CMA STUDENT E-Bulletin

VOL 09 | NO. 07 | JULY 2024

An Initiative of Directorate of Studies

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

About the Institute

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

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

Vision Statement

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

Mission Statement

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

Institute Motto

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

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PRESIDENT'S COMMUNIQUE

Dear Students,

Greetings to all of you, the vibrant and dynamic future of the cost and management accounting profession! I am filled with immense pride and optimism for the remarkable strides we have collectively made as an Institute and as a community dedicated to excellence.

The journey of becoming a Cost & Management Accountant is a rigorous yet rewarding one, and I am continually inspired by the dedication and hard work each one of you exhibits. Your commitment to mastering the intricacies of cost and management accounting not only fortifies your own career prospects but also enhances the integrity and capability of our profession as a whole.

In today's fast-paced and ever-evolving business environment, adaptability is key. The ICMAI is committed to equipping you with the tools and knowledge necessary to thrive in this dynamic landscape. Our curriculum is continuously updated to reflect the latest trends, technologies, and methodologies in the field of cost management. We are embracing digital transformation and incorporating data analytics, AI, and machine learning into our learning modules to ensure that you are well-prepared for the future.

I would also like to take this opportunity to congratulate all the students who have excelled in their examinations and professional endeavors. Your achievements are a testament to your hard work and the quality of education provided by the ICMAI. Keep pushing boundaries and striving for excellence; your success is our greatest reward.

As we move forward, I urge you to stay curious, stay resilient, and never lose sight of your goals. The road to success is paved with continuous learning and unwavering determination. Remember, the ICMAI is here to support you every step of the way.

I extend my heartfelt best wishes to all of you. May your journey be filled with knowledge, growth, and success. Let us continue to uphold the values of integrity, excellence, and innovation that define our esteemed profession.

Warm regards,

CMA Bibhuti Bhusan Nayak

President, ICMAI

VICE PRESIDENT'S COMMUNIQUE

Dear Students,

It is with great pleasure and pride that I address you through this issue of the CMA Student E-Bulletin. As the Vice President of ICMAI, I am honored to witness the remarkable dedication, resilience, and ambition that each of you brings to our prestigious institute.

The field of cost and management accounting is constantly evolving, and as aspiring professionals, you are at the forefront of this dynamic journey. Our primary goal at ICMAI is to empower you with the knowledge, skills, and opportunities necessary to excel in your careers and contribute meaningfully to the profession.

We are living in an era where technological advancements are reshaping industries. At ICMAI, we are committed to integrating these advancements into our curriculum to provide you with a cutting-edge education. Our focus on digital literacy, data analytics, and strategic management ensures that you are well-equipped to navigate the complexities of modern business environments.

In addition to technical proficiency, we emphasize the importance of holistic development. Our programs are designed to enhance not only your analytical and problem-solving skills but also your leadership, communication, and interpersonal abilities. Through workshops, seminars, and interactive sessions, we aim to shape you into well-rounded professionals ready to take on leadership roles.

The globalization of economies presents both challenges and opportunities. To prepare you for a global career, we are strengthening our international collaborations and exchange programs. These initiatives provide you with exposure to global best practices and diverse perspectives, enriching your professional outlook.

As you progress through your studies, remember that you are not alone on this journey. The ICMAI community is here to support you every step of the way. Whether it is through mentorship programs, academic support, or career counseling, we are dedicated to ensuring your success.

I would like to extend my heartfelt congratulations to all students who have achieved academic and professional milestones. Your hard work, perseverance, and commitment are truly commendable. Celebrate these achievements, for they are the foundation upon which your future successes will be built.

As you continue your journey with ICMAI, I encourage you to remain curious, stay motivated, and embrace the opportunities that come your way. The future of the cost and management accounting profession is bright, and I have no doubt that each of you will play a pivotal role in shaping it.

I wish you all the very best in your studies and future endeavors. Let us continue to strive for excellence, uphold the values of integrity and professionalism, and work together to elevate the standards of our esteemed profession.

Warm regards,

CMA T.C.A. Srinivasa Prasad

Vice President, ICMAI

CHAIRMAN'S COMMUNIQUE

Dear Students,

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

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

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

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

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

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

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

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

Warm regards,

CMA Vinayranjan P.

Chairman, Training & Educational Facilities Committee, ICMAI

CMA FOUNDATION COURSE

Syllabus 2022

Topic

Fundamentals of Business Laws -

Module 1 : Introduction

Business Communication -

Module 5: Business Communication

FOUNDATION

Paper-1

Fundamentals of Business Laws and Business Communication (FBLC)

SECTION – A: FUNDAMENTALS OF BUSINESS LAWS

State True or False:

1. Sessions Court is the lowest court to approach for criminal matters.
2. Money Bill is introduced in Lok Sabha.
3. Any Elected Minister can pass an ordinance.
4. There is no punishment for Contempt of Court.
5. The Supreme Court of India was established by Britishers.
6. We can approach the Court for violation of our Fundamental Rights.
7. The International Court of Justice is the highest court in the hierarchy of Indian Judicial System.
8. The President of India and the Governor of a State can pass an Ordinance.
9. Executive Magistrates have responsibilities only related to the judicial system.
10. Only acts passed by the Parliament of India or State Legislature are the laws.

Fill in the Blanks:

1. Law is a ______ of rules.
2. The need for empowering authorities to frame _________ working at the grass-root level.
3. The Part ___ provides for provisions for the Panchayat Raj system.
4. Mr. ____________ was the head of the drafting committee of the Constitution of India, 1950.
5. Under Article ______ of the Constitution of India, 1950, The Supreme Court of India and the High Court of each state under Article _____ of the Constitution of India, 1950 have the powers to initiate action for contempt of Court.
6. Some states are provided with Legislative ________ and Legislative __________, both.
7. Article ____ of the Indian Constitution illustrates about recourse in situations of inconsistency between laws made by Parliament and laws made by the Legislatures of States.
8. An appeal against orders of subordinate courts in both ________ and _________ matters lies with the High Court.
9. The Supreme Court of India, under Article ________can review its own orders or judgments.
10. Article ______ of Constitution of India, 1950 empowers all High Courts to practice superintendence over all the courts or tribunals within its territorial jurisdiction.
11. Case laws are _________ precedents.
12. The _________ can decide disputes between the Government of India and one or more states.
13. An ordinance is law, that can be brought into place by the __________for the whole of India or any territory within and/or the ___________ of any state for the concerned territory in case of any exigency.
14. Article _____ of the Constitution of India states that The Parliament for the Union shall be headed by the President and shall have two house.

ANSWER:

State True or False:

1	2	3	4	5	6	7	8	9	10
F	T	F	F	F	T	F	T	F	F

Fill in the Blanks:

1	Set	5	129, 215	9	137	13	President, Governor
2	Regulation	6	Council and Assembly	10	227	14	79
3	IX	7	254	11	Judicial		
4	B. R. Ambedkar	8	Civil & Criminal	12	The Supreme Court of India		

SECTION – B: BUSINESS COMMUNICATION

1. Mr. A and Mr. B belong to two distinct cultural backgrounds. Mr. B believes that his culture is superior compared to the culture of Mr. A. This phenomenon is known as __________.

   a) Defiance

   b) Ethnocentrism

   c) Denial

   d) None of the above

2. _____________ stage at which members learn to accept each other's culture however they still remain devoted to their own respective cultures

   a) Adoption

   b) Integration

   c) Denial

   d) Minimization

3. Recognizing the different types of cultures, the similarities and differences between them without being judgmental is called ____________.

   a) Acceptance

   b) Cultural Sensitivity

   c) Adoption

   d) Integration

4. Which of the following is not an example of a physical communication barrier?

   a) Telephonic Disturbances

   b) Distance

   c) Background noises

   d) Language

5. Excessive usage of technical jargons and double meaning words are what type of barrier?

   a) Sematic Barriers

   b) Psychological Barriers

   c) Physical Barriers

   d) None of the above

6. Information overload is when Listener gets ___________________.

   a) inadequate information

   b) too much information

   c) adequate information

   d) irrelevant information

ANSWER:

State True or False:

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

Topic

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)

1. What are the four frameworks of Accounting ?
   a. Social , Environmental , Regulatory , Conceptual
   b. Cultural , Legal , Institutional , Conceptual
   c. Economic , Political , Historical , Conceptual
   d. Financial , Environmental , Institutional , Conceptual

2. Which type of expenditure is for long-term benefits to the Business ?
   a. Capital expenditure
   b. Trading expenditure
   c. Revenue expenditure
   d. Operational expenditure

3. The …………………… Is a document that lists the names , account numbers , and balances of the General Ledger Accounts.
   a. Trial Balance
   b. Chart of Accounts
   c. Balance Sheet
   d. Income Statement

4. What is the first step in accounting cycle?
   a. Preparation of Final Accounts
   b. Recording transactions in Journal
   c. Ledger posting
   d. Preparing Bank Reconciliation Statement

5. Which Book of original entry records credit purchase transactions?
   a. Cash Book
   b. Purchase Day Book
   c. Sales Day Book
   d. Miscellaneous Purchases Book

6. What is the formula for the accounting equation?
   a. Assets + Liabilities = Equity
   b. Assets = Liabilities - Equity
   c. Assets - Liabilities = Equity
   d. Assets = Liabilities + Equity

7. What is the accounting principle that states an entity will continue operations for the foreseeable future?
   a. Cost Principle
   b. Going Concern Principle
   c. Matching Principle
   d. Prudence Principle

8. What is the formula for calculating straight line depreciation?
   a. Cost of Asset x Rate of Depreciation
   b. Cost of Asset / Rate of Depreciation
   c. Cost of Asset - Salvage Value / Estimated Useful Life
   d. Cost of Asset / Estimated Useful Life

9. Which of the following is not a type of ledger account used in accounting?
   a. Personal Ledger
   b. Private Ledger
   c. Nominal Ledger
   d. General Ledger

10. Which type of ledger contains all the nominal accounts of a business?
    a. General Ledger
    b. Personal Ledger
    c. Private Ledger
    d. Nominal Ledger

11. Which of these is an example of a revenue expenditure?
    a. Money spent on repairs to the building
    b. Money paid for the addition to land
    c. Money spent on new equipment
    d. Money spent on salaries and wages

12. What is the accounting principle that requires the matching of revenues with the expenses incurred to generate those revenues?
    a. Conservatism Principle
    b. Matching Principle
    c. Cost Principle
    d. Completeness Principle

13. What is the formula used to calculate the net profit before taxes?
    a. Gross Profit + Expenses
    b. Gross Profit – Expenses
    c. Revenues – Expenses
    d. Revenues + Expenses

14. What is the accounting principle that states that all expenses must be recorded in the period when they were incurred, regardless of when the payment was made?
    a. Going Concern Principle
    b. Accrual Principle
    c. Consistency Principle
    d. Prudence Principle

15. Which of the following is an example of a current asset?
    a. Accounts Receivable
    b. Buildings
    c. Land
    d. Patents

16. What is the purpose of the closing entries made during the accounting cycle?
    a. To record various adjusting entries
    b. To transfer balances from temporary accounts to permanent accounts
    c. To record all transactions of the business
    d. To balance general ledger accounts

17. Which of the following transactions appear in the trial balance?
    a. Adjusting Entries
    b. Closing Entries
    c. Opening Entries
    d. All of the Above

18. Which accounting convention requires the business to follow a set of ethical principles and norms in its accounting practices?
    a. Convention of Consistency
    b. Convention of Materiality
    c. Convention of Disclosure
    d. Convention of Ethics

19. What is the process of transferring entries from the Journal to the Ledger called?
    a. Posting
    b. Recording
    c. Adjusting
    d. Journalizing

20. What is the accounting principle that states that assets should be recorded at the price they were acquired, regardless of their current market value?
    a. Conservatism Principle
    b. Cost Principle
    c. Matching Principle
    d. Completeness Principle

21. Which of the following is an example of a long-term liability?
    a. Accounts Receivable
    b. Rent Payable
    c. Mortgage Payable
    d. Wages

22. Which of the following is not an application of cost accounting?
    a. Control of costs
    b. Measurement of financial performance
    c. Planning and budgeting
    d. Communicating financial information to external parties

23. Which of the following is an example of a cost centre?
    a. Sales department
    b. Marketing department
    c. Human resources department
    d. Production department

24. Which of the following is not an example of a direct cost?
    a. Wages paid to workers
    b. Depreciation of machinery
    c. Raw material consumed
    d. Direct labour cost

25. Which of the following is true about cost-volume-profit (CVP) analysis?
    a. It is not useful for decision-making.
    b. It helps in determining the impact of changes in production volume on profitability.
    c. It is not relevant for cost control purposes.
    d. It is not useful for determining the selling price of a product.

26. Which of the following is true about cost-volume-profit (CVP) analysis?
    a. It is not useful for decision-making.
    b. It helps in determining the impact of changes in production volume on profitability.
    c. It is not relevant for cost control purposes.
    d. It is not useful for determining the selling price of a product.

27. Which of the following is true regarding variable costs?
    a. They remain constant irrespective of the level of production.
    b. They change proportionately with the level of production.
    c. They do not change with the level of production.
    d. They cannot be controlled through cost management techniques.

28. Which of the following is true regarding cost drivers?
    a. They are factors that cause costs to increase.
    b. They have no impact on the overall cost of a product.
    c. They are not important for decision-making.
    d. They are not related to the cost of any product.

29. Which of the following is true about the classification of costs?
    a. It helps in determining the selling price of a product.
    b. It is not relevant for cost control purposes.
    c. It is not useful for decision-making.
    d. It helps in identifying cost behaviour.

30. Which of the following is not a method of cost ascertainment?
    a. Historical costing
    b. Marginal costing
    c. Standard costing
    d. Absorption costing

ANSWER

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

Topic

Fundamentals of Business Mathematics -

Module 1: Arithmetic

Fundamentals of Business Statistics

Module 4: Statistical Representation of Data

FOUNDATION

Paper-3

Fundamentals of Business Mathematics and Statistics (FBMS)

In this issue we will carry out MCQs on Arithmetic & Statistical Representation of Data – refer Module 1 and Module 4 of Study guide.

1. If $\frac{1}{b+c}, \frac{1}{c+a}, \frac{1}{a+b}$ are in AP then

(a) $b^2 - a^2 = c^2 - b^2$

(b) $2b = a + c$

(c) $a + b + c = 0$

(d) $b^2 = ac$

2. If arithmetic mean of a & b is $\frac{a^{n+1}+b^{n+1}}{a^n+b^n}$ then n is

(a) 1

(b) -1

(c) 0

(d) Infinity

3. If 16th term of the series X, 3.5, 3.25, 3……is zero, then sum of 1st 16 term of the series is

(a) 90

(b) 30

(c) -30

(d) 0

4. If $a^2 + b^2$, $ab + bc$ and $b^2 + c^2$ are in GP then which one of the following is correct

(a) $b^2 = ac$

(b) $(a+b)^2 = (b + c)(c + a)$

(c) $a^2 = bc$

(d) $abc = 1$

5. If (1 + 1 + 3 + 5 + upto k terms) - $t_k = 0$, then t_k is equal to

(a) $k^2 - 2k + 2$

(b) k^2

(c) $2k^2 - 5k + 3$

(d) k

6. If X:Y = 4:5, find (3X+5Y):(7X-2Y)

(a) 37 :18

(b) 18 :37

(c) 11 :34

(d) 31 :12

7. Using the properties of proportion, solve the following equation for y, given $\frac{341}{91} = \frac{y^3+3y}{3y^2+1}$

(a) 14

(b) 11

(c) 12

(d) 10

8. When the number 418 in decreased in the ratio of 19: 16, the new number is

(a) 352

(b) 325

(c) 496

(d) 469

9. A class consists of 48 male students and 23 female students. Find the ratio of female students to total strength of the class.

(a) 23: 48

(b) 48: 23

(c) 48: 71

(d) 23: 71

10. Find out the compound value of ₹28,950, interest rate being 12.5% per annum compounded continuously for 8 years.

(a) 76,895

(b) 74,695

(c) 78,695

(d) 77,995

11. Find the effective rate of interest to the nominal rate of 8% payable monthly.

(a) 8.30%

(b) 8.20%

(c) 8.10%

(d) 8.00%

12. Annuity is -

(a) increasing stream of cash flows.

(b) Decreasing stream of perpetual cash flows.

(c) Level stream of perpetual cash flows.

(d) Level stream of cash flows occurring for a fixed period of time.

13. A Quantitative characteristic is known as

(a) An attribute

(b) A discrete variable

(c) A continuous variable

(d) None of above

14. Annual income of a person is

(a) An attribute

(b) A discrete variable

(c) A continuous variable

(d) a or c

15. The quickest method to collect primary data is

(a) Personal interview

(b) Indirect interview

(c) Telephone interview

(d) By observation

16. The mode of presentation of data are

(a) Textual, tabulation and diagrammatic

(b) Tabular, internal and external

(c) Textual, tabular and internal

(d) Tabular, textual and external

17. For tabulation, 'caption' is

(a) The upper part of the table

(b) The lower part of the table

(c) The main part of the table

(d) The upper part of a table that describes the column and sub-column

18. "Stub" of table is the

(a) Left part of the table describing the columns

(b) Right part of the table describing the columns

(c) Right part of the table describing the rows

(d) Left part of the table describing the rows

19. Pie-diagram is used for

(a) Comparing different components and their relation to the table

(b) Representing qualitative data in a circle

(c) Representing quantitative data in circle

(d) b or c

20. Weights are generally called –

(a) Range

(b) Mean

(c) Frequencies

(d) Mode

21. Length of a class is

(a) The difference between the UCB and LCB of that class

(b) The difference between the UCL and LCL of that class

(c) a or b

(d) Both a and b

22. (Class frequency)/(Width of the class) is defined as

(a) Frequency density

(b) Frequency distribution

(c) Both

(d) None

23. An area diagram is

(a) Histogram

(b) Frequency polygon

(c) Ogive

(d) None

24. Most of the commonly used frequency curves are

(a) Mixed

(b) Inverted J-shaped

(c) U-shaped

(d) Bell-shaped

25. The distribution of profits of a company follows

(a) J-shaped

(b) U-shaped

(c) Bell-shaped frequency curve

(d) Any of these

26. Cost of sugar in a month under the heads Raw-materials, Labour, direct production and others were 12, 20, 35 and 23 units respectively. What is the difference between the central angles for the largest and smallest components of the cost of sugar?

(a) 72o

(b) 48o

(c) 56o

(d) 92o

27. The number of accidents for seven days in a locality are given below:

C	0	1	2	3	4	5	6
Frequency	15	19	22	31	9	3	2

What is the number of cases when 3 or less accident occurred?

(a) 56

(b) 6

(c) 68

(d) 87

28. Which one of the following is an exclusive series?

(a) 10-15, 15-20, 20-25……..

(b) 3-4, 4-5, 7-8…….

(c) 20-22, 23-25, 26-28…….

(d) None of the above

29. Graphs of frequency distribution is

(a) For developing inclusive series data

(b) Comparative analysis

(c) For developing exclusive series data

(d) For ascertaining mid-values of a class

30. Relative frequency is associated with which of the following?

(a) Mid value of a class

(b) Ratio of total frequency

(c) Exclusive series data

(d) Inclusive series data

ANSWER

1	a	$\frac{1}{c+a} = \frac{1}{b+c} = \frac{1}{a+b} - \frac{1}{c+a}$ By simplifying we get $\frac{b-a}{b+c} = \frac{c-b}{b+a}$ Or, $b^2 - a^2 = c^2 - b^2$. Hence the result.
2	c	$\frac{a+b}{2} = \frac{a^{n+1}+b^{n+1}}{a^n+b^n}$. We get $a^n = b^n$ Or, $\frac{a^n}{b^n} = 1$ Or, $(\frac{a}{b})^n = 1$ Or, $(ab^{-1})^n = (ab^{-1})^0$
3	b	d = -0.25; 1st term is 3.75; $S_{16} = \frac{16}{2}(3.75+0)$
4	a	We have $(ab+bc)^2 = (a^2 + b^2)(b^2 + c^2)$. Hence the result.
5	a	(1+1+3+5+upto k terms) - $t_k = 0$. So t_k = (1+1+3+5+upto k terms) Or, t_k = 1+(1+3+5+upto k - 1 terms) and the bracketed portion is an AP
6	a	X :Y = 4 : 5, find (3X+5Y) : (7X-2Y) (3*4 + 5*5) : (7*4-2*5) (12+25) : (28-10) 37:18

ANSWER

7	b	$\frac{341}{91} = \frac{y^3+3y}{3y^2+1}$ $\frac{341+91}{341-91} = \frac{(y^3+3y)+(3y^2+1)}{(y^3+3y)-(3y^2+1)}$ $\frac{216}{125} = \frac{(y+1)^3}{(y-1)}$ $\frac{(y+1)^3}{(y-1)^3} = \frac{6^3}{5^3}$ $\frac{(y+1)}{(y-1)} = \frac{6}{5}$ 5*(y+1) = 6*(y-1) 5y+5 = 6y-6 6y-5y = 5+6 Y = 11
8	a	418 decreased in 19:16 418/19*16 = 352
9	d	Male Students – 48, Female students – 23, Total strength of the class : Male students + Female students Total strength: (48+23) = 71 students. Ratio of female students to Total strength : 23 : 71
10	c	P = 28950, r = 12.50% p.a. or 0.125, n = 8 $A = P*e^{(r*n)}$ $A = 28950*e^{(0.125*8)}$ $A = 28950*e^{1}$ A = 28950*e (e = 2.7183) A = 28950*2.7183 = 78,694.79 or 78,695 (Approx.)

11	a	$r = (1+\frac{0.08}{12})^{1*12} - 1$ $r = (1+ 0.00667)^{12} - 1$ $r = 1.00667^{12} - 1$ $r = 1.08299 - 1$ $r = 0.08299$ or $8.299\% = 8.30\%$ (Approx.)
12	d	Annuity is level stream of cash flows occurring for a fixed period of time.

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

Suggestions:

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

Best Wishes.

Topic

Fundamentals of Business Economics -

Module 1: Basic Concepts

Fundamentals of Management -

Module 5: Fundamentals of Management

FOUNDATION

Paper-4

Fundamentals of Business Economics and Management (FBEM)

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

KING of Portugal organized a second expedition with 13 ships under the command of Pedro A. Cabral. Cabral accidentally discovered Brazil on the way to India. He carried gold and other valuable trade goods. Cabral was unable to do business with the local Calicut merchants. He and his men were finally driven out after local Muslims rioted and killed many of his men. Cabral had success at another Indian city, Cochin and returned to Portugal with a valuable cargo of spices. Thus Portuguese had successfully opened up a new trade route to India. The enclave of Goa, on the west coast of India, was annexed by Portugal in 1510, and remained in Portuguese control until it was retaken by force by the Indian Govt. in 1961.

Not to be outdone by the Portuguese, England's Queen Elizabeth, under pressure from the powerful British mercantile establishment, created the East India Trading Company on Dec.31, 1600. 12 years later, four British galleons defeated the Portuguese at a naval battle, thus gaining good graces of the Mughal Emperor Jahangir. Fortunately for the British, Jahangir was an alcoholic and He signed over trading concessions to the British during one of His many drinking binges. So long for today. The history will be continued.

MOCK TEST

I. Choose the correct answer:

1. Who was the proponent of the welfare definition of economics?
   A. Marshall
   B. Pigou
   C. Robbins
   D. Samuelson

2. Main economic problems faced by any society include
   A. What to produce
   B. How to produce
   C. For whom to produce
   D. All of these

3. An improvement in production technology leads to a
   A. Leftward shift in the PPC
   B. Rightward shift in the PPC
   C. No change in PPC
   D. None of the above

4. In a free market economy the problem of allocation is solved by the
   A. Profit mechanism
   B. Consumption mechanism
   C. Market mechanism
   D. None of the above

5. Given that price elasticity of demand for x, is unity. When p= ₹4, Q = 300. What will be Q when p = ₹3?
   A. 400
   B. 500
   C. 1000
   D. None of the above

6. Suppose the demand curve is X = 10 – 3P. What will be the price elasticity of demand when P= (5/3)
   A. Elasticity = 5
   B. Elasticity = 1
   C. Elasticity = 0.5
   D. None of the above

7. The demand for a commodity which can be put to a variety of uses will be
   A. Relatively elastic
   B. Relatively inelastic
   C. Unitary elastic
   D. None of the above

8. The demand for durable goods usually remains
   A. Relatively elastic
   B. Relatively inelastic
   C. Unitary elastic
   D. None of the above

9. The mid-point of a linear demand curve shows a price elasticity of demand which is
   A. Relatively elastic
   B. Relatively inelastic
   C. Unit elastic
   D. Perfectly inelastic
10. Movement along any demand curve shows
    A. Change in demand
    B. Change in quantity demanded
    C. Contraction in demand
    D. None of the above
11. If the price of a complementary good rises, the demand curve shifts to the
    A. Leftward direction
    B. Rightward direction
    C. Upward direction
    D. None of the above
12. When there is decreasing returns to a variable factor, then
    A. AP=MP
    B. AP<MP
    C. AP>MP
    D. None of the above
13. The law of variable proportion explains the shape of
    A. AFC curve
    B. LAC curve
    C. SAC curve
    D. None of the above
14. The total cost function is given by C=100+15Q-6Qsquare+Qcube. What will be the total fixed cost?
    A. 100
    B. 15
    C. 6
    D. None of the above
15. The short-run total cost
    A. Cannot be zero
    B. Can be zero
    C. Both A and B
    D. None of the above
16. SMC is equal to the
    A. Change in LMC
    B. Change in TFC
    C. Change in TVC
    D. None of the above
17. In the long run, the external economies of scale are enjoyed by
    A. An industry
    B. A firm
    C. Both of them
    D. None of the above
18. Kinked demand curve is related to
    A. Monopoly market
    B. Oligopoly market
    C. Monopolistic competition
    D. None of the above
19. The Fisher's equation in the Quantity theory of money is
    A. MV = PT
    B. MP = VT
    C. MT = PV
    D. None of the above
20. The name of the Central Bank of India is
    A. CENTRAL BANK OF INDIA
    B. BANK OF INDIA
    C. RESERVE BANK OF INDIA
    D. None of the above
21. In order to control inflation the central bank should
    A. Sell bonds in the open market
    B. Lower the bank rate
    C. Purchase bonds in the open market
    D. None of the above
22. Which is embodied in all the functions of management?
    A. Planning
    B. Control
    C. Organizing
    D. Co-ordination

23. A manager has to exhibit the style of leadership depending on the
    - A. Situation
    - B. Performance
    - C. Time
    - D. Period
24. Operational planning is
    - A. Long term planning
    - B. Short term planning
    - C. Medium term planning
    - D. Annual planning
25. Which of the following is not a part of staffing?
    - A. Recruitment
    - B. Selection
    - C. Training
    - D. Publicity
26. Filtering means
    - A. Hiding some meaning
    - B. Disclose the information
    - C. Sending the message
    - D. None of the above
27. Horizontal communication is also known as
    - A. Written communication
    - B. Lateral communication
    - C. Verbal communication
    - D. None of the above
28. Which communication creates a record of evidence?
    - A. Formal
    - B. Verbal
    - C. Written
    - D. All of the above
29. Supervisory directly controls the activities in a
    - A. Board
    - B. Committee
    - C. Team
    - D. Group
30. Maslow's model is formulated in terms of
    - A. Wants
    - B. Rewards
    - C. Human needs
    - D. Goals

ANSWER

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

So friends!!

I hope you have enjoyed the Mock test. There are a couple of questions based on mathematics. Do not worry. They are very simple. Economics of today involves lots of higher mathematics. So you can not avoid mathematics totally. It will be helpful if you go through the "straight line" chapter of co-ordinate geometry. So long for today!!

Wish you all the best.

CMA INTERMEDIATE COURSE

Syllabus 2022

Topic

Module 2:
Indian Contracts Act, 1872

INTERMEDIATE

Group I - Paper-5

Business Laws and Ethics (BLE)

BUSINESS LAWS AND ETHICS

It is expected that you - the students prepare a time-table with time allotted for each subject and read, write, revise and recapitulate all that you keep on reading. The first important point is that you must read the *Bare Act* and the *Sections* and start asking questions to yourself and find your own answers. In this issue we shall deal with Indian Contract Act, mainly two special type of contract as per Indian Contract Act, 1872.

Special Contract: Laws of Agency

Chapter ten of the Indian Contract Act deals with Agency. Section 182 provides that an 'agent' is a person employed to do any act for another or to represent another in dealing with the third person. Some significant concepts associated with Laws of agency are enumerated below.

