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COMBO



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LDR QUESTIONS marked	ABC ANALYSIS

CHAPTER-WISE COMPILATION INCLUDES:
• SM • MCQ Bank
• 14 MQPs • 12 PYPs

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4

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QUICK REVIEW
of important concepts



COVERING 1,069+
MCQs



TOPIC-WISE
break up



**REFERENCE TO
ALL QUESTIONS**



LDR QUESTIONS
marked



ABC ANALYSIS

CHAPTER-WISE COMPILATION INCLUDES:

- SM
- MCQ Bank
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- 12 PYPs

100%
COVERAGE

REVIEWER™

**FUNDAMENTALS OF BUSINESS LAWS AND
BUSINESS COMMUNICATION**

CMA Foundation

2nd Edition

Publisher:



VIVITSU
STRIVING TOWARDS KNOWLEDGE

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Reviewer™

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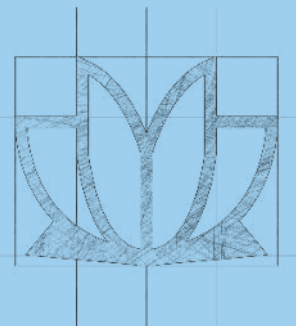
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To the one who's not just dreaming CMA —
but becoming it



CMA

Write your name here

What Matters in CMA?

1 CONCEPTUAL CLARITY

Law isn't about memorising sections — it's about *understanding logic*, rights, and duties. When the “why” behind each provision is clear, Use this *Reviewer to test your understanding* right after studying a concept. Apply the law, don't just read it.

2 CONSISTENCY

Law needs *regular revision*. Just a few objective questions daily can help retain legal language and presentation.

This *chapter-wise structure* helps you revise consistently and master each concept one at a time, without waiting for the full syllabus.

3 CONFIDENCE

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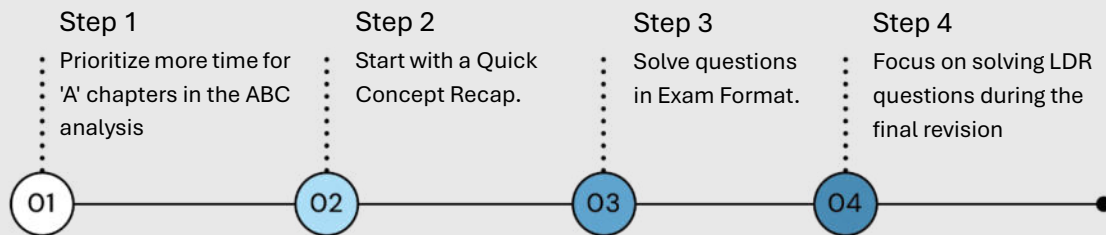


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Don't just study—study smart. Watch renowned professors solve the Vivitsu Reviewer with you on YouTube, breaking down every concept, question, and answer for better understanding and stronger retention.

60+ in BUSINESS LAWS



Step 1: Prioritize your chapters

Topics in the index are categorized as A, B, or C based on their importance. Focus more on 'A' chapters, as they carry the most weight, and give adequate attention to 'B' chapters. While all chapters must be covered, this approach helps manage time efficiently for better results.



Step 2: Start with a Quick Concept Recap

Use this powerful summary for a quick brush-up on key concepts before you attempt the chapter. This helps you identify and understand the core principles. If a question gives you trouble, return to this section / main study material to solidify the concept, then come back and solve it again.



Step 3: Practice in Exam Format

Always solve the question on your own before looking at the answer. If you get confused in MCQs and options or make a conceptual mistake, be sure to mark it to review during your next revision.



Step 4: Last Day Revision (LDR)

Focus on solving LDR questions during the final revision. On the day before your exam, prioritize these questions as they cover the most critical concepts from each chapter. You'll find a quick summary of LDR question numbers listed right before each chapter for easy reference.

5 Ways Vivitsu Reviewer will help you CLEAR CMA FOUNDATION

SECTION A: FUNDAMENTALS OF BUSINESS LAWS											
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2.6	Performance of Contracts	2	-	-	4	2	2	2	1.42	2.38 - 2.39	B
2.7	Discharge of Contracts	-	-	-	-	-	-	-	-	2.39 - 2.41	B
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2.9	Agency	-	-	-	-	-	-	-	-	2.42 - 2.44	A
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2.11	Joint Venture	-	-	-	-	-	-	-	-	2.48 - 2.50	C

05

Prioritize using ABC Analysis

Each chapter is categorized as A , B or C

A : Very Important, Read on priority

B : Moderately Important

C : Less Critical but still essential

Topic-wise Break up

04

1.3

LEGAL METHOD AND COURT SYSTEM IN INDIA

Quick Review of Important Concepts

Legal Method and Court System in India

- **Judiciary Hierarchy:** The Supreme Court is the highest court in India. Below it are the High Courts and then District & Subordinate Courts (Civil and Criminal).
- **Writ Jurisdiction:** Both the Supreme Court (Article 32) and High Courts (Article 226) have the power to entertain petitions for the violation of Fundamental Rights.
- **Supreme Court Powers:** Includes Original, Writ, Appellate, Advisory, Punishment for Contempt (Article 324), and Review (Article 327).
- **High Court Powers:** Includes Original, Appellate, and Power of Superintendence (Article 227).
- **Lowest Criminal Court:** The Judicial Magistrate is the lowest court to approach for criminal matters.
- **Alternative Dispute Resolution (ADR):** Processes like Arbitration, Conciliation, Mediation, and Lok Adalat are supported to resolve disputes. These are generally less time-consuming and cost-effective.
- **Tribunals:** These are quasi-judicial bodies set up to handle specific areas of law, relieving the judiciary's workload and providing expertise.

Multiple Choice Questions (MCQ)

47. Which is the highest court in India? (SM, MCQ)

Bank (MQP [2] 2 Marks Jun'25)

- (a) High Court
- (b) Supreme Court of India
- (c) International Court of Justice
- (d) Sessions Court

Ans: (b)

48. Which Article

the power to

Article 32

Article 226

Ans: (b)

49. When was the Supreme Court of India

established? (SM, MCQ Bank)

- (a) 26th November 1949
- (b) 26th January 1950
- (c) 26th January 1951
- (d) 26th October 1952

Ans: (b)

50. Which Article of the Constitution of India

gives the power to

Article 32

Article 226

Ans: (b)

Includes 100% coverage of SM + MCQ Bank + MQP + PYP

(SM, MCQ Bank, MQP [1] 2 Marks Jun'25) (PYP 2 Marks-Dec'23)

03

Concept Summary

5.1

INTRODUCTION TO BUSINESS COMMUNICATION

Quick Review of Important Concepts

Communication: is the process of sharing, exchanging, or transmitting information, ideas, feelings, and experiences. Its primary aim is to ensure understanding between parties.

Business Communication: involves exchanging information within and outside an organization to achieve goals and ensure mutual understanding. It is essential for smooth operations, decision-making, employee management, leadership, customer service, and organizational efficiency.

Significance:

- Improves managerial efficiency & leadership.
- Builds employee morale, loyalty, trust.
- Supports decision-making and HR management.
- Enhances customer service.

02

Concept Summary

Sharpen your memory with lightning-fast concepts recap before you hit the questions. Also perfect for the final 1.5-day revision!



1.1

01

SOURCES OF LAW

Quick Review of Important Concepts

Sources of Law

- **Definition of Law:** Law is a set of rules that governs the behavior of individuals and organizations to accommodate societal requirements.
- **Foundational Source:** The Constitution of India, 1950, is the founding source of modern Indian law.
- **Classification:** Laws are broadly classified into:
 - **Statutes:** Enacted by Parliament and State Legislatures (e.g., Indian Contracts Act, Sale of Goods Act).
 - **Case Laws:** Judicial precedents and customary laws (personal laws).
 - **Ordinances, Regulations, and other Mandates:** Issued by authorities like the President or Governor during legislative recess.
- **Historical Context:** Indian legal history is divided into Ancient, Medieval, British Administration, and Indian Legal Periods. Key ancient texts include Vedas and Smritis (e.g., Manusmriti, based on "Dharma").
- **Customs:** Customary laws, including personal laws (e.g., Hindu and Mohammedan law), are a source. For a custom to be valid, it must not be uncertain, unreasonable, or in contravention of law and public morality.
- **Judicial Precedents:** The Doctrine of Stare Decisis refers to the rule that past judgments are followed in future cases. The Supreme Court decisions are binding on all lower courts.

Multiple Choice Questions (MCQ)

1. What are the sources of law? (2M, MCQ Bank, MQP 2 Marks Dec'23, Jan'24, Jan'24, 2 Marks MQP'22 Jan'23, PMP 2 Marks Dec'23, MQP 12 2 Marks June'24)

- (a) Constitution of India
- (b) Constitution of India, judicial precedents, customary laws, statutes and ordinance
- (c) Statutes enacted by the Parliament of India and State Legislatures
- (d) Religion

Ans (b)

2. When was the Constitution of India passed by the Constituent Assembly? (2M, MCQ Bank, 2 Marks MQP 12 Dec'24, June'24)

- (a) 26th January 1950
- (b) 26th November 1949
- (c) 26th November 1945
- (d) 15th August 1947

Ans (b)

3. What Are Personal Laws? (2M, MCQ Bank, PMP 2 Marks June'23 & June'24) (MQP 12 2 Marks June'24)

- (a) Laws relating to interpersonal behaviour
- (b) Customs (religious beliefs) that have now been codified
- (c) Laws that a person makes
- (d) Laws based on opinion

Ans (b)

4. Elements of Law include (2M)

- (a) Command
- (b) Duty
- (c) Sanction
- (d) All the above

Ans (d)

5. As per the Historical definition of law, it is not universal in nature. (2M)

- (a) True
- (b) False
- (c) Partly True
- (d) Partly False

Ans (a)

6. ... is a primary source of Hindu law. (2M, 2 Marks MQP 12 Jan'23) PMP 2 Marks Dec'23

- (a) Vedas
- (b) Holy Quran
- (c) Bible
- (d) None of the above

Ans (a)

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4.3	Difference between Promissory Note, Bill of Exchange and Cheque	2	-	10	-	-	2	-	2	4.10 – 4.11	B
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5.4	Types of Business Communication	4	6	4	6	6	4	6	5.14	5.8 – 5.13	A
5.5	Internet Based Business Communication	2	2	-	-	-	-	-	0.57	5.13 – 5.17	C
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ABC Analysis



Very Important,
Read on priority



Moderately
Important



Less critical but still
essential

Ensure you thoroughly read all chapters without skipping any. The ABC analysis is designed to help you prioritize based on past trends, but it should not replace comprehensive preparation.

WHAT DOES REVIEWER INCLUDE?

This Reviewer offers 100% coverage, including all questions from:

- SM: ICMAI Study Material Questions
- MCQ Bank
- PYP: Past Year Papers
- MQP: Model Question Papers (1 or 2 denotes MQP 1 or MQP 2)



1.1

SOURCES OF LAW

Quick Review of Important Concepts

Sources of Law

- **Definition of Law:** Law is a **set of rules** that has evolved over centuries to accommodate societal requirements.
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- **Customs:** Customary laws, including personal laws (e.g., Hindu and Mohammedan law), are a source. For a custom to be valid, it must not be uncertain, unreasonable, or in contravention of law and public morality.
- **Judicial Precedents:** The **Doctrine of Stare Decisis** refers to the rule that court decisions are followed in future cases. The Supreme Court's decisions are binding on all courts in India (Article 141).

Multiple Choice Questions (MCQ)



1. What are the sources of law? (SM, MCQ Bank, MQP 2 Marks Dec'23, Jun'23, Jun'24, 2 Marks MQP [2] Jun'25, PYP 2 Marks Dec'23, MQP [1] 2 Marks June'26)

- (a) Constitution of India
- (b) Constitution of India, judicial precedents, customary laws, statutes and ordinance
- (c) Statutes enacted by the Parliament of India and State Legislatures
- (d) Religion

Ans: (b)

2. When was the Constitution of India passed by the Constituent Assembly? (SM, MCQ Bank, 2 Marks MQP [2] Dec'24, June'26)

- (a) 26th January 1950
- (b) 26th November 1949
- (c) 25th November 1949
- (d) 15th August 1947

Ans: (b)



3. What Are Personal Laws? (SM, MCQ Bank, PYP 2 Marks June'23 & June'24) (MQP [1] 2 Marks June'26)

- (a) Laws relating to interpersonal behaviour
- (b) Customs (religious beliefs) that have now been codified
- (c) Laws that a person makes
- (d) Laws based on opinion

Ans: (b)

4. Elements of Law include. (SM)

- (a) Command
- (b) Duty
- (c) Sanction
- (d) All the above

Ans: (d)

5. As per the Historical definition of law, it is not universal in nature. (SM)

- (a) True
- (b) False
- (c) Partly True
- (d) Partly False

Ans: (a)

6. Is a primary source of Hindu law. (SM, 2 Marks MQP [2] Jun'25) (PYP 1 Marks-Dec'15)

- (a) Vedas
- (b) Holy Kuran
- (c) Bible
- (d) None of the above

Ans: (a)



7. ... Is the most ancient source of Hindu Law (SM)

- (a) Judicial decisions (b) Personal Law
(c) Statutes (d) Customs

Ans: (d)

8. Custom prevails in a particular locality. (SM)

- (a) Legal (b) General
(c) Conventional (d) Local

Ans: (d)

9. Custom to be valid must not be: (SM)

- (a) Immemorial
(b) Uncertain
(c) Reasonable
(d) In confirmation with Law and public morality

Ans: (b)

10. Shruthi includes.....number of Vedas. (SM)

- (a) 1 (b) 2
(c) 3 (d) 4

Ans: (d)

11. Hindu and Muhammedan law is (SM, MQP (1) 2 Marks June'25, PYP 1 Marks Dec'19)

- (a) Personal Law (b) Principal Law
(c) Historical Law (d) Customary Law

Ans: (a)

12. Law Administrated by Chancellor is known as. (SM)

- (a) Statute Law (b) Equity
(c) Equity Courts (d) All of These

Ans: (b)

13. These customs which are not obligatory and are observed due to the pressure of public opinion are known as (SM)

- (a) Custom having sanction. (b) Positive Morality
(c) Both A and B (d) None of these

Ans: (b)

14. Customs that are enforced by the state are known as. (SM)

- (a) Customs having Sanction. (b) Local Customs
(c) General Customs (d) All of these

Ans: (a)

15. This is an essential condition for making a valid custom. (SM)

- (a) Compulsory Observations (b) Peaceable Enjoyment
(c) Certainty (d) All of these

Ans: (d)

16. Which of the following is not the branch of Law? (SM)

- (a) Civil Law (b) Administrative Law
(c) Commercial Law (d) None of these

Ans: (d)

17. The Hindu personal Law is basically found in. (SM)

- (a) Shruti (b) Smriti
(c) Both A and B (d) None of the above

Ans: (c)

18. Which of the following is not a Smriti? (SM)

- (a) Manu (b) Yajnavalkya
(c) Narada (d) Shruti

Ans: (d)

19. Legal customs and Conventional customs are a part of (SM, MQP[2] 2Marks Jun'25)

- (a) Customs without Sanction (b) Customs having Sanction.
(c) Judicial Customs (d) Voluntary Customs

Ans: (b)

20. Which of the following is not a source of Indian Law? (SM, PYP 1 Marks-June'14)

- (a) English mercantile Law (b) Judicial Law
(c) Civil Law (d) None of the above

Ans: (d)

21. In case of Hindu and Muslim Family Business, Which Laws prevail to divide their family properties? (SM, PYP 1 Marks June'15)

- (a) Government Law (b) Their own laws
(c) Legal laws (d) None of these

Ans: (b)

22. Custom as a source has a very inferior place in the (SM, PYP 1 Marks-June'15)

- (a) Hindu Law (b) Judicial decision
(c) Criminal law (d) None of the above

Ans: (d)

23. Customs are considered as of Law. (SM, MQP[2] 2Marks Jun'25, PYP 1 Marks June'17)

- (a) Rules (b) Source
(c) Principle (d) Decision

Ans: (b)

24. Find the odd one out (SM, PYP 1 Marks Dec'19)

- (a) Manu (b) Yajnavalkya
(c) Shruti (d) Narada

Ans: (c)



25. Law is a _____ of rules (MQP(1) 2 Marks June'23)

- (a) book (b) set
(c) combination (d) none of the above

Ans. (b)

26. The Part ____ provides for provisions for the Panchayat Raj system (SM, MQP(1) 2 Marks June'25)

- (a) IX (b) X
(c) XI (d) XII

Ans: (a)

27. State which of the following statements is true. (SM, PYP 2 Marks June'24)

- (a) Case laws are judicial precedents
(b) Any elected Minister can pass an ordinance
(c) There is no punishment for Contempt of Court
(d) Only Acts passed by the Parliament of India or State Legislature are the law

Ans: (a)

28. Which among the following is not a source of law? (PYP 2 Marks Dec'25)

- (a) Custom (b) Precedent
(c) Practice (d) Opinion of lawyers

Ans: (d)

29. "Inter Vivos" means (PYP 2 Marks Dec'25)

- (a) Between two living persons.
(b) Between two persons.
(c) Between two partners.
(d) A company and an employee.

Ans: (a)



30. Which Law is related to the Commercial activities of the people of the society? (SM, MQP[2] 2 Marks Jun'25) (PYP 1 Marks-June'14)

- (a) Constitutional Law (b) Administrative Law
(c) Civil Law (d) Mercantile Law

Ans: (d)

Quick Review of Important Concepts

Legislative Process in India

Parliament Composition: The Parliament consists of the **President, the Council of States (Rajya Sabha), and the House of the People (Lok Sabha)** (Article 79).

- **Bills:** Legislative proposals are introduced as Bills (Article 107). A **Money Bill** is introduced only in the Lok Sabha (Article 109). A **Private Bill** is introduced by a member other than a Minister.
- **Ordinances:** The **President** can promulgate Ordinances during legislative recess (Article 123). Similarly, the **Governor of a State** can promulgate Ordinances (Article 213). Ordinances have a tenure ranging from six weeks to six months.
- **Constitutional Amendments:** The Constitution can be amended under **Article 368**. The Supreme Court in *Keshav Ananda Bharati vs State of Kerala* ruled that amendments cannot contravene Fundamental Rights.
- **Power Sharing:** Article 243 provides for local governance (Panchayati Raj).
- **Legislative Powers:** The 7th Schedule of the Constitution deals with the separation of subjects for legislatures (Union List, State List, Concurrent List). Article 254 addresses inconsistencies between laws made by Parliament and State Legislatures.

