Direc	ctions, 2015", every Non-		
Standard 1 1550t5	Banking Financial Company shall make provision for standard as	sets at 0.25 percent of the		
	outstanding.			
	As per the "Systemically Important Non-Banking Financial (N	Non-Deposit Accepting or		
	Holding) Companies Prudential Norms (Reserve Bank) Direct	tions, 2015", every Non-		
	Banking Financial Company shall make provisions for standard assets at 0.40 percent of the			
	outstanding.			
Sub-standard Assets	A general provision of 10 per cent of total outstanding shall be made	de.		
	Unsecured Portion			
	(a) 100% provision to the extent to which the advance is not covered by the realisable value of			
	the security to which the NBFC has a valid recourse shall be made.			
Doubtful Assets	Secured Portion			
	Period for which the asset has been considered as doubtful	% of Provision		
	Up to 1 year	20		
	One to three years	30		
	More than three years	50		
Loss Assets	100% of the outstanding should be provided for.			

Consider the following illustration.

#### **Comprehensive Problem 1**

While closing its books of account on 31st March, 2024, a Non-Banking Finance Company has its advances classified as follows:

Particulars	₹ In lakhs
Standard assets	33,600
Sub-standard assets	2,680
Secured portions of doubtful debts:	
Up to one year	640
one year to three years	180
more than three years	60
Unsecured portions of doubtful debts	194
Loss assets	96

Calculate the amount of provision, which must be made as per the "Non-systemically Important Non-Banking Financial (Non-Deposit Accepting or Holding) Companies Prudential Norms (Reserve Bank) Directions, 2015.

#### **Solution:**

Calculation of provision required on advances as on 31st March, 2024

Particulars	Amount	% of Provision	Provision
Particulars	₹ In lakhs	76 OI Provision	₹ In lakhs
Standard assets	33,600	0.25	84.00
Sub-standard assets	2,680	10	268.00
Secured portions of doubtful debts:			
Up to one year	640	20	128.00
one year to three years	180	30	54.00
more than three years	60	50	30.00
Unsecured portions of doubtful debts	194	100	194.00
Loss assets	96	100	96.00
			854.00

### Topic: Accounting for Business Combinations and Restructuring

#### · Contingent Consideration and Calculation of Goodwill

As per Para 39 of Ind AS 103, the consideration the acquirer transfers in exchange for the acquiree includes any asset or liability resulting from a contingent consideration arrangement. The acquirer shall recognise the acquisition-date fair value of contingent consideration as part of the consideration transferred in exchange for the acquiree.

Consider the following illustration.

#### **Illustration on Contingent Consideration:**

DAWN Ltd. has acquired 100% of the equity of NIGHT Ltd. on March 31, 2023. The purchase consideration comprises of an immediate payment of ₹20 lakhs and three further payments of ₹2 lakh each if the return on equity exceeds 16% in each of the subsequent three financial years. On the acquisition date, the aggregate value of D's identifiable assets is ₹22, 00,000. Calculate purchase consideration and Goodwill/ gain on bargain purchase. Assume discount rate @10%.

#### **Solution:**

As per Ind AS 103, contingent consideration should be added with purchase consideration at discounted present value.

Accordingly, Purchase consideration and goodwill are calculated:

Particulars	₹ In Lakhs
Immediate cash payment	20,00,000
Fair value of contingent consideration	4,97,360
$[2,00,000/1.1 + 2,00,000/(1.1)^2 + 2,00,000/(1.1)^3]$	
Purchase Consideration	24,97,360
Less: Net Assets	22,00,000
Goodwill	2,97,360

#### · Comprehensive Problem on Business Combination

T Ltd. manufactures and sells cars. The Company wants to foray into the two-wheeler business and therefore it acquires 30% interest in M Ltd. for ₹5,00,000 as at 1stFebruary, 2024 and an additional 25% stake as at 31st March, 2024 for ₹5,00,000 at its fair value. The summarised Balance Sheets of two companies as at 31stMarch, 2024 are as under.

D (* 1	T Ltd.	M Ltd.
Particulars	(₹)	(₹)
Assets		
Non-current Assets		
Property, Plant & Equipment	13,50,000	3,50,000
Financial Assets		
Investment in M Ltd.	10,00,000	
Investment in Corporate Bonds		4,00,000
Current Assets		
Financial Assets		
Trade Receivables	80,000	50,000
Cash and Cash equivalents	<u>5,20000</u>	
Total Assets	29,50,000	8,00,000
Equity and Liabilities		
Equity		
Equity Share Capital	5,00,000	1,00,000
Other Equity	15,00,000	5,50,000
Non-Current Liabilities		
Long-term Borrowings	4,00,000	
Current Liabilities		
Financial Liabilities		
Trade Payables	5,50,000	1,50,000
<b>Total Equity and Liabilities</b>	<u>29,50,000</u>	8,00,000

#### Additional Information:

- 1. M Ltd. sells the motorcycles under the brand name 'Moving Star' which has a fair value of ₹3,50,000 as at 31st March, 2024. This is a self- generated brand therefore M Ltd. has not recognized the brand in its books of accounts.
- For the purpose of acquisition fair value of following assets of M Ltd. are estimated as under.
  - Property, Plant & Equipment ₹ 7,50,000
  - Investment in Corporate Bonds ₹ 5,00,000
- 3. Book value of other asset and liabilities of M Ltd. represent their fair value.

#### Required:

In relation to the acquisition of M Ltd. pass the necessary journal entries to give effect of business combination in accordance with Ind AS 103 as at acquisition date i.e. 31st March, 2024. NCI is measured by the entity at fair value. Provide working notes, Ignore deferred tax implication.

#### **Solution:**

#### In the books of T Ltd. Journal

	Dantiaulans	Dr.	Cr.
	Particulars		Amount (₹)
Plant and Equipment	Dr.	7,50,000	
Investment in bonds	Dr.	5,00,000	
Trade Receivables	Dr.	50,000	
Brand	Dr.	3,50,000	
Goodwill (W.N. 4)	Dr.	5,00,000	
To Investment in M Ltd			10,00,000
To Profit &Loss A/c (W	N.1)		1,00,000
To Trade Payables			1,50,000
To NCI (W.N.3)			9,00,000
(Being assets and liabil considered at fair value	lities acquired at fair value and previous investment on the acquisition date)		2,00,000

### **Working Notes:**

1. Calculation of fair value of shares on the acquisition date 31st March, 2024

<u>*</u>	
25% Shares purchase on 31st March, 2024	₹5,00,000
30% Shares purchase on 1st February, 2023 at ₹5,00,000	
Fair value = [(5,00,000 / 25%) x 30%]	₹ <u>6,00,000</u>
Total consideration at fair value on acquisition date	₹11,00,000
Less: Cost of investment (5,00,000 + 5,00,000)	(₹ <u>10,00,000)</u>
Gain recognised to Profit or Loss	₹ <u>1,00,000</u>

2. Computation of Net Identifiable Assets at fair value

	₹
Plant and Equipment	7,50,000
Investment in bonds	5,00,000
Trade Receivables	50,000
Self-generated Brand	3,50,000
Less: Trade Payables	(1,50,000)
Net Identifiable Assets at fair value	<u>15,00,000</u>

3. Measurement of Non-controlling Interest (on fair value basis)

	₹
Share of NCI (100-30-25) %	45%
Taking fair value of shares on 31st March, 2023 as a base [(11,00,000/55%) x 45%]	₹9,00,000

4. Computation of Goodwill

	₹
Total Consideration at fair value	11,00,000
NCI	9,00,000
PC + NCI	20,00,000
Less: Net Identifiable Assets	<u>15,00,000</u>
Goodwill	<u>5,00,000</u>

Module 8: E-WAY BILL

# **FINAL**

Group IV - Paper-19

**Indirect Tax Laws** and Practice (ITLP)

#### E-WAY BILL

he implementation of the Goods and Services Tax (GST) in India marked a significant transformation in the country's indirect taxation system. Among the various components introduced under GST, the Electronic Way Bill, commonly known as the **e-way bill**, is a pivotal mechanism aimed at simplifying and streamlining the transportation of goods across India. Introduced to replace the traditional waybill system prevalent in the pre-GST era, the e-way bill system leverages technology to ensure transparency, reduce tax evasion, and facilitate smooth movement of goods.