1. Termination of Agency

Section 201 provides for the termination of agency. An agency is terminated by the principal-

- revoking his authority; or
- by the agent renouncing the business of the agency; or'
- by the business of the agency being completed; or
- by either the principal or agent dying or becoming of unsound mind; or
- by the principal being adjudicated an insolvent under the provisions of any act for the time being in force for the relief of insolvent debtors.

Section 202 provides that where the agent has himself an interest in the property which forms the subject matter of the agency, the agency cannot, in the absence of an express contract, be terminated to the prejudice of such interest.

Examples:

a) *A gives authority to B to sell A's land and to pay himself, out of the proceeds, the debts due to him. A cannot revoke his authority, nor can it be terminated by his insanity or death;*

b) *A consigns1000 bales of cotton to B, who has made advances to him on such cotton, and desires B to sell the cotton and to repay himself out the price, the amount of his own advances. A cannot revoke the authority nor is it terminated by his insanity or death.*

Section 208 provides as to the time at which the agent's authority is terminated as to agent and as to third persons. The termination of the authority of an agent does not, so for as regards the agent, take effect before it becomes known to him, or, so far as regards third persons, before it becomes known to them.

Examples:

a) *X directs Y to sell goods for him, and agrees to give Y 8% commission on the price fetched by the goods. X afterwards, by letter, revokes Y's authority. Y, after the letter is sent, but before he receives it, sells the goods for ₹100.The sale is binding on X and Y is entitled to ₹8 as his commission;*

b) *A, at Kolkata, by letter directs B to sell for him some cotton lying in a warehouse in Mumbai, and afterwards, by letter, revokes his authority to sell, and directs B to send the cotton to Kolkata. B, after receiving the second letter, enters in to a contract with P, who knows the first letter, but not of the second, for the sale to him of the cotton. P pays B the money, with which B absconds. P's payment is good as against A.*

c) *A directs B, his agent, to pay certain money to C. A dies and D takes out probate to his will. B, after A's death, but before hearing of it, pays the money to C. The payment is good as against D, the executor.*

2. Revocation of agent's authority

Section 203 provides for the revocation of agent's authority. The principal may, save as is otherwise provided by Section 202, revoke the authority given to his agent at any time before the authority has been exercised so as to bind the principal. Section 204 provides that the principal cannot revoke the authority given to his agent after the authority has been partly exercised, so far as regards such acts and obligations as arise from acts already done in the agency.

Examples:

a) *A authorizes B to buy 1,000 bales of cotton on account of A, and to pay for it out of A's moneys remaining in B's hands. B buys 1,000 bales of cotton in his own name, so as to make himself personally liable for the price. A cannot revoke B's authority so far as regards payment for the cotton.*

b) *A authorizes B to buy 1,000 bales of cotton on account of A, and to pay for it out of A's moneys remaining in B's hands. B buys 1,000 bales of cotton in A's name, and so as not to render himself personally liable for the price. A can revoke B's authority to pay for the cotton.*

3. Compensation

Section 205 provides for the provision of compensation for revocation by principal or renunciation by agent. When there is an express or implied contract that the agency should be continued for any period of time, the principal must make compensation to the agent, or the agent to the principal, as the case may be, for any previous revocation or renunciation of the agency without sufficient cause.

4. Rights of principal

The rights of principal are described in Sections 215 and 216.

Section 215 provides that if an agent deals on his own account in the business of the agency, without first obtaining the consent of the principal and acquainting him with all material circumstances which have come to his own knowledge on the subject, the principal may repudiate the transaction, if the case shows, either that any material fact has been dishonestly concealed from him by the agent, or that the dealings of the agent have been disadvantageous to him.

Examples:

a) *A directs B to sell A's estate. B buys the estate for himself in the name of C. A, on discovering that B has bought the estate for himself, may repudiate the sale, if he can show that B has dishonestly concealed any material act, or that the sale has been disadvantageous to him;*

b) *A directs B, to sell A's estate. B on looking over the estate before selling it, finds a mine on the estate which is unknown to A. B informs A that he wishes to buy the estate for himself, but conceals the discovery of the mine. A allows B to buy, in ignorance of the existence of the mine. A, on discovering that B knew of the mine at the time he bought the estate, may either repudiate or adopt the sale at his option.*

Section 216 provides that if an agent, without the knowledge of his principal, deals in the businesses of the agency on his own account instead of on account of his principal, the principal is entitled to claim from the agent any benefit which may have resulted to him vfrom the transaction.

Example:

A direct B, his agent, to buy a certain house for him. B tells A that it cannot be bought, and buys the house for himself. A may, on discovering that B has bought the house, compel him to sell it to A at the price he gave for it.

5. Agent's right and obligation

The rights of agents are depicted in Section 217 to 219

Section 217 provides that an agent may, retain, out of any sums received on account of the principal in the business of the agency, all moneys due to himself in respect of advances made or expenses properly incurred by him in conducting such business and also such remuneration as may be payable to him for acting as agent.

Section 218 provides that subject to such deductions, the agent is bound to pay to his principal all sums received on his account;

Section 219 provides that in the absence of any special contract, payment for the performance of any act is not due to the agent until the completion of such act, but an agent may detain moneys received by him on account of goods sold, although the whole of the goods consigned to him for sale may not have been sold, or although the sale may not be actually complete.

Topic

Module 1: Accounting Fundamentals

INTERMEDIATE

Group I - Paper-6

Financial Accounting (FA)

Bank Reconciliation Statement

A Bank Reconciliation Statement (BRS) is a document that matches the cash balance on a company's balance sheet to the corresponding amount on its bank statement. The purpose is to ensure the accuracy of financial records and to identify any discrepancies.

Steps to Prepare a Bank Reconciliation Statement

1. **Compare the opening balances**: Ensure the opening balance of the cash book matches the bank statement.
2. **Check deposits and withdrawals**: Verify that all deposits and withdrawals are recorded in both records.
3. **Identify outstanding checks**: List all checks issued but not yet cleared.
4. **Identify deposits in transit**: List all deposits recorded in the cash book but not yet credited by the bank.
5. **Adjust for bank errors**: Note any errors made by the bank and adjust accordingly.
6. **Adjust for company errors**: Correct any errors made in the company's records.
7. **Prepare the reconciliation statement**: Start with the bank statement balance, add deposits in transit, deduct outstanding checks, and adjust for any errors to arrive at the adjusted cash book balance.

Key Concepts

- **Cash Book**: Records all cash transactions.
- **Bank Statement**: Issued by the bank, showing all transactions in the bank account.
- **Outstanding Checks**: Checks that have been issued but not yet cleared by the bank.
- **Deposits in Transit**: Deposits recorded in the company's books but not yet credited by the bank.
- **Bank Errors**: Mistakes made by the bank in recording transactions.
- **Company Errors**: Mistakes made by the company in recording transactions.

Importance of Bank Reconciliation Statement

1. **Ensures Accuracy of Financial Records**
   - o **Detection of Errors**: Identifies discrepancies between the company's records and the bank's records, such as incorrect entries or omissions.
   - o **Prevents Mistakes**: Helps prevent errors in financial statements by ensuring that the cash book and bank statement balances match.
2. **Fraud Prevention and Detection**
   - o **Identifies Unauthorized Transactions**: Helps spot unauthorized or fraudulent transactions by comparing the bank statement with the company's cash book.
   - o **Mitigates Risk of Embezzlement**: Regular reconciliation reduces the risk of internal fraud or embezzlement.
3. **Effective Cash Management**
   - o **Accurate Cash Position**: Provides an accurate picture of the company's cash position, helping in effective cash flow management.
   - o **Informed Decision-Making**: Enables better decision-making regarding cash requirements and investments.
4. **Improves Internal Control**
   - o **Accountability**: Enhances accountability by ensuring that all transactions are properly recorded and reconciled.
   - o **Operational Efficiency**: Streamlines financial processes and improves operational efficiency by maintaining up-to-date records.
5. **Compliance and Auditing**
   - o **Regulatory Compliance**: Helps comply with regulatory requirements by maintaining accurate financial records.
   - o **Audit Trail**: Provides a clear audit trail for external auditors, simplifying the auditing process.
6. **Prepares for Financial Reporting**
   - o **Accurate Financial Statements**: Ensures that financial statements accurately reflect the company's financial position.
   - o **Transparency**: Enhances transparency and reliability of financial information provided to stakeholders.

A Bank Reconciliation Statement is crucial for maintaining the integrity and accuracy of a company's financial records. It plays a vital role in error detection, fraud prevention, effective cash management, improving internal controls, ensuring compliance, and preparing accurate financial statements. Regular reconciliation helps businesses maintain accurate records, make informed decisions, and provide transparent financial information to stakeholders.

Example

Suppose the bank statement shows a balance of ₹10,000, while the cash book shows ₹9,500. After comparing the two, you identify the following:

- Outstanding checks: ₹1,500
- Deposits in transit: ₹2,000
- Bank error (overcharge): ₹100
- Company error (under-recorded withdrawal): ₹ 400

Bank Reconciliation Statement

Particulars	Amount
Balance as per bank statement	₹10,000
Add: Deposits in transit	₹2,000
Less: Outstanding checks	₹1,500
Add: Bank error	₹100
Less: Company error	₹400
Adjusted cash book balance	₹10,200

Depreciation and Amortisation

Depreciation and amortization are accounting methods used to allocate the cost of tangible and intangible assets over their useful lives. These methods help in matching the cost of assets with the revenue they generate over time.

Depreciation

Depreciation is an accounting method used to allocate the cost of a tangible asset over its useful life. This systematic allocation helps reflect the usage, wear and tear, or obsolescence of the asset in the company's financial statements.

Objectives of Depreciation

- **Match Expenses with Revenue**: Ensures that the cost of an asset is matched with the revenue it generates over time.
- **Reflect True Asset Value**: Provides a more accurate representation of an asset's value on the balance sheet.
- **Financial Planning**: Helps in planning for the replacement of assets by spreading their cost over their useful life.

Factors Affecting Depreciation

- **Cost of the Asset**: The initial purchase price and any additional costs necessary to prepare the asset for use.
- **Useful Life**: The estimated period over which the asset will be productive.
- **Residual Value (Salvage Value)**: The estimated value of the asset at the end of its useful life.
- **Depreciation Method**: The chosen method of calculating depreciation expense.

Methods:

- Straight-Line Method
- Declining Balance Method
- Units of Production Method
- Sum-of-the-Years-Digits Method

Example:

1. A company purchases a piece of machinery for \$15,000. The machinery has an estimated useful life of 5 years and a salvage value of \$3,000. Calculate the annual depreciation expense using the straight-line method.

   Depreciation Expense = Cost − Salvage Value / Useful Life

   Depreciation Expense = 15,000 − 3,000 / 5 = 12,000 / 5 = 2,400

2. An asset is purchased for ₹25,000 with no salvage value and a useful life of 4 years. Calculate the depreciation expense for the first two years using the double declining balance method.

   Depreciation Rate = 100% / Useful Life×2 = 100% / 4×2 = 50%

First Year:

Depreciation Expense =
Book Value at Beginning of Year × Depreciation Rate

Depreciation Expense = 25,000×50% = 12,500

Second Year:

Book Value at Beginning of Second Year = Cost – Accumulated Depreciation

Book Value = 25,000 – 12,500 = 12,500

Depreciation Expense = 12,500 × 50% = 6,250

The depreciation expenses are ₹12,500 for the first year and ₹6,250 for the second year.

Amortisation

Amortization is the process of spreading the cost of an intangible asset over its useful life. This accounting method ensures that the expense related to the intangible asset is matched with the revenue it generates over time.

Objectives of Amortization

- **Expense Allocation**: Spreads the cost of intangible assets over their useful lives.
- **Financial Accuracy**: Reflects the decline in value of intangible assets over time.
- **Revenue Matching**: Matches the cost of intangible assets with the revenue they help generate.

Intangible Assets Subject to Amortization

- **Patents**: Exclusive rights to produce or sell an invention.
- **Copyrights**: Exclusive rights to reproduce and sell artistic or literary work.
- **Trademarks**: Rights to use a symbol, name, or logo.
- **Franchise Agreements**: Rights to operate a business using another company's name and systems.
- **Goodwill**: The value of a company's brand name, customer relationships, etc.

Amortization Methods

- Straight-Line Method:
- Units of Production Method

Impact of Amortization

- **Financial Statements**: Reduces net income on the income statement and the book value of intangible assets on the balance sheet.
- **Taxation**: Amortization expense is deductible for tax purposes, reducing taxable income.

Example:

A company acquires a copyright for ₹ 1,00,000 with a useful life of 20 years and no residual value.

Amortization Expense = 1,00,000/20 = ₹ 5,000 per year

Questions:

1. What is the main purpose of a Bank Reconciliation Statement?
   a) To prepare financial statements
   b) To match the company's cash book with the bank statement
   c) To record all cash transactions
   d) To reconcile outstanding invoices

2. Which of the following is an example of a deposit in transit?
   a) A check issued but not yet cleared
   b) A bank charge not recorded in the cash book
   c) A deposit made but not yet credited by the bank
   d) A loan repayment

3. What should be done if the bank statement shows an overcharge?
   a) Record the overcharge in the cash book
   b) Ignore the overcharge
   c) Adjust the bank statement
   d) Add the overcharge to the bank reconciliation statement

4. An outstanding check is:
   a) A check recorded in the cash book but not yet cleared by the bank
   b) A check that has been cleared by the bank but not recorded in the cash book
   c) A check that has been issued and cleared
   d) A check that has been cancelled

5. If the bank reconciliation statement shows an adjusted cash book balance higher than the bank statement balance, which of the following might be true?
   a) There are outstanding checks
   b) There are deposits in transit
   c) The bank has made an error
   d) The company has made an error

6. What is the primary purpose of depreciation?
   a) To allocate the cost of an asset over its useful life
   b) To increase the value of an asset over time
   c) To match the revenue with the expenses in the same period
   d) Both a and c

7. Which depreciation method allocates an equal amount of expense each year?
   a) Declining Balance Method
   b) Straight-Line Method
   c) Units of Production Method
   d) Sum-of-the-Years-Digits Method

8. How is accumulated depreciation reported in the financial statements?
   a) As an expense on the income statement
   b) As a contra asset on the balance sheet
   c) As a liability on the balance sheet
   d) As a revenue on the income statement

9. What is the primary purpose of amortization?
   a) To allocate the cost of an intangible asset over its useful life
   b) To increase the value of an intangible asset over time
   c) To match the revenue with the expenses in the same period
   d) Both a and c

10. Which of the following is an example of an intangible asset that would be amortized?
   a) Building
   b) Equipment
   c) Patent
   d) Land

ANSWER

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

Topic

Module 2: Heads of Income

INTERMEDIATE

Group I - Paper-7A

Direct Taxation (DT)

Overview of Salaries – Part I

1. **Salary** means any payment by the employer to employee.
2. **Basis of charge:** Salary is chargeable to tax either on '*due*' basis or on '*receipt*' basis, whichever is earlier.
3. **Basic Salary:** Fully taxable in all cases.
4. **Dearness Allowance (DA) or Dearness Pay (DP):** Fully taxable in all cases.
5. **Fees:** Fully taxable in all cases.
6. **Commission:** Fully Taxable.
7. **Bonus:** Contractual bonus is taxable as bonus whereas voluntary bonus is taxable as perquisite.
8. **Gratuity**

   a. Gratuity received during continuation of service is fully taxable in the hands of all employees.

   b. Gratuity received at the time of termination of service by Government employee is fully exempted.

   - Gratuity received at the time of termination of service by non–government employee, covered by the Payment of Gratuity Act shall be exempted to the minimum of the following

     (a) Actual Gratuity received

     (b) ₹ 20,00,000; and

     (c) 15/26 × Completed year of service × Salary p.m.

     Completed year of service consider any fraction in excess of 6 months.

   - Gratuity received at the time of termination of service by non-government employee not covered under the Payment of Gratuity Act shall be exempted to the minimum of the following:

     (a) Actual Gratuity received;

     (b) ₹ 20,00,000; and

     (c) 1/2 × **Completed year of service × Average Salary p.m.**

     Completed year of service ignores any fraction of the year.

   c. Gratuity received after death of employee is exempted.

9. **Leave Salary Encashment**

   a. Leave salary during continuation of service is fully taxable in hands of all employees.

   b. Leave salary received by Government employee is fully exempted.

   - Leave salary received by non-Government employee shall be exempted to the minimum of the following:

     (a) Actual amount received as leave salary

     (b) ₹ 25,00,000/-

     (c) 10 × Average salary p.m.

     (d) [{(1 × completed year of service) – leave actually taken in terms of month} × average salary p.m.]

     Completed year of service ignores any fraction of the year.

   c. Leave salary paid to the legal heir of deceased employee is not taxable as salary.

10. **Pension [Sec. 17(1)(ii)]**

    - Uncommuted pension is fully taxable in the hands of all employees
    - Commuted pension received by a Government employee is fully exempt from tax.
    - Commuted pension received by an employee who also received gratuity: 1/3 of *total* pension commuted shall be exempted.
    - Commuted pension received by an employee who does not receive gratuity: ½ of *total* pension commuted shall be exempted.

11. **Voluntary Retirement Compensation:** Compensation received at the time of voluntary retirement shall be exempted to the minimum of the following

    (a) Actual amount received as per guidelines; or

(b) ₹ 5,00,000 provided following conditions are satisfied –

(i) Compensation is not received from Individual, HUF or Firm.

(ii) Voluntary Retirement Scheme (VRS) framed in accordance with prescribed guidelines i.e.

(a) Scheme must be applicable to all employees who have either completed age of 40 years or has completed 10 years of service

(b) Scheme must be framed to reduce the number of employees

(c) Vacancy caused is not to be filled up

(d) Retiring employee is not employed in another company or concern belonging to the same management

(e) Compensation does not exceed - 3 months salary for each completed year of service; or salary for balance month of service left. Benefit under 10(10C) can be claimed once in the life of assessee.

12. **Annuity [Sec. 17(1)(ii)]:** Fully taxable

13. **Salary received in lieu of notice period:** Fully taxable

14. **Profits in lieu of salary [Sec. 17(3)]:** Fully taxable

ALLOWANCES

15. **House rent allowance (HRA):** Minimum of the following is exempted from tax:

    (a) Actual HRA received

    (b) 50%/40% of salary

    (c) Rent Paid – 10% of Salary

16. **City Compensatory Allowance/Tiffin Allowance/ Medical Allowance/Servant Allowance:** Fully taxable.

17. **Entertainment Allowance:** Fully taxable, irrespective of actual expenditure incurred. Government employee can claim deduction u/s 16(ii)

18. **Children Education Allowance:** Minimum of the following is exempted –

    (a) ₹ 100 per month per child (to the maximum of two children)

    (b) Actual amount received.

19. **Children Hostel Allowance:** Minimum of the following is exempted –

    (a) ₹ 300 per month per child (to the maximum of two children)

    (b) Actual amount received

20. **Truck Driver's Allowance:** Minimum of the following shall be exempted:

    (a) 70% of allowance

    (b) ₹ 10,000 p.m.

21. **Allowance to Government employees outside India:** As per sec. 10(7), any allowance or perquisite allowed outside India by the Government to an Indian citizen for rendering services outside India is wholly exempt from tax.

22. Any other allowance for which there is no specific provision shall be fully taxable.

23. **In case of following allowances deduction is allowed to the extent of actual expenditure:** Travel or transfer Allowance, Daily Allowance, Conveyance Allowance, Helper / Assistant Allowance, Professional Development Allowance/ Research Allowance, Uniform Allowance

24. Allowance [Old Regime -vs.- Default Regime]

Sec.	Particulars	Taxability	
		Old Regime	**New Regime**
10(13A)	House Rent Allowance	Amount received by the employee in excess of specified limits will be taxable.	No exemption
10(14)(i)	Special allowance or benefit, not being in the nature of a perquisite, specifically granted to meet expenses wholly, necessarily and exclusively incurred in the performance of the duties of an office or employment of profit. Following allowances are covered		
	Cat A a. **Travel or Tour or Transfer[1] Allowance** b. **Daily Allowance** c. **Conveyance Allowance**	i. Actual allowance received; or ii. Actual amount spent for the purpose, - whichever is less would be exempt	
	Cat B d. Helper Allowance e. Uniform Allowance f. Research or Training Allowance	i. Actual allowance received; or ii. Actual amount spent for the purpose, - whichever is less would be exempt	No Exemption
10(14)(ii)	Special allowances granted to the assessee either to meet his personal expenses at the place where the duties of his office or employment of profit are ordinarily performed by him or at the place where he ordinarily resides or to compensate him for the increased cost of living E.g., City Compensatory Allowance, Tiffin Allowance, Medical Allowance, Servant Allowance, Transport Allowance, etc.	Amount received by the employee in excess of specified limits [specified under rule 2BB(2)] will be taxable. ***Taxpoint***: Deduction is available irrespective of actual expenditure	Partial exemption is available only in respect of transport allowance to employee who is blind / deaf and dumb / orthopaedically handicapped

1 Allowance granted to meet the cost of travel on transfer includes any sum paid in connection with transfer, packing and transportation of personal effects on such transfer.

Topic

Module 4:

Concept of Indirect Taxes

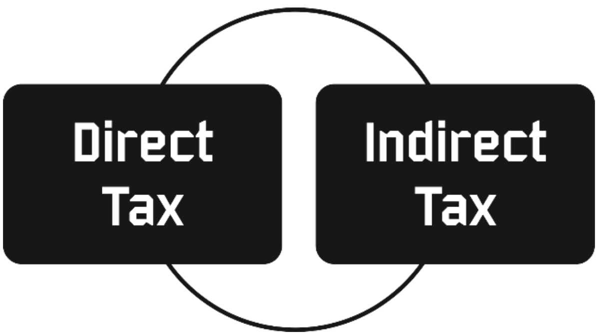
INTERMEDIATE

Group I - Paper-7B

Indirect Taxation (IDT)

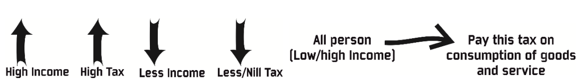
Concept of Indirect Tax

In a Welfare State, the Government takes primary responsibility for the welfare of its citizens, as in matters of health care, education, employment, infrastructure, social security and other development needs. To facilitate these, Government needs revenue. Taxation is the primary source of revenue to the Government for incurring such public welfare expenditure. In other words, Government is taking taxes from the public through its one hand and through another hand; it incurs welfare expenditure for public at large. However, no one enjoys handing over his hard-earned money to the government to pay taxes. Thus, taxes are compulsory or enforced contribution to the Government revenue by public. The government may levy taxes on income, business profits or wealth or add it to the cost of some goods, services, and transactions.



Type of Taxation

There are two types of taxes: Direct Tax and Indirect Tax. Tax, of which incidence and impact fall on the same person, is known as Direct Tax, such as Income Tax. On the other hand, tax, of which incidence and impact fall on two different persons, is known as Indirect Tax, such as GST, etc. It means, in the case of Direct Tax, tax is recovered directly from the assessee, who ultimately bears such taxes, whereas in the case of Indirect Tax, tax is recovered from the assessee, who passes such burden to another person & is ultimately borne by consumers of such goods or services.



Direct tax: Progressive in nature

Indirect Tax: Regressive in nature

Features of Indirect Taxes

Indirect taxes are taxes that are levied on goods and services rather than on income or profits. These taxes are collected by an intermediary (such as a retailer or manufacturer) from the person who ultimately bears the economic burden of the tax (such as the consumer). Here are some key points about indirect taxes:

- **Tax on goods and services**: Indirect tax is levied at the time of supply or manufacture or purchase or sale or import or export of goods. Further, it is also levied on supply.
- **Burden**: Tax, being indirect tax paid by the seller, shall be recovered by the seller from the buyer. Thus, one can say that burden of indirect tax is shifted from seller to buyer and ultimately borne by consumers of such goods or services.
- **Inflationary in nature**: Cost of goods and services increases due to levy of indirect tax thus indirect taxes promote inflation.
- **Social welfare**: It is useful tool to promote social welfare by checking the consumption of harmful goods or sin goods through higher rate of tax.
- **Wider Tax Base**: Majority of goods and services are liable to indirect tax with very low threshold limits, so tax base is much wider in case of indirect tax in compare to direct tax.
- **Regressive in Nature**: All persons (rich or poor) will bear equal wrath of tax on goods or service consumed by them irrespective of their ability. In other words, indirect tax does not create any difference between rich and poor. Poor people are also required to pay equal percentage of tax on certain goods and service of mass consumption. Thus, it may increase the disparities between rich and poor.
- **No pinch**: Seller (the person on which indirect tax is levied) does not perceive a direct pinch of tax as it is recovered by him from the buyer and then he is paying to the Government. On the other hand, since it is inbuilt in the price of the goods, the ultimate payer (i.e., buyer) pay it without knowing that he is paying any tax to the Government.
- **Examples of Indirect Taxes in India**:
  - *Goods and Services Tax (GST)*: A comprehensive indirect tax on the manufacture, sale, and consumption of goods and services throughout India, replacing multiple indirect taxes like VAT, excise duty, and service tax3.
  - *Customs Duty*: Levied on goods imported into India, aimed at protecting domestic industries and generating revenue.
  - *Excise Duty*: Previously levied on the manufacture of goods within India, now largely subsumed under GST.

Comparison Chart

Basis	Direct Tax	Indirect Tax
Meaning	Direct tax is referred to as the tax, levied on person's income and wealth and is paid directly to the government.	Indirect Tax is referred to as the tax, levied on a person who consumes the goods and services and is paid indirectly to the government.
Nature	Progressive in nature i.e., higher tax is levied on a person earning higher income and vice versa.	Regressive in nature i.e., all persons will bear equal wrath of tax on goods or service consumed by them irrespective of their ability.
Incidence and Impact	Falls on the same person. Assessee, himself bears such taxes. Thus, it pinches the taxpayer.	Falls on different person. Tax is recovered from the assessee, who passes such burden to another person. Thus, it does not pinch the taxpayer.
Example	Income Tax	GST, Custom Duty
Evasion	Tax evasion is possible	Tax evasion is hardly possible because it is included in the price of the goods and services.
Inflation	Direct tax helps in reducing the inflation.	Cost of goods and services increases due to levy of indirect tax thus indirect taxes promote inflation. However, sometimes it is useful tool to promote social welfare by checking the consumption of harmful goods or sin goods through higher rate of tax.
Imposition and collection	Imposed on and collected from the same person	Imposed on and collected from consumers of goods and services but paid and deposited by the assessee.
Burden	Cannot be shifted	Can be shifted
Event	Taxable income of the assessee	Supply of goods and services

Conclusion

Indirect taxes play a crucial role in the revenue generation of governments worldwide. They are embedded in the prices of goods and services, making them less visible to consumers but impactful on their purchasing power. Understanding the concept and implications of indirect taxes is essential for both consumers and businesses.

Topic

Module 2:
Cost Ascertainment – Elements of Cost

INTERMEDIATE

Group I - Paper-8

Cost Accounting (CA)

COST ACCOUNTING

Materials is the basic items which is required for the purpose of production and / or rendering services . it is a major part of current assets as well as working capital of a business. In most of the developing countries, about 50% to 75% of total capital is generally invested in material items. The average investment in material varies from industry to industry. Hence control must be exercised during the time of purchase, storage and utilization of materials. Almost in every examination one or more questions may be set from this chapter. specially in the area of Stores Pricing, EOQ Levels of stock and stock valuation. students feel difficulty in the areas like treatment of Return and Shortage of Stores, determination of impact on profit under different methods of valuation, pricing issues etc. thorough treatment of subject – material will help the students to improve their confidence level and proficiency in dealing with different situations. The students should be clear about the distinction between material control and inventory control. like all other functions purchasing is an important function of management. in big manufacturing organizations separate purchase departments are being set for conducting purchases. Top management lays down the purchase policy and accordingly, necessary purchases are made by the purchase department.

It is the independent function of the purchase department to decide:- What to purchase?, When to purchase?, where to purchase?, How to purchase?. When all purchases are made under the control of a purchaser or chief purchaser who ranks level with the top management, the buying is to Centralized. but if the buying function is performed by other respective managers, including the chief purchaser, it is said to be decentralized. The decision for centralized or decentralized purchase will depend on, type and quality of material required, location of the production centers, policy of the firm and urgency of purchasing items. In order to make scientific control and optimum level of inventory, different levels of stocks are fixed, which are:- reorder level, Maximum Level, Minimum Level, Danger Level and average Level. There are various methods of pricing the materials issued in cost accounting. The choice mostly depends on the nature of materials used and the condition of the business itself. The principal methods used in costing for pricing stores issues are:- Cost price method, Average Cost Price Method, Market price Method, Notional price Method etc. the Cost price method includes: FIFO, LIFO, NIFO, HIFO, FILO and Base stock price.