Multiple Choice Questions (MCQ)



31. Which Article in the Constitution of India, 1950 has provisions for introduction of a bill in the Parliament of India? (SM, MCQ Bank, MQP 2 Marks Jun'24, MQP[1] 2 Marks Jun'25, Dec'25) (MQP [2] 2 Marks June'26)

- (a) Article 119 (b) Article 141
(c) Article 107 (d) Article 243

Ans: (c)



32. Money Bill is introduced in which House of the Parliament? (SM, MCQ Bank, MQP 2 Marks



Jun'24,MQP[2] Marks Dec'24, Dec'25 PYP 2 Marks-June'23 & June'24)

- (a) Council of People – Lok Sabha
- (b) Council of States – Rajya Sabha
- (c) Both the Houses
- (d) None of the Houses

Ans: (a)



33.Which Article of the Constitution of India empowers the legislature to make laws? (SM,MCQ Bank, MQP 2 Marks Dec'23,Jun'23) (PYP 2 marks-June'23)(MQP [2] 2 Marks June'26)

- (a) Article 12
- (b) Article 243
- (c) Article 141
- (d) Article 245

Ans: (d)

34.What is the Schedule in the Constitution of India, for Separation of Subject for Legislature? (MCQ Bank)

- (a) 9th Schedule
- (b) 7th Schedule
- (c) 32nd Schedule
- (d) 14th Schedule

Ans: (b)

35.Under which Article can we amend the provisions of the Constitution of India? (MCQ Bank) (PYP 2 Marks-Dec'23)

- (a) Article 356
- (b) Article 368
- (c) Article 254
- (d) Article 245

Ans: (b)

36.Which Article of the Constitution of India, deals with inconsistency between laws made by Parliament and laws made by the Legislatures of States? (MCQ Bank) (MQP [2] 2 Marks Dec'25)

- (a) Article 245
- (b) Article 254
- (c) Article 368
- (d) Article 32

Ans: (b)

37.What is a Private Bill? (SM,MCQ Bank, MQP[1] 2 Marks Dec'24,PYP 2 Marks Dec'25)

- (a) A bill introduced by a member other than a Minister
- (b) Bill introduced by a private citizen
- (c) Bill introduced by a Private company
- (d) A bill relating affairs which are private to individual

Ans: (a)

38.The Parliament for the Union of India which shall consist? (SM,MCQ Bank, MQP [1]2 Marks Dec'24, Jun'26)

- (a) The President, the Council of States (Rajya Sabha) and the House of the People (Lok Sabha)
- (b) Rajya Sabha
- (c) Lok Sabha
- (d) Legislative Assembly

Ans: (a)

39.....is the last stage of law making and therefore, the lawyer or the jurist is more important than the legislature. (SM)

- (a) Custom
- (b) Social control
- (c) Legislation
- (d) None of these

Ans: (c)

40.When a law is proposed in parliament it is called (MQP (1) 2 Marks-Dec'24)

- (a) Act
- (b) statue
- (c) bill
- (d) notification

Ans: (c)



41.Fundamental Rights are mentioned under which part of the Constitution of India? (SM,MCQ Bank, MQP[2] 2 Marks Dec'24) (PYP 2 Marks-June'23)

- (a) Part-II
- (b) Part-III
- (c) Part-IX
- (d) Part-XII

Ans: (b)

42.What kind of structure does the Indian Constitution have? (MCQ Bank) (PYP 2 Marks-Dec'23) (MQP [1] 2 Marks June'26)

- (a) Unitary
- (b) Federal
- (c) Autocracy
- (d) Totalitarian

Ans: (b)

43.In Indian Parliament, House of the people is called (PYP 2 MarksDec'25)

- (a) Council of ministers
- (b) Lok Sabha
- (c) Rajya Sabha
- (d) Legislature

Ans:(b)

44.The subjects on which law can be made by both Central and State is called (PYP 2 MarksDec'25)

- (a) Union list
- (b) Concurrent
- (c) Formal
- (d) One sided

Ans:(b)

45.Why is India referred to as a "quasi-federal" State? (PYP 2 Marks Jun'26)

- (a) Because it has no Central government at all.
- (b) Because it is a country that refuses to follow any federal rules.



- (c) Because it is a federation that possesses a strong central machinery.
- (d) Because the State governments have more power than the Central government.

Ans: (c)

- (a) Govt bill
- (b) Treasury
- (c) Private members bill
- (d) None of the above

Ans: (c)

46. A Bill introduced by any Member of Parliament, is called (PYP 2 Marks Dec'25)

1.3

LEGAL METHOD AND COURT SYSTEM IN INDIA

Quick Review of Important Concepts

Legal Method and Court System in India

- **Judiciary Hierarchy:** The **Supreme Court is the highest court** in India. Below it are the High Courts and then District & Subordinate Courts (Civil and Criminal).
- **Writ Jurisdiction:** Both the **Supreme Court (Article 32)** and **High Courts (Article 226)** have the power to entertain petitions for the violation of Fundamental Rights.
- **Supreme Court Powers:** Includes Original, Writ, Appellate, Advisory, Punishment for Contempt (Article 129), and Review (Article 137).
- **High Court Powers:** Includes Original, Appellate, and Power of Superintendence (Article 227).
- **Lowest Criminal Court:** The Judicial Magistrate is the lowest court to approach for criminal matters
- **Alternative Dispute Resolution (ADR):** Processes like Arbitration, Conciliation, Mediation, and Lok Adalat are supported to resolve disputes. These are generally **less time-consuming and cost-effective**.
- **Tribunals:** These are quasi-judicial bodies for specific or technical matters, aiming to reduce the judiciary's caseload and provide expertise.

Multiple Choice Questions (MCQ)

47. Which is the highest Court in India? (SM, MCQ Bank) (MQP [2] 2 Marks June'26)

- (a) High Court
- (b) Supreme Court of India
- (c) International Court of Justice
- (d) Sessions Court

Ans: (b)

48. Which Articles of the Constitution of India have the power to entertain petitions of violation of Fundamental Right? (SM, MCQ Bank)

- (a) Article 32 (b) Article 226
- (c) Article 226 and Article 32 (d) Article 356

Ans: (c)



49. Which is the highest civil court in a district? (SM, MCQ Bank, MQP [1] 2 Marks Jun'25) (PYP 2 Marks-Dec'23)

- (a) Sessions Court (b) Supreme Court of India
- (c) District Court (d) High Court

Ans: (c)

50. When was the Supreme Court of India established? (SM, MCQ Bank)

- (a) 26th November 1949
- (b) 26th January 1950
- (c) 28th January 1950
- (d) 1st October 1937

Ans: (b)



51. Mention the number of judges in the Supreme Court of India including Chief Justice of India currently. (SM, MCQ Bank, 2 Marks MQP [1] Dec'24) (PYP 2 Marks-Dec'23)

- (a) 23 (b) 32
- (c) 34 (d) 46

Ans: (c)

52. Which Article of the Constitution of India stipulates law made by the Supreme Court of India? (SM, MCQ Bank)

- (a) Article 141 (b) Article 245
- (c) Article 368 (d) Article 352

Ans: (a)

CHAPTER 3: SALE OF GOODS ACT, 1930



LDR Questions

Q 1, Q 2, Q 3, Q 21, Q 37, Q 53, Q 69, Q 78, Q 86, Q 110, Q 117, Q 139, Q 140, Q 146, Q 149, Q 152, Q 166

3.1

DEFINITION

Quick Review of Important Concepts

Key Definitions (Sec. 2)

Term	Section	Meaning / Notes
Buyer	Sec. 2(1)	A person who buys or agrees to buy goods
Seller	Sec. 2(13)	A person who sells or agrees to sell goods
Delivery	Sec. 2(2)	Voluntary transfer of possession from one person to another
Goods	Sec. 2(7)	Every kind of movable property except actionable claims & money; includes stocks, shares, crops, grass, things attached to land if agreed to be severed before sale
Document of Title to Goods	Sec. 2(4)	Bill of lading, dock warrant, warehouse receipt, railway receipt etc. used as proof of ownership/possession
Future Goods	Sec. 2(6)	Goods to be manufactured, produced or acquired after contract of sale
Price	Sec. 2(10)	Money consideration for a sale of goods
Property	Sec. 2(11)	General ownership in goods, not just special property
Specific Goods	Sec. 2(14)	Goods identified & agreed upon at time of contract

Contract of Sale (Sec. 4)

Concept	Definition
Contract of Sale	Seller transfers/ agrees to transfer property in goods to buyer for price
Sale	Ownership immediately transferred
Agreement to Sell	Ownership transferred in future/condition ; conditional sale

Sale vs Agreement to Sell

Basis	Sale	Agreement to Sell
Ownership	Immediate	Future/conditional
Nature	Executed	Executory
Rights	Right in rem	Right in person
Risk of Loss	Buyer bears	Seller bears
Resale	Seller cannot resell	Seller may resell (good title to bona fide buyer)
Destruction	Loss on buyer	Loss on seller
Insolvency of Buyer	Seller must deliver to receiver	Seller may refuse delivery
Insolvency of Seller	Buyer can claim goods	Buyer only gets refund/dividend
Tax	Liable for GST	Not until sale happens

Type of Goods

- **(Section 6) Existing** - Owned or possessed by seller at the time of sale.
- **Specific** - Identified and agreed upon at the time a contract of sale.
- **Ascertained** - Good become ascertained subsequent to the formation of a contract of sale.
- **Unascertained** - Defined only by description and may form part of a lot.



- **(Section 2(6)) Future** - To be manufactured or produced or acquired after making of contract of sale.
- **(Section 6(2)) Contingent** - Acquisition of which by the seller depends upon a contingency

Doctrine of Caveat Emptor (Sec. 16)

Rule **Buyer must beware; seller not bound to disclose defects**

1. Fitness for purpose (buyer relies on seller's skill)
2. Merchantable quality (by description)

Exceptions

3. Wholesomeness (food items)
4. Fraud by seller
5. Usage of trade

Multiple Choice Questions (MCQs)



1. Under Sec.2(4) of the Sale of Goods Act, a delivery order enabling a person to obtain delivery on payment of price is (SM, MCQ Bank, MQP 2 Marks Jun'24) (MQP [2] 2 marks Dec'25, June'26)

- (a) Deemed as a Document of Title
- (b) Not a Document of Title
- (c) Document enabling title to Goods
- (d) Not a valid document at all

Ans: (a)



2. A Share Certificate is a — (SM, MCQ Bank, MQP 2 Marks Jun'24, MQP[2] 2 Marks Dec'24, Dec'25, June'26)

- (a) Document of Title to Goods
- (b) Bill of Exchange
- (c) Document Showing Title to Goods
- (d) Instrument of Transfer

Ans: (c)



3. A Bill of Lading is a — (SM, MCQ Bank, MQP 2 Marks Dec'23, Jun'23, Jun'24, MQP[2] 2 Marks Dec'24, MQP[2] Marks Jun'25, Dec'25, June'26)

- (a) Bill of Exchange
- (b) Promissory Note
- (c) Cheque
- (d) Document of Title to Goods

Ans: (d)

4. Seller means a person who (SM, PYP 1 marks sep'14 -15)

- (a) Sells or agrees to sell
- (b) Bear authority to sell
- (c) Only agrees to sell goods
- (d) Desirous of selling

Ans: (a)

5. Mercantile agent means the person: (SM, PYP 1 Marks Sep'14, Mar'15, Jun'16)

- (a) Who sells goods or consigns for the purpose to sell or buy goods or raise money on security of goods
- (b) Who only sell or purchase
- (c) Who only consign goods
- (d) Who only transfer goods

Ans: (a)

6. Under Sale of Goods Act, 1930 the term 'Goods' means every kind of movable property and includes: (SM, PYP 2 mark Dec'14 Jun'15 mar'16 dec'16, June'23)

- (a) Stock and share
- (b) Growing crops, grass
- (c) Both (a) and (b)
- (d) None of the above

Ans: (c)

7. The term "goods" in sale of goods means: (SM, PYP 1 Marks mar'15)

- (a) Moveable goods other than money and actionable claims
- (b) All moveable goods only
- (c) Tangible consumable goods
- (d) Tangible goods

Ans: (a)

8. The acquisition of which is contingent upon happening or non-happening of certain events will be treated as (SM)

- (a) Future goods
- (b) Unascertained goods
- (c) Contingent goods
- (d) Forward commodities

Ans: (c)



9. Which of the following is/are not included in the meaning of 'goods' as defined in the Sale of Goods Act. (SM, PYP 1 Mark Mar 15)

- (a) Stocks & Shares
- (b) Actionable claims
- (c) Legal tender
- (d) Both 'b' and 'c'

Ans: (d)

10. Which of these is a document of title of goods? (SM, PYP 1 Mark Sep'15)

- (a) Usance Promissory Notes
- (b) International Bill of Exchange
- (c) Bill of lading
- (d) Account payee crossed cheque

Ans: (c)

11. The definition of "Document of title to goods" given in the Sale of Goods Act is (SM, MQP[1] 2 Marks Jun'25 PYP'Dec'15)

- (a) Exhaustive
- (b) Inclusive
- (c) Exclusive
- (d) Not clear

Ans: (b)

12. A document issued by a warehouse keeper or a wharfingers stating that the goods specified in the document are in his warehouse is called (SM, PYP 1 mark Dec'15)

- (a) Dock warrant
- (b) Bill of lading
- (c) A warehouse keeper's or wharfingers certificates
- (d) Delivery order

Ans: (c)

13. Under the Sale of Goods Act, 1930, the term 'Mercantile Agent' means a mercantile agent, having as such agent, authority to _____. (SM)

- (a) Sell goods or consign goods for the purpose of sale
- (b) Buy goods
- (c) Raise money on the security of goods
- (d) All of the above

Ans: (d)

14. Sale of Goods Act, 1930 deals with _____. (SM, PYP 1 Marks Jun'16)

- (a) Cash Sale
- (b) Credit Sale
- (c) Hire Purchase sale
- (d) Sale of goods in general

Ans: (d)

15. Goods that are identified and agreed upon at the time of contract of Sale are known as (SM, PYP 1 Marks Dec'16, Jun'26)

- (a) Specific goods
- (b) Future goods
- (c) Generic goods
- (d) Existing goods

Ans: (a)

16. Under Sec 2(7) of the Sale of Goods Act, 1930 the term goods does not include (SM)

- (a) Stock and share
- (b) Growing crops
- (c) Grass
- (d) Neither (a) nor (b) nor (c)

Ans: (d)

17. A valid contract of sale (SM) (MQP [1] 2 Marks June'26)

- (a) Includes Contract for work and labour
- (b) Does not include 'An arrangement to sell'
- (c) Includes hire purchase contract
- (d) Includes 'an arrangement to sell'

Ans: (d)

18. 'Goods' means (SM, PYP 1 Mark Dec'17)

- (a) Every kind of movable property other than actionable claims and money
- (b) Some kinds of immovable property only
- (c) Every kind of movable property including actionable claims and money
- (d) Both (a) and (b)

Ans: (a)

19. 'Future Goods' (SM, PYP 1 Mark Dec'17, Jun'26)

- (a) Can be subject matter of sale
- (b) Cannot be subject matter of sale
- (c) Sometimes may be the subject matter of sale
- (d) Depends on circumstances

Ans: (a)

20. A agrees to buy 200 lts of oil from B's on place of cotton. It is a (PYP 1 mark Dec'22)

- (a) Barter sale
- (b) Hire purchase of sale
- (c) Instalment purchase
- (d) None of the above

Ans: (a)



21. The Sale of Goods Act, 1930 governs the transfer of property in (MCQ Bank, MQP[2] 2 Marks Dec'24, June'26, PYP Mar'16 June'17)

- (a) Movable property
- (b) Immovable property
- (c) Both movable and immovable property
- (d) All types of properties

Ans: (a)



22.A valid contract of sale (SM, MCQ Bank, PYP 1 Mark Jun'17)

- (a) includes 'an agreement to sell'
- (b) does not include 'an agreement to sell'
- (c) includes hire purchase contract
- (d) Includes contract for work and labour

Ans: (a)

23.Which one of the following does not connote 'goods' as defined in the Sale of Goods Act? (MQP (1) 2 Marks Dec'24 Dec'19)

- (a) Money
- (b) Animals
- (c) Debt
- (d) Both (A) and (C)

Ans: (d)

24.A hire purchaser of the goods : (MQP (1) 2 Marks-Dec'24)

- (a) can resale the goods
- (b) cannot use the goods
- (c) has an option to return the goods (or) buy it
- (d) none of the above

Ans: (c)

25.Sale of Goods Act,1930 was enforced on _____ . (MQP (2) 2 Marks-June'25 PYP sep'14 Dec'15 Jun'16)

- (a) July 1, 1930
- (b) June 1, 1930
- (c) July 31, 1930
- (d) June 30, 1930

Ans: (a)

26.For terms not defined in the Sales of Goods Act, reference is made to (PYP 1 Marks Sep'15 & March 2015)

- (a) Indian Contract Act
- (b) Companies Act
- (c) Transfer of Immovable Property Act
- (d) Consumer Protection Act

Ans: (a)

27.Which of the following is not considered as goods? (PYP 1 marks sep'14)

- (a) Antiques
- (b) Jubilee coins
- (c) Current coins
- (d) None

Ans: (c)

28.A contract for the sale of "Future Goods" is (PYP 1 Mark sep'14, Dec'15)

- (a) Sale
- (b) Agreement to sell
- (c) Void
- (d) Hire purchase contract

Ans: (b)

29.The doctrine of "CAVEAT EMPTOR" is not applicable: (PYP 1 Mark sep'14)

- (a) When the goods are of mass consumption
- (b) In case of perishable goods
- (c) When the seller is well- established and known person
- (d) When the buyer has relied upon the skill & judgment of the seller

Ans: (d)

30.A contract of sale of goods which provide that property would pass to buyer on full payment of price and execution of sale deed is known as: (PYP 1 Mark sep'14)

- (a) Sale
- (b) Agreement to sell
- (c) Hire purchase agreement
- (d) Sale of approval

Ans: (b)

31.Goods the acquisition of which is contingent upon happening or non-happening of certain events will be treated as (MQP (1) 2 Marks-June'25 PYP 1 marks Mar'15)

- (a) Future goods
- (b) Unascertained goods
- (c) Contingent goods
- (d) Forward commodities

Ans: (c)

32.CIF contract is also known as (SM,MQP[2] 2Marks Jun'25 PYP Mar 15)

- (a) Contingent contract
- (b) Contract for sale of document
- (c) Conditional contract of sales
- (d) Quasi contract

Ans: (b)

33.Doctrine of caveat emptor does not apply when: (SM, MQP[1] 2 Marks Jun'25 PYP Mar'15)

- (a) Goods are purchased by sample
- (b) Goods are purchased by description
- (c) Goods are purchased by sample as well as description
- (d) All of the above

Ans: (d)

34.Price must either be certain or definite or (PYP 1 mark June'15)

- (a) Determined by some method or criterion prescribed in the contract
- (b) By valuation of a third party
- (c) All of the above
- (d) None of the above

Ans: (c)



5.1

INTRODUCTION TO BUSINESS COMMUNICATION

Quick Review of Important Concepts

Communication: is the process of sharing, exchanging, or transmitting information, ideas, feelings, and experiences. Its primary aim is to ensure understanding between parties.

Business Communication: involves exchanging information within and outside an organization to achieve goals and ensure mutual understanding. It is essential for smooth operations, decision-making, employee management, leadership, customer service, and organizational efficiency.

Significance:

- Improves managerial efficiency & leadership.
- Builds employee morale, loyalty, trust.
- Supports decision-making and HR management.
- Enhances customer service.

Uses:

- **Group Discussions (GD):** Develop communication, leadership, social skills.
- **Speeches/Debates:** Convey ideas, argue effectively.
- **Presentations:** Efficient info-sharing; may/may not use visuals.

Role in Marketing:

- Builds relationships, fosters innovation, ensures transparency.
- Overcomes barriers, projects professionalism.
- Modes: Advertising, Direct Marketing, Sales Promotion, Personal Selling.

Skills for Effective Communication:

- Clear, complete, concrete messages.
- Empathy, active listening, open-mindedness.
- Use verbal & non-verbal cues.
- Feedback essential.

Active Listening Benefits:

- Improves problem-solving, social skills, empathy, learning.
- Builds stronger relationships; ensures understanding.