An **e-way bill** is an electronic document generated on the GST portal evidencing the movement of goods. It includes details such as the consignor, consignee, origin, destination, and route. The primary purpose of the e-way bill is to provide a mechanism for tracking the movement of goods and ensuring that the appropriate taxes are paid.

#### Legal Framework

The e-way bill system is governed by Section 68 of the Central Goods and Services Tax Act, 2017, and Rule 138 of the CGST Rules, 2017. These provisions mandate that any registered person causing the movement of goods of consignment value exceeding ₹ 50,000 must generate an e-way bill prior to the commencement of such movement.

#### **Purpose and Importance**

- Prevention of Tax Evasion: By tracking the movement of goods, tax authorities can ensure that taxable supplies are duly reported and taxes are paid.
- **Simplification of Logistics**: The e-way bill replaces the need for multiple transit passes and waybills, reducing paperwork and delays at checkpoints.
- Transparency: Real-time tracking and centralized data enhance transparency in supply chain operations.
- Compliance and Uniformity: A standardized system across all states promotes ease of doing business and consistent compliance requirements.

#### When is an E-Way Bill Required?

An e-way bill is required when there is a movement of goods:

- In relation to a supply (sale)
- For reasons other than supply (e.g., return, job work)
- Due to inward supply from an unregistered person

The movement can be:

- **Inter-state**: Between different states
- **Intra-state**: Within the same state (subject to state-specific rules)

#### **Threshold Limit:**

- The consignment value must exceed ₹50,000.
- Some states may have specified different limits for intra-state movement.

#### Components of an E-Way Bill

An e-way bill consists of two parts:

- 1. Part A: This part contains details about the consignment, such as:
  - o GSTIN of the recipient
  - o Place of delivery (PIN Code)
  - o Invoice or challan number and date
  - o Value of goods
  - o HSN code
  - o Reason for transportation
- **2. Part B**: This part contains details about the transporter, such as:
  - o Vehicle number
  - o Transporter ID

#### Generation of E-Way Bill

#### Who Can Generate?

- **Registered Person**: Consignor or consignee who is registered under GST.
- **Unregistered Person**: If the supply is from an unregistered person to a registered recipient.
- **Transporter**: If neither the consignor nor the consignee generates it, the transporter can do so.

#### **Modes of Generation:**

- Online Portal: The primary method is through the GST e-way bill portal.
- **SMS**: E-way bills can be generated via SMS for small businesses or in case of emergencies.
- **Bulk Upload**: Facility provided for businesses to generate multiple e-way bills at once.
- API Integration: Large businesses can integrate their systems with the e-way bill portal for seamless generation.
- Android App: Registered users can generate e-way bills through the mobile app.

#### **Steps**

Here are the steps to generate an e-way bill:

- 1. Login: Access the e-Way Bill System and log in using your credentials.
- 2. Enter Details: Fill in the required details in Part A and Part B of the e-way bill form.
- 3. Generate: Once the details are entered, click on the 'Generate' button to create the e-way bill.
- 4. Print: The generated e-way bill can be printed and should be carried along with the goods during transportation.

#### Validity of E-Way Bill

The validity of an e-way bill depends on the distance the goods need to be transported. The validity period is calculated from the date and time of generation of the e-way bill. Here is a general guideline for the validity:

Type of conveyance	Distance	Validity of EWB
Other than Over	Less Than 200 Kms	1 Day
dimensional cargo	For every additional 200 Kms or part thereof	additional 1 Day
For Over	Less Than 20 Kms	1 Day
dimensional cargo	For every additional 20 Kms or part thereof	additional 1 Day

#### **Exceptions and Exemptions**

There are certain exceptions and exemptions to the requirement of an e-way bill:

a. where the goods being transported are specified in Annexure;

#### **Taxpoint**

Liquefied petroleum gas for supply to household and Non domestic exempted category (NDEC) customers
Kerosene oil sold under PDS
Postal baggage transported by Department of Posts
Natural or cultured pearls and precious or semi-precious stones; precious metals and metals clad with precious metal (Chapter 71)
Jewellery, goldsmiths' and silversmiths' wares and other articles (Chapter 71)
Currency
Used personal and household effects
Coral, unworked (0508) and worked coral (9601)

- b. where the goods are being transported by a Nonmotorised conveyance;
- where the goods are being transported from the customs port, airport, air cargo complex and land customs station to an inland container depot or a container freight station for clearance by Customs;
- in respect of movement of goods within such areas as are Notified under clause (d) of sub-rule (14) of rule 138 of the State or Union territory Goods and Services Tax Rules in that particular State or Union territory;
- where the goods, other than de-oiled cake, being transported, are specified in the Schedule appended to Notification No 2/2017- Central tax (Rate) dated the 28th June, 2017 published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (i), vide number G.S.R 674 (E) dated the 28th June, 2017 as amended from time to time;
- where the goods being transported are alcoholic liquor for human consumption, petroleum crude, high speed diesel, motor spirit (commonly known as petrol), natural gas or aviation turbine fuel;
- where the supply of goods being transported is treated as No supply under Schedule III of the Act;
- h. where the goods are being transported
  - under customs bond from an inland container depot or a container freight station to a custom sport, airport, air cargo complex and land customs station, or from one customs station or customs port to another customs station or customs port, or
  - ii. under customs supervision or under customs seal;
- where the goods being transported are transit cargo from or to Nepal or Bhutan;
- where the goods being transported are exempt from tax under Notification No 7/2017-Central Tax(Rate), dated 28th June 2017 published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (i), vide number G.S.R 679(E)dated the 28th June, 2017 as amended from time to time and Notification No 26/2017 Central Tax(Rate), dated the 21st September, 2017 published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (i), vide number G.S.R 1181(E)dated the 21st September, 2017 as amended from time to time:
- any movement of goods caused by defence formation under Ministry of defence as a consignor or consignee;

- where the consignor of goods is the Central Government, Government of any State or a local authority for transport of goods by rail;
- m. where empty cargo containers are being transported;
- n. where the goods are being transported upto a distance of twenty kilometers from the place of the business of the consignor to a weighbridge for weighment or from the weighbridge back to the place of the business of the said consignor subject to the condition that the movement of goods is accompanied by a delivery challan issued in accordance with rule 55.
- where empty cylinders for packing of liquefied petroleum gas are being moved for reasons other than supply.