The various tools and techniques commonly used for inventory control are :--

1) Perpetual inventory system and continuous stock verification.
2) ABC analysis.
3) Stock turnover analysis.
4) Setting – up various levels of stocks.
5) Codification.
6) Determining the Economic Ordering Quantity (EOQ)
7) Establishment a Budget system.
8) Standardization.
9) Use of control ratios.
10) Computerization.
11) Simplification through variety reduction.
12) Application of quantitative techniques, operation research for demand forecasting.
13) Review of slow and non-moving items.
14) Provisioning and provisioning and purchase procedure.
15) Reporting. Etc.

Fixation of Stock Levels –

In stores different level of stock may be maintained. the level of stock can be classified into four different levels: maximum Level, Minimum Level, Reordering Level., Average Stock Level.

By solving the following problem, the concept of different stock levels will be clear:

PROBLEM:

Calculate Maximum Level, Minimum Level and Reorder Level from the following data –

Re-order Quantity : 1200 units.

Re-order period : 4 to 6 weeks'

Maximum Consumption : 300units per week.

Minimum Consumption : 200units per week

Normal Consumption : 250 units per week.

SOLUTION:

Re-order Level = Maximum Consumption x Maximum Reorder period

= 300units x 6 weeks = 1800 units.

Minimum Stock Level = Re-order Stock Level -- (Normal Consumption x Normal Reorder period)

= 1800 units –{ 250 x (4+6)/2

= 1800 – 1250 units

= 550 units .

Maximum Level = Re-order level + Re-ordering Quantity -- (Minimum Consumption x Minimum Re-order period) = 1800units + 1200 units – (200 x 4) units

= 3000 – 800 units.

= 2200 units.

Labour Cost represents the related cost of converting raw materials into finished products. It represents an important item of total cost. labour cost relates to human behavior , hence most sensitive . so labour cost not only means wages but also includes cost of recruitment and training cost of idle time , cost of labour turnover , cost of overtime and shift work , cost of labour inefficiency, cost of wastage and spoilage etc. Controlling of labour cost is the most important function of administrative management . It is not like material which can be stored for future. If the day"s labour is not utilized efficiently on the same day , idle time will occur with a loss to the department concerned. Again , if the management takes any action without recognizing the human element , it may result to strike or close down of the business. So it is a difficult task for for the management to exercise control over labour cost. There are various techniques for effective control labour costs :

1) Planning of production
2) Budget of labour forces .
3) Standardization of labour cost and labour hours .
4) Labour performance reports.
5) Time booking through automatic time recorder.
6) Suitable system of wages payment coupled with various incentive schemes.

Direct Labour Cost And Indirect Labour Cost :

It is that cost which can be identified with and allocated to cost centres or cost units. Thus direct labour cost has a linear relationship with the volume of production. It forms part of prime cost. On the other hand labour cost which cannot be apportioned to or absorbed by cost centres or cost units is indirect labour cost. Thus those labours who are not directly engaged in altering the composition or condition of the product provide various types of services . they are helpers , maintenance personnel etc. indirect labour is a part of overhead.

Labour Turnover :

Labour turnover may be defined as the rate of change in composition of the labour fource of an organization during a specified period . labour turnover is a peculiar problem of industry and leads to high cost and low productivity . Thus, Labour Turnover = No of workers leaving in a particular period / Avg no of workers employed during the period.

Cost of labour turnover is treated as an overhead expense and should be charged directly to production.

Job Evaluation and Merit Rating:

Job evaluation represents an effort to determine the relative value of every job. The evaluation may be achieved through the assignments of points or the use of some other systematic rating method for essential job requirements, such as skill,experience and responsibility.

Merit rating , on the other hand , refers to the evaluation of merit of an employee in terms of the requirements of the job . It is actually the evaluation of the performance of an employee. In merit rating , the personal qualities of an individual are taken into account.

Idle time:

Idle time refers to such a time for which wages are paid without any production. It is the difference between the time as per attendance records and the time booked for different jobs or workorders. The idle time may arise mainly due to two causes: i) Normal causes and ii) Abnormal causes. Cost of Normal Idle Time , which is uncontrollable should be charged to the job or workorder at an inflated rate . cost of Abnormal Idle Time should not be includrd in production cost but should be charged to Costing Profit and Loss A/c.

Overtime:

If a worker spends more time over and above the normal workimg hours , it is known as overtime . generally rate of overtime is higher than the normal rate . the extra payment required to be paid for Overtime work is known as overtime premium .

Idle Facilities:

It means the Plant and Machinary facilities available for utilization but which are not used fully due to normal or abnormal reasons. This generally arises due to market constraint or defective management policy .

Idle Capasity and Excess Capasity:

The term Idle capacity refers to temporary idleness becose of shortage of production due to lack of orders or any other causes. Excess capacity responses the surplus capasityy over what can be expected to be utilized at present due to unbalanced machines and equipmentswithin the departments,

Suggestions:

Generally , the questions from this chapter have been set relating to the method of remuneration . the cost of normal idle time should be considered as part of cost of product or service. A number of short notes are set in the examination from this part of chapter.

Topic

Module 2: Operations Planning

INTERMEDIATE

Group II - Paper-9

Operations Management and Strategic Management (OMSM)

Operations Management

In this issue let us discuss few numerical problems on operational planning with basic EOQ to complex EOQ model. Refer sub Module 2.7 of the guide book.

Question **1**.

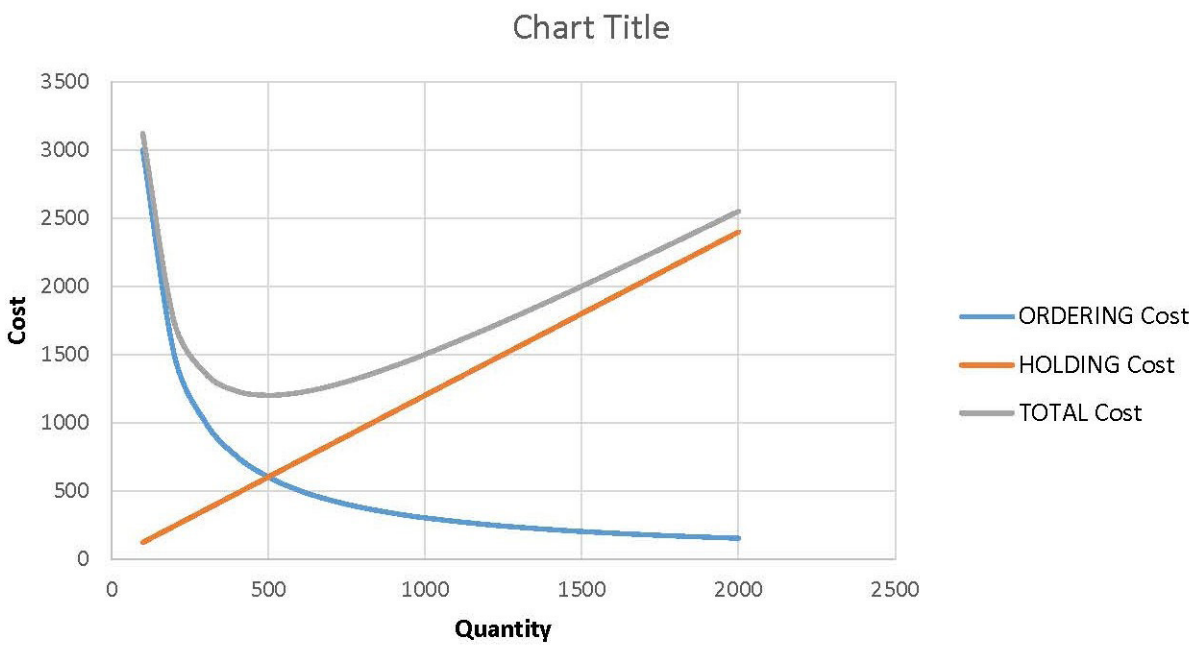
Annual Demand 2000 units (Constant). Purchase price p.u. ₹10 p.u. Holding Cost ₹2.40 p.u. Ordering cost ₹150 per order. Compute EOQ by graphical method as well as by formula.

Answer:

Order Q	Average	No of orders	Ordering cost	Holding Cost	Total
100	50	20	3000	120	3120
200	100	10	1500	240	1740
300	150	6.666666667	1000	360	1360
400	200	5	750	480	1230
500	250	4	600	600	1200
600	300	3.333333333	500	720	1220
700	350	2.857142857	428.5714286	840	1268.571
800	400	2.5	375	960	1335
900	450	2.222222222	333.3333333	1080	1413.333
1000	500	2	300	1200	1500
1200	600	1.666666667	250	1440	1690
1400	700	1.428571429	214.2857143	1680	1894.286
1600	800	1.25	187.5	1920	2107.5
1800	900	1.111111111	166.6666667	2160	2326.667
2000	1000	1	150	2400	2550

$$EOQ = \sqrt{\frac{2DO}{h}} = \sqrt{\frac{2 \times 2000 \times 150}{h}} = 500$$

EOQ is the ordering quantity at which total cost comprising Ordering cost and holding cost is at its minimum. More order quantities push up the holding cost but pull down the ordering cost. EOQ occurs at the point of trade-off between these two costs as depicted in the following fig:



Question 2.

In Q1, say total working days in the year is 250 days and lead time (time from the date placing the order to date of receipt of order) is 15 days (Constant), then what will be reorder point?

Answer:

No. of working days = 250

Lead time = 15 days

So, with an annual demand of 2000, per day demand = 2000 / 250 = 8

So, deamdn for 15 days = 15 * 8 = 120

So, when stock level is at 120, place for recorder.

Question 3.

Refer Q1. Compute optimum interval between two consecutive orders.

Answer:

Optimum interval between two consecutive orders = EOQ / D

2000 can complete 1 year.

So, 500 can complete 500/2000 = 0.25 years.

Question 4.

Refer Q1. Compute Annual total variable inventory cost.

Answer:

Annual total variable inventory cost = TC = Q/2*h+D/Q*O

or TC = SQRT (2DOh)

or SQRT (2DOic)

SQRT (2×2000×150×2.4) = 1200

Question 5. EOQ with price break (Single)

Refer Q1. Suppose the supplier informs that if the order size is at least 800 units then a discounted price of ₹9.80 per unit will be offered. Do you accept the offer?

Answer:

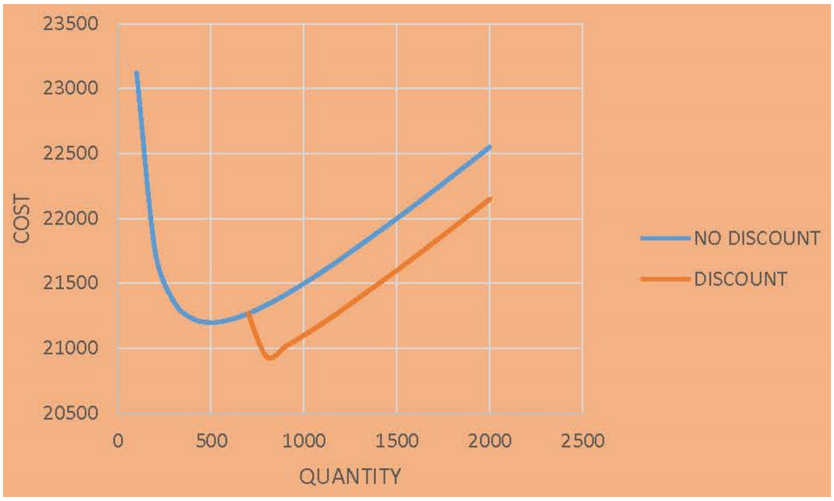
EOQ with price break (Single)

In the previous problme Cost P.U. is ₹ 9.80 prvided 800 units are pruchased at a time

at 500: Total annual cost = 500/2*2.4+2000/500*150+2000*10 = 21200

at 800: Total annual cost = 800/2*2.4+2000/800*150+2000*9.8= 20935

Go for 800.



Since the cost at minimum order quantity 800 and above is lower than the cost at EOQ of 500 units, we must give order at 800 units. The above shown curve shows a sizeable drop in the cost due to the price discount at a quantity of 800 units. At this level the total cost is lower than the total cost corresponding to 500 units.

Question 6. EOQ with price break (Multiple), with holding cost is given in ₹ per unit.

Refer Q5. The supplier now offers the following price schedule instead of a single price break:

Quantity		Price per unit
less than 300		10
300<=Q< 600		9.9
600<=Q< 1000		9.7
1000<=Q< 1500		9.5
Q>= 1500		9.4

At what level do you order to minimize the cost?

Answer:

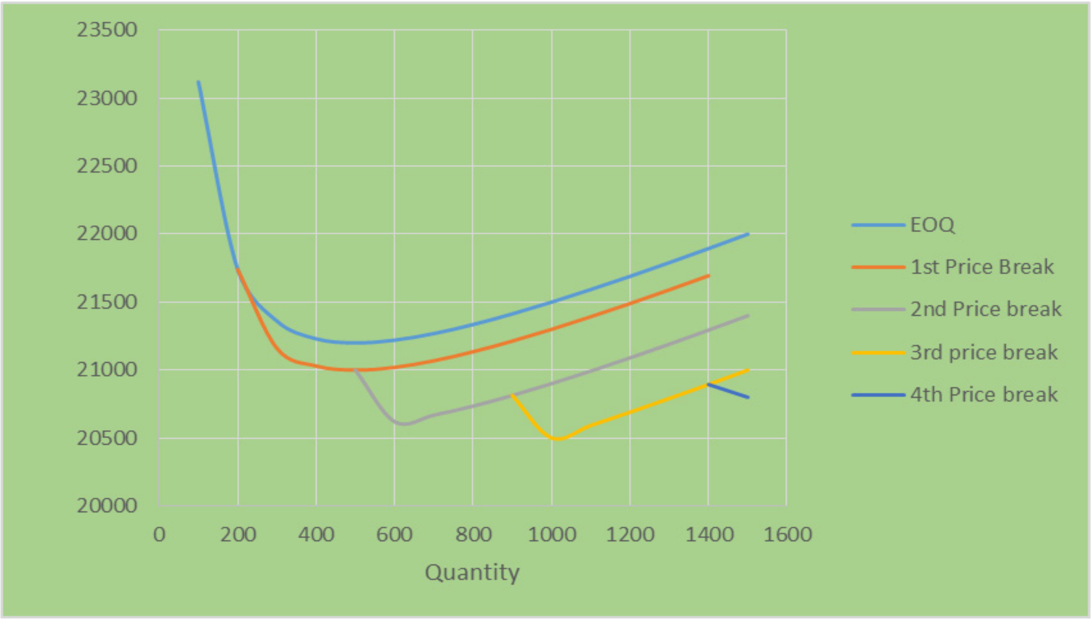
This is a problem with multiple price break but with constant holding cost given in ₹ per unit.

Considering discount given at different quantity levels the total cost at different levels is calculated and shown in the following table:

Category	Unit Cost	Order Quantity	Holding Cost	Ordering Cost	Purchase Cost	Total	
1	10	100	120	3000	20000	23120	
2	10	200	240	1500	20000	21740	
3	9.9	300	360	1000	19800	21160	
4	9.9	400	480	750	19800	21030	
5	9.9	500	600	600	19800	21000	
6	9.7	600	720	500	19400	20620	
7	9.7	700	840	428.5714286	19400	20668.57	
8	9.7	800	960	375	19400	20735	
9	9.7	900	1080	333.3333333	19400	20813.33	
10	9.5	1000	1200	300	19000	20500	
11	9.5	1100	1320	272.7272727	19000	20592.73	
12	9.5	1200	1440	250	19000	20690	
13	9.5	1300	1560	230.7692308	19000	20790.77	
14	9.5	1400	1680	214.2857143	19000	20894.29	
15	9.4	1500	1800	200	18800	20800	

(Blue at EOQ and Reds at different price breaks)

Clearly the total cost is minimum at a quantity of 1000 units and not at EOQ of 500 units. The inventory decision then is that to minimize the total cost , we should order 1000 units every time.



Question 7. EOQ with price break (Multiple), with holding cost is given in (%) age.

Consider the following problem:

Annual Demand		8000	
Ordering cost		180/order	
Holding cost		10%	
Price breaks are:			
Lot size			Unit price
1-999			Rs.22
1000-1499			Rs.20
1500-1999			Rs.19
2000 & above			Rs.18.5

At what level do you order to minimize the cost?

Answer:

Step1:						Total Cost	
find EOQ with lowest price			18.5				
					2000/2*0.1*18.5+8000/2000*180+8000*18.5		
EOQ = SQRT(2DO/ic) =		1247.700588		Not feasible		150570	Selected as minimum
Step2:							
find EOQ with next lowest price			19		1500/2*0.1*19+8000/1500*180+8000*19		
EOQ = SQRT(2DO/ic) =		1231.174023		Not feasible		154385	
Step3:							
find EOQ with next lowest price			20		1200/2*0.1*20+8000/1200*180+8000*20		
EOQ = SQRT(2DO/ic) =		1200		Feasible		161200	
If feasibility does not come in step 3 then we have to coninue finding EOQ at next level.							
At feasibility we compute total cost . Then at every price level next to this feasibilty level i.e at 1500 and 2000 level							

Question 8.

Till now we have assumed that EOQ is supplied at a single lot. Means 500 units in Q1 is supplied in a single lot. But assume supply is made in lots @ 50 units/day. Then refer Q 1 and compute maximum stock build up. Also compute the time required to supply the whole EQQ. Assume 250 working days in a year.

Answer:

The computation is shown in the following table:

Assuming 2000 annual demand and 250 working days, then								
demand rate per day 2000/250 = 8								
Then EOQ = SQRT((2 D O/ h)(p/(p-d)))			where d =8 and p =50					
So EOQ=	SQRT(2*2000*150/2.4)*(50/50-8)=			545.5447256				
and total inventory cost		SQRT((2 D O H)(1-d/p))			1099.818			
in one day stock build up is = no of units supplied - no of units consumed = 50-8 -42								
to supply total 545.545 units @ 50 units/day total time required 545.545/50 =							10.9109	days
So maximum stock build up = 10.91*42 =				458.22				

Key formulae used in this issue are:

1. EOQ = $\sqrt{\frac{2DO}{h}}$ where D = annual Demand in units, O ordering Cost ₹/unit, h = holding cost in ₹/unit;
2. Reorder level = (Consumption per day) × (Lead time in Days)
3. Holding cost in %: Holding Cost (₹) = (Cost/unit) × (%age rate)
4. Optimal Interval between two orders = EOQ/D
5. Annual Total Variable Inventory cost = Total of Ordering and Holding Cost = $\sqrt{2DOh}$

   Or when holding is given in % age = $\sqrt{2DOic}$
6. When D is given in ₹: EOQ = $\sqrt{\frac{2DO}{i}}$
7. EOQ with supply made in lots---"p" indicates rates of supply and "d" indicates consumption per day

   EOQ = $\sqrt{\frac{2DO}{h}} = \sqrt{\frac{p}{p - d}}$

   & Total variable inventory cost = Total of Ordering and Holding Cost = $\sqrt{2DOh}\ \sqrt{1-\frac{d}{p}}$

Suggestions:

This issue is based on basic EOQ management with an objective to make foundation for further study on designing operation schedule. The problems are just indicative type from which maximum benefits could be reached and applied while studying operations & production management in the curriculum. Guide book on the paper 9-Operations Management & Strategic Management along with reference books needs to be thoroughly consulted.

Best Wishes.

VOL 09 I NO. 07

Topic

Module 1:
Accounting for Shares and Debentures

Module 6:
Basic Concepts of Auditing

INTERMEDIATE

Group II - Paper-10

Corporate Accounting and Auditing (CAA)

Section A: Corporate Accounting

Topic: Buyback of Shares

- **Multiple Choice Questions**

1. The buy back of equity shares in any financial year should not exceed
   A. 20% of the total paid-up equity share capital in that financial year
   B. 25% of the total paid-up equity share capital in that financial year
   C. 25% of the total called-up equity share capital in that financial year
   D. 20% of the total paid-up equity share capital plus free reserves of that financial year
2. In which of the following cases, the special resolution will not be required for buyback?
   A. 20% of total equity share capital plus free reserve of the company
   B. 15% of total equity share capital plus free reserve of the company
   C. 10% of total equity share capital plus free reserve of the company
   D. none of the above
3. After buy back debt-equity ratio should not exceed
   A. 1 : 1
   B. 1 : 2
   C. 2 : 1
   D. 3 : 4
4. Every buy back shall be completed within a period of
   A. 8 months from the date of passing of the special resolution
   B. 4 months from the date of passing of the special resolution
   C. 1 year from the date of passing of the special resolution
   D. 1 month from the date of passing of the special resolution
5. Shares bought back shall be extinguished and physically destroyed within
   A. 10 days from the last date of completion of buy back
   B. 5 days from the last date of completion of buy back
   C. 15 days from the last date of completion of buy back
   D. 7 days from the last date of completion of buy back
6. The offer for buy back shall remain open for a period of
   A. not less than 10 days and not exceeding 20 days from the date of despatch of the letter of offer
   B. not less than 15 days and not exceeding 20 days from the date of despatch of the letter of offer
   C. not less than 15 days and not exceeding 30 days from the date of despatch of the letter of offer
   D. not less than 20 days and not exceeding 30 days from the date of despatch of the letter of offer

Answer Keys:

1-B; 2-C; 3-C; 4-C;5-D; 6-C

- **Comprehensive Problem**

A Ltd. wants to buy back 150000 equity shares of ₹ 10 each at a price of ₹ 20 each on 01.04.2021. The buy back is allowed in its articles of association and the company has obtained necessary approval from the shareholders. The company has sufficient bank balance to make the payment for buy back of shares.

The following information is available as on 31.03.21:

₹

Equity Share Capital (₹ 10 each fully pa id)	75,00,000
General Reserve	90,00,000
Dividend Equalization Reserve	15,00,000
Balance of Profit and Loss (Cr.)	7,50,000
10% Debentures (₹ 100 each)	11,250,000
Bank Loan	60,00,000
Current Liabilities	99,00,000

a. Determine whether the proposed buyback is permissible considering the relevant provisions of Companies Act 2013 in this respect.

b. Pass necessary journal entries in the books of the company to give effect of the process, if the plan is found to be in place.

Solution

The proposed buyback is permissible as all the tests are satisfied.

Workings:

Amount of buyback = 150000 shares at ₹20 each = ₹30,00,000

1. Shares Outstanding Test: Max. Permissible Limit = 25% of Outstanding Shares

Particulars	
Total number of shares outstanding	7,50,000
25% of the shares outstanding	1,87,500

Since the proposed buyback (150000 shares) is lower than the maximum limit, it is permissible.

2. Resource Test: Max. Permissible Limit = 25% of Paid-up Capital plus Free Reserves

Particulars	
Equity share capital (₹)	75,00,000
Free Reserve (₹) (General Reserve + DER +P/L)	1,12,50,000
Paid up Capital plus Free Reserves (₹)	1,87,50,000
25% of Paid-up Capital plus Free Reserves (₹)	46,87,500

Since, the amount of proposed buyback is lower than 25% of Paid-up Capital plus Free Reserves, it is permissible.

3. Debt Equity Ratio Test: Debt after buyback cannot exceed twice the paid up capital plus free reserves.

Particulars		
Total Debt (₹) (11250000 + 6000000 + 9900000)		27150000
Paid up capital after buy-back (7500000 – 150000 x 10)	11250000	
Free reserves	1500000	
Less. Premium on buyback (150000 x 10)	1500000	6000000
Less. Transfer to Capital redemption reserve		8250000
Paid up capital + Free Reserve after buyback		14250000
Debt Equity ratio = 27150000 : 14250000		1.91:1

Since the revised Debt-equity ratio is lower than 2:1, the proposed buyback is permissible.

Journal Entry

Date	Particular	Dr (₹)	Cr. (₹)
1.4.2021	Equity Share Capital A/C	1000000	
	General Reserve A/C	1000000	
	To Equity Share-holders A/C		2000000
	(Being cancellation of shares bought back and premium on buyback provided out of General Reserve)		
1.4.2021	Equity Share-holders A/C	3000000	
	To Bank A/C		3000000
	(Being buyback of 150000 shares of ₹ 10 each at ₹ 20 per share.)		
1.4.2021	General Reserve A/C	1000000	
	To Capital redemption Reserve A/C		1000000
	(Being nominal value of shares bought back transferred to CRR)		

Section B: Auditing

Topic: Basic Concepts of Auditing

- **Multiple Choice Questions**

1. Which of the following is/are statutory book(s) of a company?
   A. Register of charges
   B. Register of Members
   C. Register of debenture holders
   D. All of the above
2. Test checking requires application of ___________.
   A. mathematical theory
   B. sampling theory
   C. geometry theory
   D. stakeholder theory
3. Which of the following is not an objective of audit planning?
   A. Allocation of work
   B. manage time
   C. ensure that no important matter is left
   D. increase in audit fees
4. ___________is conducted with a particular object in view, viz. to know financial position, earning capacity, prove fraud, invest capital, etc.
   A. Auditing
   B. Accounting
   C. Investigation
   D. Sampling
5. Audit working papers are the property of
   A. the client
   B. the auditor
   C. the government
   D. the audit clerks

Answer Keys:

1-D; 2-B; 3-D; 4-C; 5-B

- **Comprehensive Question and Answer**

Question:

What do you mean by Audit Planning? Discuss its advantages.

Answer:

Meaning of Audit Planning

Audit planning is a process of deciding in advance what is to be done, who is to do it, how it is to be done and when it is to be done by the auditor in order to have efficient and effective completion of work. Audit planning can be done only when, the auditor is having knowledge of the business of the client. It helps in accomplishment of objectives of audit and enables the auditor to cover different aspects of audit work in a systematic manner within a preset time frame. It enhances the quality of audit work. Audit plans should cover knowledge about client's accounting systems and policies, internal control procedures and coordinating the work to be performed. Plans should be flexible so that they can be developed or revised as and when required by the auditor.

Advantages of Audit Planning

1. Accomplishment of Objectives: Audit plan ensures that it provides right means to accomplish audit objectives. Further it also ensures that appropriate attention is devoted to important areas of audit.
2. Identification of Problems: A well drawn and established audit plan helps in identifying potential problems.
3. Timely Completion of Work: It ensures that work is completed properly within the specified time and no important area is left out. It also ensures that all important areas of management receive attention.
4. Facilitates Coordination: It facilitates coordination of the audit work done by auditors and other experts.
5. Better Audit Work: It helps in improving the quality of audit work and provides promptness and perfection in audit performance.

Topic

Module 4:
Sources of Finance and Cost of Capital

Module 8:
Introduction to Data Science for Business Decision-making

INTERMEDIATE

Group II - Paper-11

Financial Management and Business Data Analytics (FMDA)

Subject: Financial Management and Business Data Analytics
Financial Management
Cost of Capital

Cost of capital is the minimum rate of return that a firm must earn on its investments so as to leave market price of its. It is also referred to as cut-off rate, target rate, hurdle rate, required rate of return and so on. In calculating the cost of capital, the focus is on long-term funds. The specific costs have to be calculated for (i) long-term debt (including debentures); (ii) preference shares; (iii) equity capital; and (iv) retained earnings.

Example

XYZ Ltd. has on its books the following amounts and specific costs of each type of capital.

Type of capital	Book value (₹)	Market value (₹)	Specific costs (%)
Debt	4,00,000	3,80,000	5
Preference	1,00,000	1,10,000	8
Equity	6,00,000	12,00,000	15
Retained earnings	2,00,000		13
Total	13,00,000	16,90,000	

You are requested to determine the weighted average cost of capital using (a) Book value weights and, (b) Market value weights. How are they different?

Answer:

(a) Calculation of weighted average cost of capital using book value weights:

Type of capital	Book value (₹) (BV)	Specific costs (%) (k)	Total Costs = (BV × k) (₹)
Debt	4,00,000	5	20,000
Preference	1,00,000	8	8,000
Equity	6,00,000	15	90,000
Retained earnings	2,00,000	13	26,000
Total	13,00,000		1,44,000

Weighted average cost of capital (k_o) = $\frac{₹\ 1,44,000}{₹\ 13,00,000} \times 100 = 11.1\%$

(b) Calculation of weighted average cost of capital using market value weights

Type of capital	Market value (₹)	Specific costs (%) (k)	Total Costs = (BV × k) (₹)
Debt	3,80,000	5	19,000
Preference	1,10,000	8	8,800
Equity	9,00,000	15	1,35,000
Retained earnings	3,00,000	13	39,000
Total	16,90,000		2,01,800

Weighted average cost of capital (k_o) = $\frac{₹\ 2,01,800}{₹\ 16,90,000} \times 100 = 11.9\%$

Note 1: The total market value of equity shares and retained earnings is apportioned three-fourths and one-four respectively on the basis of their book values.