Multiple Choice Questions (MCQs)



1. Which business communication usage provides a bird's eye view on a matter? (SM, MCQ Bank, MQP 2 Marks Jun'24, PYP 2 Marks June'23) (MQP [2] 2 Marks June'26)

- (a) Speech
- (b) Group Discussion
- (c) Debate
- (d) Presentation

Ans: (d)



2. In which business communication, a speaker has to clearly speak for or against a topic? (SM, MCQ Bank, MQP 2 Marks Dec'23, Jun'23, Jun'24, MQP[1] 2 Marks Dec'24, PYP 2 Marks June'24) (MQP [2] 2 Marks June'26)

- (a) Presentation
- (b) Debate
- (c) Speech
- (d) Group discussion

Ans: (b)



3. Includes face to face interaction with customers for closing the sale. (SM, MCQ Bank, MQP 2 Marks Dec'23, Jun'23, Jun'24, MQP[2] 2 Marks Jun'25, June'26)

- (a) Sales promotion
- (b) Advertising
- (c) Direct marketing
- (d) Personal Selling

Ans: (d)



4. Use of coupons and samples come under which mode of marketing communication? (SM, MCQ Bank, MQP 2 Marks Dec'23, Jun'23, Jun'24, MQP[2] 2 Marks Dec'24, Jun'26)

- (a) Sales promotion
- (b) Advertising
- (c) Personal selling
- (d) Direct marketing

Ans: (a)

5. What is the situation called when a bad image of the company is created? (SM, MCQ Bank, MQP 2 Marks Jun'24) (MQP [1] 2 Marks June'26)

- (a) Positive PR
- (b) Negative PR
- (c) Customer service
- (d) Promotion

Ans: (b)



6. Business communications help in establishing _____ when marketing (SM, MCQ Bank, MQP 2 Marks Dec'23, Jun'23, Jun'24,

MQP[2] 2 Marks Jun'25, Dec'25, June'26) (MQP [1] 2 Marks June'26)

- (a) Professionalism
- (b) Rudeness
- (c) Negativity
- (d) Casualness

Ans: (a)

7. Professional behaviour includes behave in a _____ manner in the workplace? (SM, MCQ Bank, PYP 2 Mark-Dec'23)

- (a) Neutral
- (b) Positive
- (c) Negative
- (d) None of the above

Ans: (b)

8. Business attire refers to _____ in a professional conduct? (SM, MCQ Bank, MQP[2] 2 Marks Dec'24, Dec'25)

- (a) Manners
- (b) Qualities
- (c) Clothing
- (d) None of the above

Ans: (c)

9. It is _____ to interrupt people while they are speaking? (SM, MCQ Bank, MQP[2] 2 Marks Dec'24)

- (a) Polite
- (b) Desirable
- (c) Rude
- (d) None of the above

Ans: (c)

10. What does interpersonal communication mean? (SM)

- (a) Communication with ourselves
- (b) Communication with other
- (c) Both (a) & (b)
- (d) None of the above

Ans: (b)

11. Which of the following feature is not of communication? (SM, PYP 2 Marks June'26)

- (a) Continuous
- (b) Goal oriented
- (c) No flow of message
- (d) Inter-disciplinary science

Ans: (c)

12. Which of the following is not an importance of communication? (SM)

- (a) Human relation
- (b) Inter-disciplinary science
- (c) Personal asset
- (d) Public relation

Ans: (b)



13. Which of the feature belongs to choose of means and mode of communication? (SM, MQP[2] 2Marks Jun'25)

- (a) Nature of organization
- (b) Variable means
- (c) Distance involved
- (d) None of these

Ans: (c)

14. Which communication is essential for ensuring mutual co-operation and understanding between departments? (SM, PYP 2 marks June'26)

- (a) Sound communication
- (b) Organizational communication
- (c) Persuasive communication
- (d) oral communication

Ans: (b)

15. Which factor is not in consideration while choosing means & mode of communication? (SM, MQP[1] 2Marks Jun'25)

- (a) Cost factor
- (b) Nature & weather of locality
- (c) Resources
- (d) Distance involved

Ans: (b)

16. _____ is the biggest example of paid communication (SM)

- (a) Advertisement
- (b) Publicity
- (c) Letters
- (d) All of these

Ans: (a)

17. Which of these is an essential feature required for advertisement? (SM)

- (a) Exposure
- (b) Perseverance
- (c) Retention
- (d) All of these

Ans: (d)

18. Which of the following statements about communication is TRUE? (PYP 1 mark July'21)

- (a) Ineffective communication produces at least sometimes good result to the sender
- (b) Ineffective communication is vague, incomplete incorrect and difficult to understand
- (c) In effective communication in an organisation sometimes helps in decision making
- (d) In effective communication is rarely " the breeding ground of misunderstanding and mistrust

Ans: (b)

19. Which of the following factors decides the success or failure of communication? (PYP 1 mark Nov'21)

- (a) Feed back
- (b) Repetition
- (c) Gestures
- (d) Character

Ans: (a)

20. The word "Communication" has been derived from Latin word (PYP 1 mark Dec'18)

- (a) Communism
- (b) Community
- (c) Communicate
- (d) Communis

Ans: (d)

21. Which of the following proves that talking is an important means of communication? (PYP 1 Mark Nov'20)

- (a) Man is a social animal
- (b) We need to interact with ourselves
- (c) Most of our daily activities involve talking to others
- (d) We like to use our vocal cords

Ans: (c)

22. Which of the following is a respected skill in business communication? (PYP 1 Mark Jan'21)

- (a) Conciseness
- (b) Redundancy
- (c) Verbosity
- (d) Wordiness

Ans: (a)

23. According to the principles of professional networking, what should a business do before trying to build brand new relationships? (PYP 2 Marks Jun'26)

- (a) Stop talking to old clients to save time.
- (b) Nurture and take care of the relationships they already have.
- (c) Mix their personal life and business life together completely.
- (d) Only communicate with people through text messages.

Ans: (b)



Quick Review of Important Concepts

Business Communication:

- Vital for relationships, negotiations, sales, presentations, problem-solving, and decision-making. Effective communicators exhibit:
1. **Good listening skills** – Focus on understanding rather than speaking.
 2. **Open-mindedness** – Accept feedback and be willing to learn.
 3. **Attentiveness** – Listen patiently without distractions.
 4. **Active participation** – Engage in discussions meaningfully.

Eight Cs of Effective Communication:

1. **Clarity** – Message should be easily understood; avoid ambiguity.
2. **Conciseness** – Keep messages short, direct, and to the point.
3. **Courtesy** – Maintain respect, politeness, and positive tone.
4. **Correctness** – Use proper grammar, spelling, and syntax.
5. **Completeness** – Include all necessary information for action.
6. **Concreteness** – Be specific, clear, and meaningful; avoid vagueness.
7. **Consideration** – Understand the receiver's perspective and potential impact.
8. **Coherence** – Ensure logical, relevant, and structured communication.

Multiple Choice Questions (MCQ)

24. Participants involved in the process of communication must be _____.

(SM, MCQ Bank) (MQP [2] 2 marks Dec'25)
(MQP [1] 2 Marks June'26)

- (a) Judgemental (b) Open-minded
(c) Both a and b (d) None of the above

Ans: (b)



25. Which of the following is not one of the 8C's of communication? (SM, MCQ Bank, MQP 2 Marks Dec'23, Jun'23, MQP [1] 2 Marks Dec'24, PYP 2 Marks-June'23) (MQP [2] 2 Marks June'26)

- (a) Curiousness (b) Conciseness
(c) Considerate (d) Concreteness

Ans: (a)



26. Need of proper grammar and syntax comes under which C of communication? (SM, MCQ Bank, MQP [1] 2 Marks Dec'24, PYP 2 marks-Dec'23 & June'24) (MQP [2] 2 Marks June'26)

- (a) Completeness (b) Coherence
(c) Courteous (d) Correctness

Ans: (d)

27. If a message is short and to the point, the message is said to be _____? (SM, MCQ Bank, PYP 2 Marks-Dec'23) (MQP [2] 2 Marks June'26)

- (a) Correct (b) Concise
(c) Coherent (d) Complete

Ans: (b)

28. Which of the following is not a part of Seven 'C's of effective communication? (SM, PYP 1 Mark-June'14)

- (a) Clarity of expression
(b) Conciseness in presentation
(c) Correctness of facts
(d) None of the above

Ans: (d)

29. Coherent Presentation is an important factor of communication here 'coherent' stands for (SM)

- (a) Clear (b) Easy & soft
(c) Soft (d) None

Ans: (a)

30. Which of these should not be present in a business letter? (SM)

- (a) The name of firm or businessman
(b) The date
(c) Business jargon
(d) Courteous leave taking

Ans: (c)

31. There are _____ 'Cs' of effective communication. (MQP [1] 2 Marks-June'25)



- (a) Five (b) Eight
(c) Ten (d) Twenty

Ans: (b)

32. Communication saves to achieve within a group or organisation which of the following four major functions? (PYP 1 Marks-Aug'20)

(i) Anger, (ii) Motivation, (iii) Emotional expression, (iv) Information, (v) Control

- (a) (ii), (iii), (iv), (v)
(b) (i), (ii), (iii), (v)
(c) (i), (iv)
(d) (i), (ii), (iv), (v)

Ans: (a)

33. Negative messages should be B had A L conveyed with a (PYP 1 Mark-July'21)

- (a) Harsh tone
(b) Considerate attitude
(c) Frown of the face
(d) Confusing gesture

Ans: (b)

34. Which of the following messages is a positive message? (PYP 1 Mark Aug'20)

- (a) We cannot take your order now
(b) We do not want to continue our business relations with you
(c) We sincerely appreciate your interest in our training programmes
(d) We cancel your trip with immediate effect

Ans: (c)

35. An alphabetical list of sources, such as books, journals etc; consulted by the writer in preparing a business report is called: (PYP 1 Mark Aug'20)

- (a) Index (b) Contents
(c) Title (d) Bibliography

Ans: (d)

36. A negative message can (PYP 1 Mark Aug'20)

- (a) cause severe damage in interpersonal relationship
(b) improve business relations
(c) bring more customers to the organisation
(d) hurt the feeling of the sender

Ans: (a)

37. _____ language should not be used in communication. (PYP 1 Mark June'14, June'15, Aug'20)

- (a) Polite (b) Clear
(c) Offensive (d) Oral

Ans: (c)

38. Effective communication has become essential due to: (PYP 1 Mark June'16, June'17)

- (a) Increase in size of organisation
(b) Growing specialisation
(c) Growing need of co-ordination
(d) All the stated options are correct.

Ans: (d)

39. Which of the following, falls into the group of seven C's of effective communication? (PYP 1 Mark June'17, June'19)

- (a) Customer newsletter
(b) Customised reports
(c) Courtesy towards recipient
(d) Customers feedback

Ans: (c)

40. There are C's in communication: (PYP 1 Mark Dec'15)

- (a) Seven (b) Six
(c) Four (d) Eight

Ans: (d)

41. According to the principles of effective communication, why is it often more important to have good listening skills than speaking skills? (PYP 2 Marks Jun'26)

- (a) Because listening allows you to ignore the other person's opinion.
(b) Because listening is the only way to make sure the other person stops talking.
(c) Because if you listen, you never have to speak or give your own ideas.
(d) Because it helps you avoid judging someone too quickly (premature evaluation) and prevents verbal conflicts.

Ans: (d)



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2

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Reviewer®

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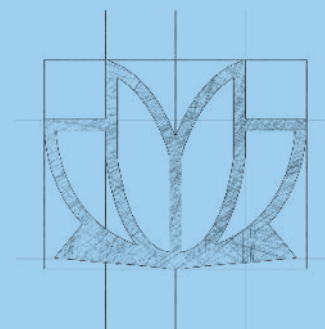
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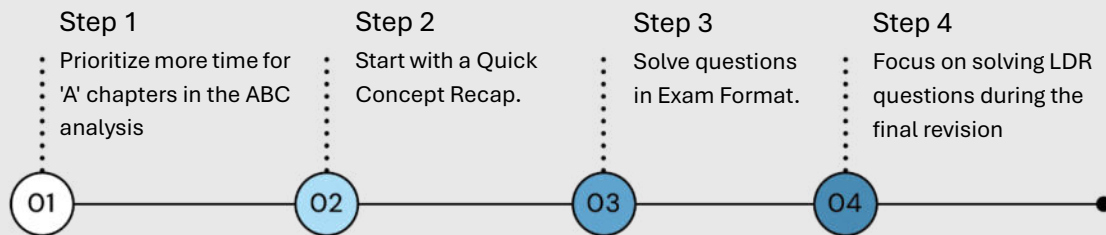


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60+ in Financial and Cost Accounting



Step 1: Prioritize your chapters

Topics in the index are categorized as A, B, or C based on their importance. Focus more on 'A' chapters, as they carry the most weight, and give adequate attention to 'B' chapters. While all chapters must be covered, this approach helps manage time efficiently for better results.



Step 2: Start with a Quick Concept Recap

Use this powerful summary for a quick brush-up on key concepts before you attempt the chapter. This helps you identify and understand the core principles. If a question gives you trouble, return to this section / main study material to solidify the concept, then come back and solve it again.



Step 3: Practice in Exam Format

Always solve the question on your own before looking at the answer. If you get confused in MCQs and options or make a conceptual mistake, be sure to mark it to review during your next revision.



Step 4: Last Day Revision (LDR)

Focus on solving LDR questions during the final revision. On the day before your exam, prioritize these questions as they cover the most critical concepts from each chapter. You'll find a quick summary of LDR question numbers listed right before each chapter for easy reference.

5 Ways Vivitsu Reviewer will help you CLEAR CMA FOUNDATION

		Dec	Dec	Dec							IMP
	SECTION A: FUNDAMENTALS OF FINANCIAL ACCOUNTING										
1	Accounting Fundamentals									1.1 - 1.48	
1.1	Understanding of Four Frameworks of Accounting and Forms of Organization	-	-	2	4	4	4	4	2.37	1.1 - 1.2	A
1.2	Accounting Principles, Concepts and Conventions	6	4	6	-	4	2	2	3.42	1.3 - 1.6	A
1.3	Capital and Revenue Transactions	6	6	2	2	4	6	6	4.37	1.7 - 1.10	A
1.4	Accounting Cycle - Charts of Accounts and Classification Structure, Analysis of Transaction - Accounting Equation, Double Entry System, Books of Original Entry, Subsidiary Books and Finalization of Accounts	6	10	2	2	2	10	10	6	1.10 - 1.34	A
1.5	Journal (Day Books, Journal Proper - Opening, Transfer, Closing, Adjustment and Rectification Entries), Ledger	2	6	2	6	6	-	-	3.34	1.15 - 1.19	A
1.6	Cash Book, Bank Book, Bank Book, Bank Book, Bank Book	2	4	6	6	2	2	2	10	1.20 - 1.27	A
1.7	Cost of Sales	-	-	2	2	2	-	-	6.45	1.28 - 1.29	A
1.8	Cost of Sales	-	-	2	2	2	-	-	4.45	1.30 - 1.38	B
1.9	Cost of Sales	-	-	2	2	2	-	-	4.45	1.38 - 1.45	A
1.10	Cost of Sales	-	-	2	2	2	-	-	4.45	1.46 - 1.48	A
2	Accounting for Special Transactions									2.1 - 2.17	A

05

Prioritize using ABC Analysis

Each chapter is categorized as A , B or C

A : Very Important, Read on priority

B : Moderately Important

C : Less Critical but still essential



Quick Review of Important Concepts

04

Topic-wise Break up

- Accounting Principles (GAAP)
- GAAP = set of rules, conventions, standards and procedures ensuring uniformity and consistency in accounting
- In India: Financial statements prepared as per ICAI Accounting Standards and Companies Act, 2013.

➤ Accounting Concepts (Assumptions/Theory)

1. Entity Concept – Business & Owner's transactions are separate.
2. Going Concern Concept – Business will continue to operate in future.
3. Periodicity Concept – Income/loss is split into periods.
4. Money Measurement Concept – Record only items measurable in money.
5. Accrual Concept – Record transactions when due, not when cash received/paid.
6. Dual Aspect Concept – Every transaction has two effects: $\text{Assets} = \text{Liabilities} + \text{Capital}$.
7. Matching Concept – Match revenues with related expenses in same period.
8. Realisation Concept – Record revenue only when earned/realised.
9. Cost Concept – Record assets at purchase (historical) cost, not market value.

➤ Accounting Conventions (Practices/Customs)

1. Conservatism – Anticipate losses, not profits. Show minimum profit.
2. Consistency – Same accounting methods should be used year after year for comparability.
3. Materiality – Report only significant (material) information that affects decisions.
4. Full Disclosure – All relevant info must be disclosed to avoid misleading.

Multiple Choice Questions (MCQ)

12. The determination of expenses for an accounting period is based on the concept of (SM, MCQ Bank) (MQP 2 Marks-June'24 and MQP12 Dec'24, June'26, PYP 1 Mark-June'22, Dec'22, Dec'24)

- (a) Entity Concept
- (b) Going Concern Concept
- (c) Cost Concept
- (d) Money Measurement Concept

Ans: (c)

- (a) Entity Concept
- (b) Conservatism Convention
- (c) Cost Concept
- (d) Going Concern Concept

Ans: (c)

Includes 100% coverage of SM + MCQ Bank + MQP + PYP

13. Accounting does not record non-financial transactions because of (SM, MCQ Bank) (MQP 2 Marks-June'24 and MQP12 June'25, June'26) (PYP 1 Mark-June'22 and June'24 and Dec'24)

- (a) Entity Concept
- (b) Accrual Concept
- (c) Cost Concept
- (d) Money Measurement Concept

Ans: (d)

- (a) Separate Entity
- (b) Going Concern
- (c) Conservatism
- (d) Time Period

Ans: (d)

03

(SM, MCQ Bank) (MQP 2 Marks-June'24 and MQP (2) June'25, June'26) (PYP 1 Mark-June'15)

14. Provision for bad debts is made as per the (SM, MCQ Bank) (MQP 2 Marks-June'24) (PYP 1 Mark-June'24 and Dec'22, MQP 12 2 Marks-June'26)

- (a) Conservatism Concept
- (b) Materiality Concept
- (c) Realisation Concept

Ans: (a)



Quick Review of Important Concepts

Definition:

A business owned, controlled, and operated by a single person who bears all profits, losses, and risks.

Features:

- Single owner forms and manages the business.
- Minimal legal formalities.
- Owner has unlimited liability.
- Full control rests with the proprietor.
- Accounting treats owner and business as separate entities.

02

Concept Summary

Sharpen your memory with lightning-fast concepts recap before you hit the questions. Also perfect for the final 1.5-day revision!



Q 1, Q 12, Q 20, Q 60, Q 63, Q 76, Q 97, Q 138, Q 140, Q 164, Q 165, Q 166, Q 167, Q 195, Q 196, Q 203, Q 229, Q 262, Q 264, Q 278, Q 321, Q 322, Q 323, Q 324, Q 325, Q 326, Q 327, Q 371, Q 429, Q 452, Q 454, Q 458

1.1

UNDERSTANDING OF FOUR FRAMEWORKS OF ACCOUNTING AND ORGANISATION

ORGANISATION

01

Quick Review of Important Concepts

- Business and Accounting
- Business: Economic activity that involves the use of resources (materials, labour, machinery, etc.) to produce goods and services.
- Need for Accounting: To track profitability and financial position (assets, liabilities, sources of funds).

Definition of Accounting: Art of recording, classifying, summarizing and interpreting financial transactions.

Objectives of Accounting

- Provide information for decision-making to stakeholders.
- Systematic recording of all transactions.
- Ascertain results (Profit/Loss A/c).
- Ascertain financial position (Balance Sheet).

Functions of Accounting

- Identify and describe financial transactions.
- Record (Classify and summarize).
- Show profitability and financial status.
- Analyze, interpret and communicate to users.

Book-keeping vs Accounting vs Accountancy

- Book-keeping: Narrow – recording and classifying transactions.
- Accounting: Broader – includes analysis, interpretation, reporting.
- Accountancy: Widest – principles, rules, and overall theory of accounting.

Frameworks of Accounting

- Conceptual – Objectives and concepts guiding recognition, measurement and reporting.
- Legal – Laws (Partnership Act, Companies Act, Banking Regulation Act, Insurance Act, etc.).
- Institutional – Standards issued by ICAI (AIS, Ind AS), CIMA.
- Regulatory – RBI, SEBI, IRDAI, TRAI, CIRC, etc. affect reporting.

Forms of Organisations and Accounting Impact

- Sole Proprietorship – Not regulated, governed mainly by Income Tax Act.
- Partnership Firm – governed by Partnership Act, 1932 and Contract Act, 1932.
- LLP – regulated by LLP Act, 2008.
- Company – Regulated by Companies Act, 2013 (Disclosure, Financial statements, CSR, etc.).

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1.2	Accounting Principles, Concepts and Conventions	6	4	6	-	4	2	2	3.42	1.3 – 1.6	A	
1.3	Capital and Revenue Transactions	6	6	2	2	4	6	6	4.57	1.7 – 1.10	A	
1.4	Accounting Cycle – Charts of Accounts and Codification Structure, Analysis of Transaction – Accounting Equation, Double Entry System, Books of Original Entry, Subsidiary Books and Finalisation of Accounts	6	10	2	2	2	10	10	6	1.10 – 1.14	A	
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1.10	Accounting Treatment of Bad Debts and Provision for Doubtful Debts	4	2	4	-	2	-		1.71	1.46 – 1.48	A	
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2.3	Bills of Exchange (excluding Accommodation Bill, Insolvency)	4	6	4	6	6	4	4	4.85	2.12 – 2.17	A
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4.2	Application of Cost Accounting for Business Decisions	-	-	-	-	-	4	4	1.14	4.4 – 4.6	C
4.3	Definition of Cost, Cost Centre, Cost Unit and Cost Drivers	4	4	6	8	4	6	6	5.43	4.6 – 4.10	A
4.4	Classification of Costs (with reference to Cost Accounting Standard 1)	6	8	8	6	10	8	8	7.71	4.10 – 4.15	A
4.5	Ascertainment of Cost and Preparation of Statement of Cost and Profit (Cost Sheet)	16	12	12	6	10	6	6	9.71	4.15 – 4.27	A

ABC Analysis



Very Important,
Read on priority



Moderately
Important



Less critical but still
essential

Ensure you thoroughly read all chapters without skipping any. The ABC analysis is designed to help you prioritize based on past trends, but it should not replace comprehensive preparation.