#### **Challenges and Issues**

Despite its benefits, the e-way bill system has faced some challenges:

- 1. Technical Glitches: The online system has experienced technical glitches, causing delays in the generation of e-way bills.
- 2. Compliance Burden: Small businesses and transporters have found it challenging to comply with the e-way bill requirements due to a lack of resources and technical know-how.
- **3. Interstate Variations**: Different states have different rules and procedures for the e-way bill, leading to confusion and compliance issues.

#### **Recent Updates and Amendments**

The government has made several updates and amendments to the e-way bill system to address these challenges and improve its efficiency. Some of the recent updates include:

- 1. Auto Calculation of Distance: The system now auto-calculates the distance between the source and destination based on the PIN codes entered.
- 2. Blocking of E-Way Bill Generation: If a taxpayer has not filed their GST returns for two consecutive tax periods, they will be blocked from generating e-way bills.
- **3. Extension of Validity**: The validity of the e-way bill can be extended if the goods cannot be transported within the original validity period due to exceptional circumstances.

#### Conclusion

The e-way bill system represents a significant stride towards modernizing India's tax infrastructure. By leveraging technology, it aims to strike a balance between facilitating trade and ensuring compliance. For businesses, understanding and adapting to the e-way bill provisions is crucial not only for compliance but also for optimizing their logistics operations. While challenges persist, continuous efforts by the government to refine the system, coupled with proactive adaptation by businesses, can harness the full benefits of the e-way bill mechanism. As India continues on its path towards economic growth and digital transformation, the e-way bill is poised to play a pivotal role in shaping efficient and transparent trade practices.

Module 1: Introduction to Performance Management

Module 5: Fundamentals of **Business Valuation** 

# **ELECTIVES**

Paper-20A

Strategic Performance Management and Business Valuation (SPMBV)

### Module 1: Introduction to Performance Management

### **Improvement Tools for CFOs in Performance Budgeting**

Performance budgeting is a crucial process for Chief Financial Officers (CFOs), ensuring that financial resources are allocated efficiently to drive organisational performance. Unlike traditional budgeting, which focuses primarily on cost control, performance budgeting aligns expenditures with strategic objectives, measuring financial inputs against tangible outputs and outcomes. However, CFOs often face challenges in optimising performance budgets due to economic uncertainties, evolving business needs, and the complexity of performance measurement.

To enhance decision-making and ensure optimal allocation of resources, CFOs can leverage various improvement tools. These tools help in refining budgetary processes, increasing financial visibility, and aligning expenditure with strategic goals. This essay explores the key improvement tools available to CFOs when working with performance budgets and their potential impact on financial efficiency and organisational success.

### The Importance of Improvement Tools in Performance Budgeting

CFOs are responsible for maintaining financial discipline while ensuring that investments generate meaningful returns. Performance budgeting aims to connect financial planning with operational effectiveness, but without the right tools, it can be difficult to track, analyse, and adjust expenditures efficiently.

Improvement tools provide CFOs with the capability to:

- Enhance budget accuracy by leveraging data-driven insights
- Improve resource allocation by linking expenditures to performance metrics
- Strengthen forecasting through predictive analytics
- Foster accountability by tracking financial performance against key performance indicators (KPIs)
- Increase operational efficiency through automation and process improvements

By integrating the right tools, CFOs can improve financial planning, ensure alignment with corporate objectives, and drive long-term value creation.

### **Key Improvement Tools for CFOs in Performance Budgeting**

#### 1. Zero-Based Budgeting (ZBB)

• Overview: Traditional budgeting often builds upon previous years' allocations, leading to

inefficiencies and waste. Zero-based budgeting (ZBB), however, requires that every budgetary request be justified from scratch. This approach ensures that expenditures are necessary and aligned with business priorities.

#### **▲** Benefits:

Eliminates redundant spending
 Enhances cost control and efficiency
 Aligns financial resources with strategic objectives

#### **▲** Challenges:

- ☐ Time-intensive due to the need for detailed cost justification
- ☐ Requires strong analytical capabilities and organisational buy-in

#### 2. Rolling Forecasts

▲ Overview: Instead of setting annual budgets that become outdated quickly, rolling forecasts provide continuous financial updates based on real-time data. CFOs can adjust forecasts monthly or quarterly to reflect changing market conditions.

#### **▲** Benefits:

Improves agility in budgetary planning
 Reduces reliance on outdated assumptions
 Helps CFOs anticipate financial risks and opportunities

#### **▲** Challenges:

- ☐ Requires a dynamic financial management system
- ☐ Needs strong cross-departmental collaboration

#### 3. Driver-Based Budgeting (DBB)

▲ Overview: Driver-based budgeting focuses on the key business drivers that influence costs and revenues. Instead of analysing expenses in isolation, CFOs identify and model the factors that have the greatest impact on performance.

#### **▲** Benefits:

- ☐ Provides a more accurate representation of financial dynamics
- ☐ Enhances decision-making by focusing on controllable factors

		☐ Improves the connection between financial planning and business strategy	performance. CFOs can monitor expenditure efficiency, revenue growth, profitability, and cost
	•	Challenges:	trends using interactive dashboards powered by financial analytics.
		<ul> <li>Requires in-depth understanding of business drivers</li> </ul>	▲ Benefits:
		☐ May involve complex data modelling	☐ Enhances financial transparency
4.	Ac	ctivity-Based Costing (ABC)	☐ Supports data-driven decision-making
	♣ Overview: Traditional budgeting often allocates costs based on broad estimates. Activity-based		☐ Allows for quick identification of financial inefficiencies
		costing (ABC) refines this approach by assigning	▲ Challenges:
	re	costs based on the actual consumption of resources by different activities or departments.	☐ Requires integration with financial reporting systems
	•	Benefits:	☐ May involve data governance challenges
		☐ Enhances cost transparency	7. Predictive Analytics and Artificial Intelligence (AI)
		☐ Helps identify inefficiencies and reduce waste	Overview: Predictive analytics and AI leverage historical data to forecast future financial
		☐ Improves decision-making in resource allocation	performance, optimise resource allocation, and detect potential risks. AI-driven budgeting tools
	_	Challenges:	use machine learning to enhance forecasting accuracy.
		☐ Data-intensive and requires detailed cost tracking	▲ Benefits:
		☐ Can be complex to implement in large	☐ Reduces forecasting errors
		organisations	☐ Automates budgetary decision-making
5.	Sco	enario Planning and Sensitivity Analysis	☐ Improves efficiency in financial planning
	• Overview: Given the uncertainty in business environments, CFOs must prepare for different		▲ Challenges:
		financial scenarios. Scenario planning models different financial situations (e.g., economic	☐ Requires investment in technology infrastructure
		downturns, industry disruptions), while sensitivity analysis examines how specific	☐ Needs skilled personnel to interpret AI-generated insights
		variables impact performance.	8. Cloud-Based Enterprise Resource Planning (ERP)
	A Benefits:		Systems
		☐ Enables proactive risk management	▲ Overview: Cloud-based ERP systems integrate financial management with other business
		☐ Improves strategic decision-making	functions, providing real-time insights into
		<ul> <li>Helps CFOs identify contingency plans for uncertain conditions</li> </ul>	budgets, expenditures, and performance. These systems streamline budget planning and reduce
	_	Challenges:	manual errors.
		☐ Requires sophisticated financial modelling tools	A Benefits:
			☐ Enhances collaboration across departments
		☐ Dependent on the accuracy of input assumptions	☐ Provides centralised financial data for better decision-making
6.	Key Performance Indicator (KPI) Dashboards		☐ Reduces administrative burden
	_	Overview: KPI dashboards provide real-	<b>▲</b> Challenges:
		time visualisation of financial and operational	☐ Initial implementation costs can be high

☐ Requires employee training and change management

#### 9. Benchmarking and Competitive Analysis

▲ Overview: CFOs can improve performance budgeting by benchmarking their financial metrics against industry peers. Competitive analysis helps identify best practices and areas for cost optimisation.