Capital Asset Pricing Model Approach (CAPM)

The CAPM explains the behaviour of security prices and provides a mechanism whereby investors could assess the impact of proposed security investment on their overall portfolio risk and return.

The basic assumptions of CAPM are:

(a) the efficiency of the security markets and

(b) investor preferences.

The efficient market assumption implies that

(i) all investors have common (homogeneous) expectations regarding the expected returns, variances and correlation of returns among all securities;

(ii) all investors have the same information about securities;

(iii) there are no restrictions on investments;

(iv) there are no taxes;

(v) there are no transaction costs; and

(vi) no single investor can affect market price significantly.

CAPM describes the relationship between the required rate of return, or the cost of equity capital. It is shown below:

$$K_e = R_f + b\,(K_m - R_f)$$

Where

K_e = cost of equity capital

R_f = the rate of return required on a risk-free asset/ security/investment

K_m = the required rate of return on the market portfolio of assets that can be viewed as the average rate of return on all assets.

b = the beta coefficient

Example 2

From the following information, determine the cost of equity capital using the CAPM approach.

(a) Required rate of return on risk-free security 8%.

(b) Required rate of return on market portfolio of investment is 13%.

(c) The firm's beta is 1.6.

Answer:

$K_e = R_f + b\,(K_m - R_f)$

$K_e = 0.08 + 1.6(0.13 - 0.08) = 16.0\%$

Multiple Choice Questions

1. The cost of equity share capital is greater than the cost of debt because __________.

    (a) Equity shares carry a higher risk than debts

    (b) The face value of equity shares is lower than the face values of debentures in most cases

    (c) Equity shares do not provide a fixed dividend rate

    (d) Equity shares are not easily saleable

    Answer: (a)

2. If cost of debt is 8%, cost of equity is 13.9%, tax rate is 40% and capital structure is debt = 40% and equity = 60%, then weighted average cost of capital will be:

    (a) 11.54%

    (b) 6.924%

    (c) 10.26%

    (d) 8.204%

    Answer (c)

3. The required rate of return is 16%. Management is anticipating 8% growth rate. The company expects to pay dividend of ₹5 per share at the end of coming year. On this basis, at which price should the equity share be sold by the company?

    (a) ₹60.20

    (b) ₹62.50

    (c) ₹64.30

    (d) ₹61.70

    Answer: (b)

4. The preference shares of LM Ltd. pay an annual dividend of ₹6.50 a share and sells for ₹48 per share. What is the cost of preference share?

    (a) 9.19%

    (b) 7.38%

    (c) 13.54%

    (d) 9.46%

    Answer (c)

5. P/E ratio is

    (a) Profitability ratio

    (b) Turnover ratio

    (c) Liquid ratio

    (d) Market test ratio

    Answer (d)

Data Analytics
(Data Analysis and Modelling)

Introduction to Data Science for Business Decision-making

Data science combines math and statistics, specialized programming, advanced analytics, artificial intelligence (AI) and machine learning with specific subject matter expertise to uncover actionable insights hidden in an organization's data. These insights can be used to guide decision making and strategic planning. (Source: IBM)

Data science is the domain of study that deals with vast volumes of data using modern tools and techniques to find unseen patterns, derive meaningful information, and make business decisions.

Source:https://www.devopsschool.com/blog/what-is-data-science-advantages-and-disadvantages-of-data-science/

Advantages of Data Science

1. **Multiple job options:** It has given rise to a large number of career opportunities in its various fields. Some of them are *Data Scientist, Data Analyst, Research Analyst, Business Analyst, Analytics Manager, Big Data Engineer, etc.*

2. **Business benefits:** It helps organizations knowing how and when their products sell best and that's why the products are delivered always to the right place and right time. Faster and better decisions are taken by the organization to improve efficiency and earn higher profits.

3. **Highly paid jobs & career opportunities:** As data scientist, one can earn good salary and other benefits from the organisation.

4. **Hiring benefits:** It has made it comparatively easier to sort data and look for best of candidates for an organization.

Data measurements scales

The most widely used classification of measurement scales are: (a) nominal scale; (b) ordinal scale; (c) interval scale; and (d) ratio scale.

(a) **Nominal scale**: Nominal scales are used for labeling variables, without any quantitative value. "Nominal" scales could simply be called "labels." Nominal scales provide convenient ways of keeping track of people, objects and events. One cannot do much with the numbers involved.

(b) **Ordinal scale:** The ordinal scale places events in order, but there is no attempt to make the intervals of the scale equal in terms of some rule. Rank orders represent ordinal scales and are frequently used in research relating to qualitative phenomena. They do not specify how much better or worse a stock is at a specific price compared to one with a lower price. For example, the top 10 stocks by P/E ratio.

(c) **Interval scale:** A scale which represents quantity and has equal units but for which zero represents simply an additional point of measurement is an interval scale. The Fahrenheit scale is a clear example of the interval scale of measurement. Thus, 60-degree Fahrenheit or -10 degrees Fahrenheit are interval data.

(d) **Ratio scale:** The ratio scale possesses all characteristics of the nominal, ordinal, and interval scales. It is the most informative scale as it tends to describe the order and number of the object between the values of the scale. The most common examples of this scale are height, money, age, weight etc. With respect to market research, the common examples that are observed are sales, price, number of customers, market share etc.

Topic

Module 1: Introduction to Management Accounting

Module 2: Activity Based Costing

INTERMEDIATE

Group II - Paper-12

Management Accounting (MA)

Module 1: Introduction to Management Accounting

1. Introduction to Accounting

Accounting is the systematic process of recording, reporting, and analyzing financial transactions. This process is critical for businesses as it helps stakeholders—including employees, shareholders, creditors, and regulatory agencies—make informed decisions. Accounting has been aptly described as the "language of business," underscoring its role in facilitating communication within and outside the organization. The need for accounting information varies among users; for instance, owners are interested in profitability and financial strength, management requires data for internal decision-making, creditors look at the company's financial position, and regulatory bodies focus on compliance.

The three main branches of accounting are financial accounting, management accounting, and cost accounting. Each serves a distinct purpose and caters to different users.

2. Financial Accounting

Financial accounting is primarily concerned with recording financial transactions and preparing financial statements for external users. Its main objective is to provide a clear picture of the financial performance and position of a business to stakeholders such as investors, creditors, and regulatory agencies. Financial accounting adheres to standardized principles and guidelines, namely the Generally Accepted Accounting Principles (GAAP) or the International Financial Reporting Standards (IFRS).

The core financial statements include the Income Statement, Balance Sheet, Cash Flow Statement, and the Statement of Changes in Equity. The Income Statement shows the company's revenue and expenses, resulting in net profit or loss. The Balance Sheet provides a snapshot of the company's assets, liabilities, and equity at a specific point in time. The Cash Flow Statement tracks the inflows and outflows of cash, helping stakeholders understand the liquidity position. The Statement of Changes in Equity outlines changes in the company's equity over a reporting period.

3. Management Accounting

Management accounting focuses on providing information for internal decision-making. Unlike financial accounting, which looks at historical data, management accounting is forward-looking and emphasizes planning, controlling, and evaluating business operations. It helps managers make informed decisions by providing relevant financial and non-financial information.

Management accounting has several key features:

- **No statutory requirement:** Unlike financial accounting, there are no legal requirements for management accounting.
- **Focus on future predictions:** It provides information that helps in forecasting and planning.
- **Quantitative and qualitative information:** Management accounting uses both types of information to provide a comprehensive view of the business.

Several tools and techniques are commonly used in management accounting, including budgeting, cost-volume-profit analysis, variance analysis, and performance measurement. Budgeting involves planning future business activities in monetary terms, helping managers allocate resources efficiently. Cost-volume-profit analysis examines the relationship between costs, revenue, and profit at different levels of production and sales. Variance analysis compares actual performance with planned performance to identify and understand deviations. Performance measurement involves assessing the efficiency and effectiveness of business operations.

4. Cost Accounting

Cost accounting is mainly concerned with determining the costs of products or services and assisting in cost control and cost reduction. It provides detailed cost information that helps management plan and control business activities. The main objectives of cost accounting are cost ascertainment, cost control, and cost reduction.

Key principles of cost accounting include cost allocation, absorption costing, and marginal costing. Cost allocation involves distributing costs among different departments or products. Absorption costing includes both fixed and variable costs in the cost of production, while marginal costing considers only variable costs.

Cost accounting methods include standard costing, activity-based costing (ABC), job costing, and process costing. Standard costing involves comparing actual costs with predetermined standards to identify variances. ABC assigns costs to products or services based on the activities required for their production. Job costing calculates costs for specific jobs or batches, making it suitable for industries with customized production. Process costing is used in industries with continuous production processes, such as chemicals or food processing.

5. Differences Between Financial and Management Accounting

While financial and management accounting are both essential for business operations, they serve different purposes and audiences. Financial accounting is primarily for external reporting, providing historical data that complies with regulatory standards like GAAP or IFRS. It focuses on summarizing the financial performance and position of the business through standardized financial statements.

In contrast, management accounting is for internal use, providing information to help managers make informed decisions about the future. It includes both quantitative and qualitative data, focusing on areas such as budgeting, forecasting, and performance evaluation. Unlike financial accounting, management accounting does not have statutory requirements, giving it flexibility in how information is presented and used.

6. Contemporary Techniques in Management Accounting

Management accounting has evolved to include contemporary techniques that address the complexities of modern business environments. Some of these techniques include Activity-Based Costing (ABC), the Balanced Scorecard, Just in Time (JIT), and Total Quality Management (TQM).

- **Activity-Based Costing (ABC):** ABC assigns costs to products or services based on the activities required for their production. This method provides a more accurate cost per product by identifying and assigning costs to specific activities.
- **Balanced Scorecard:** This tool includes multiple perspectives—financial, customer, internal business processes, and learning and growth. It provides a balanced view of organizational performance, helping managers align business activities with strategic goals.
- **Just in Time (JIT):** JIT focuses on reducing waste and improving efficiency by receiving goods only as they are needed in the production process. This technique minimizes inventory costs and enhances product quality.
- **Total Quality Management (TQM):** TQM emphasizes continuous improvement in all aspects of the business by involving all employees in the process. It focuses on customer satisfaction, process improvement, and reducing defects.

7. Strategic Cost Management

Strategic cost management aligns cost management practices with the overall business strategy. It focuses on long-term cost efficiency and involves techniques such as Value Chain Analysis, Target Costing, and Life Cycle Costing.

- **Value Chain Analysis:** This technique examines all activities involved in delivering a product or service, identifying areas where value can be added or costs can be reduced.
- **Target Costing:** Target costing starts with determining the desired profit margin and market price, then works backward to identify the maximum allowable cost for a product.
- **Life Cycle Costing:** This approach considers the total cost of ownership over the product's life cycle, from development to disposal, helping managers make decisions that minimize costs over the long term.

8. Role of Management Accountants

Management accountants play a crucial role in business operations. They are responsible for preparing and monitoring budgets, conducting financial analysis and forecasting, and measuring performance. Their skills and competencies include analytical skills, communication skills, and technical accounting knowledge. Management accountants help in formulating business strategies, making informed decisions, and ensuring that resources are used efficiently.

9. Ethical Considerations in Management Accounting

Ethics is a critical aspect of management accounting. Ethical conduct ensures the accuracy and honesty of financial reporting, maintaining public trust and credibility. Management accountants are expected to adhere to a code of ethics that includes principles of integrity, objectivity, confidentiality, and professional competence. Ethical behavior is essential for maintaining the credibility of the accounting profession and the trust of stakeholders.

In conclusion, management accounting is an essential tool for internal decision-making, providing relevant financial and non-financial information that helps managers plan, control, and evaluate business operations. It complements financial and cost accounting, offering a comprehensive view of the business's financial health and guiding strategic decisions for future growth.

Multiple Choice Questions

1. Which of the following is the primary purpose of management accounting?
   a) Preparing financial statements for external users
   b) Classifying financial transactions
   c) Assisting management in decision-making
   d) Recording past financial transactions
2. Which branch of accounting primarily focuses on providing information for external users?
   a) Cost Accounting
   b) Management Accounting
   c) Financial Accounting
   d) Internal Accounting
3. What is the main emphasis of cost accounting?
   a) Decision-making
   b) Cost ascertainment and cost control
   c) Financial reporting
   d) Market analysis
4. Which accounting type is mandatory by law for companies?
   a) Cost Accounting
   b) Management Accounting
   c) Financial Accounting
   d) Internal Accounting
5. Management accounting information is mainly used by:
   a) Investors
   b) Government agencies
   c) Management
   d) Creditors
6. The scope of management accounting is:
   a) Narrower than cost accounting
   b) Broader than financial accounting
   c) Focused only on cost control
   d) Limited to external reporting
7. Which tool is commonly used in management accounting?
   a) Statutory Audit
   b) Financial Reporting Standards
   c) Cost-Volume-Profit Analysis
   d) External Auditing
8. Which of the following is not a characteristic of cost accounting?
   a) Quantitative measurement
   b) Predictive analysis
   c) Focus on cost control
   d) Cost ascertainment
9. Which accounting type has a broader scope in terms of information provided?
   a) Financial Accounting
   b) Management Accounting
   c) Cost Accounting
   d) External Accounting
10. Management accounting does not include which of the following?
    a) Cost data
    b) Financial data
    c) Qualitative information
    d) Legal compliance data
11. Which of the following focuses on the preparation of financial reports for potential investors?
    a) Management Accounting
    b) Financial Accounting
    c) Cost Accounting
    d) Internal Accounting
12. Management accounting helps managers in:
    a) External reporting
    b) Legal compliance
    c) Cost reduction only
    d) Decision-making and strategy formulation
13. Which of the following best describes cost accounting?
    a) Recording all financial transactions
    b) Allocating costs to products or services

c) Preparing tax returns

d) Auditing financial statement

14. The balanced scorecard includes perspectives such as financial, customer, internal business processes, and _______.

a) Market conditions

b) Innovation and learning

c) Government regulations

d) Competitive analysis

Fill in the Blanks

1. The three branches of accounting are financial accounting, cost accounting, and______________ accounting.
2. ___ ___________accounting provides information for internal users to make better decisions.
3. Management accounting information can be both ________ ___ and qualitative.
4. Financial accounting is primarily concerned with the preparation of financial reports for ____________ users.
5. ___ _____costing includes both fixed and variable costs in the cost of production.

True/False

1. Management accounting is concerned with providing information to external users.
2. Financial accounting focuses on future planning and decision making.
3. The balanced scorecard is a contemporary management accounting technique.
4. Cost accounting is narrower in scope compared to management accounting.
5. Total Quality Management (TQM) is a traditional management accounting technique.

Answers:

MCQs Answer

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

Fill in the blanks Answers

1. Management
2. Management
3. Quantitative
4. External
5. Absorption

True/False

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

Module 2: Activity Based Costing (ABC)

Concept

ABC assigns cost to activities based on their use of resources. It then assigns cost to cost objects, such as products or customers, based on their use of activities. ABC can track the flow of activities in organization by creating a link between the activity (resource consumption) and the cost object.

CIMA defines 'Activity Based Costing' as "an approach to the costing and monitoring of activities which involves tracing resource consumption and costing final outputs. Resources are assigned to activities, and activities to cost objects based on consumption estimates. The latter utilize cost drivers to attach activity costs to outputs."

Advantages of Activity Based Costing

The main advantages of using Activity Based Costing are:

- More accurate costing of products/services.
- Overhead allocation is done on logical basis.
- It enables better pricing policies by supplying accurate cost information.
- Utilizes unit cost rather than just total cost
- Help to identify non-value-added activities which facilitates cost reduction.
- It is helpful to the organizations with multiple products.
- It highlights problem areas which require attention of the management.

Limitations of Activity Based Costing

The main limitations using Activity Based Costing are:

- It is more expensive, particularly in comparison with traditional costing system.
- It is not helpful to the small organizations.
- It may not be applied to organizations with limited products.
- Selection of the most suitable cost driver may not be easy/ may be difficult or complicated.

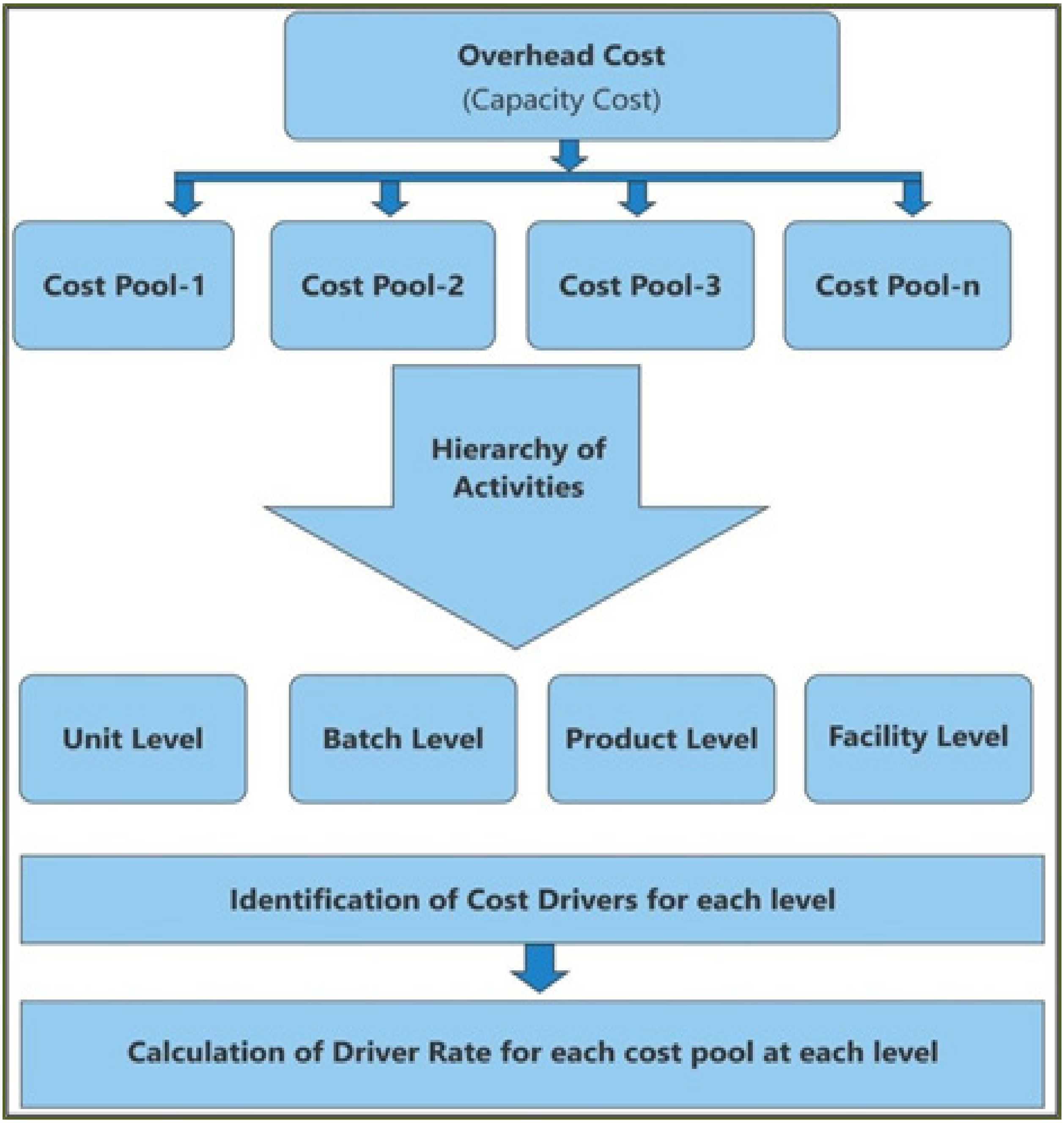
Difference between Activity Based Costing and Traditional Absorption Costing

Activity Based Costing	Traditional Absorption Costing
1. Overheads are *related to activities* and grouped into activity cost pools.	1. Overheads are *related to cost centers/* departments.
2. Costs are related to activities and hence are *more realistic*.	2 Costs are related to cost centers and hence not realistic of cost behaviour.
3. Activity–wise cost drivers are *determined.*	3. Time (Hours) are *assumed* to be the only cost driver governing costs in all departments.
4. Activity–wise recovery rates are determined and there is no concept of a single overhead recovery rate.	4. Either multiple overhead recovery rates (for each department) or a single overhead recovery rate may be determined for absorbing overheads.
5. Cost are **assigned to cost objects**, e.g. customers, products, services, departments, etc.	5. Costs are **assigned to Cost Units** i.e. to products, or jobs or hours.
6. *Essential activities can be simplified and unnecessary activities can be eliminated.* Thus, the corresponding costs are also reduced/ minimized. Hence ABC aids cost control.	6. *Cost Centers/ departments cannot be eliminated.* Hence, not suitable for cost control.

Stages and flow of costs in ABC

The different stages in ABC calculations are listed below:

1. Identify the different activities within the organization
2. Relate the overheads to the activities
3. Support activities are then spread across the primary activities
4. Determine the activity cost drivers
5. Calculate activity cost driver rates



Basic components of ABC - resource drivers and cost drivers

a) **Activity:** Activity, here, refers to an event that incurs cost.

b) **Cost Object:** It is an item for which cost measurement is required e.g. a product or a customer.

c) **Cost Driver:** It is a factor that causes a change in the cost of an activity.

d) There are two categories of cost driver.

(i) **Resource Cost Driver:** It is a measure of the quantity of resources consumed by an activity. It is used to assign the cost of a resource to an activity or cost pool.

(ii) **Activity Cost Driver:** It is a measure of the frequency and intensity of demand, placed on activities by cost objects. It is used to assign activity costs to cost objects.

e) **Cost Pool:** It represents a group of various individual cost items.

Examples of Cost Pools and Drivers

Activity Cost Pools	Related Cost Drivers
Ordering and Receiving Materials cost	Number of purchase orders
Setting up machines' costs	Number of set-ups
Machining costs	Machine hours
Assembling costs	Number of parts
Inspecting and testing costs	Number of tests
Painting costs	Number of parts
Supervising Costs	Direct labour hours

Multiple Choice Questions

1. Cost attribution to cost units on the basis of benefit received from indirect activities, such as ordering, setting-up, assuring quality is known as
   a) Allocation
   b) Activity-based costing
   c) Always better control
   d) Absorption
2. In activity-based costing, the allocation basis used for applying costs to services or products is called
   a) Cost driver
   b) Cost object
   c) Allocation
   d) Applicator
3. Which system of costing encourages managers to identify which activities are value-added activities?
   a) Standard Costing
   b) Activity-based Costing
   c) Uniform Costing
   d) Direct Costing
4. What is the primary benefit of using ABC over traditional costing methods?
   a) Simplicity in implementation
   b) Increased focus on labor costs
   c) More accurate product costing
   d) Reduced need for accounting systems
5. Which of the following would be an example of an activity cost pool in ABC?
   a) Machine setups
   b) Direct materials
   c) Sales revenue
   d) Profit margin
6. ABC helps in identifying:
   a) Non-value-added activities
   b) Fixed manufacturing costs
   c) Direct labor costs
   d) Variable selling expenses
7. ABC can be particularly useful in industries where:
   a) Overhead costs are a small proportion of total costs
   b) There is a single product line
   c) Overhead costs are a significant proportion of total costs
   d) Products have identical resource usage
8. Which of the following is not a step in the ABC process?
   a) Assigning costs to cost objects
   b) Calculating the overhead rate
   c) Identifying activities
   d) Assigning costs to activities
9. In ABC, an "activity" is defined as:
   a) A process that generates revenue
   b) Any event that consumes resources
   c) An expense related to sales
   d) A department within the organization
10. Which statement about ABC is true?
    a) ABC does not account for indirect costs
    b) ABC is less accurate than traditional costing methods
    c) ABC only applies to manufacturing industries
    d) ABC assigns costs based on actual usage of resources
11. One of the disadvantages of ABC is:
    a) It is easy to implement
    b) It provides less detailed information
    c) It can be time-consuming and costly to implement
    d) It does not allocate costs accurately

12. A company using ABC will generally:
    a) Ignore non-manufacturing costs
    b) Use a single overhead rate for all products
    c) Use multiple cost drivers
    d) Allocate costs based on direct labor hours only
13. A company has identified the following activities and cost drivers: Activity A with a cost of ₹750,000 and 1,000 machine hours, Activity B with a cost of ₹375,000 and 500 setups. What is the cost driver rate for Activity A?
    a) ₹750 per machine hour
    b) ₹1500 per machine hour
    c) ₹3750 per machine hour
    d) ₹7500 per machine hour
14. A product requires 3 setups, 200 machine hours, and 5 quality inspections. If the cost per setup is ₹7,500, the cost per machine hour is ₹375, and the cost per inspection is ₹3,750, what is the total cost assigned to the product?
    a) ₹93,750
    b) ₹97,500
    c) ₹1,01,250
    d) ₹1,16,250
15. A company has overhead costs of ₹6,000,000 for an activity driven by 1,200 machine hours. If a product requires 100 machine hours, how much overhead cost will be allocated to this product?
    a) ₹400,000
    b) ₹500,000
    c) ₹600,000
    d) ₹700,000

Answer:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
b	a	b	c	a	a	c	b	b	d	c	c	a	d	b

True and False

1. Batch-related activities, such as setting up a machine or processing a purchase order, are performed each time a batch of goods is produced.
2. Activity Cost Driver is a measure of the quantity of resources consumed by an activity.
3. Traditional Costing System analysis will itemize the costs of each plant, and correctly allocate these costs to the activities conducted within them.
4. An ABC analysis reveals all of the costs associated with a product, and so is useful for determining the minimum price that should be charged.
5. ABC cannot be used in conjunction with customer profitability analysis (CPA) to determine more accurately the profit earned by serving particular customers.

Answer

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

Fill in the blanks

1. Different products utilize different number of resources, which is not recognized in ____________ system.
2. ____________________ system assumes that activities are responsible for the incurrence of costs and products creates the demand for activities.
3. The concept of ABC was first defined in the late 1980s by ________________________.
4. The ___________ is used to determine what causes the cost of each activity (e.g. machine hours; number of dispatch orders).
5. ________________ activities are performed each time a unit of the product or service is produced.

Answer

1. traditional costing
2. Activity-Based Costing
3. Robert Kaplan and William Burns
4. cost driver
5. Unit-level

CMA FINAL COURSE

Syllabus 2022

Topic

Module 1: The Companies Act, 2013

FINAL

Group III - Paper-13

Corporate and Economic Laws (CEL)

Case study on formation of a company

Mohan and Shyam along with other four friends decide to start a business of running an old age home with commercial objective. They have plans to raise fund, both equity and loan from known people. Shyam feels that since this is a charitable purpose, they may register as non profit company (section 8) and claim tax benefit. The six friends will take profits from the company apart from taking monthly remuneration since they will be working full time for the business. Rajesh, another friend opines that since they want to gain out of the venture, partnership law will apply.

Multiple Choice Question

1. Whose opinion was that partnership law will apply is correct?
   a) Mohan,
   b) Shyam,
   c) Rajesh,
   d) None.

2. If they form a private limited company, they can issue shares to how many ______ persons.
   a) 50
   b) 100
   c) 200
   d) 500.

3. Which of the following is correct in relation to the situation above?
   a) They will not get NPO licence because it is for gain.
   b) They can form NPO (section 8) Company.
   c) They can register an NGO.
   d) In every case the company will get tax exemption.

4. If they go for partnership, what is the maximum number of partners they may have.
   a) 10,
   b) 20,
   c) 30,
   d) 50.

Answers:

1	2	3	4
c) Rajesh	c)200	a)	d) 50

Topic

Module 1: Investment Decisions, Project Planning and Control

FINAL

Group III - Paper-14

Strategic Financial Management (SFM)

Paper 14: Strategic Financial Management
Topic: Investment Decisions, Project Planning and Control

- **Multiple Choice Questions**

1. Which of the following investment avenues has the least risk associated with it?

   A. Corporate Fixed Deposits

   B. Deposits in commercial banks

   C. Public Provident Fund

   D. Non-convertible zero coupon bonds

   Solution:

   The correct option is (C) Public Provident Fund

   Justification:

   The other three are subject to only capital adequacy norms and the funds can be invested freely to fetch returns commensurate with the risk. PPF is required to invest only in specified risk free securities.