CHAPTER 1: ACCOUNTING FUNDAMENTALS



LDR Questions

Q 1, Q 12, Q 20, Q 60, Q 63, Q 76, Q 97, Q 138, Q 140, Q 164, Q 165, Q 166, Q 167, Q 195, Q 196, Q 203, Q 229, Q 262, Q 264, Q 278, Q 321, Q 322, Q 323, Q 324, Q 325, Q 326, Q 327, Q 371, Q 429, Q 452, Q 454, Q 458

1.1 UNDERSTANDING OF FOUR FRAMEWORKS OF ACCOUNTING AND FORMS OF ORGANISATION

Quick Review of Important Concepts

➤ Business and Accounting Basics

- Business: Economic activity to earn profit and maximize owners' wealth; uses limited resources (materials, labour, machinery, services).
- Need for Accounting: To track profit/loss and financial position (assets, liabilities, sources of funds).

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- Partnership Firm – governed by Partnership Act, 1932 and Contract Act, 1872.
- LLP – regulated by LLP Act, 2008.
- Company – highly regulated by Companies Act, 2013 (disclosures, financial statements, CSR, etc.).



Multiple Choice Questions (MCQ)



1. The main Purpose of Financial Accounting is? (SM, MCQ Bank) (MQP 2 Marks- June'23 and Dec'23 and June'24, MQP(1) June'25)

- (a) To Provide financial information to shareholders
- (b) To maintain Balance Sheet
- (c) To minimize taxes
- (d) To keep track of liabilities

Ans: (a)

2. Accounting provides information on : (SM, MCQ Bank) (MQP 2 Marks-June'24, MQP(1) June'25, MQP (2) 2 Marks June'26)

- (a) Cost and income for managers
- (b) Company's tax liability for a particular year
- (c) Financial conditions of an institution
- (d) All of the above

Ans: (d)

3. Accounting is a/an: (PYP 1 Mark June'16)

- (a) Science
- (b) Art
- (c) Subject matter of sociology
- (d) Subject matter of philosophy

Ans: (b)

4. Which one of the following characteristics is not related to Financial Accounting? (PYP 1 Mark Dec'17)

- (a) Evaluates the financial strength of the whole business.
- (b) Based on monetary transactions of the enterprise
- (c) Reports are always subject to statutory audit.
- (d) Reports are as per requirement of management.

Ans: (d)

5. _____ is not an objective of accounting. (PYP 1 Mark Dec'18)

- (a) Giving accurate information
- (b) Keeps records in systematic manner
- (c) Analyses recorded data
- (d) Ascertain financial position of business

Ans: (a)

6. Which one of the following is not a framework of accounting? (PYP 2 Mark June'24)

- (a) Conceptual
- (b) Legal
- (c) Social
- (d) Institutional

Ans: (c)

7. _____ is an activity which is concerned with recording and classifying financial data related to business operations in order of its occurrence. (PYP 2 Marks Dec'25)

- (a) Book-keeping
- (b) Accounting
- (c) Posting
- (d) Journalizing

Ans: (a)

8. Which of the following is not a framework of accounting? (PYP 2 Marks Dec'25)

- (a) Legal Framework
- (b) Business Framework
- (c) Institutional Framework
- (d) Regulatory Framework

Ans: (b)

9. _____ is used by accountants for recording transactions chronologically in the first place. (PYP 2 Marks Jun'26)

- (a) Invoice
- (b) Challan
- (c) Journal
- (d) Ledger

Ans: (c)

10. Identify the correct sequential order of the stages of accounting cycle:

- I. Recording in Journal
- II. Posting in Ledger
- III. Passing of adjustment entries
- IV. Drafting of Adjusted Trial Balance
- V. Identification of transactions (PYP 2 Marks Jun'26)

- (a) I, V, II, III, IV
- (b) V, I, II, IV, III
- (c) I, III, V, II, IV
- (d) V, I, II, III, IV

Ans: (d)

11. Consider the following data and identify the amount which will be deducted from sundry debtors in Balance Sheet.

Bad debts (from trial balance) – ₹1,600
Provision for doubtful debts (old) – ₹2,000
Current year's provision (new) – ₹800
(MQP [1 & 2] 2 Marks Dec'25)

- (a) ₹400
- (b) ₹800
- (c) ₹2,000
- (d) ₹2,400

Ans: (b)



Quick Review of Important Concepts

➤ Accounting Principles (GAAP)

- GAAP = set of rules, conventions, standards and procedures ensuring **uniformity and comparability** in accounting.
- In India: financial statements prepared as per **ICAI Accounting Standards** and **Companies Act, 2013**.

➤ Accounting Concepts (Assumptions/Foundations)

- Entity Concept** – Business ≠ Owner; transactions kept separate.
- Going Concern Concept** – Business will continue in future.
- Periodicity Concept** – Infinite life split into periods (quarter, year).
- Money Measurement Concept** – Record only items measurable in money.
- Accrual Concept** – Record transactions when due, not when cash received/paid.
- Dual Aspect Concept** – Every transaction has two effects: basis of **Assets = Liabilities + Capital**.
- Matching Concept** – Match revenues with related expenses in same period.
- Realisation Concept** – Record revenue only when earned/realised.
- Cost Concept** – Record assets at purchase (historical) cost, not market value.

➤ Accounting Conventions (Practices/Customs)

- Conservatism** – Anticipate losses, not profits. Show minimum profit.
- Consistency** – Same accounting methods should be used year after year for comparability.
- Materiality** – Report only significant (material) information that affects decisions.
- Full Disclosure** – All relevant info must be disclosed fully, fairly and adequately.

Multiple Choice Questions (MCQ)

12. The determination of expenses for an accounting period is based on the concept of (SM, MCQ Bank) (MQP 2 Marks-June'24 and MQP(1) Dec'24, June'26, PYP 1 Mark-June'17, Dec'15, Dec'19 and Dec'22)

- | | |
|-----------------|-----------------|
| (a) Objectivity | (b) Materiality |
| (c) Matching | (d) Periodicity |

Ans: (c)

13. Accounting does not record non-financial transactions because of (SM, MCQ Bank) (MQP 2 Marks-June'24 and MQP(2) June'25, June'26) (PYP 1 Mark-June'17 and June'18 and Dec'16 and Dec'23)

- | |
|-------------------------------|
| (a) Entity Concept |
| (b) Accrual Concept |
| (c) Cost Concept |
| (d) Money Measurement Concept |

Ans: (d)

14. Provision for bad debt is made as per the (SM, MCQ Bank) (MQP 2 Marks-June'24) (PYP 1 Mark-June'19 and Dec'22, MQP (2) 2 Marks June'26)

- | |
|-----------------------------|
| (a) Entity Concept |
| (b) Conservatism Convention |
| (c) Cost Concept |
| (d) Going Concern Concept |

Ans: (b)

15. Fixed Assets and Current Assets are categorized as per concept of (SM, MCQ Bank) (MQP 2 Marks-June'24 and MQP(1) Dec'24, June'26) (PYP 1 Mark-June'17 and June'23)

- | | |
|---------------------|-------------------|
| (a) Separate Entity | (b) Going Concern |
| (c) Consistency | (d) Time period |

Ans: (b)

16. Omission of paise and showing the round figures in Financial Statements is based on (SM, MCQ Bank) (MQP 2 Marks-June'24 and MQP (2) June'25, June'26) (PYP 1 Mark-June'15)

- | |
|--------------------------|
| (a) Conservatism Concept |
| (b) Consistency Concept |
| (c) Materiality Concept |
| (d) Realization Concept |

Ans: (c)



17.P and L Account is prepared for an period of one year by following (SM, MCQ Bank) (MQP 2 Marks-June'24 and MQP(2) Dec'24, June'26, PYP 1 Mark-Dec'18 and June'23)

- (a) Consistency Concept
- (b) Conservatism Concept
- (c) Accounting Period Concept
- (d) Cost Concept

Ans: (c)

18.Bad Debts are recorded on which accounting principle: (SM, MQP (1) 2 Marks Dec'25)

- (a) Going Concern
- (b) Substance Over Form
- (c) Prudence
- (d) None of the above

Ans: (c)

19.If a concern proposes to discontinue its business from March 2023 and decides to dispose of all its plants within a period of 4 months, the Balance Sheet as on March 31, 2023, should indicate the plants at them. (SM)

- (a) Historical cost
- (b) Net realizable value
- (c) Cost less depreciation
- (d) Salvage value

Ans: (b)

20.Which financial statement represents the accounting equation Assets = Liabilities + Owner's equity: (SM, MCQ Bank) (MQP (2) 2 Marks-Dec'24, Dec'25) (PYP 1 Mark-June'19, June'18 and 2 Marks June'24, Dec'22, MQP (1) 2 Marks June'26)

- (a) Income Statement
- (b) Statement of Cash flows
- (c) Balance Sheet
- (d) None

Ans: (c)

21.Which of the following concepts, if violated, would make comparison of financial statements over a period of time difficult? (PYP 1 Mark-Sept' 14)

- (a) Cost concept
- (b) Consistency concept
- (c) Accounting period. concept
- (d) Accrual concept

Ans: (b)

22.Conservatism concept does not require: (PYP 1 Mark-Sept' 14)

- (a) Making provision for doubtful debts
- (b) Valuing stock at lower of cost or net realisable value

- (c) Creating provision for discount on creditors
- (d) Making provision for an unfavourable legal suit

Ans: (c)

23.As per duality concept or accounting equivalence concept, which of the following is correct? (PYP 1 Mark-Sept' 14)

- (a) All increase in liabilities and increase in assets represent sources of funds
- (b) All decrease in liabilities and decrease in assets represent sources of funds
- (c) All increase in liabilities and decrease in assets represent sources of funds
- (d) All increase in liabilities and increase in assets represent uses of funds

Ans: (c)

24.The _____ concept means similar items in a set of accounts should be given similar accounting treatment and it should be applied from one period to another.(PYP 1 Mark-March'15)

- (a) Going Concern
- (b) Prudence
- (c) Consistency
- (d) Materiality

Ans: (c)

25.'A Limited' purchased goods of ₹10,00,000 and sold 90% of goods and remaining goods market value is ₹ 90,000, and closing stock is 10%, but he recorded follows: 90,000 and not ₹ 1,00,000. Which concept does he follow? (PYP 1 Mark-March'15)

- (a) Materiality concept
- (b) Cost concept
- (c) Entity concept
- (d) Conservatism concept

Ans: (d)

26.Assets are held in the business for the purpose of: (PYP 1 Mark-Sept'15)

- (a) Resale
- (b) Conversion into cash
- (c) Earning revenue
- (d) None of the above

Ans: (c)

27.It is essential to standardize the accounting principles and policies in order to ensure: (PYP 1 Mark-Sept'15)

- (a) Transparency
- (b) Consistency
- (c) Comparability
- (d) All of the above

Ans: (d)

CHAPTER 3: PREPARATION OF FINAL ACCOUNTS



LDR Questions

Q 2, Q 5, Q 6, Q 8, Q 10, Q 53, Q 107, Q 108, Q 109, Q 112, Q 122,
Q 143, Q 144, Q 145, Q 146, Q 147, Q 148

3.1

PREPARATION OF FINANCIAL STATEMENTS OF SOLE PROPRIETORSHIP

Quick Review of Important Concepts

Definition:

A business owned, controlled, and operated by a single person who bears all profits, losses, and risks.

Features:

- Single owner forms and manages the business.
- Minimal legal formalities.
- Owner has unlimited liability.
- Full control rests with the proprietor.
- Accounting treats owner and business as separate entities.

Financial Statements:

1. Manufacturing Account (for manufacturers)

Manufacturing Account

To Opening WIP	By Closing WIP
To Raw Materials	By Trading A/C (COGM)
To Direct Labour	
To Direct Expenses	
To Factory Overhead	

2. Trading Account

Trading Account

To Opening Stock	By Sales
To Purchases	Less: Sales Returns
To Direct Expenses	By Closing Stock
To Gross Loss (if any)	By Gross Profit (if any)

3. Profit & Loss Account

Profit & Loss Account

To Administrative Expenses	By Gross Profit b/d
To Selling & Distribution Expenses	By Other Income
To Financial Expenses	
To Depreciation & Amortisation	
To Net Loss (if any)	By Net Profit b/d

4. Capital Account

Capital Account

To Drawings	By Capital Introduced
	By Net Profit from P&L A/C
	By Other Adjustments (if any)



Balance Sheet (T-Account Structure)

Liabilities (Credit)	Assets (Debit)
Capital Account	Fixed Assets (Net of Depreciation)
Long-term Liabilities	Non-current Investments
Short-term Liabilities	Current Assets
- Sundry Creditors	- Stock/Inventory
- Bills Payable	- Sundry Debtors
- Advances from Customers	- Bills Receivable
- Outstanding Expenses	- Cash at Bank
	- Cash in Hand
	- Prepaid Expenses
	- Advances to Suppliers

Multiple Choice Questions (MCQ)

1. The purpose of preparing final accounts is to ascertain: (SM, MCQ Bank) (MQP (1) 2 Marks-June'24, June'26)

- (a) Profit & Loss A/c
- (b) Capital
- (c) The value of assets
- (d) Profit or loss and financial position

Ans: (d)

2. If the manager is entitled to a commission of 5% on profits before deduction this commission, he will get a commission of ₹___ on a profit of ₹8,400 (SM, MCQ Bank) (MQP 2 Marks-June'24 & MQP(1) June'25 & MQP(2) Dec'24, Dec'25)

- (a) ₹400
- (b) ₹442.11
- (c) ₹420
- (d) None of these

Ans: (c)

3. Fixed assets are : (SM, MCQ Bank) (MQP 2 Marks-June'23 & Dec'23 & June'24 & MQP(1) June'25)

- (a) Kept in the business for use over a long time for earning income
- (b) Meant for resale
- (c) Meant for conversion into cash as quickly as possible
- (d) All of the above

Ans: (a)

4. The manufacturing account is prepared: (SM, MCQ Bank) (MQP 2 Marks-June'24 & MQP (1) Dec'24, PYP 1 Mark June'17, Dec'18, June'19, 2 Marks June'23, June'24)

- (a) To ascertain the profit or loss on the goods produced
- (b) To ascertain the cost of the manufactured goods
- (c) To show the sale proceeds from the goods produced during the year
- (d) both (b) and (c)

Ans: (b)

5. A company wishes to earn a 20% profit margin on selling price. Which of the following is the profit mark upon cost, which will achieve the required profit margin? (SM, MCQ Bank) (MQP 2 Marks-June'24 & MQP(2) June'25, PYP 1 Mark Sept'14)

- (a) 33%
- (b) 25%
- (c) 20%
- (d) None of these

Ans: (b)

6. At the time of preparation of financial accounts, bad debts recovered account will be transferred to (SM, MCQ Bank) (MQP (1) 2 Marks-June'24, June'26, & MQP(2) June'25 & Dec'24)

- (a) Debtors A/c
- (b) Profit & Loss A/c
- (c) Profit & loss Adjustment A/c
- (d) Profit & loss Appropriation A/c

Ans: (b)

7. Depreciation appearing in the Trial Balance should be (SM, MCQ Bank) (MQP 2 Marks-June'24 & MQP(1) Dec'24)

- (a) Debited to P & L A/c
- (b) Shown as liability in balance sheet
- (c) reduced from related asset in balance sheet
- (d) both (a) and (c) above

Ans: (a)

8. Gross profit is equal to (SM, MCQ Bank) (MQP 2 Marks-June'23 & Dec'23 & June'24 & MQP (2) Dec'24, June'26, PYP 1 Mark June'16)

- (a) sales – cost of goods sold
- (b) sales – closing stock + purchase
- (c) opening stock + purchases – closing stock
- (d) none of the above

Ans: (a)



9. Which of the following is not a part of financial statement? (SM, MCQ Bank) (MQP (1) 2 Marks-June'24, Dec'25, PYP 1 Mark June'18, Dec'18)

- (a) Profit and loss account
- (b) Balance sheet
- (c) Cash flow statement
- (d) Trial balance

Ans: (d)



10. Based on which of the following concepts, is share capital account shown on the liabilities side of a balance sheet? (SM, MCQ Bank) (MQP 2 Marks-June'24 & MQP(2) June'25 & MQP (1) Dec'24)

- (a) Business entity concept
- (b) Money measurement concept
- (c) Going concern concept
- (d) Matching concept

Ans: (a)

11. Closing stock appearing in the trial balance is shown in – (SM, MCQ Bank, MQP (1) 2 Marks-Dec'24, Dec'25, June'26, PYP 1 Mark June'17, June'18 & June'23, Dec'23)

- (a) Trading A/c and Balance Sheet
- (b) Profit and Loss A/c
- (c) Balance Sheet only
- (d) Trading A/c only

Ans: (c)

12. Consider the following data and identify the amount which will be deducted from sundry debtors in Balance sheet.

Particulars	₹
Bad debts (from trial balance)	1,600
Provision for doubtful debts (old)	2,000
Current year's provision (new)	800

(SM, MCQ Bank) (MQP(1) 2 Marks-June'25 & MQP(1) Dec'24, June'26)

- (a) ₹ 400
- (b) ₹ 800
- (c) ₹ 2,000
- (d) ₹ 2,400

Ans: (b)

13. Inventory is : (SM, MCQ Bank) (MQP (2) 2 Marks-Dec'24, June'26)

- (a) Included in the category of fixed assets
- (b) An investment
- (c) A part of current assets
- (d) An intangible fixed asset

Ans: (c)

14. By Profit & Loss Account we get _____. (MQP(1) 2 Marks-Dec'23 & June'23)

- (a) Net Profit
- (b) Capital
- (c) Gross Profit
- (d) Gross Loss

Ans: (a)

15. If sales are ₹2,000 and the rate of G.P on cost of goods sold is 25%, then the cost of goods sold will be _____. (MQP(1) 2 Marks-Dec'23 & June'23)

- (a) ₹1,600
- (b) ₹2,000
- (c) ₹400
- (d) ₹500

Ans: (a)

16. Expenses due but not yet paid are known as _____. (MQP(1) 2 Marks-June'25)

- (a) Real Expenses
- (b) Paid Expenses
- (c) Outstanding Expenses
- (d) None of the above

Ans: (c)

17. Gross Profit + Direct Expenses + Purchases + Opening Stock – Closing Stock (MQP(1) 2 Marks-June'25)

- (a) Net Profit
- (b) Sales
- (c) Cost of Goods Sold
- (d) None of the above

Ans: (b)

18. In sole trade, income tax is recorded as _____. (MQP(1) 2 Marks-June'25)

- (a) Revenue Income
- (b) Revenue Expense
- (c) Capital Expense
- (d) Drawings

Ans: (d)

19. Opening stock ₹ 50,000 closing stocks ₹ 40,000, purchases ₹ 1,90,000, profit margin is 16.67% on the sales, then sales are _____. (MQP(2) 2 Marks-June'25, PYP 1 Mark Dec'19)

- (a) ₹2,20,000
- (b) ₹2,50,000
- (c) ₹2,40,000
- (d) ₹2,30,000

Ans: (c)

20. Given old provision for bad & doubtful debt is ₹4,000 sundry debtors ₹ 50,000, new PBD required = 10% on sundry debtors then the amount of additional provision to be credited is ₹ _____. (MQP(2) 2 Marks-June'25)

- (a) ₹ 1,000
- (b) ₹ 2,000
- (c) ₹ 3,000
- (d) ₹ 4,000

Ans: (a)

21. _____ contains closing balances of Real and Personal Account (MQP(2) 2 Marks-June'25)

- (a) Trading Account
- (b) Profit and Loss Account
- (c) Income and Expenditure Account
- (d) Balance Sheet

Ans: (d)



22. A profit and loss appropriation account is used to _____. (MQP(1) 2 Marks-Dec'24)

- (a) To divide the profit and loss between the owners of the company
- (b) To show an ideal profit and loss situation of the company according to the market.
- (c) To compare the profit and loss of the company with other companies
- (d) None of the above

Ans: (a)

23. A profit and loss sheet is prepared (MQP(2) 2 Marks-Dec'24)

- (a) With the trading account
- (b) In succession to the trading account
- (c) Before the trading account
- (d) It can be prepared anytime

Ans: (b)

24. The accounts receivable are shown in the balance sheet at: (PYP 1 Mark Sept'14)

- (a) Current market value
- (b) Estimated net realizable value
- (c) Original cost when the asset is recorded in the books of account
- (d) Sales value

Ans: (b)

25. Which one of the following balance will not be carried to the next accounting period? (PYP 1 Mark Sept'14)

- (a) Rent paid in advance
- (b) Closing cash balance
- (c) Salary 'outstanding
- (d) Consultancy fees paid

Ans: (d)

26. The basic objective of preparing Profit and Loss Account is: (PYP 1 Mark Sept'14)

- (a) To know the financial position of the organization on a particular period
- (b) To know the financial results of the organization for a particular Period.
- (c) To know the financial results of the organization on a particular date
- (d) To calculate the cost of goods sold during a particular period.