#### **▲** Benefits:

- ☐ Provides external validation of financial performance
- ☐ Identifies inefficiencies and cost-saving opportunities
- ☐ Enhances competitiveness through datadriven insights

#### **▲** Challenges:

- ☐ Requires access to accurate and relevant industry data
- ☐ Differences in business models may limit direct comparisons

#### 10. Performance-Based Incentive Structures

▲ Overview: Aligning budgeting outcomes with performance-based incentives ensures that financial targets translate into operational efficiency. Linking budgets to performance metrics encourages accountability and cost discipline.

#### **▲** Benefits:

	Emiliare or immirror respondition, we rece
	departments
	Drives efficiency in budgetary execution
	Encourages a culture of performance-driven

financial management

☐ Enhances financial responsibility across

#### **▲** Challenges:

- Requires clear and measurable performance metrics
   May face resistance if incentives are
- ☐ May face resistance if incentives are perceived as unfair

#### Conclusion

Performance budgeting is a complex yet essential aspect of financial management that requires CFOs to balance cost control with organisational effectiveness. By leveraging improvement tools such as zero-based budgeting, rolling forecasts, driver-based budgeting, predictive analytics, and ERP systems, CFOs can enhance budget accuracy, optimise resource allocation, and improve financial agility.

The right combination of these tools enables CFOs to navigate economic uncertainties, align financial plans with strategic objectives, and drive sustainable growth. Ultimately, an effective performance budgeting framework ensures that financial resources contribute to long-term value creation, enhancing both profitability and operational excellence.

### Module 5: Fundamentals of Business Valuation

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

Valuation is a fundamental aspect of corporate finance, guiding investment decisions, mergers and acquisitions (M&A), financial reporting, and capital allocation. Chief Financial Officers (CFOs) must ensure that valuations accurately reflect an organisation's financial health, strategic value, and market position. A well-structured valuation framework helps CFOs assess business worth, make informed strategic decisions, and manage investor expectations.

There are multiple valuation frameworks available, each suited for different business contexts. The choice of framework depends on factors such as industry characteristics, the purpose of valuation, financial reporting requirements, and market conditions. This essay explores the key valuation frameworks available to CFOs, their methodologies, benefits, and limitations.

#### The Importance of Valuation for CFOs

Valuation plays a crucial role in financial decision-making, helping CFOs:

- Evaluate investments and acquisitions Ensuring a fair price is paid for assets or companies
- Assess capital structure Optimising debt-toequity ratios
- **Determine shareholder value** Ensuring the organisation maximises investor returns
- Comply with financial reporting standards Meeting regulatory requirements for fair value measurement
- Enhance strategic planning Guiding long-term financial decisions based on intrinsic company value

To achieve these objectives, CFOs must rely on structured valuation frameworks that provide a comprehensive understanding of business value.

#### **Key Valuation Frameworks**

#### 1. Discounted Cash Flow (DCF) Valuation

#### Overview:

The Discounted Cash Flow (DCF) method estimates the intrinsic value of a company by projecting future cash flows and discounting them to their present value using a required rate of return. The assumption is that a company's value is derived from the present value of its expected future cash flows.

#### Methodology:

- 1. Forecast future free cash flows (FCF) over a defined period (e.g., 5-10 years).
- 2. Determine the discount rate, often using the Weighted Average Cost of Capital (WACC).
- 3. Calculate the terminal value, representing the value beyond the forecast period.
- 4. Discount all cash flows and the terminal value to present value.

#### **Benefits:**

- Provides an intrinsic valuation independent of market conditions.
- Useful for long-term strategic financial planning.
- Allows for scenario analysis to assess business risks.

#### **Limitations:**

- Highly sensitive to assumptions about future cash flows and discount rates.
- Requires reliable financial projections, which may be difficult for volatile industries.
- Difficult to apply in cases where cash flows are unpredictable.

# 2. Market-Based Valuation (Comparables and Precedents)

#### Overview:

Market-based valuation frameworks determine company value based on comparable companies (Trading Multiples) and precedent transactions (Transaction Multiples). These methods rely on real-world market data to assess a business's worth.

#### Methodology:

 Comparable Company Analysis (CCA): Identifies publicly traded companies with similar financial characteristics and industry dynamics, then applies valuation multiples such as Price-to-Earnings (P/E), Enterprise Value-to-EBITDA (EV/EBITDA), or Price-to-Book (P/B).  Precedent Transaction Analysis (PTA): Examines historical M&A transactions to determine valuation multiples paid for similar companies.

#### **Benefits:**

- Uses real market data, making it practical for M&A and investment decisions.
- Provides insight into industry norms and investor sentiment.
- Simple and widely used in investment banking and corporate finance.

#### **Limitations:**

- Difficult to find truly comparable companies or transactions.
- Market fluctuations can distort valuation metrics.
- May not reflect the specific strategic value of the company being valued.

### 3. Asset-Based Valuation (Net Asset Value & Liquidation Value)

#### Overview:

The Asset-Based Valuation (ABV) framework calculates a company's value based on the fair market value of its assets, subtracting liabilities. This method is most relevant for asset-heavy industries such as real estate, manufacturing, and financial institutions.

#### Methodology:

- Book Value Method: Uses balance sheet figures to determine net asset value (NAV).
- Replacement Cost Method: Estimates the cost to replace company assets at current market prices.
- Liquidation Value: Calculates the residual value if the company were to be liquidated, typically applying a discount to assets.

#### **Benefits:**

- Provides a strong baseline for valuing businesses with significant tangible assets.
- Useful for distressed companies or liquidation scenarios.
- Less influenced by market fluctuations compared to earnings-based methods.

#### **Limitations:**

- Does not consider intangible assets such as brand value, goodwill, and intellectual property.
- May undervalue high-growth companies with strong earnings potential but limited tangible assets.
- Asset values may fluctuate based on economic conditions and depreciation.

#### 4. Real Options Valuation (ROV)

#### Overview:

Real Options Valuation (ROV) extends traditional valuation models by incorporating the flexibility to make strategic business decisions over time, such as expansion, divestiture, or entering new markets. It is particularly useful in industries with high uncertainty, such as pharmaceuticals, technology, and energy.

#### Methodology:

- Identifies investment opportunities as "options" that management can execute based on market conditions.
- Uses option-pricing models (e.g., Black-Scholes or binomial trees) to estimate the value of strategic flexibility.

#### **Benefits:**

- Incorporates flexibility in decision-making, making it useful for dynamic industries.
- Provides a more accurate valuation in uncertain markets.
- Useful for high-growth companies and R&Ddriven sectors.