2. Z Ltd. invests ₹ 20 lacs in a project with life 5 years and no salvage value. Tax rate is 50% and straight-line depreciation is used. The uniform expected cash flows after tax and before depreciation shield are:

Year end	1	2	3	4	5
Cash flows after tax (₹ lacs)	4	5	6	6	7

   The payback period is

   A. 3 years

   B. 3 years and 11 months

   C. 2 years and 11 months

   D. 2 years and 6 months

   Solution:

   The correct option is (C) 2 years and 11 months.

   Justification:

   CFAT, depn shield = 6,7,8,8,9 For years 1,2,3,4,5. Cumulative cash flows = 6, 13, 21, 29, 38

   Pay back = 2 years + 7/8 × 12 = 2 +10.5 = 2 years and 11 months

3. A company has ₹ 7 crore available for investment. It has evaluated its options and has found that only four investment projects given below have positive NPV. All these investments are divisible and get proportional NPVs.

Project	Initial Investment (₹ crore)	NPV (₹ crore)	PI
W	6.00	1.80	1.30
X	3.00	0.60	1.20
Y	2.00	0.50	1.25
Z	2.50	1.50	1.60

   Which investment projects should be selected?

   A. Project W in full and X in part

   B. Project Z in full and W in part

   C. Project W in full and Z in part

   D. Project Z and Y in full and X in part

   Solution:

   Correct Option is (B)

   Justification:

   Project Z in full and W in part

   All 4 projects have positive NPV. So, PI is the selection criteria. Higher the PI, greater is the return for every rupee of investment. Z has highest and W has 2nd highest PI. So, option B is selected.

4. Duhita Ltd. intends to buy an equipment. Quotes are obtained for two different makes A and B as given below:

Equipment Type	Cost (₹ Million)	Estimate life (years)
A	4.5	10
B	6.00	15

   Ignoring the operations and maintenance costs which will be almost the same for A and B, which one would be chapter? The company's cost of capital is 10% [Given: PVIFA (10%, 10 yrs.) = 6.1446 and PVIFA (10%, 15 years) = 7.6061]

   A. A will be cheaper

   B. B will be cheaper

   C. Cost will be the same

   D. They are not comparable and therefore nothing can be said about which is cheaper.

   Solution:

   Correct Option is - (A) Make A will be cheaper

   Justification:

   Equivalent annual cost of Make – A = 45,00,000 ÷ 6.1446 = ₹ 7,32,350

   Equivalent annual cost of Make – B = 60,00,000 ÷ 7.6061 = ₹ 7,88,841

- **Comprehensive Problem**

Problem 1

R Ltd., a profitable company is considering the purchase of a new machine for ₹75,00,000. The machine's useful life is 5 years, with annual maintenance, insurance and administration costs of ₹ 12 lacs. Depreciation is over its life on straight line basis, considering zero scrap value. The tax rate is 30%. R Ltd. has a capital structure of 60% debt and 40% equity. Cost of debt before tax is 8% and the cost of equity is 12%. R Ltd. is interested in leasing out this machine to a lessee 'L' on year-end annual lease rents and R will have to maintain the equipment at the costs stated above. What should be the lease rents to be billed to 'L' for the lease proposal to break-even if:

(i) R Ltd. acquires the machine from its total finance pool.

(ii) R Ltd. uses a bank borrowing specifically for this purpose at 10% interest rate on outstanding principal at the beginning of each year, with year-end instalments comprising ₹15 lacs towards principal and balance towards interest for the year?

Present calculations to the nearest rupee.

Solution:

Depreciation per annum = ₹75/5 = ₹15 lacs; tax shield = 0.3 × 15 = ₹4.5 lacs

Capital: 60% debt at 8% before tax = 5.6% after tax; 40% equity = 12%

Weighted average cost of capital after tax = 0.6 × 5.6 + 0.4 × 12 = 3.36 + 4.8 = 8.16%

After tax cost of bank loan = 10% (1 – 0.3) = 7%.

Annual Cash cost = ₹12 lacs before tax = ₹8.4 lacs after tax.

Annual cash cost after tax and depreciation shield = ₹ (8,40,000 – 4,50,000) = ₹3,90,000.

(i) If the funding is out of the general finance pool, discount rate to be used = WACC = 8.16%.

End of year	Factor	Cash (₹) Inflows/(outflows)	PV of cash flows
0	PV1	(75,00,000)	(75,00,000)
1-5	Annuity factor 8.16%, 5 years = 3.976	(3,90,000)	(15,50,640)
			90,50,640

P.V. of After-tax lease rents to break even = ₹ 90,50,640

After tax annual lease rentals = 90,50,640/3.976 = ₹22,76,318

Annual billable lease rents = 22,76,318/70% = ₹32,51,883

(ii) This is a lease v/s borrow decision applicable to the lessor. The break-even lease rents should cover the after-tax cost of specific borrowing. The applicable discount rate = 7%.

End of year	Outstanding principal	Interest	After tax interest	Principal payments	Cash outflow	PV factor	PV of outflows
0				75,00,000			
1	60,00,000	7,50,000	5,25,000	15,00,000	20,25,000	0.935	18,93,375
2	45,00,000	6,00,000	4,20,000	15,00,000	19,20,000	0.873	16,76,160
3	30,00,000	4,50,000	3,15,000	15,00,000	18,15,000	0.816	14,81,040
4	15,00,000	3,00,000	2,10,000	15,00,000	17,10,000	0.763	13,04,730
5	0	1,50,000	1,05,000	15,00,000	16,05,000	0.713	11,44,365
							74,99,670

Total outflows including maintenance, etc = 3,90,000 x annuity factor 7%, 5 years + 74,99,670 = 390000 × 4.10 + 7499670 = 15,99,000 + 74,99,670 = ₹90,98,670

After tax annual lease rentals to break even = 90,98,670/4.10 = ₹22,19,188

Billable lease rentals = 22,19,188/0.7 = ₹ 31,70,269

Problem 2

A company has to replace its machine with either machine EM or LM. The following details are given:

Particulars	EM	LM
Purchase price (₹)	20,00,000	10,00,000
Scrap value at the end of its life (₹)	3,00,000	3,00,000
Life (no. of years)	12	6
Overhauling due at the end of year	8	4
Overhauling cost (₹)	4,00,000	2,00,000
Annual repair cost (₹)	2,00,000	2,80,000

If LM is chosen, it has to be replaced by another LM machine at the end of the 6th year at ₹12,00,000. Ignore depreciation and taxes. Use a discount rate of 10% p.a. with annual rests. Present annual pre-discounted cash flows for each machine, then apply the PV or annuity factors and show computations to the nearest rupee. Compare the equivalent annual cash flows for the machines. Which machine should the company choose based on NPV?

Solution:

Machine EM

Year	Cash flows	Factor	PV
0	- 20,00,000	1	- 20,00,000
1-12	- 2,00,000	6.814	- 13,62,800
8	- 4,00,000	0.467	-1,86,800
12	+ 3,00,000	0.319	+ 95,700
NPV			- 34,53,900

Machine LM

Year	Cash flows	Factor	PV
0	-10,00,000	1	-10,00,000
1-12	-2,80,000	6.814	-19,07,920
4	-2,00,000	0.683	- 1,36,600
10	-2,00,000	0.386	-77,200
6	+3,00,000 -12,00,000	0.564	-5,07,600
12	+3,00,000	0.319	+95,700
NPV			**-35,33,620**

Equivalent annual cash flows:

Machine EM: -34,53,900/12 = - 2,87,825

Machine LM: -35,33,620/12 = - 2,94,468

So, Machine EM is better.

Topic

Module 1: Assessment of Income and Computation of Tax Liability of Various Entities

FINAL

Group III - Paper-15

Direct Tax Laws and International Taxation (DIT)

Non-Resident: Computation on a Presumptive Basis

Specific sections of the Income Tax Act govern the computation of income on a presumptive basis for non-residents in India. These provisions simplify the tax calculation for non-residents engaged in certain business activities. Here are the key sections and their implications:

Section 44B: Shipping Business

Applicable to	All non-resident assesse
Condition	Assessee must be engaged in the business of operation of ships.
Estimated income	Income taxable under the head "Profits & gains of business or profession" from such business shall be estimated at 7.5% of the amount being aggregate of the following: 1. The amount paid or payable (whether in or out of India) to the assessee (or to any person on his behalf) on account of the carriage of passengers, livestock, mail or goods shipped at any port in India; and 2. The amount received or deemed to be received in India by or on behalf of the assessee on account of the carriage of passengers, livestock, mail or goods shipped at any port outside India.
Notes: The amount paid or payable or received or deemed to be received, as the case may be, shall also include demurrage charges or handling charges or any other amount of similar nature.	

Let's go through an example of how presumptive income is calculated for a non-resident engaged in the shipping business u/s 44B of the Income Tax Act.

Example: Non-Resident Shipping Business

Scenario:

- A non-resident shipping company earns income from the carriage of goods from an Indian port.
- The total amount paid or payable for the carriage of goods is ₹10,00,00,000.

Step-by-Step Calculation:

- Determine the Specified Sum:

  The specified sum is the total amount paid or payable for the carriage of goods from an Indian port.

  In this case, the specified sum is ₹10,00,00,000.

- Calculate Presumptive Income:

  Under section 44B, the presumptive income is 7.5% of the specified sum.

  Presumptive Income = 7.5% of ₹10,00,00,000

  Presumptive Income = ₹ 75,00,000

- Tax Liability:

  The presumptive income of ₹ 75,00,000 will be considered as the taxable income for the non-resident shipping company.

  The company will then be taxed on this presumptive income according to the applicable tax rates.

This simplified method helps non-residents avoid the complexities of maintaining detailed books of accounts and audits, providing a straightforward way to calculate their taxable income.

Section 44BB: Exploration of Mineral Oils

Applicable to	Non-resident assessee
Conditions	Assessee must be engaged in the business of - • Providing services or facilities in connection with; or • Supplying plant[1] and machinery on hire, used or to be used in, – the prospecting for, or extraction or production of, mineral oils[2]. 1. Plant includes ships, aircraft, vehicles, drilling units, scientific apparatus and equipment, used for the purpose of the said business 2. Mineral oil includes petroleum and natural gas.
Estimated income	A sum equal to 10% of the aggregate of the following amount shall be deemed to be the profits and gains of such business chargeable to tax - • The amount paid or payable (whether in or out of India) to the assessee (or to any person on his behalf) on account of the provision of services and facilities in connection with, or supply of plant and machinery on hire used, or to be used, in the prospecting for, or extraction or production of, mineral oils in India; and • The amount received or deemed to be received in India by or on behalf of the assessee on account of the provision of services and facilities in connection with, or supply of plant and machinery on hire used, or to be used, in the prospecting for, or extraction or production of, mineral oils outside India.
Assessee may claim lower profit	An assessee may claim lower profits and gains if he keeps and maintains books of account as per sec. 44AA and gets his accounts audited and furnishes the report u/s 44AB and thereupon the Assessing Officer shall proceed to make an assessment of the total income of the assessee u/s 143(3) & determine the sum payable by, or refundable to, the assessee
Taxpoint	Benefit of unabsorbed depreciation and brought forward loss shall not be allowed to the assessee for such previous year

Section 44BBA: Operation of Aircraft

Applicable to	All non-resident assessee.
Condition	Assessee must be engaged in the business of operation of aircraft.
Estimated income	Income of such business shall be estimated at 5% of the aggregate of the following - • The amount paid or payable (whether in or out of India) to the assessee (or to any person on his behalf) on account of the carriage of passengers, livestock, mail or goods from any place in India; and • The amount received or deemed to be received in India by or on behalf of the assessee on account of the carriage of passengers, livestock, mail or goods from any place outside India.

Section 44BBB: Foreign Companies in Turnkey Projects

Applicable to	A foreign company
Condition	The assessee must be engaged in the business of - • civil construction; or • erection of plant or machinery or testing or commissioning thereof, – in connection with a turnkey power project approved by the Central Government in this behalf. Approval issued by the Department of Power in the Ministry of Energy shall be deemed to be the approval of the Central Government for this section.
Estimated income	Income of such business shall be estimated at 10% of the amount paid or payable (whether in or out of India) to the said assessee (or to any person on his behalf) on account of such civil construction, erection, testing or commissioning.
Assessee may claim lower profit	An assessee may claim lower profits and gains if he keeps and maintain books of account as per sec. 44AA and gets his accounts audited and furnishes the report u/s 44AB and thereupon the Assessing Officer shall proceed to make an assessment of the total income of the assessee u/s 143(3) and determine the sum payable by, or refundable to, the assessee.
Taxpoint	Benefit of unabsorbed depreciation and brought forward loss shall not be allowed to the assessee for such previous year

Benefits of Presumptive Taxation

- **Simplified Compliance**: Non-residents can benefit from simplified tax compliance as they are not required to maintain detailed books of accounts.
- **Reduced Administrative Burden**: The presumptive taxation scheme reduces the administrative burden and costs associated with maintaining and auditing accounts.
- **Certainty in Tax Liability**: Non-residents have certainty regarding their tax liability, which is calculated as a fixed percentage of their gross receipts or specified sums.

Conclusion

The presumptive taxation scheme for non-residents under Sections 44B, 44BB, 44BBA, and 44BBB provides a straightforward method for calculating taxable income. This scheme is particularly beneficial for non-residents engaged in shipping, mineral oil exploration, aircraft operation, and turnkey projects, as it simplifies compliance and provides certainty in tax liability.

Topic

Module 1: Introduction to Strategic Cost Management

FINAL

Group III - Paper-16

Strategic Cost Management (SCM)

Unveiling the Value Chain

01.00 Value

By dictionary definition, 'value' is defined as: 'the amount of money that can be received in exchange of something'. The term value, in a commercial context, refers to economic worth, which may reflect:

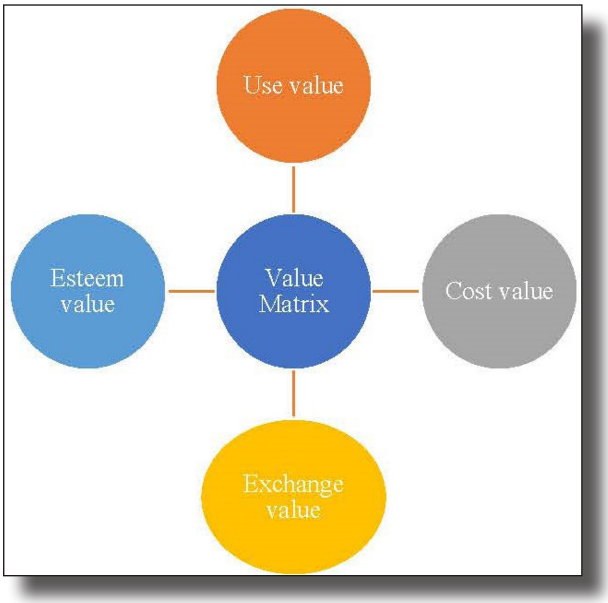
(i) Use value

(ii) Cost value

(iii) Exchange value, or

(iv) Esteem value.

'Use Value' reflects the intrinsic value. It is the measure of properties, qualities and features which make the product or service useful for the consumer. Use value, therefore, is the functional worth of a product or service.



'Cost Value' is the sum of all costs incurred in producing the product or rendering a service. Cost value, thus, is the sum of raw material cost, labour cost, and overheads expended to produce the product or service. 'Exchange Value' in a conventional sense, refers to the price that a purchaser is willing to offer for the product or service, the price being dependent upon the satisfaction level that is derived from the product or service.

'Esteem Value' is the measure of properties, features, attractiveness of graphic packaging and the like which increases sales appeal or which attracts customers and create in them a strong desire to own the product. "Esteem value", hence, is the price paid by the buyer or the cost incurred by the manufacturer beyond the use value. In other words, "Esteem value" reflects the aura of ownership.

Use value may be construed as the fundamental for any item, because without use value the item can have neither exchange value nor esteem value. Any attempt to improve the value of a product must consider two elements. The first element is the utility of the product, i.e. the use value. The second element relates to the value of ownership, i.e. esteem value.

The concept can, better, be explained by the price discrimination being practiced in relation to a luxury car and a basic small car. From the use point of view both the cars fulfil the same function, viz. both of them offer safe economical travel (use value); but the luxury car has a greater esteem value and hence priced at a phenomenal value.

Another example could be the exorbitantly priced gold-plated ball pen in comparison to a disposable pen. Even though the use value for both the pens is nearly the same, the factor of esteem value enables a privileged pricing for gold-plated ball pen.

Everything said, from a customer perspective, 'Value is the price paid for a product, process, material or service required to perform a specific function in an efficient way'

02.00 Value Creation

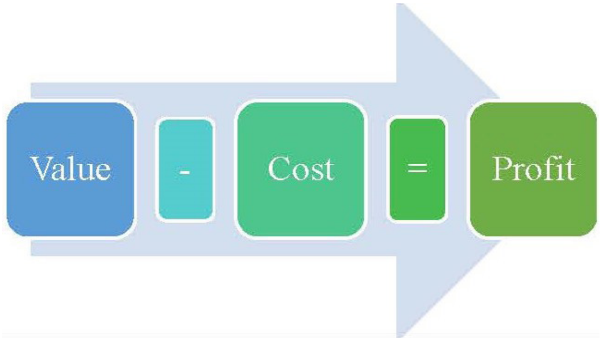
Manufacturing companies create value by acquiring raw materials and converting them into useful products (i.e. finished goods). In the process, manufacturers incur conversion costs such as factory costs, administrative costs, selling costs, and distribution costs.

Similarly, retailers create value by bringing together a range of products and present them in a way that is convenient to customers, sometimes supported by services such as trial rooms or personal shopper advice. In the process, retailers incur service costs such as procurement costs, storage costs, administrative costs, and sales support costs.

Adding further, insurance companies create value by offering policies to customers that are underwritten by larger re-insurance policies. Here, they are packaging these larger policies in a customer-friendly way, and distributing them to a mass audience. In the process, insurance companies incur insuring costs such as reinsurance costs, claim costs, and administrative costs.

The onerous learning is that value is created by producing goods or rendering services. Entrepreneurs are benefited if the 'value created' is greater than the 'costs incurred'. In other words, the value that is created by a company as reduced by the costs incurred is the profit margin. Expressed as a formula the equation would read as:

(Value Created – Cost of Creating that Value) = Profit Margin



The more value an organization creates, the more profitable it is likely to be. As more and more value is provided to the customers, competitive advantage creeps in. Understanding how a company creates value, and looking for ways to add more value, are critical elements in developing a competitive strategy.

In this context, worth recalling is the fundamental assumption of Activity Based Costing which scripts. "Products consume activities and Activities consume costs". The implied reading is that value creation runs through a process of activities and that 'Activities propel Value Creation'.

03.00 Porter's Value Chain

Developed by Michael Porter in 1985 and used throughout the world, the value chain is a powerful tool for disaggregating a company into its strategically relevant activities in order to focus on the sources of competitive advantage; that is, the specific activities that result in lower costs or higher prices.

A company's value chain is typically part of a larger value system that includes companies either upstream (suppliers) or downstream (distribution channels), or both. This perspective about how value is created forces managers to consider and see each activity not just as a cost, but as a step that has to add some increment of value to the finished product or service.

Thus, the value chain is a set of activities that an organization carries out to create value for its customers. Porter proposed a general-purpose value chain that companies can use to examine all of their activities, and see how they are connected. The way in which value-chain-activities are performed determines costs and affects profits.

04.00 Elements in Porter's Value Chain

Rather than looking at departments or accounting cost categories, Porter's Value Chain focuses on systems that depict as to how inputs are changed into the outputs. Using this viewpoint, Porter described a chain of activities common to all businesses, and he divided them into:

(i) Primary Activities, and

(ii) Support Activities.

04.01 Primary Activities

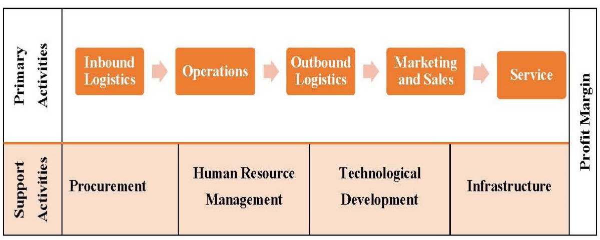
Primary activities relate directly to the physical creation, sale, maintenance and support of a product or service. They consist of the following:

- **Inbound Logistics:** These are all the processes relating to receiving, storing, and distributing the inputs internally. The supplier relationships are a key factor in creating value here.
- **Operations:** These are the transformation activities that change inputs into outputs that are sold to customers. Here, operational systems create value.
- **Outbound Logistics:** These activities deliver the product or service to the customer. These are the things like collection, storage, and distributing the outputs. They may be internal or external to the organization.
- **Marketing and Sales:** These are the processes that are used to persuade clients to purchase from the firm instead of its competitors. The benefits being offered, and how well they are communicated to the customers, are sources of value here.
- **Service:** These are the activities relating to maintaining the value of the product or service to customers, once it has been purchased.

04.02 Support Activities

Support activities support the primary functions stated above. Each support, or secondary, activity can play a role in each primary activity. For example, procurement supports operations with certain activities, but it also supports marketing and sales with other activities.

- **Procurement (Purchasing):** This is what the organization does to get the resources it needs to operate. This includes finding vendors and negotiating best prices.
- **Human Resource Management:** This is how well a company recruits, hires, trains, motivates, rewards, and retains its workers. People are a significant source of value, and businesses can create a clear advantage with good HR practices.
- **Technological Development:** These activities relate to managing and processing information, as well as protecting a company's knowledge base. Minimizing information technology costs, staying current with technological advances, and maintaining technical excellence are sources of value creation.
- **Infrastructure:** These are a company's support systems, and the functions that allow it to maintain daily operations. Accounting, legal, administrative, and general management are examples of necessary infrastructure that businesses can use to their advantage.



Companies use these primary and support activities as "building blocks" to create a valuable products or services. Noteworthy is the fact that Porter's value chain is a generic model and can be modified as may be needed by the situation and circumstances.

05.00 Value Chain Analysis (VCA)

Value chain analysis (VCA) is a process where a firm identifies its primary and support activities that add value to its final product and then analyse these activities to reduce costs or increase differentiation. Value chain analysis relies on the basic economic principle of advantage - companies are best served by operating in sectors where they have a relative productive advantage compared to their competitors. Simultaneously, companies should ask themselves where they can deliver the best value to their customers.

Simply stated, Value Chain Analysis is the process of observing and evaluating each business activity involved in the creation of a finished product or service. The purpose of value chain analysis is to find areas of improvement within the value chain that will increase a company's competitive advantage.

Conducting a value chain analysis prompts a firm to consider how each step adds or subtracts value from its final product or service. This, in turn, can help it realize some form of competitive advantage, such as:

- Cost reduction, by making each activity in the value chain more efficient and, therefore, less expensive.
- Product differentiation, by investing more time and resources into activities like research and development, design, or marketing that can help the product stand out.

Typically, increasing the performance of one of the four secondary activities shall benefit at least one of the primary activities.

06.00 Example of Apple

06.01 Apple's Primary Activities

1. **Inbound logistics:** Apple's inbound supply chain is enormous. Its top 200 suppliers provide the company with 98% of procurement expenditures for materials, manufacturing and product assembly. These suppliers are held to strict quality standards by means of a Specially Designed Procurement Program. Every year, the list of suppliers is revisited. Suppliers that meet Apple's standards and provide a more competitive product are added to the list to ensure optimization of their value chain.
2. **Operations:** Apple takes advantage of lower labour and raw material costs in Japan and China. Outsourcing helps them keep overall manufacturing costs low.
3. **Outbound logistics:** Apple's business model allows the customers to purchase its products online and from the company's stores. Because the company has hundreds of retail stores, it can capitalize on keeping any retail margins made through Apple sales. Brand name recognition also means that non-Apple outlets stock the products in large numbers.

4. **Marketing and sales:** Apple's marketing and sales efforts are identifiable for its design, quality and innovation. Apple reflects its perceived value not only in the cost of its products but also in its advertising.

5. **Service:** Most products sold by Apple are initially covered by a 1-year warranty and 90 days of support from staff. They also staff their stores with trained Apple technicians who offer guided, interacted demos to customers.

06.02 Apple's Support Activities

1 **Research and development:** Apple invests heavily in research and development into products that can maintain Apple's competitive advantage. The investment paid off: for example, in 2020, the company released 28 new or refreshed products onto the market.

2 **Human Resource Management:** Apple is known for recruiting top candidates and even poaching talent from other companies to get the best people working for them.

07.00 Quick Take

Conducting a value chain analysis is one of the most powerful processes a business can undertake. The details involved in the analysis can uncover where the company spends its money, how well the operations are working and how the company can outmanoeuvre its competitors.

08.00 Terms to Master

Value: Value is the price paid for a product, process, material or service required to perform a specific function in an efficient way.

Value Chain: Value chain is a set of activities that an organization carries out to create value for its customers.

Primary Activities of Porter's Value Chain: Primary activities of Porter's value chain relate directly to the physical creation, sale, maintenance and support of a product or service.

Support Activities of Porter's Value Chain: Support activities of Porter's value chain support the primary functions. Each support activity can play a role in each primary activity.

Value Chain Analysis: Value Chain Analysis is the process of observing and evaluating each business activity involved in the creation of a finished product or service.

Topic

Cost and Management Audit

FINAL

Group IV - Paper-17

Cost and Management Audit (CMAD)

COST AND MANAGEMENT AUDIT

A. Multiple Choice Questions:

1. What is the role of documentation in the internal control process ?

   A. Documentation is optional and not required for effective internal control.

   B. Documentation is necessary to provide evidence of the effectiveness of internal control.

   C. Documentation should be minimal to avoid unnecessary complexity.

   D. Documentation is only required for organizations that have experienced a material weakness

   Ans : B

2. Which of the following is a limitation of internal control ?

   A. Controls are subject to human error and management override.

   B. Internal control can provide absolute assurance of achieving objectives.

   C. The framework eliminates the need for ongoing monitoring of controls.

   D. The framework is not adaptable to the size and complexity of the organization.

   Ans : A

3. Which of the following is NOT a component of internal control according to the 2013 Framework?

   A. Control Environment

   B. Risk Assessment

   C. Control Activities

   D. Financial Reporting

   Ans: D

4. What is the primary purpose of the Internal Control?

   A. To provide a comprehensive guide for organizations to assess the effectiveness of their internal control systems.

   B. To introduce revolutionary changes to the internal control process.

   C. To eliminate the need for organizations to document their internal controls.

   D. To reduce the complexity of internal control for smaller entities.

5. A number of checks & controls exercised in a business to ensure its efficient working is known as:

   A. Internal check.

   B. Internal control.

   C. C Internal audit.

   D. Interim check.

   Ans. : Internal check

B. Management Reporting Issues and Analysis

A large manufacturing entity used to import raw materials for its operation and the same discharged in dockside area. Subsequently, based on daily production target the same shipped to Plant through loaders and dumper trucks. The Unit Management is concerned about high stock discrepancy and consumption variance against Bill Of Materials (BOM) with resultant write offs.

You have recently joined the Company's Management Audit Department and management requested you to review the entire movement, storage process of imported Raw Materials and report the matter with suggestion, if any, to tighten the controls for pre-empting the possibility of such high losses.

Report

1. **Absence of policy guideline to inventorize bulk materials and adjustment of short/excess stock in Books**

Observation:

- Difference between Bill of Lading and Shore Receipt quantity exists for all the vessels. Both the quantities are estimated as per draft survey.
- Random weighment is carried out after discharge by vessels for all bulk materials. Acknowledgement of receipt is based on 'draft survey' carried out.
- During 2022- 2023, short receipt of nett 245 mt.(₹ 2.5 Crores) of MOP (Fine and Granular) was noticed .