Ans: (b)

27. Prepaid expenses will not be reflected in: (PYP 1 Mark Sept'14)

- (a) Profit & Loss Account
- (b) Cash Book
- (c) Balance Sheet
- (d) Cash Flow Statement

Ans: (d)

28. Net worth is excess of: : (PYP 1 Mark Sept'14)

- (a) Fixed Assets over Current Liabilities
- (b) Total Assets over Total Liabilities
- (c) Fixed Assets over Current Assets
- (d) Long-Term Loan over Short-Term Loan

Ans: (b)

29. As per the Companies Act, which of these are allowed to create secret reserves in their books of account: (PYP 1 Mark Dec'14)

- (a) Banking Companies
- (b) Insurance Companies
- (c) Electricity Companies
- (d) All the three

Ans: (d)

30. Which of the following is not true with regard to preparation of Profit & Loss Account? (PYP 1 Mark Dec'14)

- (a) Profit & Loss Account is prepared for a certain period and hence it is an interim statement.
- (b) Profit & Loss Account does not disclose the effect of non-financial items.
- (c) Net Profits are ascertained on the basis of current costs.
- (d) Net Profits as disclosed by P&L Account is not absolute.

Ans: (a)

31. On the debit side of a Sales A/c entry can be for which of these reasons: (PYP 1 Mark Dec'14)

- (a) Sales returns
- (b) Discount allowed
- (c) Both
- (d) Additional sales

Ans: (c)

32. Interest payable on debentures is _____ (PYP 1 Mark March'15)

- (a) An appropriation of profit
- (b) A Charge against profit
- (c) Transferred to sinking fund
- (d) Treated as miscellaneous expenses to be shown in balance sheet

Ans: (b)

33. Financial statements do not consider: (PYP 1 Mark Sept'15)

- (a) Assets expressed in monetary terms.
- (b) Liabilities expressed in monetary terms.
- (c) Only assets expressed in non-monetary terms.
- (d) Assets and liabilities expressed in non-monetary terms.

Ans: (d)



34. Prepaid expenses are valued on the balance sheet at: (PYP 1 Mark March'16)

- (a) Replacement Cost
- (b) Current Cost
- (c) Cost less expired portion
- (d) Cost to acquire less accumulated amortization

Ans: (c)

35. When a fixed asset is obtained as a gift, the account to be credited is: (PYP 1 Mark March'16)

- (a) Goodwill A/c
- (b) Capital Reserve A/c
- (c) Donor's A/c
- (d) General Reserve A/c

Ans: (b)

36. Closing balance of Work in Process (WIP) is part of (PYP 1 Mark march'16)

- (a) Assets A/c
- (b) Expenses A/c
- (c) Liability A/c
- (d) Owner's equity A/c

Ans: (a)

37. Which of the following is/are Fixed Assets? (PYP 1 Mark June'16)

- (a) Closing inventory
- (b) Fixed Deposits in a Bank
- (c) Patents
- (d) Prepaid expenses

Ans: (c)

38. Cash received from debtors would be deemed as ____ of funds (PYP 1 Mark June'16)

- (a) No flow
- (b) Sources
- (c) Uses
- (d) Gain

Ans: (a)

39. Tax deducted at source A/c appears in (PYP 1 Mark June'16)

- (a) Asset side
- (b) Liability side
- (c) Profit and loss A/c
- (d) Debited to capital A/c

Ans: (a)

40. Insurance prepaid is shown as (PYP 1 Mark June'16)

- (a) Current asset
- (b) Current liability
- (c) Fixed asset
- (d) Income

Ans: (a)

41. Which of the following are current assets of a business? (PYP 1 Mark June'16)

- (i) Income received in advance
- (ii) Stock
- (iii) Prepaid expenses
- (iv) Accrued income
- (v) Debtors

- (a) Both (i) and (iv) above
- (b) Both (ii) and (iii) above
- (c) (i), (ii) and (iii) above
- (d) (ii), (iii), (iv) and (v) above

Ans: (d)

42. Which of this is not operating income? (PYP 1 Mark June'16)

- (a) Income for sales of trading goods
- (b) Bad debts recovered
- (c) Interest on FDs
- (d) None of the above

Ans: (c)

43. Research and Development Cost A/c appearing in Balance Sheet is a _____ (PYP 1 Mark June'16)

- (a) Real A/c
- (b) Intangible assets
- (c) Tangible assets
- (d) Personal A/c

Ans: (b)

44. _____ is a financial expense. (PYP 1 Mark Dec'16)

- (a) Foreman salary
- (b) Office building rent
- (c) Interest on debt
- (d) Warehouse charges

Ans: (c)

45. Claims against company pending in court case. It is a: (PYP 1 Mark Dec'17)

- (a) Current Liability
- (b) Current Asset
- (c) Contingent Liabilities
- (d) Unsecured Loan

Ans: (c)

46. Till the discounted bill is paid by the acceptor, it remains as: (PYP 1 Mark Dec'18)

- (a) A contingent liability
- (b) A current liability
- (c) An asset
- (d) An expense

Ans: (a)

CHAPTER 4: FUNDAMENTALS OF COST ACCOUNTING



Q 1, Q 4, Q 31, Q 45, Q 56, Q 74, Q 87, Q 89, Q 90, Q 114, Q 148,
Q 150, Q 154, Q 160, Q 242, Q 243, Q 244, Q 245, Q 246, Q 247

4.1

MEANING, DEFINITION, SIGNIFICANCE OF COST ACCOUNTING, ITS RELATIONSHIP WITH FINANCIAL ACCOUNTING

Quick Review of Important Concepts

Need: Financial accounts lack detail → Cost accounting helps in control, pricing, efficiency & decisions.

Evolution

- Small firms (old) → no costing.
- Industrial Revolution → need for cost control.
- 1880–1925 → scientific management, standard costing.
- World Wars → cost-plus contracts.
- India → ICAI (1959), Cost Audit (1968, now Sec. 148).

Scope

1. Cost ascertainment
2. Cost records
3. Cost control
4. Cost reporting

Objectives

- Fix cost/unit & prices
- Detect waste & improve profit
- Control materials, labour, overheads
- Aid in budgeting & decisions

Methods of Costing (based on type of industry/product)

- **Job Costing** – For specific customer orders; each job treated separately (e.g., printing press, repair work).
- **Batch Costing** – Costs accumulated by batches; $\text{cost/unit} = \text{Total Batch Cost} \div \text{Units}$ (e.g., biscuits, medicines, toys).
- **Process Costing** – Continuous production; cost collected per process; $\text{cost/unit} = \text{Total Cost} \div \text{Units}$ (e.g., chemicals, sugar, oil).
- **Operating Costing** – For service industries; cost/unit of service (e.g., hospitals, transport)
- **Contract Costing** – For long-term construction contracts (e.g., highways, bridges).

Systems of Cost Accounting (based on cost accumulation & reporting)

- **Historical Costing** – Costs recorded after incurred; useful for post-mortem analysis, but less control.
- **Standard Costing** – Predetermined costs set; actual vs standard → Variance analysis for control.
- **Absorption Costing** – Both fixed and variable costs absorbed into cost/unit → Inventory valuation includes fixed overheads.
- **Direct/Variable (Marginal) Costing** – Only variable costs charged to cost/unit; fixed costs written off to P&L. Useful for decision-making.
- **Uniform Costing** – Same costing principles used across firms in an industry → facilitates comparison.
- **Marginal Costing** – Analyses the effect of output changes on profit by separating fixed & variable costs (contribution margin analysis).

Cost vs Financial Accounting:

- **Financial Accounting:** For external reporting, statutory, historical, overall profit/loss.
- **Cost Accounting:** For management use, control, planning, unit cost, efficiency, and decision-making.



1. **The main purpose of cost accounting is to:** (SM, MCQ Bank, MQP (1) 2 Marks-June'24, Dec'25 & MQP(1)(2) June'25, PYP 1 Mark June'18, Dec'19, 2 Mark Dec'22, Dec'23, Jun'26)

- (a) maximize profits,
- (b) help in inventory valuation
- (c) provide information to management for decision making
- (d) Aid in the fixation of selling price

Ans: (c)

2. **The main objective of cost accounting is:** (MQP(1) 2 Marks-Dec'24)

- (a) To record day-to-day business transactions
- (b) To measure managerial efficiency
- (c) To ascertain the true cost of products and services
- (d) To determine tender price

Ans: (c)

3. **What items aren't part of cost accounting?** (MQP(1) 2 Marks-Dec'24)

- (a) Cost of the product
- (b) Controlling
- (c) Planning
- (d) Profit sharing

Ans: (d)



4. **Process cost is very much applicable in:** (SM, MCQ Bank, MQP 2 Marks-June'24 & MQP(1) Dec'24, PYP 1 Mark Dec'19, MQP (2) 2 Marks June'26)

- (a) construction industry
- (b) pharmaceutical industry
- (c) Airline company
- (d) none of these

Ans: (b)

5. **The technique & process of ascertaining cost is** (PYP 1 Mark March'15, Dec'18)

- (a) Cost accounting
- (b) Management accounting
- (c) Costing
- (d) Management accountancy

Ans: (c)

6. **Which of the following method of costing is suitable for printing press?** (MCQ Bank) (MQP 2 Marks-June'24 & MQP(2) June'25 & MQP(1) Dec'24, Dec'25, PYP 1 Mark march'15, Dec'17, June'18)

- (a) Job costing
- (b) Process costing

- (c) Contract costing
- (d) Batch costing

Ans: (a)

7. **One of most important tools in cost planning is:** (PYP 1 Mark Sept'15)

- (a) Direct tax
- (b) Cost Sheet
- (c) Budget
- (d) Marginal Costing

Ans: (c)

8. **Which one of the following is the traditional approach for costing?** (PYP 1 Mark Sept'15)

- (a) Contribution approach
- (b) Absorption costing approach
- (c) Decision making approach
- (d) Marginal costing approach

Ans: (b)

9. **Which or the following is a cost behaviour oriented approach production costing?** (PYP 1 Mark Sept'15)

- (a) Absorption Costing
- (b) Marginal Costing
- (c) Process Costing
- (d) Job order Costing

Ans: (b)

10. **Under which of the following, all cost of the production is considered as product cost regardless of whether they are variable or fixed in nature?** (PYP 1 Mark Dec'15)

- (a) Absorption Costing
- (b) Direct Costing
- (c) Marginal Costing
- (d) Variable Costing

Ans: (a)

11. **A Cost is:** (PYP 1 Mark June'16)

- (a) A sacrifice
- (b) Release of something
- (c) Measure of consumption of resources
- (d) All of the above

Ans: (d)

12. **Costing is a technique of:** (PYP 1 Mark June'17)

- (a) Recording of Cost transactions
- (b) Ascertaining Cost
- (c) Preparation of final accounts
- (d) Decision' making

Ans: (b)

13. **Which of the following is a Cost' Control Technique?** (PYP 1 Mark Dec'17)

- (a) Marginal Costing
- (b) Uniform Costing



- (c) Standard Costing
- (d) Absorption Costing

Ans: (c)

14. The branch of the accounting dealing with the classification, recording, allocation, summarizing and reporting of current and prospective costs, is known as: (PYP 1 Mark June'18)

- (a) Financial Accounting
- (b) Management Accounting
- (c) Cost Accounting
- (d) Cost Accountancy

Ans: (c)

15. Which of the following is not a function of Cost Accountancy? (PYP 1 Mark June'18)

- (a) Cost Control
- (b) Cost Ascertainment
- (c) Cost Analysis
- (d) Cost Accounting

Ans: (c)

16. Which of the following costing method is suitable for Toy Making Industry? (PYP 1 Mark Dec'18, Jun'26)

- (a) Contract Costing
- (b) Process Costing
- (c) Job Costing
- (d) Batch Costing

Ans: (d)

17. Which of the following is not a technique of costing? (PYP 1 Mark Dec'18)

- (a) Marginal Costing
- (b) Process Costing
- (c) Standard Costing
- (d) Budgetary Costing

Ans: (c)

18. Which of the following is not a method of costing? (PYP 1 Mark June'19)

- (a) Process Costing
- (b) Batch Costing
- (c) Direct Costing
- (d) Operating Costing

Ans: (c)

19. Which of the following is a suitable cost unit for the BPO Services/ Call Centres? (PYP 1 Mark June'19)

- (a) Cost per item
- (b) Cost per hour
- (c) Cost per account handled
- (d) Cost per minute

Ans: (c)

20. The costs are differentiated between fixed and variable costs under: (PYP 1 Mark Dec'17, June'19)

- (a) Marginal Costing
- (b) Direct Costing
- (c) Standard Costing
- (d) Absorption Costing

Ans: (a)

21. Which one of the following is not a cost unit? (PYP 1 Mark Dec'19)

- (a) Kilo watt hour
- (b) Credit division
- (c) Patient day
- (d) Tonne-mile

Ans: (b)

22. Which costing method is used by Spare parts manufacturing industry? (PYP 2 Marks June'23, Dec'23)

- (a) Process Costing
- (b) Job Costing
- (c) Batch Costing
- (d) Absorption Costing

Ans: (c)

23. A cost unit (PYP 2 Marks Dec'23)

- (a) Measure of work output in a standard hour.
- (b) A unit of production or service in relation to which costs are ascertained.
- (c) Cost per labour hour.
- (d) Cost per machine hour

Ans: (b)

24. Which of the following is not a cost unit applicable for the services sector? (PYP 2 Marks June'24)

- (a) Passenger-Km
- (b) Tonne-Km
- (c) Room-Day
- (d) Cubic-feet

Ans: (d)

25. Which method of costing is for appropriate readymade garments industry? (PYP 2 Marks June'24)

- (a) Process Costing
- (b) Batch Costing
- (c) Multiple Costing
- (d) Contract Costing

Ans: (b)



26. In India, which of the following formulates the Cost Accounting Standards (CAS)?

(PYP 2 Marks Dec'25)

- (a) The Institute of Cost Accountants of India.
- (b) Cost Accounting Standards Board
- (c) The Institute of Chartered Accountants of India
- (d) Council of Cost Accounting Standards

Ans:(b)

27. Which method of costing is appropriate for colleges? (PYP 2 Marks Dec'25)

- (a) Operating Costing
- (b) Job Costing
- (c) Multiple Costing
- (d) Contract Costing

Ans:(a)

28. In which year was cost audit introduced under the Indian Companies Act? (PYP 2 Marks Dec'25)

- (a) 1958
- (b) 1968
- (c) 1978
- (d) 1988

Ans:(b)

29. Costs are classified into Materials cost, Employee cost and Expenses under the classification by (PYP 2 Marks Jun'26)

- (a) Nature of expense
- (b) Behavioural
- (c) Functional
- (d) Controllability-wise

Ans: (a)

30. Which of the following is/are example(s) of Operating Cost Centres? (PYP 2 Marks Jun'26)

- (a) Machine shop
- (b) Welding shop
- (c) Assembly shop
- (d) All of the above

Ans: (d)

4.2

APPLICATION OF COST ACCOUNTING FOR BUSINESS DECISIONS

Quick Review of Important Concepts

Applications of Cost Accounting in Business Decisions

1. **Classification & Sub-division of Costs:** Helps measure efficiency, control costs, and assess profitability of each activity.
2. **Control of Material, Labour & Overheads:** Uses techniques like EOQ, stock levels, labour & machine planning, and classification of overheads (fixed/variable, controllable/uncontrollable).
3. **Business Policy Decisions:** Guides on new product launch, product mix, asset replacement, use of spare capacity, etc.
4. **Budgeting & Performance Reports:** Prepares budgets and compares with actuals (management by exception) to track variances.
5. **Standards for Efficiency:** Compares standard costs vs actuals to measure operating efficiency.
6. **Best Use of Resources:** Provides data to reduce waste, improve efficiency, and minimize costs.
7. **Price Determination:** Helps set remunerative selling prices, especially during recession/depression, by distinguishing fixed vs variable costs.

Key Decision Areas Supported by Cost Accounting

- Reduce or revise selling price
- Change in production method
- Operate at full or partial capacity
- Decide most profitable production level
- Make or buy spare parts
- Launch new product or export
- Enter or exit a market
- Discontinue loss-making products
- Evaluate new investments



31. Which cost system description applies to the manufacture of 20 engraved doors for the new club house at a golf course? (SM, MCQ Bank) (MQP 2 Marks- June'23 & Dec'23 & MQP(1) Dec'24, Dec'25, MQP (2) 2 Marks June'26)

- (a) contract (b) Process
(c) Batch (d) service

Ans: (c)

32. The guidance and regulation by executive action of the cost of operating an undertaking is said to be : (SM, MCQ Bank) (MQP (1) 2 Marks-Dec'24)

- (a) Budgetary control (b) cost control
(c) cost analysis (d) None

Ans: (b)

33. Cost reduction is : (SM, MCQ Bank) (MQP (1) Dec'24, Dec'25, PYP 1 Mark Dec'19, MQP (2) 2 Marks June'26)

- (a) Long term phenomena
(b) It challenges the standards
(c) It is carried out without compromising the quality
(d) All of the above

Ans: (d)

34. _____ costing is applied in Canteens. (MQP(1) 2 Marks-Dec'23 & June'23)

- (a) Contract (b) Operating
(c) Process (d) Batch

Ans: (b)

35. In case of _____ Costing, costs are ascertained only after they have been incurred. (MQP(1) 2 Marks-Dec'23 & June'23)

- (a) Absorption (b) Standard
(c) Historical (d) Marginal

Ans: (c)

36. The cost of a group of products is ascertained. (MQP(1) 2 Marks-June'25)

- (a) Job Costing (b) Contract costing
(c) Batch Costing (d) ABC Costing

Ans: (c)

37. Historical costs are _____ costs for decision making (MQP(1) 2 Marks-June'25)

- (a) Relevant (b) Not Relevant
(c) Variable (d) Fixed

Ans: (b)

38. Which method of costing is most commonly used in the Soft Drinks industry? (MQP(2) 2 Marks-June'25)

- (a) Job Costing
(b) Process Costing
(c) Batch Costing
(d) Multiple Costing

Ans: (b)

39. Marginal costing is concerned with: (MQP(2) 2 Marks-Dec'24)

- (a) Fixed costs (b) Variable costs
(c) Semi-fixed costs (d) None of the above

Ans: (b)

40. Batch costing is useful to determine _____. (MQP(1) 2 Marks-Dec'24)

- (a) Maximum quantity of output
(b) Minimum quantity of output
(c) Economic batch quantity
(d) Profit of batches

Ans: (c)

41. Consider the following statements:

Statement I: Budgets are financial and/ or quantitative statements prepared and approved prior to a defined period of time.

Statement II: Budgets are formal quantifications of the plans of management. (PYP 2 Marks Dec'25)

- (a) Only Statement I is true.
(b) Only Statement II is true.
(c) Both statements are true.
(d) Both statements are false.

Ans:(c)

42. _____ costing differentiates between fixed cost and variable cost. (PYP 2 Marks Dec'25)

- (a) Marginal (b) Uniform
(c) Absorption (d) Standard

Ans:(a)

43. In general, Costing is a technique and process of — (PYP 2 Marks Jun'26)

- (a) Recording of Cost transactions
(b) Ascertaining Cost
(c) Preparation of final accounts
(d) Decision making

Ans: (b)



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3

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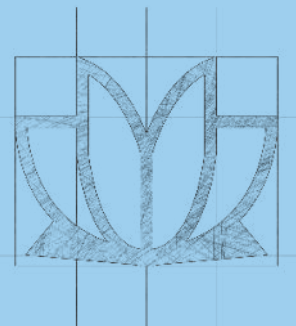
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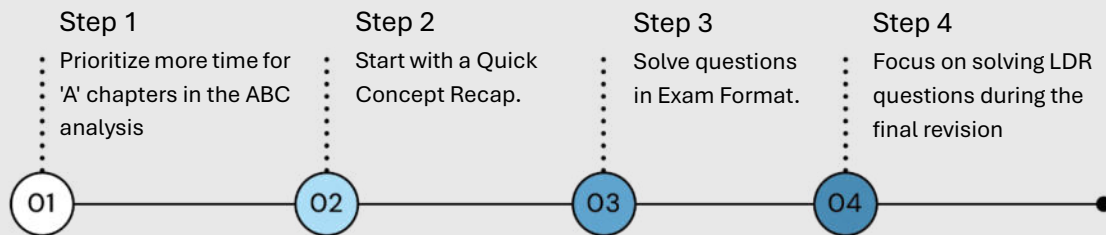


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Chapters in the index are categorized as A, B, or C based on their importance. Focus more on 'A' chapters, as they carry the most weight, and give adequate attention to 'B' chapters. While all chapters must be covered, this approach helps manage time efficiently for better results.