#### Limitations:

- Complex and requires advanced quantitative models.
- Highly sensitive to volatility assumptions.
- Not widely adopted for traditional financial reporting.

# 5. Economic Value Added (EVA) & Shareholder Value Analysis

#### Overview:

Economic Value Added (EVA) measures a company's financial performance by assessing whether it generates returns above its cost of capital. It focuses on wealth creation for shareholders.

#### Methodology:

- EVA = Net Operating Profit After Tax (NOPAT) (Capital Invested × Cost of Capital)
- A positive EVA indicates that the company is generating value for shareholders, while a negative EVA suggests capital inefficiencies.

#### **Benefits:**

- Focuses on long-term value creation.
- Helps in internal performance evaluation and incentive structuring.
- Aligns financial management with shareholder interests.

#### **Limitations:**

- Requires accurate calculation of cost of capital.
- Not suitable for early-stage companies with high reinvestment needs.
- May not fully capture non-financial value drivers like brand strength or innovation.

#### **Choosing the Right Valuation Framework**

CFOs must select a valuation framework based on the specific business context and objectives:

Valuation Framework	Best Suited For
DCF Valuation	Growth-oriented firms with stable cash flows
Market-Based (CCA/PTA)	M&A transactions and benchmarking
Asset-Based Valuation	Asset-heavy industries or distressed businesses
Real Options Valuation	Technology, R&D, and industries with high uncertainty
EVA & Shareholder Value	Performance evaluation and long- term strategic planning

A hybrid approach, combining multiple valuation methods, is often the best practice. For example, a CFO may use DCF for intrinsic value estimation, market multiples for benchmarking, and asset-based valuation for balance sheet strength assessment.

#### Conclusion

Valuation frameworks are indispensable tools for CFOs, enabling them to make informed decisions on investment, M&A, financial reporting, and shareholder value creation. While each framework has its strengths and limitations, a comprehensive valuation approach—incorporating financial projections, market data, and strategic flexibility—ensures accurate and reliable valuation outcomes. By applying the appropriate valuation methodologies, CFOs can drive sustainable financial performance, optimise resource allocation, and maximise long-term corporate value.

Module 3: Credit Risk and Liquidity Risk

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

### **ELECTIVES**

Paper-20B

Risk Management In Banking and Insurance (RMBI)

### Risk Management in Banking

### (Credit Risk and Liquidity Risk)

isk Management, as described by knowledge theorists, encompasses the management of uncertainty, risk, equivocality, and error. Uncertainty, characterized by an inability to predict outcomes even randomly, stems from insufficient information. As information gathering progresses, uncertainty transitions into risk, where outcomes can be estimated. With increasing knowledge about markets and potential outcomes, risk management offers strategies for mitigating risk. Equivocality arises from conflicting interpretations and a resulting lack of clear judgment. Given the dynamic nature of the market, banks must remain vigilant about the alignment of regulatory frameworks within the country, shifts in international accounting standards, and notably, changes in clients' business practices. Thus, it is imperative to adhere to specific risk management guidelines recommended by both the RBI and BIS.

In the banking context, risk represents the uncertainty surrounding future earnings and potential outcomes in the event of failure. Risks can stem from inadvertent staff errors or malicious intent, resulting in the depreciation of asset values and ultimately diminishing the intrinsic worth of the bank.

In other words, Risks in the banking sector refer to the potential for unfavourable deviations from expected outcomes, arising from various uncertainties inherent to banking activities. These risks represent the possibility of losses or adverse impacts due to the divergence between actual and anticipated returns or results. Some of the major risks in the banking sector encountered in Indian banking are credit risk, market risk, operational risk, liquidity risk, business risk, reputational risk, and systemic risk.

**For Example**: The Punjab National Bank (PNB) faced a fraud amounting to ₹ 11,400 crores. The risk category impacted by this incident includes credit risk, operational risk, and reputational damage.

#### Types of Risks in the Banking Sector:

The banking sector is exposed to various types of risks, which can have significant impacts on its operations, financial stability, and overall performance. Understanding and effectively managing these risks is crucial for maintaining a sound and resilient banking system. Here's an overview of major risks in the banking sector, along with detailed explanations:



#### Credit Risk:

Credit Risk Management (CRM) is a crucial process in the financial industry that involves identifying, assessing, and mitigating the potential risks associated with lending money or extending credit to individuals, businesses, or other entities. It's the practice of protecting a lender's financial interests by ensuring that debtors will be able and willing to repay their debts.

At its core, CRM is about striking a balance between risk and reward. Financial institutions want to lend money and earn interest, but they also need to protect themselves from the possibility of borrowers defaulting on their loans. This delicate balancing act requires sophisticated analysis, continuous monitoring, and strategic decision-making.

Key components of Credit Risk Management include:

- 1. Risk Identification: Recognizing potential sources of credit risk in various transactions.
- 2. Risk Assessment: Evaluating the likelihood and potential impact of identified risks.
- 3. Risk Mitigation: Implementing strategies to reduce or control credit risks.
- 4. Risk Monitoring: Continuously tracking and reassessing credit risks over time.
- 5. Policy Development: Creating and maintaining guidelines for credit-related decisions.

By employing these components, financial institutions can make informed decisions about which loans to approve, how much to lend, and at what interest rates.

#### Why CRM Matters-Importance/Benefits:

Credit Risk Management is not just a regulatory requirement; it's a fundamental practice that underpins the stability and success of financial institutions. Here's why it matters:

- 1. **Financial Stability**: Effective CRM helps maintain the overall financial health of lending institutions. By minimizing loan defaults and losses, it ensures that banks and other lenders remain solvent and can continue to provide services to their customers.
- Investor Confidence: A robust CRM system
  instils confidence in investors and stakeholders.
  It demonstrates that the institution is responsibly
  managing its assets and protecting against potential
  losses.
- Regulatory Compliance: Many countries have strict regulations governing credit risk management in financial institutions. Adhering to these regulations helps avoid penalties and maintains the institution's reputation.
- 4. **Improved Decision Making**: CRM provides valuable insights that enable better lending decisions. It helps institutions determine appropriate interest rates, loan terms, and credit limits based on the risk profile of borrowers.
- 5. **Economic Growth**: By facilitating responsible lending practices, effective CRM contributes to overall economic growth. It ensures that credit is available to qualified borrowers while protecting the financial system from excessive risk.
- Competitive Advantage: Institutions with superior CRM capabilities can often offer more competitive rates and terms to low-risk borrowers, giving them an edge in the market.
- Loss Prevention: By identifying high-risk borrowers and implementing appropriate mitigation strategies, CRM significantly reduces the likelihood and impact of loan defaults.
- 8. **Resource Optimization**: CRM helps institutions allocate their resources more efficiently by focusing more attention on high-risk accounts and streamlining processes for low-risk ones.

Effective Credit Risk Management is crucial for the success and stability of any financial institution. By implementing robust processes, leveraging appropriate technologies, and fostering a risk-aware culture, organizations can navigate the complex landscape of lending with confidence.