- Conservative principle of 'lower between Bill of Lading and Shore receipt quantity ' acknowledgement as receipt was not followed in respect of vessel named ' Bright Bulker' for MOP. Goods receipt raised for 10470 mt.(Bill of Lading quantity) against Shore receipt of 10265 mt. Differential (excess) value for inventorizing works out to ₹ 2.1 Crores (205 mt.)
- Shortage of MOP (Fine/Granular) stock worth ₹33.5 Lacs (326 mt.) reported on 31.03.2023 after physical verification and the same was not adjusted in Books. The financial value is provided for.
- As on 31.03.2023, difference between book stock (₹ 'Nil') and physical stock of Sulphur worth ₹ 1.81 Cr. (3727.71 mt.) was adjusted in Books. Sulphur is kept in the open yard at Dock-site (near berth No.5 discharge point and enclosed area opposite to Berth No.5) and at Factory. Possibility of excess Sulphur over book stock could be due to absorption of moisture, water etc., contamination and/or short shipment to Factory.
- Goods receipts are raised after completion of discharge from vessels. Verification of 9 MOP,14 Rock,3 Sulphur vessels that discharged material between 01.04.2022 to 31.03.2023, delay in raising goods receipt of over 7 days (highest 23 days lag) from the date of discharge was noticed in 20 the cases. During the period of lag in raising Goods Receipt, materials remained unaccounted.
- Vessel-wise receipt and stock record to be maintained for all bulk material and issue to be made out of the same till the stock exhausts. Book stock and stock as per vessel-wise stock card need to be reconciled as and when stock comes to 'nil' or situation of accurate measurement. Stock adjustment, if any, need to be carried out based on the difference between book stock and such vessel-wise stock cards.

Recommendation:

- Goods Receipt need to raised based on actual weighment of materials.
- Vessel-wise parallel stock cards need to be maintained and on completion of consumption of the entire material pertaining to previous vessel, the discrepancy if any need to be adjusted in Books.
- Lower between Bill of Lading and Shore receipt to be acknowledged as receipt unless the goods are raised based on full weighment.
- Maximum lag for raising Goods Receipt after completion of discharge by vessel to be defined in standard operational procedure (SOP) and followed for receipting entry.
- Policy of stock recording to bring accuracy and adjustment of difference need to be specified.

2. **Possibility of moving materials to unauthorized destination due to non-weighment of trucks/dumpers deployed for shipment of Company material at dock-site**

Observation:

- Dumpers, trucks, pay-loaders are used for shifting bulk materials discharged at various berths to highway go-downs and Dock-site storages for Sulphur, Rock, PAP and KCL go-down.
- Bulk materials discharged at different berths are shifted to dock-site go-downs without weighment. Covers in vehicles are also not used to minimize the handling loss.
- Vehicles are allowed to load material without any 'Token/slip' with permission for loading. As per prevalent system, empty and loaded vehicles are weighed at Dock-site weighbridge for ensuring shipment/movement of material.
- Front side of all go-downs are open. Vehicular movement to and from loading points and go-downs directly without routing through weighbridge is possible. Hence, possibility of shipment to destinations other than company locations can't be ruled out.

Recommendation:

- Loading permit tokens in five copies to be issued from weighbridge to loading point supervisor, vehicle (2 copies), receiving point . While taking tare weight a copy to be surrendered to weighbridge. A copy to be surrendered by vehicle and loading supervisor on completion of loading/weighment.
- One copy of loading permit to be handed over to Company designated unloading point for cross verification/acknowledgement of receipt.
- Weighment slips to be tallied with the loading permit token at the end of each shift.

3. **Non-weighment of material at Plant while receipting for consumption**

Observation:

- Loaded vehicle of Rock, Sulphur and Murates Of Potash weighed at Dock-site/ highway weigh bridges before shipment to plant. However, no weighment for the said materials being carried out while receipting at Factory for consumption.
- The Tankers carrying Phosphoric Acid are sealed at dock-site after weighment and seals broken at plant at the time of unloading at Factory Tank.
- M/s. Count engaged for taking dip measurement of Phosphoric Acid at Dock-site also engaged for unloading at Factory.

Recommendation:

- Weigh bridge at Factory need to be geared up to cross verify the weight of material delivered at Factory with that of dock-site weighment slips.
- Service for M/s. Count to supervise both dip measurement and unloading need to be restricted to one (either dock-site or factory) for establishing proper internal control.

4. **Non-tracking of intra location movements Observation :**

- Cost incurred for creation of go-down space to accept the incoming vessel, shipment to dock-site and highway go-downs are inventorised. Other inter location movements are booked as secondary shipment cost.
- During 2022-2023 shipment cost worth ₹38 Cr. were incurred for shifting material from one location to another in dock-site/highway go-downs.
- As per prevalent SAP configuration, only two locations (dock-site and plant) are mapped. All highway go-downs and others shown under third party location. In the absence of such location-wise configuration, intra location transfers are not directly verifiable.
- Multiple locations used for storage at dock-site (Sulphur kept near Berth 15 conveyor and open yard opposite to berth no.15) also not mapped in SAP separately.
- Bill for material movement for such intra location transfers are paid against certification by dock-site in-charge based on log book maintained by the transporter. In the absence of tracking and cognition through SAP the possibility for higher than actual transfer and billing for the same can't be ruled out.
- Stock of UTA go-down as on 31.03.2023 stood at 519 mt. and subsequent transfer to another 3P go-down (M/s. Pioneer) for making soda slurry not booked as inter location transfer till June 2023.

Recommendation:

- All storage locations need to be configured in SAP and inter locational movements need to be traced accordingly immediately on movements.
- All handling/shipments bills for secondary movements need to be passed based on the quantity booked under SAP relevant movement code.

Topic

Module 1:
Specific Accounting Standards

Module 2:
Valuation of Shares

FINAL

Group IV - Paper-18

Corporate Financial Reporting (CFR)

Ind AS 16: Property, Plant and Equipment (PPE)

Let us have an overview of the accounting of Fixed Assets of a company complying with the Companies Act 2013 and Indian Accounting Standards. Accounting of Fixed Assets is governed by Ind AS 16: Property, Plant and Equipment (PPE). Accounting involves:

1. Recognition
2. Measurement,
3. Recording and Presentation, and
4. Disclosure.

1. Recognition

(a) The tangible items that fulfil both the following conditions are recognized as property, plant and equipment:

(i) are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes, and

(ii) are expected to be used during more than one period.

(b) The cost of an item of property, plant and equipment shall be recognised as an asset if, and only if:

(i) it is probable that future economic benefits associated with the item will flow to the entity; and

(ii) the cost of the item can be measured reliably.

2. Measurement

(I) Initial measurement:

Property Plant and Equipment are initially measured at cost. The elements of costs are:

(a) Purchase Price—

(i) trade discount and rebate are deducted

(ii) duties and non-refundable taxes are added

(iii) cash discount not subtracted

(iv) GST not added

(v) only cash price to be recognized; if interest element is included in the price, that should be subtracted (unless capitalized as per Ind AS 23).

(vi) if the asset is acquired in exchange of another asset, purchase price is the fair value of the assed acquired or the asset given up (the carrying amount of the asset given up when neither of the fair values is reliably measured).

(b) Costs directly attributable to bringing the asset to its location and in the condition so as to make it available for its intended use—

(i) employee cost

(ii) cost of preparing the site

(iii) freight and delivery cost

(iv) installation and assembly cost

(v) costs during the test run

(vi) Professional fees (Architects fees)

(c) Dismantling cost—

(i) The estimated dismantling cost **at present value**.

(ii) Estimated cost of removing the item and restorating site **at present value**.

(d) Elements of costs **not** included:

(i) Administration and general overhead.

(ii) Advertising and promotion cost of a new product.

(iii) Cost of relocating

(iv) Initial losses when asset is operating at low level

(v) Incidental cost not directly related to installation.

(II) Subsequent measurement:

Subsequently, Property Plant and Equipment are measured at carrying amount which is

(a) Cost less depreciation less impairment loss, or

(b) Revalued amount less post revaluation depreciation and post revaluation impairment loss.

(c) Addition of all capital expenditure to (a) or (b)

   (i) expenditure which enhances the revenue generating capacity

   (ii) cost of replacements

   (iii) major inspection and overhauling expenses

3. Recording and Presentation

(a) Whenever an item of PPE is recognized any of the following accounts is debited initially at cost:

   (i) Land

   (ii) Land and building

   (iii) Machinery

   (iv) Ships

   (v) Aircraft

   (vi) Motor vehicles

   (vii)Furniture and future

   (viii)Office equipment and

   (ix) Bearer plants.

(b) Subsequently, depreciation on the asset and impairment loss for the asset, if any, is charged to Profit and Loss account and in the balance sheet cost less depreciation less impairment loss is carried.

(c) Subsequently, the asset may be revalued and

   (i) Revaluation loss is charged to P&L (to revaluation surplus to the extent it already exists)

   (ii) Revaluation profit is credited to revaluation surplus (to P&L to reverse a revaluation loss charged to P&L before)

   Revalued amount less post revaluation depreciation and post revaluation impairment loss.

(d) Depreciation:

Depreciation is the systematic allocation of the depreciable amount of an asset over its useful life. Depreciable amount is the cost of an asset or other amount substituted for cost, less its residual value. The revalued amount or fair value on exchange is one such other amount substituted for cost.

Methods of depreciation are:

(i) The straight lime method: Annual depreciation amount = Depreciable amount/ No. of years of useful life. It is a constant amount.

(ii) The reducing (diminishing) balance method: Annual depreciation is calculated at a fixed percentage on the carrying amount. The carrying amount is getting reduced over the years and at the end of useful life of the asset it becomes equal to the estimated residual value. Here the annual depreciation amount is reducing over the years.

(iii) The units of production method: Annual depreciation amount = (Annual production units/ Life time production units) × Depreciable amount.

(e) Impairment Loss: It is dealt in Ind AS 36

Impairment Loss = Carrying amount less recoverable amount

Recoverable amount is the higher of the fair value of asset less cost to sell and the value in use. Fair value is defined in Ind AS 113. It is the exit value in an orderly transaction between market participants. Value in use is the entity specific value. It is the present value of all expected future cash flows from the asset.

(f) Presentation:

   (i) PPE appears under non-current assets in the balance sheet.

   (ii) Revaluation profit/Loss is accounted through revaluation surplus a/c or P&L a/c.

   (iii) Depreciation and impairment loss are accounted through P&L a/c.

(g) Derecognition: The carrying amount of an item of property, plant and equipment shall be derecognised:

   (i) on disposal; or

   (ii) when no future economic benefits are expected from its use or disposal.

The gain or loss arising from the derecognition of an item of property, plant and equipment shall be included in profit or loss when the item is derecognised

The gain or loss arising from the derecognition of an item of property, plant and equipment shall be determined as the difference between the net disposal proceeds, if any, and the carrying amount of the item.

4. **Disclosure:** The financial statements shall make necessary disclosures as required in the Ind AS- 16.

   The financial statements shall disclose, for each class of property, plant and equipment:

   a) the measurement bases used for determining the gross carrying amount;

   b) the depreciation methods used;

   c) the useful lives or the depreciation rates used;

   d) the gross carrying amount and the accumulated depreciation (aggregated with accumulated impairment losses) at the beginning and end of the period; and

   e) a reconciliation of the carrying amount at the beginning and end of the period showing:

      (i) additions;

      (ii) assets classified as held for sale or included in a disposal group classified as held for sale in accordance with Ind AS 105 and other disposals;

      (iii) acquisitions through business combinations;

      (iv) increases or decreases resulting from revaluations

      (v) impairment losses recognised in profit or loss in accordance with Ind AS 36;

      (vi) impairment losses reversed in profit or loss in accordance with Ind AS 36;

The financial statements shall also disclose:

(a) the existence and amounts of restrictions on title, and property, plant and equipment pledged as security for liabilities;

(b) the amount of expenditures recognised in the carrying amount of an item of property, plant and equipment in the course of its construction;

(c) the amount of contractual commitments for the acquisition of property, plant and equipment; and

(d) if it is not disclosed separately in the statement of profit and loss, the amount of compensation from third parties for items of property, plant and equipment that were impaired, lost or given up that is included in profit or loss.

Valuation of Shares based on Discounted Cash Flow (DCF) model

Valuation of Shares based on Discounted Cash Flow (DCF) model

It indicates the fair market value of a equity share based on the value of cash flows that the business is expected to earn in future. This method involves the estimation of Net Operating Profits Adjusted Tax (NOPAT) for the projected period, the business's requirement of reinvestment in terms of capital expenditure and incremental working capital and appropriate cost of capital that reflects the risks of the corresponding return.

(1) Merits of DCF model:

   (i) Cash flows are unaffected by any differences of accounting policies, principles, conventions and methods.

   (ii) It provides the intrinsic or economic value unaffected by market forces.

(2) De-merits of DCF model:

   It is difficult

   (i) to estimate future cash flows, and

   (ii) to apply appropriate rate of discounting

(3) Computation of value per share = Value of Equity/ No. of equity shares

   Value of Equity = (3A) Value of the business less value of Debt Capital or (3B) aggregate of future Free Cash flows to Equity discounted at its present worth.

(4) Value of business = Aggregate of future Free Cash flows to Firm discounted at its present worth.

(5) Let us see how free cash flows are computed so that future free cash flows can be projected.

   Free Cash Flows are of two types: (A) Free Cash Flows to the Firm (FCFF) and (B) Free Cash Flows to the Equity (FCFE)

(5A) FCFF = CF – Capex (Capex means capital expenditures made within the business for expansion, replacement etc.)

(5B) FCFE {Free Cash Flow to the Equity} = FCFE

= Net Income – Increase in non-cash WC – Net Capex + Net Debt Issue

Or, FCFE = FCFF – Interest net of tax + Net Debt Issued

(5C)Cash Flows (CF) = NOPAT + Depreciation, amortisation, impairment etc. (non-cash expenses charged against profits) +(-) Decrease (Increase) in non-cash working capital

6. Net Operating Profits Adjusted Tax (NOPAT) = EBIT*(1- t)

Where, EBIT (Earnings Before Interest and Tax) is Net Operating Profits,

t = Tax Rate = Tax expenses/Earning Before Tax (EBT)

Interest net of tax = Interest*(1 – t)

(7) Terminal Value or continuing value: As business is a going concern, at the end of the limited period for which future cash flows (CF, FCFF or FCFE) are projected, the terminal value has to be computed by aggregating the discounted cash flows from that moment till infinity. Thus, Terminal Value = ∑DCF commencing from the end of projection period continued up to infinity.

(7A)Two assumptions are made for finding terminal value for business valuation:

a. There is an infinite series of cash flows (FCFF or FCFE)

b. Free cash flows are either (a) constant or (b) growing at a constant rate

(4) Value of business = Aggregate of future Free Cash flows to Firm discounted at its present worth = ∑DFCFF (for the period future free cash flows are projected) + Terminal Value (Continuing Value) discounted at its present worth

(4A)Terminal Value (Continuing Value) at constant free cash flows assumption = $TV_n = FCFF_{(n+1)}/k$, where, k is WACC.

WACC is Weighted Average Cost of Capital

(4B)Terminal Value (Continuing Value) at constant growth rate of free cash flows to firm assumption = $TV_n = FCFF_{(n+1)}/(k – g)$, where, k is WACC and g is the growth rate

(4C)If there is no period of projected cash flows, continuing value is measured at period 0. In that case

Value of business = V_0 = Continuing Value = FCFF/k (at constant cash flows assumption)

And $V_0 = FCFF_1/(k – g)$ [at constant growth rate of cash flows assumption)

(4D) When there is ‘n’ period of projected free cash flows, continuing value is measured at period tn. In that case

Value of business = V_0 = ∑DFCFF (for the years 1 to n) + TV_n discounted for ‘n’ years (for the cash flows from tn+1 to infinity)

(3A) Value of Equity = Value of business – Value of Debt Capital

(3B) Value of Equity (V_e) = Aggregate of future Free Cash flows to Equity (FCFE) discounted at its present worth. Here k = cost of equity.

(8) Illustrative examples of Discounted Cash Flow (DCF) model:

Problem 1.

Yr	2018	2019	2020	2021	2022	….
FCFF (₹)	500	600	700	800	800 continued at 800	

(a) Find value of the business on 01-01-2021, given that WACC = 10% and Cost of Equity = 15%.

(b) Find value of the business on 01-01-2020, given that WACC = 10% and Cost of Equity = 15%.

(c) Find value of the business on 01-01-2019, given that WACC = 10% and Cost of Equity = 15%.

Solution:

(a) From the date of valuation all future free cash flows are constant at ₹ 800. Thus, in accordance with para (4A) the formula of Continuing value is $V_0 = FCFF_1/k = V_{1-1-21} = CF_{2021}/WACC$ = 800/10% = ₹ 8000

(b) From the date of valuation future cash flows for 2020 is projected at Rs 700 and at the end of the projection period on 01-01-2021 we may apply the formula of Terminal Value which we already found in part (a) at ₹ 8000. Thus, business value is

V_{1-1-20} = 700/(1.1) + (800/.1)/(1.1) [DCF for 2020 + PV of the Terminal Value] = 7909

(c) From the date of valuation future cash flows for 2019 and 2020 are projected at Rs 600 and Rs 700 and at the end of the projection period on 01-01-2021 we may apply the formula of Terminal Value which we already found in part (a) at ₹ 8000. Thus, in accordance with para 1.6.2 the formula of business value is

$V_{1\text{-}1\text{-}19} = 600/(1.1)\ 700/(1.1)^2 + (800/.1)/(1.1)^2$ [DCF for 2019 and 2020 + PV of the Terminal Value] = **7736 (Approx.)**

Workings: (in ₹)

	01-01-2019	2019	2020	2021 onwards continued to infinity
CF		600	700	800
Terminal Value (TV)			8000	
DCF of 2019	545.45455			
DCF of 2020	578.5124			
PV of TV	6611.5702			
$V_{01\text{-}01\text{-}2019}$	**7735.537**2			

Problem 2.

Forthcoming Year 1	₹ Lakh
Data provided:	
EBIT	700
Depreciation	120
Capex	180
Interest	60
Increase in non-cash working capital	100
Debt Capital	3000

Further information:

Tax rate = t	25%
WACC	10%
Cost of Equity	12.5%
No of equity shares	5000000

Find:

(a) NOPAT

(b) CF

(c) FCFF

(d) Value of business based on FCFF at constant FCFF assumption

(e) Value of business when growth rate is 5% based on FCFF

(f) Value per share based on FCFF when constant growth rate is 5%.

(g) Value per share based on FCFE when constant growth rate is 5%.

Solution: (amount in ₹ Lakh)

(a) NOPAT = EBIT*(1 – t) = 700*(1 - 0.25) = 525

(b) CF = NOPAT + Depreciation - Increase in non-cash working capital = 525 + 120 – 100 = 545

(c) FCFF = CF – Capex = 545 – 180 = 365

(d) Value of business based on FCFF

Value of business = V_0 = Continuing Value = $FCFF/_{wacc}$ (at constant cash flows assumption) = 365/0.1 = 3650

(e) Value of business = V_0 = Continuing Value = FCFF/(k – g) = 365/(0.10 – 0.05) = 365/ 0.05 = 7300

(f) Value per share based on FCFF when constant growth rate is …..5%

V_0 = 7300;

Equity = V0 – Debt Capital = 7300 – 3000 = 4300

No. of equity shares = 50 lakhs

Value per share = 4300/50 = ₹ 86

(f) FCFE = FCFF – Interest net of tax + Net Debt Issued = 365 – 80*(1 – 0.25) + (140 - 90) = 355

Value of equity = FCFE/ (Ke – g) = 355/(.125 -.05) = 355/0.075 = 4733.33

Value per share = Equity/ n = 4733.33/50 = ₹91.67.

Topic

Module 1:
Supply under GST - A Refresh

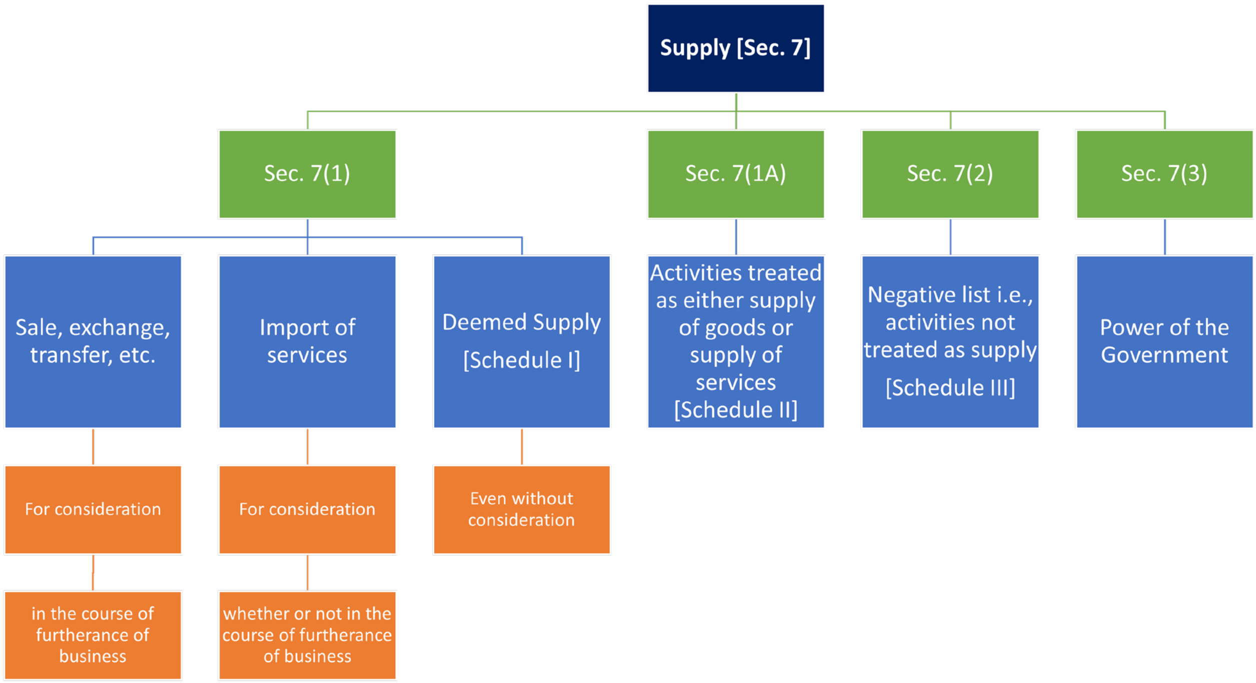
FINAL

Group IV - Paper-19

Indirect Tax Laws and Practice (ITLP)

Supply Under GST

The taxable event in GST is supply of goods or services or both. Various taxable events like manufacture, sale, rendering of service, purchase, entry into a territory of State etc. have been done away with in favour of just one taxable event i.e., supply. Thus, it is very important to understand the meaning of supply. The GST law provides an inclusive definition of "supply"



The taxable event in GST is supply of goods or services or both. Various taxable events like manufacture, sale, rendering of service, purchase, entry into a territory of state etc. have been done away with in favour of just one event i.e. supply. The constitution defines "Goods and Services Tax" as any tax on supply of goods, or services or both, except for taxes on the supply of alcoholic liquor for human consumption.

The meaning and scope of supply under GST can be understood in terms of the following six parameters, which can be adopted to characterize a transaction as supply:

1. Supply of goods or services. Supply of anything other than goods or services does not attract GST
2. Supply should be made for a consideration
3. Supply should be made in the course or furtherance of business
4. Supply should be made by a taxable person
5. Supply should be a taxable supply
6. Supply should be made within the taxable territory

While these six parameters describe the concept of supply, there are a few exceptions to the requirement of supply being made for a consideration and in the course or furtherance of business. Any transaction involving supply of goods or services without consideration is not a supply, barring few exceptions, in which a transaction is deemed to be a supply even without consideration. Further, import of services for a consideration, whether or not in the course or furtherance of business is treated as supply.

Supply of Goods or Services or Both

Goods as well as services have been defined in the GST Law. The securities are excluded from the definition of goods as well as of services. Money is also excluded from the definition of goods as well as services, however, activities relating to the use of money or its conversion by cash or by any other mode, from one form, currency or denomination, to another form, currency or denomination for which a separate consideration is charged are included in services.

Schedule II to the CGST Act, 2017 lists a few activities which are to be treated as supply of goods or supply of services. For instance, any transfer of title in goods would be a supply of goods, whereas any transfer of right in goods without transfer of title would be considered as services.

Further Schedule III to the CGST Act, 2017 spells out activities which shall be treated as neither supply of goods nor supply of services or outside the scope of GST. This includes:

a. Services by an employee to the employer in the course of or in relation to his employment.

b. Services of funeral, burial, crematorium or mortuary including transportation of the deceased.

c. Sale of land and sale of building where the entire consideration has been received after the completion certificate is issued or after its first occupation.

d. Few Actionable claims

Supply for Consideration

Consideration has specifically been defined in the CGST Act, 2017. It can be in money or in kind. Any subsidy given by the Central Government or a State Government is not considered as consideration. It is immaterial whether the payment is made by the recipient or by any other person.

A deposit given in respect of the supply of goods or services or both shall not be considered as payment made for such supply unless the supplier applies such deposit as consideration for the said supply.

Further, when there is barter of goods of services, the same activity constitutes supply as well as a consideration. When a barber cuts hair in exchange for a painting, hair cut is a supply of services by the barber. It is a consideration for the painting received.

However, there are exceptions to the requirement of 'Consideration' as a pre-condition for a supply to be called a supply as per GST. As per schedule to the CGST Act, 2017, activities as mentioned below shall be treated as supply even if made without consideration:

1. Permanent transfer or disposal of business assets where input tax credit has been availed on such assets.

2. Supply of goods or services or both between related persons or between distinct persons as specified in section 25, when made in the course or furtherance of business. However, gifts not exceeding ₹ 50,000 in value in a financial year by an employer to an employee shall not be treated as supply of goods or services or both.

3. Supply of goods— (a) by a principal to his agent where the agent undertakes to supply such goods on behalf of the principal; or (b) by an agent to his principal where the agent undertakes to receive such goods on behalf of the principal.

4. Import of services by a taxable person from a related person or from any of his other establishments outside India, in the course or furtherance of business.

Supply in the Course or Furtherance of Business

GST is essentially a tax only on commercial transactions. Hence, only those supplies that are in the course or furtherance of business qualify as supply under GST. Hence, any supplies made by an individual in his personal capacity do not come under the ambit of GST unless they fall within the definition of business as defined in the Act. Sale of goods or service even as a vocation is a supply under GST.

However, there is one exception to this 'Course or Furtherance of Business' rule i.e., import of services for a consideration.

Supply by a Taxable Person

A supply to attract GST should be made by a taxable person. Hence, a supply between two non-taxable persons does not constitute supply under GST. A "taxable person" is a person who is registered or liable to be registered under section 22 or section 24. Hence, even an unregistered person who is liable to be registered is a taxable person. Similarly, a person not liable to be registered but has taken voluntary registration and got himself registered is also a taxable person.

It should be noted that GST in India is State-centric. Hence, a person making supplies from different States needs to take separate registration in each State. Further, the person may take more than one registration within a State if the person has multiple business verticals. A person who has obtained or is required to obtain more than one registration, whether in one State or Union territory or more than one State or Union territory shall, in respect of each such registration, be treated as distinct persons for the purposes of GST. Hence, a supply between these entities constitutes supply under GST.

Taxable Supply

For a supply to attract GST, the supply must be taxable. Taxable supply has been broadly defined and means any supply of goods or services or both which, is leviable to tax under the Act. Exemptions may be provided to the specified goods or services or to a specified category of persons/entities making supply.

Supply in the Taxable Territory

For a supply to attract GST, the place of supply should be in India. The place of supply of any goods or services is determined based on Sections 10, 11, 12 and 13 of the IGST Act 2017.

In summary, supply under GST encompasses a wide range of transactions, and its correct interpretation is crucial for businesses to comply with GST regulations and ensure smooth operations. By understanding the scope and implications of supply, businesses can navigate the GST landscape more efficiently

Topic

Module 1: Introduction to Performance Management

Module 5: Fundamentals of Business Valuation

ELECTIVES

Paper-20A

Strategic Performance Management and Business Valuation (SPMBV)

Module 1 : Performance Measurement, Evaluation and Improvement Tools

Performance management, in its most refined form, is a systematic process that engages employees in improving organisational effectiveness in the accomplishment of the company's mission and objectives. As a continuous process, it encompasses the setting of objectives, the assessment of progress, and the provision of ongoing coaching and feedback to ensure that employees meet their objectives and career goals. The quintessence of performance management is the cultivation of a high-performance culture in which individuals and teams assume responsibility for the continuous improvement of business processes and their own skills and contributions.

Performance management comprises a range of activities, including goal setting, continuous progress review, regular feedback, employee development, and performance appraisals. A meticulously structured performance management system ensures that employees' activities and outputs are harmonised with the organisation's goals. The primary aim is to enhance both individual and organisational performance through alignment, measurement, and improvement.