Step 2: Start with a Quick Concept Recap

Use this powerful summary for a quick brush-up on key concepts before you attempt the chapter. This helps you identify and understand the core principles. If a question gives you trouble, return to this section / main study material to solidify the concept, then come back and solve it again.



Step 3: Practice in Exam Format

Always solve the question on your own before looking at the answer. If you get confused in MCQs and options or make a conceptual mistake, be sure to mark it to review during your next revision.



Step 4: Last Day Revision (LDR)

Focus on solving LDR questions during the final revision. In the 1.5 days before the exam, prioritize these questions as they cover the most critical concepts from each chapter. You'll find a quick summary of LDR question numbers listed right before each chapter for easy reference.

5 Ways Vivitsu Reviewer will help you CLEAR CMA FOUNDATION

SECTION A: FUNDAMENTALS OF BUSINESS MATHEMATICS										IMP
1	Arithmetic								3-1 - 3-28	
1.1	Ratios, Variations and Proportions	6	6	6	6	6	4	10	4-57	1-1 - 1-12
1.2	Time Value of Money and Annuity - Simple and Compound Interest	4	4	4	4	6	4	6	4-57	1-13 - 1-20
1.3	Arithmetic Progression and Geometric Progression	4	4	4	4	2	6	4	4-60	1-20 - 1-24
1.4	Time and Distance	2	2	2	2	2	-	-	1-42	1-24 - 1-28
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2.1	Set Theory, Venn Diagram	4	4	4	4	2	2	2	3-34	2-1 - 2-6
2.2	Indices and Logarithms	4	4	6	6	4	6	4	3-42	2-6 - 2-17
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3.1	Concept of Calculus and its Application in Business	2	2	2	2	4	4	2	2-57	3-1 - 3-4
3.2	Revenue and Cost Function	2	-	-	2	2	-	4	1-4	
4	Statistics	2	2	4	2	2			2-60	1-11 - 1-11
SECTION B: FUNDAMENTALS OF BUSINESS STATISTICS										
4	Statistical								4-1 - 4-11	
									4-1 - 4-4	
									4-5 - 4-10	A
									4-10 - 4-11	B
										B

05

Prioritize using ABC Analysis

Each chapter is categorized as A , B or C

A : Very Important, Read on priority

B : Moderately Important

C : Less Critical but still essential



Q1. 4
Q2. 3
Ans. (a)
Solution: For continuity at $x = 3$,
L.H.L. = R.H.L.
L.H.L. = $(2 \times 3) - 1 = 5$
R.H.L. = $(3 - 3) + 5 = 2$ (Not continuous)

Q1. 5
Q2. 4

Ans. (a)
Solution: $\frac{dy}{dx} = 3x^2 - 2 = 0$ $3x^2 = 2$ $x^2 = \frac{2}{3}$ $x = \pm \sqrt{\frac{2}{3}}$

Q3. If $y = x \log x$, then $\frac{dy}{dx}$ is. (PYP 2 Marks June'20)

Q1. $1 + \log x$
Q2. $\log x$
Q3. 1
Q4. x
Ans. (a)
Solution: $y = x \log x$ $\frac{dy}{dx} = x \cdot \frac{1}{x} + \log x = 1 + \log x$

Q4. If $f(x) = ax + b$ and $f(1) = 3$, $f(2) = 5$, then the value of $f(3)$ is. (PYP 2 Marks Dec'20)

Q1. 6
Q2. 4
Q3. 5
Q4. 3
Ans. (a)
Solution: $f(1) = 3$
 $a + b = 3$
 $2a + b = 5$
 $a = 2$ $b = 1$

Includes 100% coverage of SM + MCQ Bank + MQP + PYP

04

(PYP 2 Marks Dec'25)

3.2

REVENUE AND COST FUNCTION

Quick Review of Important Concepts

Revenue Concepts

- Total Revenue (TR) = $P \times Q$
(Price $\times$ Quantity sold)
- Marginal Revenue (MR)
Change in TR from selling

Average Revenue (AR) = $\frac{TR}{Q}$
(Equal to Price per unit)

03

Topic-wise Break up

Cost Concepts

- Total Cost (TC) = $TFC + TVC$
(Fixed Cost + Variable Cost)
- Total Fixed Cost (TFC): Cost that does not change with output (e.g., rent, license fee)
- Total Variable Cost (TVC): Cost that varies with output (e.g., raw materials, wages)
- Average Cost (AC) = $\frac{TC}{Q}$
- Average Fixed Cost (AFC) = $\frac{TFC}{Q}$



5.3

Last Day Revision Questions

02

Quick Review of Important Concepts

Arithmetic Mean (A.M)

Definition: Sum of observations ÷ Number of observations.

Formulas:

(a) Individual Series / Discrete Data

- Direct Method $\bar{X} = \frac{\sum X}{N}$
- Short Cut / Assumed Mean Method $\bar{X} = A + \frac{\sum fd}{N}$, where $d = X - A$
- Step Deviation Method $\bar{X} = A + \frac{\sum fd}{N} \times i$, where $i = \frac{X_1 - X_0}{h}$

(b) Grouped Data

- Direct $\bar{X} = \frac{\sum fX}{N}$
- Short Cut $\bar{X} = A + \frac{\sum fd}{N}$
- Step Deviation $\bar{X} = A + \frac{\sum fd}{N} \times i$

(c) Combined Mean $\bar{X}_C = \frac{\sum f_1 X_1 + \sum f_2 X_2 + \dots + \sum f_n X_n}{\sum f_1 + \sum f_2 + \dots + \sum f_n}$

(d) Weighted Mean $\bar{X}_w = \frac{\sum W_i X_i}{\sum W_i}$

Geometric Mean (G.M)

Definition: n th root of product of all observations.

Formulas:

(a) Individual Series: $G.M = \sqrt[n]{X_1 \times X_2 \times \dots \times X_n} = \text{antilog}\left(\frac{\sum \log X}{n}\right)$

(b) Discrete / Frequency Data: $G.M = \text{antilog}\left(\frac{\sum f \log X}{N}\right)$

(c) Grouped / Continuous Data

$$G.M = \text{antilog}\left(\frac{\sum f \log X}{N}\right), \text{ where } X = \text{mid} - \text{value of class}$$

(d) Weighted G.M: $G.M = \text{antilog}\left(\frac{\sum W_i \log X_i}{\sum W_i}\right)$

(e) Combined G.M

$$G.C = \left[\left(\frac{G_1}{N_1} \right)^{N_1} + \left(\frac{G_2}{N_2} \right)^{N_2} + \dots + \left(\frac{G_n}{N_n} \right)^{N_n} \right]^{\frac{1}{N_1 + N_2 + \dots + N_n}}$$

Property: $G.M \leq A.M$ (for positive numbers)

Harmonic Mean (H.M)

Definition: Reciprocal of the arithmetic mean of reciprocals.

Formulas:

(a) Individual Series: $H.M = \frac{N}{\sum \frac{1}{X}}$

(b) With Frequency: $H.M = \frac{N}{\sum \frac{f}{X}}$

(c) Weighted H.M: $H.M = \frac{\sum W_i}{\sum \frac{W_i}{X_i}}$

Property: $H.M \leq G.M \leq A.M$



1. If $Q:W = 2:3$, $W:T = 4:5$ and $T:Y = 6:7$, find $Q:Y$ (JAM, MGT (I) 2 Marks Dec'20)

(a) 35:32

(b) 35:35

(c) 35:33

(d) 33:35

Ans: (b)

Solution: $Q:W = 2:3$, $W:T = 4:5$ and $T:Y = 6:7$

$$\left[\frac{2}{3} \times \frac{5}{4} \times \frac{7}{6} = \frac{35}{36} \right] \Rightarrow \frac{Q}{Y} = \frac{35}{36} \Rightarrow Q:Y = 35:36$$

Solution: (c) 3 and 18: $3 = \frac{3}{1} \times \frac{18}{3} = 18 \times \frac{1}{3} = \frac{18}{3}$ or 27:4

2. Find the third proportional to 6 $\frac{1}{2}$ and 5. (JAM, MGT (I) 2 Marks)

(a) $\frac{10}{3}$

(b) $\frac{5}{3}$

(c) 4

(d) 8

Ans: (d)

3. Two numbers are in the ratio 3:5, if the sum of

Solution: $AB \propto XY \therefore AB = K.XY$

$$\frac{A}{B} + \frac{B}{A} = \frac{X}{Y} + \frac{Y}{X} \mid \frac{A^2+B^2}{AB} = \frac{X^2+Y^2}{XY} \mid \frac{A^2+B^2}{K.XY} = \frac{X^2+Y^2}{XY}$$

$$A^2 + B^2 = K(X^2 + Y^2) \mid \therefore A^2 + B^2 \propto X^2 + Y^2$$



01

Answers with
detailed solutions

4. When the number 1380 is increased in the ratio 5:6, the new number is. (JAM, MGT (I) 2 Marks Dec'20)

(a) 198

(b) 208

(c) 199

(d) 209

Ans: (b)

Solution: $\frac{1380}{x} = \frac{5}{6} \Rightarrow x = \frac{1380 \times 6}{5} = 1656$

5. Find the fourth proportional to 6, 8, 9 is. (JAM, MGT (I) 2 Marks Dec'24, (I) Dec'20)

(a) 18

(b) 12

(c) 7

(d) 14

Ans: (b)

Solution: No. of faces: 6

No. of edges: 12

Ratio of no. of faces to edges = $6:12 = 1:2$

6. Find the fourth proportional to 6, 8, 9 is. (JAM, MGT (I) 2 Marks Dec'24, (I) Dec'20)

(a) 18

(b) 12

(c) 7

(d) 14

Ans: (b)

Solution: Let fourth proportional to 6, 8, 9 be x

$$\frac{6}{8} = \frac{9}{x} \mid x = \frac{9 \times 8}{6} = \frac{72}{6} = 12$$

7. Find the compounded ratio of 15:8 and 16:5. (JAM, MGT (I) 2 Marks)

(a) 27:4

(b) 4:27

(c) 27:8

(d) 8:27

Ans: (d)

10. If $AB=27$ and $\frac{1}{A} + \frac{1}{B} = \frac{1}{3}$ then, (JAM)

(a) $A^2 + B^2 = 27^2 + 3^2$

(b) $A + B = 27$

(c) $AB = 2 \times 3$

(d) $A + B = \frac{27}{3}$

Ans: (d)

Solution: $AB = 27$ and $AB = 3 \times 27$

$$\frac{1}{A} + \frac{1}{B} = \frac{1}{3} \mid \frac{A+B}{AB} = \frac{1}{3} \mid \frac{A+B}{27} = \frac{1}{3} \mid A+B = \frac{27}{3} = 9$$

$$A^2 + B^2 = 3(A^2 + B^2) \mid A^2 + B^2 = 27^2 + 3^2$$

11. Using the properties of proportion, solve the

following equation for x, given $\frac{10}{12} = \frac{15}{x}$

(JAM, MGT (I) 2 Marks June'25, (I) Dec'20)

(a) 18

(b) 15

(c) 12

(d) 30

Ans: (b)

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ABC Analysis

A Very Important,
Read on priority

B Moderately
Important

C Less critical but still
essential

Ensure you thoroughly read all chapters without skipping any- The ABC analysis is designed to help you prioritize based on past trends, but it should not replace comprehensive preparation-

CHAPTER 1: ARITHMETIC



LDR Questions

Q 4, Q 8, Q 17, Q 22, Q 62, Q 107, Q 112, Q 117, Q 184, Q 203

1.1

RATIO, VARIATION AND PROPORTION

Quick Review of Important Concepts

➤ Ratios

- Inverse Ratio: $a:b \Rightarrow b:a$

➤ Proportion

- $a:b = c:d \Rightarrow a/b = c/d$
- Property: $ad = bc$
- Continued Proportion: $a:b = b:c \Rightarrow b^2 = ac$

➤ Mean, Third & Fourth Proportional

- Mean Proportional: $y^2 = xz \Rightarrow y = \sqrt{xz}$
- Third Proportional: $z = y^2 / x$
- Fourth Proportional: $d = bc / a$

➤ Rules of Proportion

- Invertendo: $a:b = c:d \Rightarrow b:a = d:c$
- Alternendo: $a:b = c:d \Rightarrow a:c = b:d$
- Componendo: $a:b = c:d \Rightarrow (a+b):b = (c+d):d$
- Dividendo: $a:b = c:d \Rightarrow (a-b):b = (c-d):d$
- Componendo & Dividendo: $a:b = c:d \Rightarrow (a+b):(a-b) = (c+d):(c-d)$

➤ Variations

- Direct Variation: $A \propto B \Rightarrow A = kB$
- Inverse Variation: $A \propto 1/B \Rightarrow A = k/B$
- Joint Variation: $A \propto (BCD...) \Rightarrow A = k(BCD...)$

➤ Special Ratios

- Compound Ratio: $(a:b) \times (c:d) \times (e:f) = ace : bdf$
- Duplicate Ratio: $(a:b)^2 = a^2 : b^2$
- Triplicate Ratio: $(a:b)^3 = a^3 : b^3$
- Sub-Duplicate Ratio: $\sqrt{a} : \sqrt{b}$
- Sub-Triplicate Ratio: $\sqrt[3]{a} : \sqrt[3]{b}$
- Continued Ratio: $a:b:c$

➤ Key Points

- Always convert to same units before finding ratio.
- Increase by ratio $\rightarrow$ multiply by greater ratio.
- Decrease by ratio $\rightarrow$ multiply by smaller ratio.
- If both increase & decrease are present $\rightarrow$ apply ratios step by step.



Multiple Choice Question (MCQ)

1. If Q: W = 2:3, W:T = 4:5 and T: Y = 6:7, find Q: Y. (SM, MQP (1) 2 Marks Dec'25)

- (a) 35: 51 (b) 16: 35
(c) 16: 51 (d) 51: 35

Ans: (b)

Solution: Q : W = 2:3 , W : T = 4:5 and T : Y = 6:7

$$\frac{2}{3} \times \frac{4}{5} \times \frac{6}{7} = \frac{48}{105} = \frac{16}{35} \text{ or } 16:35$$

2. Two numbers are in the ratio 7: 9, if the sum of the numbers is 288, then the smaller number is. (SM, MCQ-Bank)(MQP(1) 2 Marks-Dec'24)

- (a) 126 (b) 288
(c) 162 (d) 144

Ans: (a)

Solution: Ratio = 7:9, Sum of numbers = 288

Sum of ratios = 7+9 = 16, Smaller number

$$= \frac{288}{16} \times 7 = 126$$

3. When the number 1580 is increased in the ratio 5: 9, the new number is. (SM, MCQ-Bank, MQP (2) 2 Marks Dec'25)

- (a) 788 (b) 2488
(c) 878 (d) 2844

Ans: (d)

Solution: 1580 increased in 5: 9 = $\frac{1580}{5} \times 9 = 2844$

4. The ratio of the number of faces to the number of edges of a box is. (SM, MCQ-Bank) (MQP (1) 2 Marks-June'24, MQP (2) 2 Marks Dec'25)

- (a) 3: 8 (b) 8: 3
(c) 1: 2 (d) 2: 1

Ans: (c)

Solution: No. of faces : 6

No. of edges : 12

Ratio of no. of faces to edges = 6 : 12 = 1 : 2

5. Find the fourth proportional to 6, 8, 9 is. (SM, MCQ-Bank) (MQP(2) 2 Marks-Dec'24, (1) Dec'25)

- (a) 18 (b) 12
(c) 7 (d) 13

Ans: (b)

Solution: Let Fourth proportional to 6, 8, 9 be x

$$\frac{6}{8} = \frac{9}{x} \mid x = \frac{9 \times 8}{6} = \frac{72}{6} = 12$$

6. Find the compounded ratio of: 15: 8 and 18: 5. (SM, MCQ-Bank)

- (a) 27: 4 (b) 4: 27
(c) 27: 8 (d) 8: 27

Ans: (a)

Solution: 15 : 8 and 18: 5 = $\frac{15}{8} \times \frac{18}{5} = \frac{3}{4} \times 9 = \frac{27}{4}$
or 27:4

7. Find the third proportional to $6\frac{1}{4}$ and 5. (SM, MCQ-Bank)

- (a) $9\frac{1}{2}$ (b) $3\frac{1}{5}$
(c) 4 (d) 8

Ans: (c)

Solution: Third proportional to $6\frac{1}{4}$ and 5 is

$$6\frac{1}{4} : 5 :: 5 : Y \mid \frac{25}{4} : 5 :: 5 : Y \mid \frac{25}{4} \times Y = 5 \times 5 \mid \frac{Y}{4} = 1$$

$$\therefore Y = 4$$



8. Find the Duplicate ratio of : $8a : \sqrt{4b}$. (SM, MCQ-Bank) (MQP (1) 2 Marks-Dec'24)

- (a) $64a^2 : 2b^2$ (b) $16a^2 : b^2$
(c) $32a^2 : 4b^2$ (d) $32a^2 : 8b^2$

Ans: (b)

Solution: $8a : \sqrt{4b}$ is the given ratio $(8a)^2 : (\sqrt{4b})^2$
= Duplicate Ratio of the given one
= $64a^2 : 4b^2 = 16a^2 : b^2$

9. If $A \propto \frac{1}{B}$ and A=7 when B = 3, then when B = $2\frac{1}{3}$, A is. (SM, MQP(1) 2 Marks-Dec'24, (1) Dec'25)

- (a) $\frac{3}{7}$ (b) 3
(c) 9 (d) 1

Ans: (c)

Solution: $A \propto \frac{1}{B} \therefore A = \frac{K}{B}$. Given A = 7 when B = 3

$$\therefore 7 = \frac{K}{3} \text{ or } K = 21 \text{ So when } B = 2\frac{1}{3} = \frac{7}{3} \text{ then } A = \frac{21}{\frac{7}{3}}$$

or, A = 9

10. If $AB \propto XY$ and $\frac{A}{B} + \frac{B}{A} = \frac{X}{Y} + \frac{Y}{X}$ then. (SM)

- (a) $A^2 + B^2 \propto X^2 + Y^2$
(b) $A + B \propto XY$
(c) $AB \propto X + Y$
(d) $A + B \propto \frac{1}{X+Y}$

Ans: (a)

Solution: $AB \propto XY \therefore AB = K \cdot XY$

$$\frac{A}{B} + \frac{B}{A} = \frac{X}{Y} + \frac{Y}{X} \mid \frac{A^2+B^2}{AB} = \frac{X^2+Y^2}{XY} \mid \frac{A^2+B^2}{K \cdot XY} = \frac{X^2+Y^2}{XY}$$

$$A^2 + B^2 = K(X^2 + Y^2) \mid \therefore A^2 + B^2 \propto X^2 + Y^2$$

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

(SM, MQP (2) 2 Marks-June'25, (1) Dec'25)

- (a) 14 (b) 11
(c) 12 (d) 10

Ans: (b)



Solution: $\frac{341}{91} = \frac{y^3+3y}{3y^2+1} \mid \frac{341+91}{341-91} = \frac{(y^3+3y)+(3y^2+1)}{(y^3+3y)-(3y^2+1)}$

[By Componendo and Dividendo]

$\frac{432}{250} = \frac{(y^3+3y+3y^2+1)}{(y^3+3y-3y^2-1)} \mid \frac{432}{250} = \frac{4y^2+3y+1}{2y^2+3y-1} \mid 6y-5y=5+6$
 $Y=11$

12. The ratio of 45 seconds to $5\frac{3}{4}$ minutes is. (SM)

- (a) 5: 21 (b) 3: 23
 (c) 2: 19 (d) 1: 27

Ans: (b)

Solution: 45 Seconds : $5\frac{3}{4}$

Minutes = $\frac{45 \text{ Seconds}}{(5\frac{3}{4} \times 60 \text{ Seconds})} \mid = \frac{45 \text{ Seconds}}{345 \text{ Seconds}} \mid = \frac{3}{23}$

13. A class consists of 48 male students and 23 female students. Find the ratio of female students to total strength of the class. (SM, MCQ-Bank) (MQP(1) 2 Marks-June'23 & Dec'23, MQP (2) 2 Marks Dec'25)

- (a) 23: 48 (b) 48: 23
 (c) 48: 71 (d) 23: 71

Ans: (d)

Solution: 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

14. The mean proportional between 80 and $\frac{1}{5}$ is. (SM)

- (a) 16 (b) 4
 (c) 8 (d) 32

Ans: (b)

Solution: Mean proportional between 80 and $\frac{1}{5}$

is $\sqrt{80 \times \frac{1}{5}} = \sqrt{16} = 4$

15. Find the Triplicate Ratio of: $\frac{1}{3} : \frac{1}{2}$. (SM)

- (a) 8: 27 (b) 27: 8
 (c) 4: 9 (d) 9: 4

Ans: (a)

Solution: $\frac{1}{3} : \frac{1}{2} = \text{Given Ratio } \left(\frac{1}{3}\right)^3 : \left(\frac{1}{2}\right)^3$

= Triplicate Ratio of the given ratio

$= \frac{1}{27} : \frac{1}{8} \mid = \frac{1}{27} \times \frac{8}{1} \mid = \frac{8}{27}$ or 8: 27

16. If 4, 6, p, 27, q are in continued proportion, find the values of p and q. (SM, MCQ-Bank) (MQP(1) 2 Marks-June & Dec'23, (1) Dec'25)

- (a) p = 9, q = 9 (b) p = 9, q = 81
 (c) p = 81, q = 9 (d) p = 81, q = 81

Ans: (b)

Solution: 4, 6, p, 27, q are in continued proportion

$\frac{4}{6} = \frac{6}{p}$ and $\frac{p}{27} = \frac{27}{q} \mid 4 \times p = 6 \times 6 \mid 4 \times p = 36$

$p = \frac{36}{4} = 9 \mid \frac{p}{27} = \frac{27}{q} \mid p \times q = 27 \times 27 \mid$

$9 \times q = 729 \mid q = \frac{729}{9} = 81 \mid p = 9 \text{ and } q = 81$



17. If a Stadium having spectators divided into groups of Young Generation and Old Generation and the number of young spectators is 1525 and old spectators are 1875. Find the ratio of Total Spectators to Young Spectators. (SM, MCQ-Bank) (MQP(1) 2 Marks-June'23 & Dec'23)

- (a) 136:75 (b) 136:85
 (c) 75:61 (d) 136:61

Ans: (d)

Solution: Young Spectators – 1525,

Old Spectators – 1875,

Total strength = (1525+1875) = 3400 spectators.