#### **Liquidity Risk:**

Banks face liquidity risk when they finance long-term assets using short-term liabilities, exposing those liabilities to rollover or refinancing challenges. This risk entails the potential for an institution to be incapable of fulfilling its maturing obligations, or to do so only by borrowing funds at exorbitant rates or by selling assets at significantly reduced prices. The liquidity risk in banks manifests in different dimensions —

**Funding Liquidity Risk**: Funding liquidity risk refers to the difficulty in securing funds to fulfil cash flow commitments. This issue occurs when there is a need to cover net outflows caused by unexpected withdrawals or the non-renewal of both wholesale and retail deposits.

**Time Risk:** Time risk occurs due to the necessity to make up for the lack of anticipated fund inflows, which happens when performing assets become non-performing assets.

**Call Risk**: Call risk emerges from the materialization of contingent liabilities. It can also occur if a bank is unable to seize profitable business opportunities when they arise.

The core objective of risk management practices within the banking sector is to boost the value proposition for stakeholders by maximizing profitability and optimally allocating capital resources. This approach ensures the long-term financial stability and solvency of the banking institution. By striking a balance between prudent risk-taking and effective risk mitigation strategies, banks can enhance their ability to generate sustainable returns while maintaining a robust financial footing, ultimately benefiting all parties with vested interests in the organization's success.

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

#### Insurance Intermediaries, General Insurance, Health Insurance

nsurance in India is sold, not bought. Insurance is a complex product representing a promise to compensate the insured or third party according to specified terms and conditions in the event of the occurrence of a covered contingency. In most insurance transactions there is usually an intermediary who has a distinct role to play in the entire life cycle of a product, from the point of sale through policy servicing, up to claim servicing.

#### A) Insurance Intermediaries:

Insurance intermediaries serve as a bridge between consumers and insurance companies. An Insurance Intermediary means individual agents, corporate agents including banks and brokers, insurance marketing firm. Insurance Intermediary also includes Surveyors and Third-Party Administrators but these intermediaries are not involved in the procurement of business. Surveyors assess losses on behalf of the insurance companies. Third Party Administrators provide services related to health insurance for insurance companies.

#### **Insurance Agent:**

An agent is a person who is licensed by the Authority to solicit and procure insurance business including business relating to continuance, renewal, or revival of policies of insurance. An agent is an individual who is an intermediary representing an insurance company. A Composite Insurance Agent means an insurance agent who holds a license to act as an insurance agent for a life insurer and a general insurer.

#### **Corporate Agent:**

A corporate agent is an intermediary other than an individual, may be a firm, company or a registered society, representing an insurance company. A Designated Person means an officer normally in charge of marketing operations, as specified by an insurer, and authorized by the Authority to issue or renew licenses under the applicable regulations.

#### **Insurance Broker:**

An Insurance Broker means a person licensed by IRDAI who arranges insurance contracts with insurance companies on behalf of his clients. An Insurance Broker may represent more than one insurance company and may deal with more than one life or general.

#### **B)** General Insurance:

General Insurance is an agreement between a policyholder and insurer wherein the insurance company

protects valuable assets from fire, theft, burglary, or any other unfortunate accident.

Often, general insurance is confused with life insurance. But, the two terms have vast differences.

General Insurance	Life Insurance
Covers non-life assets	Covers life of an individual
It is not a type of savings	This insurance helps you accumulate savings for future
Annual contract with a lumpsum premium	Long-term contract with the option of instalment premiums
Pays sum assured in case of an eventuality such as theft or accident	Pays sum assured to the nominee in case of the death of the policyholder

General insurance should be our priority as our assets may get damaged due to an accident or theft. Let's understand its importance with an example:

Mr. ABC has got a new car, and he is slated to hit the roads. But while driving, his car suddenly gets hit by the other vehicle trying to overtake. This dislocates the left mirror of his car. Mr. ABC is stress-free as he has Motor Insurance, which will provide financial cover for the damages and he doesn't have to pay for the damages.

This shows how general insurance can help to eliminate the dent in our pocket by providing cover for tangible assets.

#### There are various Types of General Insurance, these include:

- Motor Insurance.
- Home Insurance.
- Travel Insurance.
- Health Insurance.

#### **Motor Insurance:**

When driving, we cannot be sure that a road mishap will never take place or there may be an instance of our vehicle getting damaged due to a man-made or natural calamity. In such circumstances, we can rely on motor insurance cover. It gives us financial protection and safeguards us from any legal complications.

#### There are two types of Motor Insurance in India:

- Third-party Motor Insurance.
- Comprehensive Motor Insurance.

Whether our own a bike or car, we need to have at least Third-Party Motor Insurance. It is compulsory to have a third-party insurance cover as per the mandate by the Motor Vehicles Act. The insurance offers to protect us if there's an accident and offers liability cover for third party damages. However, if we are looking for overall protection, then we can opt for comprehensive motor insurance that includes third-party cover and all types of accidents caused due to a man-made or natural calamity.

#### **Home Insurance:**

Home is where we all feel protected and where numerous memories are created. When buying or renting a home, we invest our hard-earned money, but we forget to realize that it needs security too. With natural calamities and riots prevalent in India, we need to make sure our home and belongings are well-taken care of. This is where Hone Insurance becomes a necessity.

#### **Common features of Home Insurance:**

- Offers cover against natural calamities and manmade calamities.
- Covers personal computer, TV, and Video equipment.
- Cover for damages caused to the building such as terraces, foundation, swimming pool, etc.
- Financial protection against your home and belongings.

#### **Travel Insurance:**

While traveling abroad, we only look forward to happy memories. However, unfortunate incidents never come knocking on the door. For instance, when you're traveling on a flight, your baggage may go missing, or there may be theft of your asset. In such situations, travel insurance will help you remain stress-free by offering protection for any loss/damage incurred. We love to travel, but does the fear of losing belongings always keeps you worried? Travel Insurance would be an ideal choice for you.

#### **Common Features of Travel Insurance:**

- Cover for loss of baggage, including delays.
- Emergency assistance.
- Loss of passport.
- Covers health expenses, transportation to the impanelled hospital, and hospital daily allowance.
- Personal Accident cover.
- Travel Insurance provides financial security in case of an unforeseen mishap whether you're flying domestically or internationally.

#### C) Health Insurance:

The healthcare costs are skyrocketing, and it is going to rise exponentially in the coming years. With inflation taking a toll on our lives, how would we ensure that loved ones get the best health services? When it comes to top general insurance, health is also considered an asset.

Make sure to protect the health and family by investing in a Health Insurance Policy. This type of general insurance offers financial coverage for medical expenses when someone is hospitalized. There are many types of health insurance policies; these include:

Indi	اميطانية	hanlth	insurance

Family	floater	health	nlan
1 allilly	moaici	meanur	pran

Senior Citizen health insurance.

Group health insurance.

Common features of a health insurance policy include:

	D 0	D (	TT 1/2	1	г-
Cover	Pre &	z Post	Hospita	11zation	Expenses.

Financial protection for room rent charges including hospital registration.

☐ Cashless medical treatment.

Coverage for ambulance cost.

Avail coverage for health check-ups once in a block of four claim-free years.

To Conclude, Insurance is rarely an off-the-shelf product. Different people will pay different premiums based on their individual risk profile. The insurer is concerned with risk, and the consumer is concerned with getting the cover they need at a fair price. An insurance intermediary works as a bridge between insurers and consumers to ensure that everyone's happy.