Effective performance management necessitates clear communication regarding expectations, continuous feedback on performance, and collaborative goal setting. It should be a holistic process that integrates various functions, such as human resources, training, and development, into a seamless and strategic framework. This integration ensures that performance management is not merely a series of disjointed activities but a coherent strategy that drives organisational success.

Performance management systems are designed to create a culture in which employees are empowered to take responsibility for their own development and performance. This empowerment is achieved through regular and constructive feedback, opportunities for professional development, and a transparent appraisal process that rewards high performance and addresses areas for improvement.

Case Study: Implementing Performance Management Tools at A2A Corporation

A2A Corporation, a multinational technology firm, faced significant challenges in aligning its rapidly expanding workforce with its strategic goals. Despite its innovative products and market presence, the company struggled with inconsistent performance across its global offices. In response, the leadership decided to overhaul its performance management system by integrating advanced performance management tools.

The first step in this transformation was the implementation of a goal-setting framework based on the Objectives and Key Results (OKR) methodology. This framework facilitated the alignment of individual objectives with the company's strategic goals, ensuring that every employee's efforts contributed to the broader organisational mission. The OKR methodology also introduced a structured yet flexible approach to setting and tracking goals, making it easier for managers and employees to stay focused and motivated.

To complement the OKR framework, A2A Corporation adopted a continuous performance management system. This system replaced the traditional annual performance review with regular check-ins and real-time feedback. Employees and managers engaged in monthly one-on-one meetings to discuss progress, address challenges, and adjust goals as necessary. This shift to continuous feedback fostered a more dynamic and responsive work environment, enabling employees to make timely adjustments and improvements.

In addition to the continuous performance management system, A2A Corporation integrated a comprehensive performance appraisal tool. This tool utilised 360-degree feedback, gathering input from peers, subordinates, and supervisors to provide a well-rounded view of an employee's performance. The 360-degree feedback process helped identify strengths and areas for development, promoting a culture of transparency and accountability.

Recognising the importance of professional development, A2A Corporation also implemented a learning management system (LMS) to support employee growth. The LMS offered a wide range of training modules, from technical skills to leadership development, enabling employees to enhance their capabilities and advance their careers. By linking the LMS with the performance management system, the company ensured that training opportunities were aligned with individual performance goals and organisational needs.

The final piece of the performance management overhaul was the introduction of a sophisticated analytics platform. This platform provided managers with real-time data on employee performance, engagement, and development. By leveraging advanced analytics, managers could identify trends, predict potential issues, and make informed decisions to support their teams effectively. The analytics platform also facilitated the measurement of the impact of the performance management initiatives, allowing the company to refine its approach continuously.

The results of these initiatives were transformative. Within a year of implementing the new performance management tools, A2A Corporation reported a significant improvement in employee engagement and productivity. The alignment of individual goals with the company's strategic objectives resulted in more focused and motivated employees. The continuous feedback and appraisal processes fostered a culture of openness and accountability, while the LMS and analytics platform supported ongoing development and informed decision-making.

One notable success story was the performance turnaround in A2A Corporation's European office. Previously plagued by low morale and high turnover, the office experienced a dramatic improvement following the implementation of the new performance management tools. The European team embraced the OKR framework, setting ambitious yet achievable goals that aligned with the company's strategic vision. Regular check-ins and 360-degree feedback sessions helped identify and address issues promptly, while targeted training programmes through the LMS enhanced employees' skills and confidence. As a result, the office not only achieved its performance targets but also became one of the top-performing regions within the company

The case of A2A Corporation illustrates the profound impact that advanced performance management tools can have on organisational success. By implementing a holistic performance management system that integrates goal setting, continuous feedback, comprehensive appraisals, professional development, and advanced analytics, the company was able to align its workforce with its strategic objectives, enhance employee engagement, and drive performance improvements across the organisation. This case study serves as a testament to the power of a well-structured performance management system in fostering a high-performance culture and achieving business excellence.

The transformation at A2A Corporation underscores the importance of strategic and thoughtful implementation of performance management tools. By fostering clear communication, regular feedback, and continuous development, organisations can create an environment where employees are motivated and equipped to perform at their best. The success seen in A2A Corporation's European office exemplifies how targeted performance management initiatives can turn around struggling divisions and boost overall company performance.

Ultimately, the integration of these advanced tools not only enhances individual performance but also propels the organisation towards achieving its long-term goals. Companies aiming for sustained growth and competitiveness must consider investing in robust performance management systems that drive continuous improvement and align individual contributions with the overarching organisational mission.

Module 1 : Performance Measurement, Evaluation and Improvement Tools

Business valuation is a critical process that involves determining the economic value of a business or company. It is an essential aspect of the financial and strategic management of companies, serving as a cornerstone for various activities such as mergers and acquisitions, investment analysis, financial reporting, and strategic planning. The process of business valuation requires a thorough understanding of the company's operations, industry conditions, and the broader economic environment.

Valuation is more than just a financial exercise; it encompasses understanding the qualitative and quantitative aspects of a business. The quantitative side involves analyzing financial statements, cash flows, and market conditions. The qualitative side, on the other hand, considers the company's competitive positioning, management quality, brand value, and other intangible assets. The integration of these elements provides a comprehensive view of a company's worth.

The necessity of business valuation extends across different scenarios. For investors, it helps in making informed investment decisions. For owners, it aids in understanding the value of their equity and in planning for future growth or sale. For stakeholders, it ensures transparency and fairness, especially in transactions involving changes in ownership or control. Business valuation is not a one-size-fits-all process; it involves various methods and approaches tailored to the specific context and purpose of the valuation.

Among the common methods used in business valuation are the market approach, the income approach, and the asset-based approach. Each of these methods offers unique insights and relies on different sets of data and assumptions. The market approach compares the business to similar companies that have been sold recently. The income approach focuses on the present value of future cash flows generated by the business. The asset-based approach evaluates the net asset value of the company's assets and liabilities. A thorough understanding of these methods is crucial for accurately assessing the value of a business.

Case Study: Business Valuation of ABC Manufacturing Inc.

ABC Manufacturing Inc., a mid-sized manufacturing company specializing in automotive parts, sought to undergo a comprehensive business valuation. The company's management decided to initiate this process to explore potential acquisition offers and to gain a better understanding of the company's financial health and market position.

Step 1: Financial Analysis

The valuation process began with a detailed financial analysis. This involved examining ABC Manufacturing's historical financial statements, including the balance sheet, income statement, and cash flow statement. Key financial metrics such as revenue growth, profitability ratios, liquidity ratios, and debt levels were analyzed. The company had shown consistent revenue growth over the past five years, with a compound annual growth rate (CAGR) of 8%. Profit margins had also improved, indicating efficient cost management and strong operational performance.

Step 2: Market Approach

The next step was to apply the market approach, which involved comparing ABC Manufacturing to similar companies in the automotive parts industry. This required identifying comparable companies and analyzing their valuation multiples, such as the price-to-earnings (P/E) ratio, enterprise value-to-EBITDA (EV/EBITDA) ratio, and price-to-sales (P/S) ratio. By selecting a peer group of publicly traded companies with similar size and business models, the valuation team was able to estimate a range of valuation multiples.

For instance, if the average EV/EBITDA multiple for comparable companies was 7x, and ABC Manufacturing's EBITDA was $10 million, the implied enterprise value would be $70 million. The market approach provided a benchmark, allowing the valuation team to assess how the market values similar companies and to apply these insights to ABC Manufacturing.

Step 3: Income Approach

The income approach, specifically the discounted cash flow (DCF) method, was then employed to value ABC Manufacturing. This method involved projecting the company's future cash flows and discounting them to their present value using an appropriate discount rate. The valuation team developed detailed financial projections for the next five years, considering factors such as expected revenue growth, profit margins, capital expenditures, and working capital requirements.

The discount rate, often referred to as the weighted average cost of capital (WACC), was calculated to reflect the company's cost of equity and debt. For ABC Manufacturing, the WACC was determined to be 10%, based on its capital structure and industry risk profile. Using the DCF method, the present value of the projected cash flows was calculated, yielding an estimated intrinsic value for the company.

Step 4: Asset-Based Approach

To complement the market and income approaches, the asset-based approach was also considered. This method involved evaluating the net asset value (NAV) of ABC Manufacturing's assets and liabilities. The company's balance sheet was scrutinized to identify the fair market value of its tangible and intangible assets. Tangible assets included machinery, equipment, and inventory, while intangible assets encompassed patents, trademarks, and goodwill.

The valuation team adjusted the book values of these assets to reflect their current market value. For instance, if the book value of machinery was $5 million but its market value was assessed at $6 million, an adjustment was made. Similarly, liabilities were assessed at their fair market value. The net asset value was then calculated by subtracting the total liabilities from the total adjusted assets. The asset-based approach provided a floor value for ABC Manufacturing, ensuring that the valuation did not fall below the net asset value of its assets.

Step 5: Reconciliation and Conclusion

The final step in the valuation process was to reconcile the values obtained from the market, income, and asset-based approaches. Each method provided a different perspective on ABC Manufacturing's value, and the reconciliation involved weighing these perspectives to arrive at a comprehensive valuation. The market approach indicated a valuation range based on comparable companies, the income approach provided an intrinsic value based on future cash flows, and the asset-based approach offered a baseline value based on net assets.

The reconciliation process involved considering the strengths and limitations of each method. For example, the market approach was useful for understanding how similar companies were valued in the market, but it was subject to market conditions and the availability of comparable data. The income approach was robust in capturing the company's future cash flow potential, but it required accurate forecasting and an appropriate discount rate. The asset-based approach provided a conservative estimate of the company's value but might not fully capture the value of intangible assets and future growth potential.

After thorough analysis and reconciliation, the valuation team concluded that the fair value of ABC Manufacturing Inc. was approximately $85 million. This comprehensive valuation provided the management and potential investors with a well-rounded understanding of the company's worth, supporting informed decision-making regarding acquisition offers and strategic planning.

The fundamentals of business valuation are rooted in a thorough and multi-faceted analysis of a company's financial health, market position, and future potential. The case study of ABC Manufacturing Inc. highlights the importance of using a combination of valuation methods to gain a comprehensive understanding of a business's value. By applying the market, income, and asset-based approaches, the valuation process captures different dimensions of value, providing a balanced and informed assessment.

The financial analysis sets the foundation by evaluating historical performance and current financial health. The market approach benchmarks the company against its peers, offering insights into market perceptions and relative value. The income approach focuses on future cash flow potential, providing an intrinsic value based on discounted future earnings. The asset-based approach ensures that the valuation reflects the tangible and intangible assets' worth, establishing a floor value.

Effective business valuation requires not only financial acumen but also strategic insight. Understanding the qualitative aspects of a business, such as its competitive positioning, management quality, and growth prospects, is crucial in providing a holistic valuation. Moreover, the reconciliation of different valuation methods ensures that the final valuation is robust and reflective of the business's true worth.

In today's dynamic business environment, accurate and comprehensive business valuation is indispensable for making informed investment decisions, facilitating mergers and acquisitions, and guiding strategic planning. Companies, investors, and stakeholders must recognize the value of a thorough valuation process and leverage it to navigate the complexities of the financial landscape. The case of ABC Manufacturing Inc. serves as a testament to the power of a well-executed business valuation in driving strategic success and achieving long-term business objectives.

Ultimately, the integration of these valuation fundamentals enables organisations to make strategic decisions with confidence, ensuring that they are well-positioned to capitalise on opportunities and mitigate risks. As businesses continue to evolve, the principles of business valuation will remain a vital tool in the pursuit of financial excellence and sustainable growth.

Topic

Module 3: Credit Risk and Liquidity Risk

Module 8: Managing Risk in Insurance Business

ELECTIVES

Paper-20B

Risk Management In Banking and Insurance (RMBI)

Asset Liability Management is a Risk Management Tool in Banks

Because the business of banking involves the identifying, measuring, accepting and managing the risk, the heart of bank financial management is risk management. One of the most important risk-management functions in banking is Asset Liability Management (ALM).

Asset Liability Management is concerned with strategic balance sheet management involving risks caused by changes in interest rates, exchange rate, credit risk and the liquidity position of a bank. With profit becoming a key-factor, it has now become imperative for a bank to move away from partial asset management (Credit and Non-Performing Asset) and partial liability management, towards an integrated balance sheet management where all the components of balance sheet and its different maturity mix will be looked at from the profit angle of the bank.

Asset Liability Management (ALM) is the act of planning, acquiring, and directing the flow of funds through an organisation. The ultimate objective of this process is to generate adequate/stable earnings and to steadily build an organisation's equity over time, while taking reasonable and measured business risks.

In brief ALM:

- ✓ Concerned with strategic balance sheet management.
- ✓ Match between assets and liabilities in Balance Sheet.
- ✓ Risks like credit, market, liquidity, interest etc. stem from mismatch between Assets & Liabilities.
- ✓ ALM is not to avoid risk but to manage risk sustaining profitability.
- ✓ Periodic monitoring of risk exposures involving collecting and analysing information.
- ✓ Ability to anticipate, forecast and to act so as to maximise bank's business to profit.
- ✓ Altering Assets & Liabilities portfolio in a dynamic way to manage risks.
- ✓ Involves judgement and decision making.
- ✓ ALM involves Planning, Directing and Controlling the flow, mix, cost and yield of the consolidated funds of bank.
- ✓ Assesses various asset mixes, funding combinations, price volume relations and their implications on Liquidity, Income and Capital ratio.
- ✓ Planning procedure which accounts for all assets and liabilities of a bank by rate, amount and maturity.

Significance Of Asset Liability Management:

Some of the reasons for growing significance of Asset Liability Management are:

a) **Volatility**: Deregulation of financial system changed the dynamics of financial markets. The vagaries of such free economic environment are reflected in interest rate structures, money supply and the overall credit position of the market, the exchange rates and price levels.

b) **Product Innovation**: The second reason for growing importance of ALM is the rapid innovations taking place in the financial products of the bank. While there were some innovations that came as passing fads, others have received tremendous response. In several cases, the same product has been repeated with certain differences and offered by various banks (normally called as old wine in new bottle). Whatever may be features of the products, most of them have an impact on the risk profile of the bank thereby enhancing the need for ALM. For example, Flexi-deposit facility.

c) **Regulatory Environment**: At the international level, Bank for International Settlements (BIS) provides a framework for banks to tackle the market risks that may arise due to rate fluctuations and excessive credit risk. Central Banks in various countries (including Reserve Bank of India) have issued frameworks and guidelines for banks to develop Asset Liability Management policies.

d) **Management Recognition**: All the above-mentioned aspects forced bank managements to give a serious thought to effective management of assets and liabilities. The managements have realised that it is just not sufficient to have a very good franchise for credit disbursement, nor is it enough to have just a very good retail deposit base. In addition to these, a bank should be in a position to relate and link the asset side with the liability side. And this calls for efficient asset-liability management.

There is an increasing awareness in the top management that banking is now a different game altogether since all risks of the game have changed.

Purpose and Objectives of Asset Liability Management:

An effective Asset Liability Management technique aims to manage the volume, mix, maturity, rate sensitivity, quality and liquidity of assets and liabilities as a whole so as to attain a predetermined acceptable risk/reward ratio. Thus, the purpose of Asset Liability Management is to enhance the asset quality; quantify the risks associated with the assets and liabilities and further manage them. Such a process will involve the following steps:

- ✓ Reviewing the interest rate structure and comparing the same to the interest/product pricing of both liquidity assets and liabilities.
- ✓ Examining the loan and investment portfolios in the light of the foreign exchange risk and liquidity risk that might arise.
- ✓ Examining the credit risk and contingency risk that may originate either due to rate fluctuations or otherwise and assess the quality of assets.
- ✓ Reviewing the actual performance against the projections made and analysing the reasons for any effect on the spreads.

The Asset Liability Management techniques so designed to manage various risks, primarily aim to stabilise the short-term profits, long-term earnings and long-term substance/quality of the bank. The parameters that are selected for the purpose of stabilising Asset Liability Management of banks are:

- ✓ Net Interest Income (NII).
- ✓ Net Interest Margin (NIM).
- ✓ Economic Equity Ratio.

A brief description of these parameters is given below:

Net Interest Income (NII):

The impact of volatility on the short-term profit is measured by Net Interest Income.

Net Interest Income = Interest Income – Interest Expenses.

In order to stabilise short-term profits; banks have to minimise fluctuations in the NII.

Net Interest Margin (NIM):

Net Interest Margin is defined as net interest income divided by average total assets.

Net Interest Margin (NIM) = Net Interest Income/ Average total Assets.

Net Interest Margin can be viewed as the ‘Spread’ on earning assets.

The net income of banks comes mostly from the spreads maintained between total interest income and total interest expense. The higher the spread, the more will be the NIM. There exists a direct correlation between risks and return. As a result, greater spreads only imply enhanced risk exposure. But since any business is conducted with the objective of making profits and achieving higher profitability is the target, it is the management of risks and not risk elimination, that holds the key to success.

Economic Equity Ratio:

The ratio of the shareholders’ funds to the total assets measures the shifts in the ratio of owned funds to total funds. This fact assesses the sustenance capacity of the bank.

Objectives of ALM:

At macro-level, Asset Liability Management leads to the formulation of critical business policies, efficient allocation of capital and designing of products with appropriate pricing strategies. And at micro-level the objectives of Asset Liability Management are two folds. It aims at profitability through price matching while ensuring liquidity by means of maturity matching.

✓ **Price Matching** basically aims to maintain spreads by ensuring that the deployment of liabilities will be at a rate higher than the costs. This exercise would indicate whether the institution is in a position to benefit from rising interest rates by having a positive gap (assets > liabilities) or whether it is in a position to benefit from declining interest rates by a negative gap (liabilities > assets).

- ✓ **Liquidity** is ensured by grouping the assets/ liabilities based on their maturing profiles. The gap is then assessed to identify future financing requirements. However, there are often maturity mismatches, which may to a certain extent affect the expected results.

ALM as Co-Ordinated Balance Sheet Management:

The asset liability management function can be viewed in terms of two-stage approach to balance sheet financial management as follows:

Stage 1

Specific Balance Sheet Management Functions

Asset side Management will include:

- ✓ Reserve position management.
- ✓ Liquidity management.
- ✓ Investment/Security Management.
- ✓ Loan Management.
- ✓ Fixed-Assets Management.

Liability side Management will include:

- ✓ Liability Management.
- ✓ Reserve Position Management.
- ✓ Long-Term Management (Notes and Debentures).
- ✓ Capital Management.

Stage 2

Income-Expense Functions

Profit = Interest Income – Interest expense – Provision for loan loss + Non-interest revenue – Non-interest expense – Taxes

Banks are required to formulate policies to achieve following objectives of Asset Liability Management:

- ✓ Spread Management.
- ✓ Loan Quality.
- ✓ Generating fee income and service charges.
- ✓ Control of non-interest operating expenses.
- ✓ Tax Management.
- ✓ Capital Adequacy.

In a nutshell, ALM is the process of aligning a bank's assets and liabilities to minimise risks and maximise profitability. This involves meticulous planning, continuous monitoring, and adaptive strategies. The goal is to ensure that a bank's sources of funds (liabilities) are appropriately matched with its uses of funds (assets), considering factors like interest rates, liquidity, credit quality, and regulatory requirements.

Risk Management for Insurance Companies

Risk management in the insurance business is a bit of a head-scratcher. On one hand, insurance companies are selling what many people consider to be a risk mitigation. On the other, insurance companies themselves face a variety of risks they need to mitigate.

Insurance companies can "self-insure," or purchase coverage from a reinsurer, but this doesn't ensure all of the company's risk is accounted for.

How Can Insurance Companies Benefit from Risk Management?

According to a study by the National Association of Insurance Commissioners (NAIC), core risks in the insurance business include "underwriting, credit, market, operational, liquidity risks, etc." Given this wide variety of concerns, there is a tremendous opportunity for risk management in insurance companies to make a positive impact.

How Enterprise Risk Management could help:

- ✓ Risk management involves identifying, assessing, and mitigating risk. The beauty of a well-implemented risk management program is that it's built on a foundation of standardized risk assessments to help companies prioritize their risk based on its potential impact. Naturally, this process will surface risks that will impact the business's core competencies.

- ✓ For an Insurance Company, service would inevitably come to the forefront of a risk assessment. To address this risk, the insurance company could take steps to integrate incident management and risk management. Most companies have a way to track incidents like customer complaints, but many do not have a way of categorizing, prioritizing, and escalating incidents across teams. Risk management in the risk insurance business helps centralize and identify trends in customer feedback.
- ✓ From there, insurance companies can implement controls to address those trends, such as hiring more customer service reps to resolve long wait times or implementing call screenings to identify less-than-helpful interactions.

Examples of Risk Management in the Insurance Sector:

Depending on emerging threats, professionals in the insurance sector face a wide variety of risks. Some examples of what those risks might be (and what to do about them):

Example #1: Property Damage:

Insurance companies are often concerned with protecting their clients' physical assets, including their brick-and-mortar properties. While natural disasters and other events may not destroy property entirely, they always pose a significant threat to a business' ability to operate normally.

Mitigation Options:

- ✓ Invest inadequate insurance coverage.
- ✓ Implement strategic controls for prevention.
- ✓ Develop a foolproof Business Continuity Plan that is proactively communicated with your entire organization.

Example #2: Data Breaches:

There's no question that businesses are relying more on technology today than ever before, meaning everyone is more susceptible to the risks associated with technology. Cybersecurity threats and ransomware attacks in recent years have skyrocketed, and data hacks have impacted businesses of all industries and sizes.

Mitigation Options:

- ✓ Conduct intuitive and objective IT risk assessments.
- ✓ Align policies and procedures to best-practice frameworks and regulations.
- ✓ Take a holistic approach to managing IT risk by engaging departments across the enterprise.

Example #3: Product or Service Issues:

When customers feel that their product did not meet expectations, challenges and risks are inevitable. So how do you prevent those risks from materializing into a more serious offense like a lawsuit?

Mitigation Options:

- ✓ Invest in professional liability insurance.
- ✓ Implement ERM software into your organization to prevent negligence claims.
- ✓ Conduct vendor due diligence to prevent third party providers from producing products or services that don't meet your organization's standards.

Example #4: Human Capital Costs:

Employees pose a significant amount of risk to any business. Human needs and how they make decisions can directly impact a company's wellbeing.

Mitigation Options:

- ✓ Invest in workers' compensation insurance.
- ✓ Focus on protecting your organization from liability claims by investing in enterprise risk management software.
- ✓ Conduct mid-year reviews (at the minimum) to determine where to invest more time and where to scale back resources.

The insurance industry will likely face a changing regulatory landscape in the years ahead. Multiple regulatory influences at the state, international levels continue to present significant challenges for the industry; the effect on insurance companies remains uncertain, and how to classify insurance companies as systemically important financial institutions (SIFIs) still requires clarification. Risk management for insurance companies enables insurance companies to succeed among this uncertainty by anticipating and addressing a wide variety of change before risks materialize.

a) What Role does Insurance play in a Risk Management Plan?

A company's risk management approach is typically designed to prioritize the organization's most significant risks, identify the potential impact of those risks and develop strategies to mitigate or eliminate them. This creates an insurance policy in the event that they occur.

b) What Risk Management Techniques are used in Insurance?

One example of a popular insurance risk management technique is a reserve fund. A reserve fund is created by using a percentage of all the premiums being collected. The fund will be used to pay out claims on behalf of people who have been impacted by an event.

c) What is the difference between Risk Management and Insurance?

Risk management is a proactive process of planning and providing for a variety of risks, such as financial losses, reputational damage or operational disruptions. It can be compared to insuring against damages or losses that might occur in the future by taking preventive action now.

In contrast, insurance is an economic agreement between two parties where one party agrees to pay for damages from specified events below certain thresholds at predetermined intervals in exchange for periodic payment by the other party.

d) What is a Reinsurance Contract? How is it helpful as a Risk Management? Examine for an Insurance Company.

Reinsurance is a risk transfer mechanism where under an insurance company passes on the risk on an insurance policy to another entity called Reinsurer for a consideration under a Reinsurance treaty (contract).

Under reinsurance one direct insurance company (also called Ceding company) transfers (cedes) part of the risk to another insurance company (called Reinsurer). This helps in reducing the liability of the direct insurer to a large extent. If there is no reinsurance, it could result in a dent in the financial position of an insurance company, especially when a natural calamity happens. Some of the global reinsurance companies who have opened reinsurance offices in India include Swiss Re., Munich Re., RGA, Hannover Re. etc. The Indian Reinsurer is GIC Re. (General Insurance Corporation of India). Reinsurers have their teams which comprise of competent technical professionals who are experts in Actuarial, Claims, Underwriting etc. Reinsurers take a proportion of the premium paid by the Policyholder and promises to pay the proportionate amount of any claims insured under the Policy.

Treaty reinsurance represents a contract between the ceding insurance company and the reinsurer who agrees to accept the risks of a predetermined class of policies over a period of time. When insurance companies underwrite a new policy, they agree to take on additional risk in exchange for a premium.

Topic

Entrepreneurship and Startup

ELECTIVES

Paper-20C

Entrepreneurship and Start Up (ENTS)

Paper 20C : Entrepreneurship and Startup
Entrepreneurial Mindset

An entrepreneurial mindset refers to a particular way of thinking and approaching opportunities, challenges, and decision-making. It encompasses a set of beliefs, thought processes, and skills that enable individuals to identify and create opportunities, take calculated risks, and persist in the face of setbacks. People with an entrepreneurial mindset will often foster innovation, resourcefulness, and adaptability, allowing them to navigate the complex world of business. These are mentioned below:

1. **Positive Attitude:** A positive attitude and outlook are a must for successful entrepreneurs. The entrepreneurial mind is characterized with the ability to observe, digest, analyze, and execute on big ideas differently and uniquely. Whether it is new products or new processes. The mindset of the head of the company sets the tone for the rest of the company and influences corporate culture. Negative thoughts undermine forward motion and the progress of the company, not to mention the management's ability to lead staff and motivate employees.

2. **Creativity:** Business owners with the characteristics for an entrepreneurial mindset ask the "what ifs" that drive inquisitiveness. Think of Steve Jobs and the iPhone. Edison and the light bulb. The Wright Brothers and the airplane. Each of these ground-breaking inventions would not have come to fruition were it not for healthy doses of creative gumption. Even if you are not in a "creative" industry, creativity is needed for entrepreneurial success. The mind of an entrepreneur is always looking for novel ideas and innovations.

3. **Persuasive Communication Ability:** While some people are more naturally persuasive than others, persuasive communication skills can be learned and practiced. Learning to communicate and present your ideas will make you a better entrepreneur—no matter what your industry is.

4. **Intrinsic Motivation and Drive:** One of the top entrepreneurial characteristics is intrinsic motivation, which means you are self-motivated as opposed to looking to others to push you to do things or hold you accountable. Those who own their own businesses are incredibly motivated to succeed.

5. **Tenacity and an Ability to Learn from Failure**: When you are starting a business, you expect that your business will be a wild success. It is true that success is wonderful, but failure is where growth and change happen. The key to learning from failure is to actually learn and embrace your mistakes so they make your better, not break you. Do your best to remove the emotion from mistakes you make as an entrepreneur so you can logically explore how to better yourself and your company.

6. **Risk-Taking:** Successful entrepreneurs know that taking risks is an inherent part of business. Assess risks carefully, weigh the potential rewards, and make informed decisions. Start with small risks and gradually increase your risk tolerance.

7. **Seek Continuous Learning:** Stay updated with the latest industry trends, technologies, and business strategies. Read books, attend workshops, and enroll in entrepreneurial education programs to expand your knowledge and skills.

8. **Network and Collaborate:** Build a strong network of like-minded individuals, mentors, and industry experts. Engage in networking events, join professional organizations, and seek opportunities for collaboration. Learning from others' experiences and perspectives can significantly contribute to your entrepreneurial growth.

Deep Tech startups

Deep technology (deep tech) or hard tech is a classification of organization, or more typically startup company, with the expressed objective of providing technology solutions based on substantial scientific or engineering challenges. Due to their disruptive nature, they have the potential to solve India's most pressing societal issues. Deep tech fields like AI, advanced materials, blockchain, biotechnology, robotics, drones, photonics and quantum computing are moving more and more quickly from early research to market applications.