Ratio of Total Strength to Young Spectators

= 3400 : 1525 = 136 : 61

18. Find two numbers whose mean proportional is 8 and the 1st number is square of the 2nd number. (SM, MCQ-Bank) (MQP(1) 2 Marks-June'23, Dec'23)

- (a) 8, 8 (b) 4, 2
 (c) 16, 4 (d) 64, 8

Ans: (c)

Solution: Mean proportional is 8 | 1st number is square of 2nd number | let two numbers be x^2 and x | Mean proportional of the numbers = $\sqrt{x \times x^2} \mid 8 = \sqrt{x^3}$ (given) $\mid 8^2 = (\sqrt{x^3})^2$
 $64 = x^3 \mid 4^3 = x^3 \mid x = 4 \mid x^2 = 16$. Two numbers are 16 and 4.

19. What number must be subtracted from each of the numbers 12, 13, 24 and 29 to make them proportional? (SM)

- (a) 9 (b) 8
 (c) 35 (d) 36

Ans: (a)

Solution: Number must be subtracted from 12, 13, 24 and 29 to make them proportional be y.

$(12-y):(13-y):(24-y):(29-y) \mid (12-y) \times (29-y)$
 $= (24-y) \times (13-y) \mid 348 - 12y - 29y + y^2$
 $= 312 - 24y - 13y + y^2 \mid 348 - 41y + y^2$
 $= 312 - 37y + y^2 \mid 41y - 37y = 348 - 312$
 $4y = 36 \mid y = 9$

20. The ratio of the pocket money saved by Rakesh and his sister is 5:6. If the sister saves ₹60 more, how much more the brother should save in order to keep the ratio of their savings unchanged? (SM, MQP(1) 2 Marks-June'23 & Dec'23)

- (a) ₹ 60 (b) ₹ 40
 (c) ₹ 50 (d) ₹ 70

Ans: (c)



Solution: Let the savings of Rakesh and his sister be $5x$ and $6x$, And Rakesh would save ₹ y more,
 $\frac{(5x+y)}{(6x+60)} = \frac{5}{6} \mid (5x+y) \times 6 = 5 \times (6x+60)$
 $30x + 6y = 30x + 300 \mid 6y = 300 \mid y = \frac{300}{6} = 50$

21. A woman can complete a task by working 6 hours a day for 12 days. If she increases her working hours to 9 hours per day, how many days will it take her to finish the same task?

(MQP (1) 2 Marks-June'25)

- (a) 9 Days (b) 12 Days
 (c) 8 Days (d) 10 Days

Ans: (c)

Solution

Total work = $\frac{6 \text{ hours}}{\text{day}} \times 12 \text{ days} = 72 \text{ hours}$

With $\frac{9 \text{ hours}}{\text{day}}$, days required = $72 \div 9 = 8 \text{ days}$.



22. The Monthly incomes of two persons Ram and Raja are in the ratio 5:7 and their monthly expenditures are in the ratio 7:11. If each of them saves Rs.60 per month. Find their monthly income. (MQP (2) 2 Marks-June'25)

- (a) ₹200 and ₹280
 (b) ₹250 and ₹350
 (c) ₹300 and ₹400
 (d) ₹150 and ₹210

Ans: (a)

Solution: Let incomes be $5x, 7x$ expenditures $7y, 11y$

Savings: $5x - 7y = 60 \mid 7x - 11y = 60$. | Solve: $x = 40$,

$y = 20$. Incomes: $5 \times 40 = ₹200 \mid 7 \times 40 = ₹280$.

23. Two numbers are in the ratio of 3:5, and if 10 is subtracted from each of them, the remainders are in the ratio of 1:5. Find the numbers.

(MQP (1) 2 Marks-June'25)

- (a) 9 and 15 (b) 10 and 16
 (c) 15 and 25 (d) 12 and 20

Ans: (d)

Solution: Let the numbers be x and y , so that

$\frac{x}{y} = \frac{3}{5} \mid 5x = 3y \dots \dots (1)$ Again $\frac{x-10}{y-10} = \frac{1}{5}$

$\mid 5x - 50 = y - 10 \mid 3y - 50 = y - 10$

[As $5x = 3y$ From (1)] $\mid 2y = 40 \mid$ so $y = 20$ And

$5x = 3y = 60 \mid$ so $x = 12$ and $y = 20$

24. If $x:y=3:4$, $y:z=5:6$ $z:w=7:8$ then $x:y:z:w$ is

(PYP 1 Mark Jun'13)

- (a) 3: 5: 7: 8 (b) 3: 4: 6: 8
 (c) 105: 140: 168: 192 (d) 3: 4: 24: 192

Ans: (c)

Solution: Continued ratio for $x:y:z = 5(3:4)$ and $4(5:6) = 15:20$ & $20:24 = 15:20:24$ | Continued ratios for $x:y:z:w = 7(15:20:24)$ & $24(7:8) = 105:140:168$ & $168:192 = 105:140:168:192$.

25. The average monthly consumption of petrol for a car for 12 months is 160 litres. If the average monthly consumption for the first 8 months is 145 litres, then the average monthly consumption of petrol for the last 4 months is: (PYP 1 Mark Jun'13)

- (a) 190 litres (b) 165 litres
 (c) 180 litres (d) 175 litres

Ans: (a)

Solution: Total consumption for 12 months = $160 \times 12 = 1,920$ litre | Total consumption for 8 months = $145 \times 8 = 1,160$ litre | Total Consumption for 4 months = $1,920 - 1,160 = 760$ litre

Average monthly consumption for 4 months = $760/4 = 190$ litre.

26. The monthly salaries of two persons are in the ratio of 3:5. If each receives an increase of 20 in salary, the ratio is altered to 13:21. Find the respective salaries: (PYP 1 Mark Sep'14)

- (a) ₹300, ₹500 (b) ₹130, ₹210
 (c) ₹240, ₹400 (d) ₹400, ₹240

Ans: (c)

Solution: Let Salaries be $3x$ and $5x$

Therefore, after increment, $(3x + 20)/(5x + 20)$

$= 13/21 \mid 63x + 420 = 65x + 260 \mid 65x - 63x = 420$

$- 260 \mid 2x = 160 \mid x = 80$. Salaries = $3x = 3 \times 80$

$= ₹240$ and $5x = 5 \times 80 = ₹400$.

27. If the two numbers 20 and $x + 2$ are in the ratio of 2:3; Find x : (PYP 1 Mark Sep'14)

- (a) 14 (b) 28
 (c) 32 (d) 29

Ans: (b)

Solution: $\frac{20}{(x+2)} = \frac{2}{3} \mid 60 = 2x + 4 \mid 2x = 60 - 4$

$2x = 56 \mid x = 28$

28. What must be subtracted from each of the numbers 17, 25, 31, 47 so that the remainders may be in proportion. (PYP 1 Mark Dec'14)

- (a) 12 (b) 6
 (c) 9 (d) 3

Ans: (d)

Solution: Let the number to be subtracted be x .

Therefore, $\frac{(17-x)}{(25-x)} = \frac{(31-x)}{(47-x)} \mid (17-x)(47-x)$

$= (25-x)(31-x) \mid 799 - 17x - 47x + x^2$

$= 775 - 25x - 31x + x^2 \mid 799 - 775$

$= 64x - 56x \mid 24 = 8x \mid x = 3$

29. The ratio of 200 gm to 2 kg. is: (PYP 1 Mark Dec'14)

- (a) 100:1 (b) 10:1
 (c) 1:1 (d) 1:10

Ans: (d)



Solution: 2 kg = 2,000 gm, Therefore, Ratio
= 200 : 2000 = 1:10

30. The Ratio of 5kg 55gm to 35kg 50gm:

(PYP 1 Mark Mar'15, Mar'16)

- (a) 5:7 (b) 1,011:7,010
(c) 111:710 (b) None of these

Ans: (b)

Solution: 5kg 55gm = 5,055 gm | 35 kg 50 gm
= 35,050 gm. Therefore, Ratio = 5,055:35,050
= 1,011:7,010

31. If A:B = 3:4, B:C = 2:5 then A:B:C: (PYP 1 Mark Mar'15)

- (a) 3:4:5 (b) 3:4:10
(c) 4:3:10 (d) 3:4:8

Ans: (b)

Solution: Continued ratio of A:B:C = (3:4) and 2(2:5)
= 3:4 and 4:10 = 3:4:10

32. X has Y and Z as his son and grandson. His present age is 1.5 times the age of his son and grandson. 10 years ago, his age was twice the age of his son and grandson, the present age of the father and sum of age of son and grandson are: (PYP 1 Mark Mar'15)

- (a) 93, 63 (b) 85, 67
(c) 88, 64 (d) 90, 60

Ans: (d)

Solution: Let present age of X be x and Y be y and Z be z | Therefore, $x = 1.5(y + z)$ | $x = 1.5y + 1.5z$
10 years ago: $X - 10 = 2(y - 10 + z - 10)$ | $x - 10 = 2y + 2z - 40$
 $1.5y + 1.5z - 10 = 2y + 2z - 40$
 $40 - 10 = 2y - 1.5y + 2z - 1.5z$ | $30 = 0.5y + 0.5z$
 $y + z = 30/0.5 = 60$ | $x = 1.5(y + z)$ | $x = 1.5 \times 60$ | $x = 90$

33. A two-digit no. is six times the sum of its digits. The number obtained by interchanging the digit is less by 9. The original no. is:

(PYP 1 Mark Mar'15, Dec'15)

- (a) 68 (b) 72
(c) 54 (d) 63

Ans: (c)

Solution: Let a be the digit at Ten's place and b be the digit at one's place, Therefore, $(10a + b)$ is the number. Now, $10a + b = 6(a + b)$ | $10a + b = 6a + 6b$
| $4a = 5b$ | $a = 5/4b$

After interchanging the digits, the number becomes $10b + a$, Therefore, $(10a + b) - 9 = 10b + a$
 $10a + b - 9 = 10b + a$ | $9a - 9 = 9b$

Dividing by 9 we get, $a - 1 = b$ | $5/4b - 1 = b$ | $5/4b - b = 1$ | $1.25b - b = 1$ | $0.25b = 1$ | $b = 4$ | $a = 5/4 \times 4 = 5$
So, the original number is $10a + b = 10 \times 5 + 4 = 54$

34. $\frac{(\sqrt{a}+\sqrt{b})}{\sqrt{a}-\sqrt{b}} = \frac{2}{1}$ then $\frac{(a+b)}{(a-b)}$ is equal to :

(PYP 1 Mark Mar'15, Mar'16)

- (a) 5/4 (b) 4/5
(c) 3 (d) None of these

Ans: (a)

Solution: $\frac{(\sqrt{a}+\sqrt{b})}{\sqrt{a}-\sqrt{b}} = \frac{2}{1}$

Applying Component and Dividendo on both sides

we get $\frac{(\sqrt{a}+\sqrt{b}+\sqrt{a}-\sqrt{b})}{(\sqrt{a}+\sqrt{b}+\sqrt{a}+\sqrt{b})} = \frac{(2+1)}{(2-1)}$ | $2\sqrt{a} / 2\sqrt{b} = 3/1$
 $\sqrt{a} / \sqrt{b} = 3/1$

Squaring both the sides we get $\frac{a}{b} = \frac{9}{1}$

Again, applying Component and Dividendo on both sides we get $\frac{(a+b)}{(a-b)} = \frac{(9+1)}{(9-1)}$ | $\frac{(a+b)}{(a-b)} = \frac{10}{8}$ | $\frac{(a+b)}{(a-b)} = \frac{5}{4}$

35. If A:B = 2:3, B:C = 4:5, then A:C = _____.

(PYP 1 Mark Jun'15, Dec'15, Mar'16)

- (a) 6:7 (b) 7:6
(c) 8:15 (d) 15:8

Ans: (c)

Solution: Continued ratio of A:B:C = 4(2:3) and 3(4:5)
= 8:12 and 12:15 = 8:12:15 Therefore, A:C = 8:15

36. If sum of digits of two digits No. is 9 and the digits obtained by interchanging the digits exceeds the given number by 27, then the number is:

(PYP 1 Mark Jun'15)

- (a) 36 (b) 45
(c) 23 (d) 65

Ans: (a)

Solution: Let a be the digit at Ten's place and b be the digit at one's place, Therefore, $(10a + b)$ is the number

Now, $a + b = 9$ [Equation 1]

After interchanging the digits, the number becomes

$10b + a$, Therefore, $(10a + b) + 27 = 10b + a$

$10a + b + 27 = 10b + a$ | $9a + 27 = 9b$

Dividing by 9 we get, $a + 3 = b$ | $a - b = -3$ [Equation 2]

Solving both the equations we get, $2a = 6$ | $a = 3$

Putting $a = 3$ in Equation 1 we get, $3 + b = 9$ | $b = 6$.

So, the original number is $10a + b = 10 \times 3 + 6 = 36$

37. The ratio of two numbers is 11:15. The sum of 3 times the first number and twice the second number is 630. The H.C.F. of the number is:

(PYP 1 Mark Jun'15)

- (a) 10 (b) 12
(c) 15 (d) None of these

Ans: (a)

Solution: Let the number be $11x$ and $15x$, where x signifies the H.C.F. | $3(11x) + 2(15x) = 630$ | $33x + 30x = 630$ | $63x = 630$ | $x = 10$. Therefore, H.C.F. = 10



3.1

CONCEPT OF CALCULUS AND ITS APPLICATION IN BUSINESS

Quick Review of Important Concepts

Functions

➤ Function Basics

- A function is a rule where each input x (independent variable) has exactly one output y (dependent variable).
- Notation: $y = f(x)$.

➤ Types of Functions

- **Constant:** $f(x) = c$
- **Single-valued:** One output for each input.
- **Multi-valued:** Multiple outputs (e.g., $y^2 = x$).
- **Explicit:** y given directly in terms of x (e.g., $y = 2x + 3$).
- **Implicit:** Relation not solved for y directly (e.g., $x^2 + y^2 = 1$).
- **Parametric:** Variables expressed using a parameter t . Example: $x = 2t, y = t^2 + 1$.
- **Odd Function:** $f(-x) = -f(x)$. Example: $f(x) = x$.
- **Even Function:** $f(-x) = f(x)$. Example: $f(x) = x^2$.
- **Inverse Function:** If $y = f(x)$ then $x = f^{-1}(y)$.

➤ Special Functions

- **Polynomial:** $f(x) = a_0 + a_1x + a_2x^2 + \dots + a_nx^n$.
– $n = 1$: Linear, $n = 2$: Quadratic, $n = 3$: Cubic.
- **Rational:** $\frac{P(x)}{Q(x)}$, where $Q(x) \neq 0$.
- **Domain:** Set of possible input values (x).
- **Range:** Set of corresponding output values ($f(x)$).

➤ Absolute Value

$$|a| = \begin{cases} a, & a \geq 0 \\ -a, & a < 0 \end{cases}$$

Complex Numbers

- Form: $a + ib$, where $i = \sqrt{-1}$.
- Real part = a , Imaginary part = ib .

Limits

➤ Definition

$$\lim_{x \rightarrow a} f(x) = L$$

if $f(x)$ gets arbitrarily close to L as x approaches a .

Types

- **Left-hand limit:** $\lim_{(x \rightarrow a^-)} f(x)$.
- **Right-hand limit:** $\lim_{(x \rightarrow a^+)} f(x)$.
- Limit exists only if both are equal.

Methods to Evaluate Limits

- **Factorisation** – cancel common factors.
- **Substitution:** put $x = a + h$, simplify.
- **Rationalisation:** multiply by conjugate if surds present.
- **At infinity:** divide numerator and denominator by highest power of x .



Fundamental Theorems of Limits

If $\lim_{x \rightarrow a} f(x) = l$, $\lim_{x \rightarrow a} g(x) = m$:

- $\rightarrow \lim_{x \rightarrow a} [f(x) \pm g(x)] = l \pm m$
- $\rightarrow \lim_{x \rightarrow a} [f(x) \cdot g(x)] = lm$
- $\rightarrow \lim_{x \rightarrow a} \frac{f(x)}{g(x)} = \frac{l}{m}, (m \neq 0)$
- $\rightarrow \lim_{x \rightarrow a} k = k$ (constant).
- $\rightarrow \lim_{x \rightarrow a} kf(x) = k \lim_{x \rightarrow a} f(x)$.

Differentiation

Concept

- Differentiation is based on limits.
- If $y = f(x)$, the **derivative** (or differential coefficient) is defined as: $f'(x) = \lim_{h \rightarrow 0} \frac{f(x+h) - f(x)}{h}$
- It represents the **rate of change** of y with respect to x .

Symbols:

$\frac{dy}{dx}, f'(x), D[f(x)], y_1$.