#### Topic

Module 1: Entrepreneurial Skill Sets

#### **ELECTIVES**

Paper-20C

Entrepreneurship and Start Up (ENTS)

#### Disruptive Innovation

#### **Disruptive Innovation**

The concept of disruptive innovation was first defined by Harvard Business School professor Clayton Christensen in a HBR article and introduced in more detail later in his book called Innovator's Dilemma in

Disruptive innovation refers to a concept, product, or a service that either disrupts an existing market or creates a completely new market segment. Disruptive innovation involves technologies used to make products easier to use or access and available to a larger, nontargeted market.

Disruptive innovation is innovation that creates a new market and value network or enters at the bottom of an existing market and eventually displaces established market-leading firms, products, and alliances.

Disruptive innovations tend to be produced by outsiders and entrepreneurs in startups, rather than existing market-leading companies. The business environment of market leaders does not allow them to pursue disruptive innovations when they first arise, because they are not profitable enough at first and because their development can take scarce resources away from sustaining innovations (which are needed to compete against current competition). Small teams are more likely to create disruptive innovations than large teams. A disruptive process can take longer to develop than by the conventional approach and the risk associated with it is higher than the other more incremental, architectural or evolutionary forms of innovations, but once it is deployed in the market, it achieves a much faster penetration and higher degree of impact on the established markets.

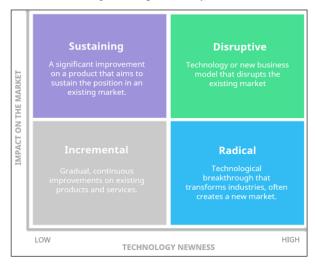
#### **Examples:**

- (a) Electric Vehicles: One of the most prominent examples of disruptive innovation in recent years is the rise of electric vehicles (EVs).
- (b) Streaming Services: The advent of streaming services such as Netflix and Amazon Prime Video has disrupted the traditional television and film industry.
- (c) Airbnb: The rise of Airbnb has disrupted the hospitality industry by offering a platform where individuals can rent out their homes or spare rooms to travelers. This peer-to-peer accommodation model has challenged traditional hotels and has provided travelers with more affordable and unique lodging options.

- (d) Uber: The introduction of ride-sharing platforms like Uber has disrupted the taxi and transportation industry. By connecting passengers directly with drivers through a mobile app, Uber has provided a more convenient and often more costeffective alternative to traditional taxis.
- (e) Online Marketplaces: E-commerce giants like Amazon and Alibaba have disrupted traditional brick-and-mortar retail by creating vast online marketplaces.

Characteristics of disruptive innovation:

- Lower margins, at least in the beginning.
- Higher risks.
- Either disrupts an existing market or creates a new market segment in the existing one.
- Sales arguments and measures of value are usually fundamentally changed.
- Often involves new technology and/or a new business model.
- Happens slowly at first until reaches the mainstream after which grows exponentially.



Source: https://www.viima.com/blog/disruptiveinnovation

#### Types of Disruptive Innovation

Christensen explains that there are two types of disruptive innovation: low-end and new-market.

#### (i) Low-End Disruption:

Low-end disruption is when a company uses a low-cost business model to enter at the bottom of an existing market and claim a segment. Because

there's no profitability incentive to fight for the bottom of the market, a low-end disruption causes incumbent companies to focus their efforts on more profitable areas.

An example of a low-end disruption is the rise of retail medical clinics in the healthcare space. Large medical centers handle everything from a sinus infection to open-heart surgery and employ specialists to care for various injuries and ailments. Typically, the more serious the injury or illness, the more expensive the cost to the patient.

#### (ii) New-Market Disruption

The other type of disruptive innovation is newmarket disruption, which is when a company creates a new segment in an existing market with a lowcost version of a product. The factor that sets newmarket disruption apart from low-end disruption is its focus on an audience that doesn't yet exist in the market. Offering a more cost-effective, simple, or accessible product effectively creates a new segment.

#### Qualities of the Disruptive Leader

- 1. **Risk-Taking**: Disruptive leaders are not afraid to take risks and embrace uncertainty. They understand that innovation and breakthroughs come from stepping outside of their comfort zone and are willing to make bold decisions, even if they involve a certain level of risk.
- Entrepreneurial Mindset: Disruptive leaders exhibit an entrepreneurial mindset, constantly seeking opportunities for growth and improvement. They are proactive, creative, and resourceful, always looking for ways to innovate and drive change within their organizations.
- 3. **Agility and Adaptability**: Disruptive leaders are agile and adaptable, able to quickly respond to changes in the business landscape. They possess a high degree of flexibility and are comfortable with ambiguity, adjusting their strategies and plans as needed to stay ahead of the curve.
- 4. **Disruptive Thinking**: These leaders are known for their disruptive thinking, challenging conventional wisdom and pushing the boundaries of what is possible. They encourage their teams to think outside the box, fostering a culture of innovation and experimentation.

 Resilience: Disruptive leaders understand that setbacks and failures are inevitable in the pursuit of innovation. They demonstrate resilience in the face of challenges, bouncing back from failures and using them as opportunities for growth and learning.

#### Case Netflix: On-demand movie streaming service

Netflix is a classic example of disruptive innovation that used a new business model and technology to disrupt an existing market. It initially offered a DVD-by-mail rental service and later launched its online, subscription-based movie streaming service. Today, its on-demand all-you-can-watch movie platform is used by over 150 million people globally.

Throughout the 1990s, things looked different as Blockbuster was expanding rapidly and dominating the video rental industry. The multi-billion-dollar company had over 9 000 video rental stores globally and it employed nearly 85 000 people worldwide.

In 2000s, however, Blockbuster started to lose significant revenue, as Netflix came and targeted segments that had been overlooked by Blockbuster.

In the beginning, Netflix's mail-in movie subscription service wasn't attractive to Blockbuster's mainstream customers, but rather to those early adopters who were already used to online shopping.

In 2007, Netflix understood that the DVD rental business was not profitable enough anymore, and the people wants the comfort of instant ordering and watching a video from couch without the hassle waiting, collecting, and returning videos. They cannibalized their own business model and using their IT-background they created fitting digital solutions and rolled it out in a lean way, shifting their customers to streaming subscribers and was quitting the DVD rental business.

In 2013, Netflix started to develop their own production and shows, the analysis of their own customers data put Netflix ahead of their competitor, having an advantage of better predicting customers future needs and acted upon this.

By 2017, Netflix scaled significantly internationally in over 190 countries with more than half of its some 130 million subscribers were outside the U.S. In the Q2 2018, its international streaming revenues exceeded domestic streaming revenues for the first time.

#### **Multiple Choice Questions:**

- 1. Innovation is defined as:
  - (a) the commercialization of a new product or process.
  - (b) the invention of a new product or process.
  - (c) a new product or process idea.
  - (d) the implementation of a new production method.

#### Answer (a)

- 2. Innovation can help to provide a temporary competitive advantage when:
  - (a) Barriers to entry are high.
  - (b) Barriers to imitation are low and intellectual property rights are difficult to enforce.
  - (c) There are few other competitors.
  - (d) Barriers to entry are low.

#### Answer (b)

- 3. Process innovation refers to:
  - (a) The development of a new service.

- (b) The development of a new product.
- (c) The implementation of a new or improved production method.
- (d) The development of new products or services.