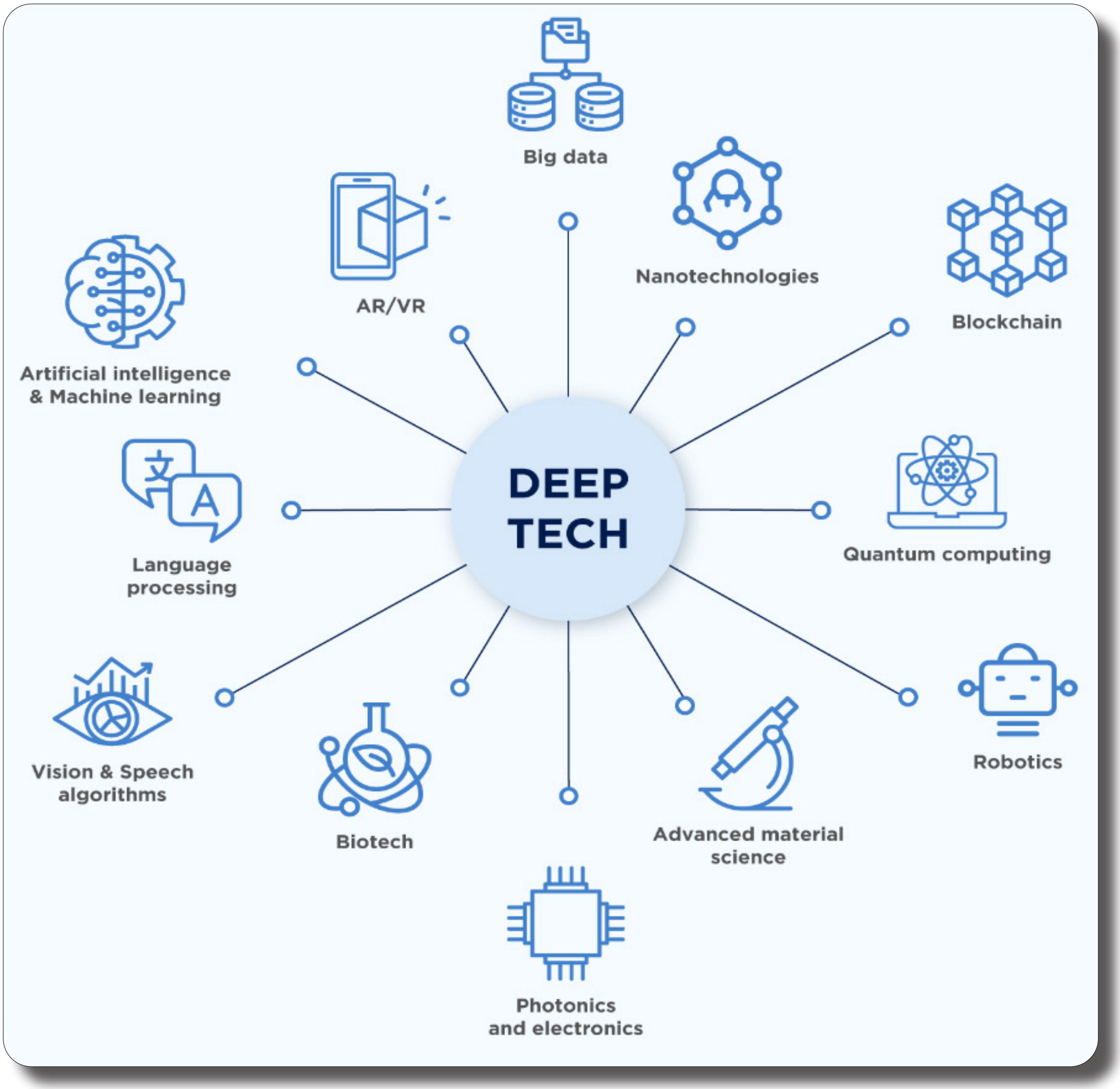
Characteristics of Deep Tech:

(a) **Impact:** The deep tech innovations are very radical and disrupt an existing market or develop a new one. Innovations based on deep tech often change lives, economies, and societies.

(b) **Time & Scale:** The time required for deep technology to develop the technology and reach market-ready maturity is way more than shallow technology development (like mobile apps and websites).

(c) Capital: Deep tech often requires a lot of early-stage funding for research and development, prototyping, validating hypothesis, and technology development.

(Source: https://www.drishtiias.com/daily-updates/daily-news-analysis/india-s-ambitious-push-for-deep-tech)



Case Study: Rise and Fall of Byju's

Rise

BYJU took birth in 2011 as Think and Learn Pvt. Ltd by teacher and engineer Byju Raveendran with just 25 students. A decade later, it became one of India's most valued startups, disrupting the edtech industry. It started by offering content for school students and ventured into test preparation. Its flagship product, BYJU'S - The Learning App, was launched in India in 2015 and reached more than 100 million registered students around the world, with 6.5 million annual paying subscribers.

More than 10,000 employees working across the globe including a content and research team of 2500 plus people who are highly qualified educators and learning science wizards who developed the curriculum after conducting extensive research in BYJU's.

Byju's business incorporates a subscription-based model. This generates recurring revenue as customers periodically pay a fee for exclusive access to specific products or services.

In 2016, BYJU's became the first Asian company to receive funding from the Chan-Zuckerberg Initiative, a philanthropic initiative by Facebook founder Mark Zuckerberg and his wife Priscilla Chan. It was back in 2018 when BYJU's turned into a unicorn, becoming the first Indian edtech company to join the prestigious unicorn club of Indian startups.

During the funding round in March 2022, BYJU's successfully concluded a round worth $800 million. Notable investors, including Sumeru Ventures, Vitruvian Partners, and BlackRock, infused $400 million, while the founder of BYJU's, Byju Raveendran, contributed the remaining $400 million. However, the closing of this funding round faced challenges in July 2022 when Sumeru and Oxshott did not transfer their due amount of $250 million, citing macroeconomic reasons.

Byju Raveendran, the CEO of BYJU's, holds approximately 25% of the company's stakes, while Divya Gokulnath and the management team possess around 4% stakes.

(Source: https://startuptalky.com/byjus-learning-app-success-story/)

Fall

Fall Of Byju's: From $22 Billion To Less Than $3 Billion In A Year

BYJU'S faced challenges on multiple fronts. Marketing expenses, constituting 32% of total costs, raised eyebrows. Allegations of forceful sales tactics, pushing loans for course purchases, damaged the company's reputation. BYJU'S acquisitions brought not only users but also losses from the acquired companies. Byju's is currently facing disputes with investors who are unhappy with the company's performance. The Rise and Fall of Byju's is a complex story and is more a sophisticated case than you think. There have also been legal cases related to non-payment of dues with the BCCI (Indian cricket sponsorship) and Code.org (US subsidiary). An FIR was also filed against Byju's for alleged misleading information in their curriculum.

Accounting practices also raised concerns. Revenue recognition methods inflated their balance sheet, creating an illusion of exponential growth. A massive $1.2 billion Term Loan B, despite low-interest rates, became a ticking time bomb. Defaulting on loan repayments in June 2023 added to BYJU'S woes.

Reports suggested that Byju's faced a sudden setback in June 2023, as Dutch-listed investor Prosus NV slashed the startup's valuation by more than 75% from its 2022 peak of $22 billion. Administrative and cash flow woes compounded, leading to a significant workforce reduction. Allegations of financial mismanagement and aggressive marketing tactics tarnished the company's image, contributing to its downfall.

Several employees made many allegations against the company. Some reports also published.

(a) **Long Work Hours: Reports suggest employees are pressured to work beyond 72 hours a week, exceeding legal limits and impacting work-life balance.**

(b) **Discouraged leave and breaks: Some employees claim they are denied lunch breaks, time off, and even after-office leave if specific targets still need to be met.**

(c) **Unresponsive HR: Allegations suggest the HR department discourages complaints and may not effectively address employee concerns.**

(Source: https://www.9toolkit.in/factors-behind-the-rise -and-fall-of-byjuss-a-case-study/)

The company is also facing legal cases related to non-payment of dues with the BCCI (Indian cricket sponsorship) and Code.org (US subsidiary).

In April 2023, Indian authorities conducted a raid on the Bengaluru office of the firm, suspecting violations of foreign exchange laws. In addition to denying any wrongdoing, the company assured its employees of full compliance with the laws. In May, the company faced a lawsuit from lenders in a US court, alleging defaults on payments and breaches of the loan agreement, including significant delays in releasing financial statements. Byju's denied the accusations of fund diversion through its US-based subsidiary, Alpha. In June, following the alleged non-payment of an interest installment of nearly $40 million, Byju's counter sued the lenders for harassment and initiated a new round of layoffs, resulting in the termination of around a thousand employees. The company faced further challenges as its auditors, Deloitte Haskins and Sells, resigned citing the delayed submission of financial statements, hindering their ability to assess the company's accounts. Subsequently, three board members resigned, leaving CEO Byju Raveendran, his wife Divya Gokulnath, and brother Riju Raveendran as the remaining members on the board.

(Source: https://www.bbc.com/news/world-asia-india-66126095)

Multiple Choice Questions

1. Which of the following is not a characteristic of entrepreneurial mindset?

   (a) Creativity

   (b) Risk taking

   (c) Dominating tendency

   (d) Continuous learning

   Answer (c)

2. **Which of the following is /are not the causes of failure of BYJU's?**

   (a) **Poor corporate governance**

   (b) **Neglect compliance practices**

   (c) **Financial mismanagement**

   (d) **Technology failure**

   Answer (d)

3. Which of the following is a revenue business model of BYJU's?

   (a) Subscription-based business model

   (b) Direct selling business model

   (c) Franchise business model

   (d) Digital marketing model

   Answer (a)

4. **Entrepreneurship is the attitude of mind to**

   (a) **Seek opportunities**

   (b) **Take calculated risks**

   (c) **Derive benefits by setting up a venture**

   (d) **All of the above**

   Answer: (d)

5. What important legal issues is Byju's facing?

   (a) Non-payment of dues with the BCCI

   (b) Acquisition of companies

   (c) Unresponsive HR practices

   (d) Long working hours

   Answer (a)

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

Dear CMA Student,

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

Submission Guidelines:

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

Submission Deadline: We kindly request you to submit your article by **20th of the previous month of publication.** This will allow us ample time to review and prepare the upcoming issues of the CMA Student E-Bulletin.

Submission Process: Please send your article to ***studies.ebulletin@icmai.in*** with the subject line **"CMA Student E-Bulletin Submission - [Your Name, Registration No.]".** Include a brief author bio and a high-resolution photograph to be featured alongside your article.

Recognition and Rewards: Selected articles will be featured prominently in the CMA Student E-Bulletin, providing you with a valuable platform to showcase your expertise. Additionally, authors of published articles will be acknowledged and the top contributors may be eligible for special recognition and rewards.

We believe that your unique insights and experiences will contribute significantly to the enrichment of the CMA Student E-Bulletin. Your participation will not only enhance your visibility within the CMA community but also foster a culture of knowledge-sharing and collaboration.

Best Regards,

Team DoS
The Institute of Cost Accountants of India

E-mail – studies.ebulletin@icmai.in

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

Statutory Body under an Act of Parliament

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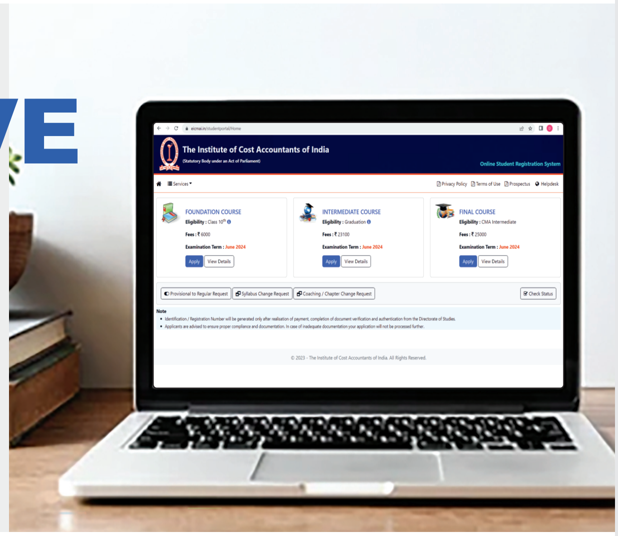
NEW IT INITIATIVE TO PROVIDE ENHANCED FACILITIES TO CMA STUDENTS



A login feature has been integrated into the **ONLINE REGISTRATION APPLICATION SYSTEM** enabling students to access various services through their accounts.

To utilize this feature, students need to create a login account by verifying their email address through an OTP sent to their registered email ID. Once the email ID is verified, it becomes the user ID and students can set their password during the account creation process.

The introduced system enables students to:

- Register online for Foundation, Intermediate & Final Courses
- Check the status of their online applications
- Request Conversion from Old Syllabus to New Syllabus
- Request changes in Oral / Postal Coaching and opt for Chapter-to-Chapter Conversion
- Convert from Provisional to Regular status

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

Behind every successful business decision, there is always a **CMA**

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+ 91-33- 2252-7143/7373/2204
+91-33-2252-1026
+91-33-2252-1723
Website : www.icmai.in

Ref. No.: DOS/CIRCULAR/07(2)/2024 Date: - July 26, 2024

CIRCULAR

Sub: Curriculum for 10 days" Industry Oriented Training Programme (IOTP)"

Further in continuation with Notification vide Ref. No. G/128/06/2024 dated 24th June, 2024, please find herewith the curriculum for 10 days "Industry Oriented Training Programme (IOTP)" **effective from December 2024 term of Examinations**.

A student, enrolling for Final Course under Syllabus 2022 has to complete 10 days "Industry Oriented Training Programme (IOTP)".

- Students appearing for both groups or remaining group, completion of IOTP is mandatory before filling up the examination application form.
- For **Oral Students**: IOTP will be conducted by the respective Regional Councils/Chapters/CMASCs, as opted by the student at the time of enrolment in Final course.
- For **Postal Students**: Students may contact their nearest Regional Councils/Chapters as per their choice.

This is for information of all concerned.

CMA Dr. D.P. Nandy
Additional Secretary & HOD-Studies

Encl: as stated above.

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

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

SKILLS TRAINING PROGRAMME

Skills Training Modules	Hours/Days	Delivery Mode	Level
Tally ERP/Zoho/ERP Next/ERP etc.	40 hrs.	Online	Intermediate
Communication & Soft Skills	20 hrs.	Online	Intermediate
MS-Office/Google Docs, Sheets, Slides/Open Office	40 hrs.	Hybrid	Intermediate
E-Filing	20 hrs.	Hybrid	Intermediate
Intermediate Skills Training	**120 hrs.**		
SAP/ORACLE/MS Dynamics/Any ERP	60 hrs.	Online/Hybrid	Final
Business Analytics/Data Analytics	20 hrs.	Online	Final
Final Skills Training	**80 hrs**		

Note:

1. Students who have applied for both/remaining group(s) shall only receive SAP/ERP login in their registered mail id; while students who have paid total course fees/2nd instalment (irrespective of exam application) are eligible to attend other Skills Training Programs/IOTP for a particular term
2. Oral students shall be served by the respective Regions/ Chapters/ CMASCs in Physical Mode and Postal students shall be served by the DOS through Online Mode

INDUSTRY ORIENTED TRAINING PROGRAMME (IOTP)

Module – I: Practical Skills 7 Days

1. Practical Knowledge on Accounts and Cost & Other Audits

1A. Process of Finalization of Accounts

- Process of finalization of Accounts w.r.t. AS, IAS & other Regulations

1B. Practical Knowledge on Cost & Other Audits

- How to maintain Cost Records
- Preparation of Cost Audit Report
- Compliances of Cost Audit
- Different types of Audit Compliances

2. Practical Knowledge on Direct and Indirect Taxation

- Tax Planning – Head Wise/ Transaction Wise/ Organization Wise
- Filing of Income Tax Return
- TDS Management
- GST Compliances
- GST Assessment & Procedure
- GST Return
- Inventory Valuation

3. Practical Knowledge on Formation of a Company and Contract Management

3A. Formation of a Company and allied works

- Formation of a Company
- Compliance to ROC
- Preparation of Notice/Agenda/Minutes of the Meeting
- MOU/Joint Venture

3B. Contract Management

- Preparation of Tender Documents
- Tendering Process
- Preparation of Work Order

4. Practical Approach on Working Capital Management

- Cash Management
- Inventory Management
  - How to design Bin Cards, Stores Ledger and Bill of Materials
  - How to develop Works Register and Fixed Asset Register
- Receivable Management
- Payable Management
- Debtors Management
- Creditors Management etc.

5. Practical Knowledge on Project Management & Project Financing and Digital Financial Services

5A. Project Management & Project Financing

5B. Digital Financial Services

- Application oriented knowledge on AI, BI & FinTech

6. Risk Management

6A. Investment & Portfolio Management

6B. Risk Management in BFSI Sector

7. MIS Report

- Manufacturing Sector
- Power Sector
- Steel Sector
- Education Sector
- Healthcare Sector

Module – II: Soft Skills 3 Days

1. **Communication Skill**
2. **Interview Skill**
3. **Presentation Skill**
4. **Group Discussion**
5. **Panel Discussion with Industry Professionals**

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Ref. No.: DOS/CIRCULAR/07(1)/2024

Date: - July 19, 2024

CIRCULAR

Sub: Revision of Minimum Recommended Stipend for undergoing Practical Training from Corporates/ Organizations (other than PCMAs/Firm of PCMAs)

It is hereby notified that minimum stipend for the students undergoing Practical Training from Corporates/ Organizations is recommended as follows:

Cities/ Towns	Pursuing CMA Intermediate Course			Pursuing CMA Final Course			CMA Final Qualified		
	Year – 1 ₹ p.m.	Year – 2 ₹ p.m.	Year – 3 ₹ p.m.	Year – 1 ₹ p.m.	Year – 2 ₹ p.m.	Year – 3 ₹ p.m.	Year – 1 ₹ p.m.	Year – 2 ₹ p.m.	Year – 3 ₹ p.m.
Category – X	20000	22000	25000	25000	27000	30000	42000	45000	50000
Category – Y	18000	20000	22000	22000	25000	27000	40000	42000	45000
Category – Z	15000	18000	20000	20000	22000	25000	37000	40000	42000

Note:
1. **Classification of Cities/Towns has been mapped as per GOI departmental notifications (Annexure- I)**
2. **This minimum recommended stipend structure shall be applicable for all corporates/ organizations other than PCMA/Firm of PCMAs w.e.f. 1st August 2024.**

This is for information of all concerned.

Debasis Nandy

CMA (Dr.) D.P. Nandy
Additional Secretary & HoD – Studies

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2) Secretary, T&EF Committee
3) All HODs at Headquarters, Delhi Office and Hyderabad Centre of Excellence
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6) All CMA Support Centres of the Institute
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Annexure-I: Classification of Cities

Sl. No.	States / Union Territories	Cities Classified as "X"	Cities Classified as "Y"
1	ANDAMAN & NICOBAR ISLANDS		
2	ANDHRAPRADESH/ TELANGANA	Hyderabad (UA)	Vijayawada (UA), Warangal (UA), Greater Visakhapatnam (M.Corpn.), Guntur (UA), Nellore (UA)
3	ARUNACHAL PRADESH		
4	ASSAM		Guwahati (UA)
5	BIHAR		Patna (UA)
6	CHANDIGARH		Chandigarh (UA)
7	CHHATTISGARH		Durg-Bhilai, Nagar (UA), Raipur (UA)
8	DADRA & NAGAR HAVELI and DAMAN & DIU		
9	DELHI	Delhi (UA)	
10	GOA		
11	GUJARAT	Ahmadabad (UA)	Rajkot (UA), Jamnagar (UA), Bhavnagar (UA), Vadodara (UA), Surat (UA)
12	HARYANA		Faridabad (M.Corpn.), Gurgaon (UA)
13	HIMACHAL PRADESH		
14	JAMMU & KASHMIR		Srinagar (UA), Jammu (UA)
15	JHARKHAND		Dhanbad (UA), Ranchi (UA), Bokaro Steel City (UA)
16	KARNATAKA	Bangalore/Bengaluru (UA)	Beigaum (UA), Hubli-Dharwad (M.Corpn.), Mangalore (UA), Mysore (UA), Gulbarga (UA)
17	KERALA		Kozhikode (UA), Kochi (UA), Thiruvanathapuram (UA), Thrissur

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			(UA), Malappuram (UA), Kannur (UA), Kollam (UA)
18	LAKSHADWEEP		
19	LADAKH		
20	MADHYA PRADESH		Gwalior (UA), Indore (UA), Bhopal (UA), Jabalpur (UA), Ujjain (M. Corpn.)
21	MAHARASHTRA	Greater Mumbai (UA), Pune (UA)	Amravati (M.Corpn.), Nagpur (UA), Aurangabad (UA), Nashik (UA), Bhiwandi (UA), Solapur (M.Corpn.), Kolhapur (UA), Vasai-Virar City (M. Corpn.), Malegaon (UA), Nanded-Waghala (M. Corpn.), Sangli (UA)
22	MANIPUR		
23	MEGHALAYA		
24	MIZORAM		
25	NAGALAND		
26	ODISHA		Cuttack (UA), Bhubaneswar (UA), Raurkela (UA)
27	PUDUCHERRY (PONDICHERRY)		Puducherry/Pondicherry (UA)
28	PUNJAB		Amritsar (UA), Jalandhar (UA), Ludhiana (M. Coprn.)
29	RAJASTHAN		Bikaner (M.Corpn.), Jaipur(M.Corpn.), Jodhpur (UA), Kota (M.Corpn.), Ajmer (UA).
30	SIKKIM		
31	TAMIL NADU	Chennai (UA)	Salem (UA), Tiruppur (UA), Coimbatore (UA), Tiruchirappalli (UA) Madurai (UA), Erode (UA)
32	TRIPURA		
33	UTTAR PRADESH		Moradabad (M.Corpn.), Meerut (UA), Ghaziabad (UA), Aligarh(UA), Agra (UA), Bareilly (UA), Lucknow (UA), Kanpur (UA), Allahabad (UA), Gorakhpur (UA), Varanasi (UA),

Page **3** of **4**

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			Saharanpur (M.Corpn.), Noida (CT), Firozabad (NPP), Jhansi (UA)
34	UTTARAKHAND		Dehradun (UA)
35	WEST BENGAL	Kolkata (UA)	Asansol (UA), Siliguri (UA), Durgapur (UA)

NOTE

The remaining cities/towns in various States/UTs which are not covered by classification as "X" or "Y" are classified as "Z".

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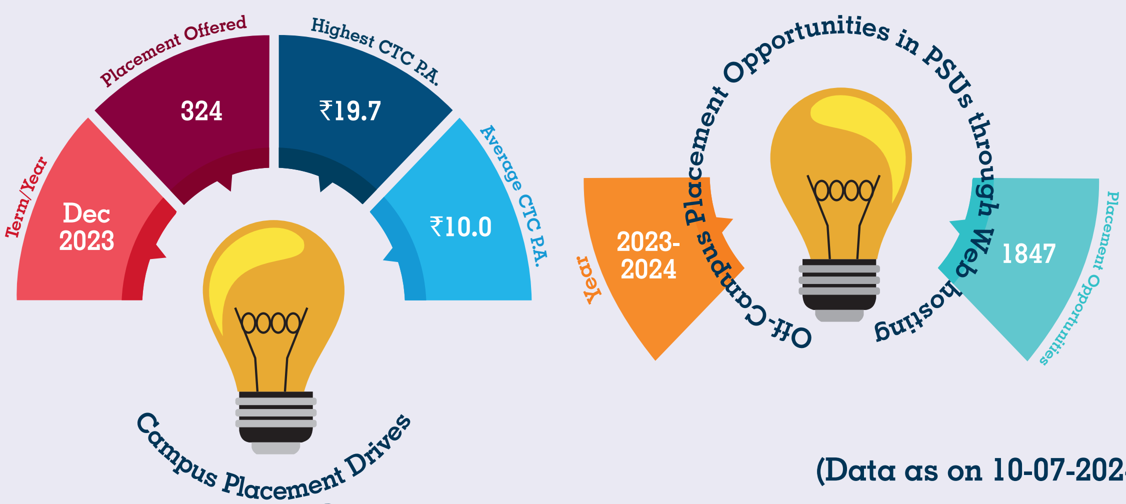
CMA Campus Placement Initiatives 2024

Campus Placement Statistics



(Data as on 10-07-2024)

Career Counselling & Placement Committee
The Institute of Cost Accountants of India

placement@icmai.in / cpt@icmai.in / career-counselling@icmai.in
+91 94323 82747 / 98308 86751 / 98748 57118

Headquarters:
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Delhi Office:
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi - 110003

Behind every successful business decision, there is always a CMA

Forthcoming Campus Placement Drive for June 2024 Batch

The Institute has a vibrant Placement Cell to facilitate the placements for all deserving candidates. It works round the clock to facilitate the placement opportunities for both qualified and semi-qualified CMAs. The Placement Directorate works closely with Corporate Sector to groom students as per industry requirements. Industry is always on the lookout for students with sound academic background, who are vibrant, knowledgeable, energetic, attentive, fast learners, adaptive, good communicator and ready to accept challenges. The Institute is committed to offer best talent for corporates.

The Institute of Cost Accountants of India (ICMAI) organises Campus Placement Programme aiming at fostering strong connections between ICMAI and industry partners, providing maximum employment opportunities for newly qualified CMAs. This programme offers a unique opportunity for corporate houses to review student profiles, conduct interviews, and select candidates who best meet their recruitment needs.

The Campus Placement Programme saw participation from a diverse range of sectors, including PSUs, MNCs, and other corporations from Banking & Insurance, Retail, Manufacturing, FMCG, Information Technology, Chemicals, Education, Hotels, Automobiles, Electronics, Power sectors.

GAIL (India) Limited, EdCIL Limited, ONGC Videsh Limited, NBCC (India) Ltd, ITC Limited, Nestle Limited, Accenture Solutions LLP, Vedanta Limited, Reliance Limited – JIO, TVS Motor Company, Ford Motor Pvt Ltd., Tata Motors, Tata Projects Ltd, Kalpataru Power Transmission Limited, RSM Astute Consulting Pvt. Ltd., TVS Electronics Limited, Prism Johnson Limited, CEAT Ltd, Genpact, Schneider Electric, Narayana Health, JMS Mining Pvt Ltd, AFCONS Infrastructure Ltd, Capgemini and many other prominent and reputed organisations participated in the Campus Placement programmes of the Institute.

The Placement Directorate conducts 12-days Pre-Placement Orientation Program to transform the budding Cost Accountants more industry friendly, skilled and marketable. The various components of the Pre-Placement Orientation Training Programs include sessions on presentation skills, group discussion skills, debate skills, interviews skills & mock interviews, contemporary issues, professional tit-bits, etc. Company-specific orientation program is also conducted for the target students prior to all the placement drives organized by the Institute. The forthcoming 12 days Pre-Placement Orientation Programme for the newly qualified CMAs of June 2024 batch will be organized at 12 locations viz. Kolkata, Mumbai, Delhi, Chennai, Ahmedabad, Jaipur, Pune, Hyderabad, Bangalore, Bhubaneswar, Vijayawada, Surat – South Gujarat Chapter in the month of September 2024 (tentatively).

The Campus Placement Programme for the newly qualified CMAs of June 2024 batch will be held from the month of September – October 2024 (tentatively) at Kolkata, Delhi, Mumbai and Chennai and other places as desired by the recruiting organisations.

We wish to express our advance congratulations to the budding CMAs of June 2024 batch and also wish to inform further to contact with the Career Counselling and Placement Committee for joining the forthcoming Campus Placement drives…!!!

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NPTEL
Knowledge Partner

DIRECTORATE OF STUDIES
in association with
CAREER COUNSELLING & PLACEMENT COMMITTEE AND CAT DIRECTORATE

CMA NYCO 2024 NATIONAL YOUTH COMMERCE OLYMPIAD

Unveil Your Innate Management Accounting Skills

CATEGORY

- **A** Class VIII - X
- **B** Class XI - XII / Pursuing CMA Foundation / CAT
- **C** Pursuing Graduation / CMA Inter / CMA Final

REGISTRATION STARTS

16th August 2024

NYCO 2024 ONLINE EXAM

Sunday, 17th November 2024

REGISTRATION FEE: ₹50

1st Rank - ₹1,00,000
2nd Rank - ₹50,000
3rd Rank - ₹20,000
(Under each category)

Consolation Prize of ₹500 for Next 100 Participants from each category

Digital Certificate of Participation for All

Registration Closes: 15th October, 2024

ICMAI invites students from all over India to register for the **CMA National Youth Commerce Olympiad (NYCO 2024).** The aim of organizing **NYCO 2024** is to unearth hidden Management Accounting talents and ignite a deep appreciation for the subject among young minds.

CMA Bibhuti Bhusan Nayak
President, ICMAI

CMA TCA Srinivasa Prasad
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