#### Answer (c)

- 4. Disruptive innovations in business are those that
  - (a) Create a new market by offering value products.
  - (b) Involve often, new technology or a new business model to offer value to the market.
  - (c) Displace established market-leading firms, products and alliances.
  - (d) All of the above

#### Answer: (d)

- 5. Established firms relative to new firms are better at:
  - (a) All types of innovation.
  - (b) Innovation which is competence-enhancing.
  - (c) Innovation which is competence-destroying.
  - (d) Innovation which is disruptive.

#### Answer (b)



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

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

Website : www.icmai.in

Ref No.:DoS-Academics/03/2025 Dated: 13/03/2025

#### Sub: Clarification for June 2025 term of Examination under Syllabus 2022

This is to bring to the notice for clarification to all concerned that the followings shall be applicable for June 2025 term of Examination.

Sl. No.	Issue	Applicable for	Reference papers	Facilities Provided
1	Companies (Cost Records and Audit ) Rules, 2014; as (amended upto 30 <sup>th</sup> November, 2024)	Intermediate and Final under Syllabus 2022	Paper 10- Corporate Accounting and Auditing(Intermedi ate), Paper 17 - Cost & Management Audit(Final)	Study Materials refer to the following links: https://icmai.in/upload/Students/Syllabus2022/Inter Stdy Mtrl/P10 160824.pdf and https://icmai.in/upload/Students/Syllabus2022/Final Stdy Mtrl/Paper17_Syll-2022_Rev.pdf  For the Supplementary of Paper 17 please go to the following link: https://icmai.in/studentswebsite/Supplementary_Syllabus_2022_June_2025.php
2	CAS 1-24 (amended upto 30 <sup>th</sup> November, 2024)	Intermediate and Final under Syllabus 2022	Paper 8 - Cost Accounting (Intermediate) Paper 17 - Cost & Management Audit(Final)	For Paper 8 and Paper 17 Study Materials refer to the following links: https://icmai.in/upload/Students/Syllabu s2022/Inter_Stdy_Mtrl/P8_160824.pdf and https://icmai.in/upload/Students/Syllabu s2022/Final_Stdy_Mtrl/Paper17_Syll- 2022_Rev.pdf  For the Supplementary of Paper 17 please go to the following link: https://icmai.in/studentswebsite/Supple mentary_Syllabus_2022_June_2025.ph p





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

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3	Companies Act 2013 (amended upto 30 <sup>th</sup> November, 2024)	Intermediate and Final under syllabus 2022	Paper 5- Business Laws and Ethics (Intermediate) Paper 10 - Corporate Accounting and Auditing(Intermediate) Paper 13 - Corporate and Economic Laws (Final) Paper 17- Cost & Management Audit(Final) Paper 18- Corporate Financial Reporting(Final)	The provisions of Companies Act, 2013 along with significant Rules / Notifications / Circulars / Orders issued by the Ministry of Corporate Affairs and the laws covered under Other Corporate Laws as amended by the concerned authority, including significant amendments upto 30th November, 2024 would be applicable for June 2025 term of examination.  For Study Materials: <a href="https://icmai.in/studentswebsite/Study_Materials_2022.php">https://icmai.in/studentswebsite/Study_Materials_2022.php</a> For the Supplementary of the respective Papers please go to the following link: <a href="https://icmai.in/studentswebsite/Supplementary_Syllabus_2022_June_2025.ph">https://icmai.in/studentswebsite/Supplementary_Syllabus_2022_June_2025.ph</a>
4	Finance Act 2024	Intermediate and Final	Paper 7- Direct and Indirect Taxation (Intermediate) Paper 15- Direct Tax Laws and International Taxation (Final) Paper 19- Indirect Tax Laws & Practice(Final)	Amendments upto 30 <sup>th</sup> November, 2024 would be applicable for June 2025 term of examination.  For Study Materials: <a href="https://icmai.in/studentswebsite/Study_Materials_2022.php">https://icmai.in/studentswebsite/Study_Materials_2022.php</a> For the Supplementary of the respective Papers please go to the following link: <a href="https://icmai.in/studentswebsite/Supplementary_Syllabus_2022_June_2025.ph">https://icmai.in/studentswebsite/Supplementary_Syllabus_2022_June_2025.ph</a> p
5	GST	Intermediate and Final	Paper 7- Direct and Indirect Taxation (Intermediate) and Paper 19- Indirect Tax Laws & Practice(Final)	Amendments upto 30 <sup>th</sup> November, 2024 would be applicable for June 2025 term of examination.  For Study Materials: <a href="https://icmai.in/studentswebsite/Study_Materials_2022.php">https://icmai.in/studentswebsite/Study_Materials_2022.php</a> For the Supplementary of the respective Papers please go to the following link: <a href="https://icmai.in/studentswebsite/Supplementary_Syllabus_2022_June_2025.ph">https://icmai.in/studentswebsite/Supplementary_Syllabus_2022_June_2025.ph</a> p
6	IND AS (In Intermediate and Final) and Business	In Intermediate – Comparative Provisions for	Paper 6 – Financial Accounting (Intermediate)	For updated Study Materials of Paper 6, Paper 10 and Paper 18 refer to the following link





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Responsibility	Specific Ind	Paper 10 -	https://icmai.in/studentswebsite/Study_
Report,	AS and	Corporate	Materials 2022.php
Reporting	in Final -	Accounting and	
through XBRL	which are	Auditing(Intermedi	
and Corporate	covered by the	ate)	
Social	Syllabus 2022	Paper 18 –	
Responsibility		Corporate Financial	
Reporting in		Reporting(Final)	
India (In Final)			

All concerned to make appropriate advisory and facilitate the students.



#### **CMA Avijit Mondal**

Joint Director and H.O.D Studies (Academics and Administration)

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

Dear CMA Student,

The are excited to extend an invitation to you to contribute an article for the CMA Student E-Bulletin, our esteemed monthly e-journal exclusively crafted for CMA students. This platform, managed by the Directorate of Studies at ICMAI, aims to provide a space for your insights, experiences and knowledge-sharing within the CMA community.

#### Submission Guidelines:

- Article Length: Please prepare articles ranging between 1200 to 1500 words.
- Topic: The articles can cover a wide spectrum of subjects, including but not limited to advancements in finance, industry insights, case studies, personal experiences and emerging trends in the field.
- Originality: We encourage you to share your unique perspectives and experiences. Ensure that your submission has not been published elsewhere.

Submission Deadline: We kindly request you to submit your article by 20<sup>th</sup> 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





www.icmai.in

#### 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
- $\odot$ Webinars
- Model Question Papers

•

MCQ Portal

- • Coaching - Oral/Postal (E-learning) Tutorial Workshops
- Skills Training
- **Practical Training**
- **Industry Oriented Training**
- •
- Programme

# **Admission Deadlines**

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

# A 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

CMA Bhawan, 12, Sudder Street, Kolkata - 700016 033-40364777/40364722/40364726

CMA Bhawan, 3, Institutional Area, Lodhi Road

011-24622156/24622157/24622158

🖂 placement@icmai.in

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# **NOTES**

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#### **ICMAI** THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

Statutory Body under an Act of Parliament www.icmai.in

#### Headquarters

CMA Bhawan, 12, Sudder Street, Kolkata - 700016 Ph: 033-033-40364779/4721/4726/4777

#### Delhi Office

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi - 110003 Ph: 011-24622156/24622157/24622158/24666124

studies@icmai.in