Basic Derivatives

- $\frac{d}{dx}(x^n) = nx^{n-1}$
- $\frac{d}{dx}(c) = 0$ ($c = \text{constant}$)
- $\frac{d}{dx}(e^x) = e^x$
- $\frac{d}{dx}(a^x) = a^x \log a$
- $\frac{d}{dx}(\log x) = \frac{1}{x}$
- $\frac{d}{dx}(\log_a x) = \frac{1}{x \log a}$

Rules of Differentiation

- Sum/Difference: $\frac{d}{dx}[u \pm v] = \frac{du}{dx} \pm \frac{dv}{dx}$
- Product Rule: $\frac{d}{dx}[uv] = u \frac{dv}{dx} + v \frac{du}{dx}$
- Quotient Rule: $\frac{d}{dx}\left(\frac{u}{v}\right) = \frac{v \frac{du}{dx} - u \frac{dv}{dx}}{v^2}$
- Chain Rule (function of a function): If $y = f(z)$ and $z = \varphi(x)$, then $\frac{dy}{dx} = \frac{dy}{dz} \cdot \frac{dz}{dx}$

Special Cases

- Implicit functions: If $f(x, y) = 0$, differentiate both sides w.r.t. x .
- Parametric functions: If $x = f_1(t)$, $y = f_2(t)$, then $\frac{dy}{dx} = \frac{\frac{dy}{dt}}{\frac{dx}{dt}}$

Higher Order Derivatives

- First derivative: $\frac{dy}{dx} = f'(x)$.
- Second derivative: $\frac{d^2y}{dx^2} = f''(x)$.
- Similarly: n th derivative = $f^{(n)}(x)$

Multiple Choice Question (MCQ)



1. $\lim_{x \rightarrow 3} (x^3 + 1)$
(SM, MCQ-Bank) (MQP(1) 2 Marks, Dec'24)
- (a) 27 (b) 53
(c) 28 (d) 54

Ans. (c)

Solution: $\lim_{x \rightarrow 3} (x^3 + 1) = 3^3 + 1 = 27 + 1 = 28$



2. $\lim_{x \rightarrow 0} (4x^2 + 7x + 5)$ (SM, MCQ-Bank)

- (a) 4 (b) 7
(c) 5 (d) 16

Ans. (c)

Solution: $\lim_{x \rightarrow 0} (4x^2 + 7x + 5)$
 $= 4(0)^2 + 7(0) + 5 = 5$

3. $\lim_{x \rightarrow 4} \left(\frac{x^2 - 16}{x - 4} \right)$ (SM, MCQ-Bank)

- (a) 2 (b) 4
(c) 8 (d) 6

Ans. (c)

Solution: $\lim_{x \rightarrow 4} \left(\frac{x^2 - 16}{x - 4} \right)$
 $= \lim_{x \rightarrow 4} \left(\frac{(x-4)(x+4)}{x-4} \right)$
 $= \lim_{x \rightarrow 4} (x + 4) = 4 + 4 = 8$

4. If $y = xe^x$ then $\frac{dy}{dx} = ?$

(SM, MCQ-Bank, MQP(2) 2 Marks-Dec'24, PYP 2 Marks Dec'23)

- (a) xe^x (b) $e^x(x + 1)$
(c) $e^x(x - 1)$ (d) $\frac{e^x}{x}$

Ans. (b)

Solution: $y = xe^x \Rightarrow \frac{dy}{dx} = e^x + xe^x = e^x(x + 1)$

5. $f(x) = \frac{x^5}{5} + \frac{x^4}{4} + \frac{x^3}{3} - 7x^2 + 18$. $f'(x) = ?$
(SM, MCQ-Bank)

- (a) $\frac{x^4}{4} + \frac{x^3}{3} + \frac{3x^2}{2} + 14$
(b) $\frac{x^6}{6} + \frac{x^5}{5} + \frac{x^4}{4} - 7x^3 + 18x$
(c) $x^4 - x^3 - \frac{3x^2}{2} + 14x$
(d) $x^4 + x^3 + \frac{3x^2}{2} - 14x$

Ans. (d)

Solution: $f(x) = \frac{x^5}{5} + \frac{x^4}{4} + \frac{x^3}{3} - 7x^2 + 18$
 $f'(x) = \frac{d}{dx} \left(\frac{x^5}{5} \right) + \frac{d}{dx} \left(\frac{x^4}{4} \right) + \frac{d}{dx} \left(\frac{x^3}{3} \right) + \frac{d}{dx} (-7x^2) + \frac{d}{dx} (18)$
 $= \frac{5x^4}{5} + \frac{4x^3}{4} + \frac{3x^2}{3} - 14x + 0$
 $= x^4 + x^3 + \left(\frac{3x^2}{2} \right) - 14x$

6. When $y = 4^x$ then derivative of y is _____
(SM, MCQ-Bank) (MQP(1) 2 Marks-Dec'24)

- (a) $x(4^{x-1})$ (b) $\frac{4^x}{2 \log 2}$
(c) $4^x 2 \log 2$ (d) None of these

Ans. (c)

Solution: $y = 4^x \mid \frac{dy}{dx} = 4^x \log 4$
 $\log 4 = \log(2^2) = 2 \ln 2 \mid \Rightarrow \frac{dy}{dx} = 4^x \cdot 2 \log 2$
 $= 4^x 2 \log 2$

7. Find the differential coefficient of $y = \frac{e^x}{e^x + 1}$
(SM, MCQ-Bank)

- (a) $\frac{e^x}{(e^x + 1)^2}$ (b) $\frac{e^{2x}}{(e^x + 1)^2}$
(c) $\frac{e^x}{(e^{2x} + 1)^2}$ (d) $\frac{e^x}{(e^x + 2)^2}$

Ans. (a)

Solution: $y = \frac{e^x}{e^x + 1} \mid \frac{dy}{dx} = \frac{[(e^x + 1)(e^x) - e^x(e^x)]}{(e^x + 1)^2}$
 $= \frac{[e^{2x} + e^x - e^{2x}]}{(e^x + 1)^2} = \frac{e^x}{(e^x + 1)^2}$

8. $y = (4x - 3)^3 + (5x - 2)^2$ Calculate y_1
(SM, MCQ-Bank) (MQP(1) 2 Marks-Dec'24, MQP (2) 2 Marks Dec'25)

- (a) $182x^2 + 13x + 29$
(b) $96x^2 + 13x + 29$
(c) $192x^2 + 238x - 88$
(d) $192x^2 - 238x + 88$

Ans. (d)

Solution: $y = (4x - 3)^3 + (5x - 2)^2$
 $y_1 = 3(4x - 3)^2 \cdot 4 + 2(5x - 2) \cdot 5$
 $= 12(16x^2 - 24x + 9) + 10(5x - 2)$
 $= 192x^2 - 288x + 108 + 50x - 20$
 $= 192x^2 - 238x + 88$

9. $\frac{x^2}{16} + \frac{y^2}{4} = 1$ is an Implicit function. The derivative of this function is — (SM, MCQ-Bank, MQP (1) 2 Marks Dec'25)

- (a) $\frac{x}{4y}$ (b) $-\frac{x}{4y}$
(c) $\frac{x}{2y}$ (d) $-\frac{x}{2y}$

Ans. (b)

Solution: $\frac{x^2}{16} + \frac{y^2}{4} = 1$
Differentiate implicitly: $\frac{2x}{16} + \frac{2y \cdot dy}{4 \cdot dx} = 0$
 $\frac{x}{8} + \frac{y \cdot dy}{2 \cdot dx} = 0 \mid \frac{y \cdot dy}{2 \cdot dx} = -\frac{x}{8} \mid \frac{dy}{dx} = -\frac{x}{(4y)}$

10. The result of differentiation of $y = \log[3x^2 + 13x + 10]$ is _____. (SM, MCQ-Bank)

- (a) $\frac{6x^2 + 13x}{3x^2 + 13x + 10}$
(b) $\frac{6x + 13}{3x^3 + 13x^2 + 10x}$
(c) $\frac{6x + 13}{3x^2 + 13x + 10}$
(d) $\frac{19}{6x + 13}$

Ans. (c)

Solution: $y = \log(3x^2 + 13x + 10)$
 $\frac{dy}{dx} = \left[\frac{1}{3x^2 + 13x + 10} \right] \cdot (6x + 13)$
 $= \frac{6x + 13}{3x^2 + 13x + 10}$



11. A function is defined as follows : $f(x) = 2x - 1, x < 3, = k, x = 3, = 8 - x, x > 3$. For what value of k, $f(x)$ is continuous at $x = 3$? (SM, MQP (2) 2 Marks-June'25)



- (a) 4 (b) 5
(c) 3 (d) 6

Ans. (b)

Solution: For continuity at $x = 3$:

$$\lim_{x \rightarrow 3^-} f(x) = (2 \times 3) - 1 = 5$$

$$\lim_{x \rightarrow 3^+} f(x) = (8 - 3) = 5. \text{ | So, } k = 5.$$

12. If $y = x \log x$, the $\frac{dy}{dx}$ is: (PYP 2 Marks June'23)

- (a) $1 + \log x$ (b) $\log x$
(c) 1 (d) x

Ans. (a)

$$\begin{aligned} \text{Solution: } y &= x \log x \quad \left| \frac{dy}{dx} = x \left(\frac{dy}{dx} \log x \right) + \log x \left(\frac{dy}{dx} x \right) \right. \\ &= x \left(\frac{1}{x} \right) + \log x (1) = 1 + \log x. \end{aligned}$$

13. If $y = (2x + 3)^4$ then $\frac{dx}{dy}$ is:

(PYP 2 Marks June'24)

- (a) $4(2x + 3)^3$ (b) $8(2x + 3)^3$
(c) $32x^3$ (d) $8(2x + 3)$

Ans. (b)

Solution: Let, $z = (2x + 3)$, Therefore, $\frac{dz}{dx} = 2$

$$\text{Now, } y = (2x + 3)^4 \quad | \quad y = z^4 \quad | \quad \frac{dy}{dz} = 4z^3$$

$$\frac{dy}{dx} = \left(\frac{dz}{dx} \right) \left(\frac{dy}{dz} \right) = 2(4z^3) = 8z^3 = 8(2x + 3)^3$$

14. For the function $y = x^3 - 3x$, the value of x for which $\frac{dy}{dx} = 0$ is (PYP 2 Marks Dec'25)

- (a) ± 1 (b) $+1$
(c) ± 3 (d) $\pm \sqrt{3}$

Ans: (a)

$$\begin{aligned} \text{Solution: } \frac{dy}{dx} &= 3x^2 - 3 = 0 \quad 3x^2 = 3 \Rightarrow \\ x^2 &= 1 \Rightarrow x = \pm 1 \end{aligned}$$

15. If $f(x) = ax + b$ and $f(-1) = 3$, $f(1) = 5$, then the value of $f(2)$ is (PYP 2 Marks Dec'25)

- (a) 0 (b) 1
(c) 6 (d) 4

Ans: (c)

Solution: $f(-1) = 3$:

$$a(-1) + b = 3$$

$$-a + b = 3 \quad \dots (1)$$

$f(1) = 5$:

$$a(1) + b = 5$$

$$a + b = 5 \quad \dots (2)$$

Add equations (1) and (2):

$$(-a + b) + (a + b) = 3 + 5$$

$$2b = 8$$

$$b = 4$$

Substitute $b = 4$ in equation (2):

$$a + 4 = 5$$

$$a = 1$$

$$\text{So, } f(x) = x + 4$$

$$\text{Find } f(2): f(2) = 2 + 4 = 6$$

3.2

REVENUE AND COST FUNCTION

Quick Review of Important Concepts

Revenue Concepts

- Total Revenue (TR):** $TR = P \times Q$
(Price $\times$ Quantity sold)
- Marginal Revenue (MR):** $MR = TR_{n+1} - TR_n = \frac{d(TR)}{dQ}$
(change in TR from selling one more unit; slope of TR curve)
- Average Revenue (AR):** $AR = \frac{TR}{Q} = P$
(equal to Price per unit)

Cost Concepts

- Total Cost (TC):** $TC = TFC + TVC$
(Fixed Cost + Variable Cost)
- Total Fixed Cost (TFC):** Cost that does **not change** with output (e.g., rent, license fee).
- Total Variable Cost (TVC):** Cost that **varies** with output (e.g., raw materials, wages).
- Average Cost (AC):** $AC = \frac{TC}{Q}$
- Average Fixed Cost (AFC):** $AFC = \frac{TFC}{Q}$



- **Average Variable Cost (AVC):** $AVC = \frac{TVC}{Q}$
- **Marginal Cost (MC):** $MC = TC_{n+1} - TC_n = \frac{d(TC)}{dQ}$

(extra cost of producing one more unit; independent of fixed cost)

Profit: $\text{Profit} = TR - TC$

- **Profit Maximization Condition:**

- * First order: $\frac{d(\text{Profit})}{dQ} = 0$
- * Second order: $\frac{d^2(\text{Profit})}{dQ^2} < 0$
- * Implies: $MR = MC$

Break-even Point (BEP)

- The output level where: $TR = TC$ or $\text{Profit} = 0$
- No profit, no loss situation.

Multiple Choice Question (MCQ)



16.A soft-drink manufacturer has a revenue function $R = 7Q^2 - 19Q + 30$ and the cost function is given by $9Q$. Find the number of cans produced by the firm, under perfect competition.

(SM, MCQ-Bank, MQP(2) 2 Marks-Dec'24)

- (a) 2 (b) 4
(c) 6 (d) 8

Ans. (a)

Solution: $R = 7Q^2 - 19Q + 30, C = 9Q$

$$MR = \frac{dR}{dQ} = 14Q - 19 \mid MC = \frac{dC}{dQ} = 9$$

$$\text{Set } MR = MC: 14Q - 19 = 9 \mid 14Q = 28 \mid Q = 2$$

17.A tin manufacturer has a revenue function given by: $R = 11Q^2 - 110Q + 70$ and the cost function is given by: $C = 22Q$. Find the number of tins to be produced by the manufacturer.

(SM, MCQ-Bank, MQP (1) 2 Marks Dec'25)

- (a) 2 (b) 6
(c) 10 (d) 14

Ans. (b)

Solution: $R = 11Q^2 - 110Q + 70, C = 22Q$

$$MR = \frac{dR}{dQ} = 22Q - 110 \mid MC = \frac{dC}{dQ} = 22$$

$$\text{Set } MR = MC: 22Q - 110 = 22 \mid 22Q = 132 \mid Q = 6$$



18.A demand function is given by: $P = a - bQ$ and the cost function is given by $C = Q^2$. Find the value of Q for which profit will be maximum under perfect competition. (SM, MCQ-Bank, MQP(1) 2 Marks-Dec'24)

- (a) $\frac{a}{(a+1)}$ (b) $\frac{a}{2(b+1)^2}$
(c) $\frac{a}{2(b+1)}$ (d) $\frac{b}{2(a+1)}$

Ans. (c)

Solution: $P = a - bQ, C = Q^2$

$$R = P \cdot Q = (a - bQ)Q = aQ - bQ^2$$

$$MR = \frac{dR}{dQ} = a - 2bQ \mid MC = \frac{dC}{dQ} = 2Q$$

$$\text{Set } MR = MC: a - 2bQ = 2Q \mid a = 2Q + 2bQ \\ = 2Q(1 + b) \mid Q = \frac{a}{2(b+1)}$$



19.The demand function is given by: $P = 1400 - 25Q$ and the cost function is given by $C = 10Q^2$. Find the value of Q at the equilibrium point.

(SM, MCQ-Bank, MQP(1) 2 Marks-June'24)

- (a) 10 (b) 20
(c) 30 (d) 40

Ans. (b)

Solution: $P = 1400 - 25Q, C = 10Q^2$

$$R = P \cdot Q = (1400 - 25Q)Q = 1400Q - 25Q^2$$

$$MR = \frac{dR}{dQ} = 1400 - 50Q \mid MC = \frac{dC}{dQ} = 20Q$$

$$\text{Set } MR = MC: 1400 - 50Q = 20Q$$

$$1400 = 70Q \mid Q = 20$$

20.A revenue function is given by $R = 3Q^2 - 8Q + 15$ and the cost function is given by: $C = 28Q$. Find the value of Q for achieving highest profit. (SM, MCQ-Bank)

- (a) 3 (b) 9
(c) 6 (d) 12

Ans. (c)

Solution: $R = 3Q^2 - 8Q + 15, C = 28Q$

$$MR = \frac{dR}{dQ} = 6Q - 8 \mid MC = \frac{dC}{dQ} = 28$$

$$\text{Set } MR = MC: 6Q - 8 = 28 \mid 6Q = 36 \mid Q = 6$$

21.The demand function is given by: $P = 1500 - 3Q$ and the cost function is given by $C = 12Q^2$. Find the value of Q at the equilibrium point.

(SM, MCQ-Bank)

- (a) 50 (b) 100
(c) 150 (d) 125

Ans. (a)

Solution: $P = 1500 - 3Q, C = 12Q^2$ Revenue R

$$= P \times Q = (1500 - 3Q)Q = 1500Q - 3Q^2$$

$$MR = \frac{dR}{dQ} = 1500 - 6Q \mid MC = \frac{dC}{dQ} = 24Q$$

$$\text{Set } MR = MC: 1500 - 6Q = 24Q \rightarrow 1500 = 30Q \rightarrow Q = 50$$

CHAPTER 5: MEASURES OF CENTRAL TENDENCY AND DISPERSION



LDR Questions

Q 2, Q 3, Q 13, Q 16, Q 140, Q 143, Q 152, Q 175, Q 220, Q 227

5.1

MEAN, MEDIAN, MODE, MEAN DEVIATION

Quick Review of Important Concepts

Arithmetic Mean (A.M)

Definition: Sum of observations ÷ Number of observations.

Formulas:

(a) Individual Series / Discrete Data

- Direct Method: $\bar{X} = \frac{\sum X}{N}$
- Short-Cut / Assumed Mean Method: $\bar{X} = A + \frac{\sum d}{N}$, where $d = X - A$
- Step-Deviation Method: $\bar{X} = A + \frac{\sum d'_i}{N} \times i$, $d'_i = \frac{X-A}{i}$

(b) Grouped Data

- Direct: $\bar{X} = \frac{\sum fX}{\sum f}$
- Short-Cut: $\bar{X} = A + \frac{\sum fd}{\sum f}$
- Step-Deviation: $\bar{X} = A + \frac{\sum fd'_i}{\sum f} \times i$

(c) Combined Mean $\bar{X}_c = \frac{n_1 X_1 + n_2 X_2 + \dots + n_k X_k}{n_1 + n_2 + \dots + n_k}$

(d) Weighted Mean $\bar{X}_w = \frac{\sum w_i X_i}{\sum w_i}$

Geometric Mean (G.M)

Definition: n-th root of product of all observations.

Formulas:

(a) Individual Series: $G.M = \sqrt[n]{X_1 X_2 \dots X_n} = \text{antilog} \left(\frac{\sum \log X_i}{n} \right)$

(b) Discrete / Frequency Data: $G.M = \text{antilog} \left(\frac{\sum f_i \log X_i}{\sum f_i} \right)$

(c) Grouped / Continuous Data:

$$G.M = \text{antilog} \left(\frac{\sum f_i \log m}{\sum f_i} \right), m = \text{mid - value of class}$$

(d) Weighted G.M: $G.M = \text{antilog} \left(\frac{\sum w_i \log X_i}{\sum w_i} \right)$

(e) Combined G.M:

$$G_c = (G_1^{n_1} \cdot G_2^{n_2} \dots G_k^{n_k})^{1/(n_1 + n_2 + \dots + n_k)}$$

Property: $G.M \leq A.M$ (for positive numbers)

Harmonic Mean (H.M)

Definition: Reciprocal of the arithmetic mean of reciprocals.

Formulas:

(a) Individual Series: $H.M = \frac{n}{\sum \frac{1}{X_i}}$

(b) With Frequency: $H.M = \frac{\sum f_i}{\sum \frac{f_i}{X_i}}$

(c) Weighted H.M: $H.M = \frac{\sum w_i}{\sum \frac{w_i}{X_i}}$

Property: $H.M \leq G.M \leq A.M$



Median (Md)

Definition: Middle value dividing data into two equal parts

- Ungrouped (n odd): $Md = \frac{n+1}{2}$ th term
- Ungrouped (n even): $Md = \text{Average of } \frac{n}{2}\text{th and } (\frac{n}{2} + 1)\text{th term}$
- Grouped (less than type): $Md = l + \frac{\frac{N}{2} - C_f}{f} \times h$
- Grouped (greater than type): $Md = l + \frac{\frac{N}{2} - C'_f}{f} \times h$

Partition Measures:

- Quartiles: $Q_k = l + \frac{kN/4 - C_f}{f} \times h$
- Deciles: $D_k = l + \frac{kN/10 - C_f}{f} \times h$
- Percentiles: $P_k = l + \frac{\frac{kN}{100} - C_f}{f} \times h$

Mode (Mo)

Definition: Most frequently occurring value

- Ungrouped / Discrete: Value with highest frequency
- Grouped: $Mo = l + \frac{f_1 - f_0}{2f_1 - f_0 - f_2} \times h$

Where:

- l=lower boundary of modal class
- f_1 =frequency of modal class
- f_0 =frequency before modal class
- f_2 =frequency after modal class
- h=width of modal class

AM, Median, Mode (Empirical): $\text{Mode} = 3 \times \text{Median} - 2 \times \text{AM}$

Multiple Choice Question (MCQ)

1. Which one of the following is a Positional Average? (SM, MCQ-Bank) (MQP(1) 2 Marks-Dec'24, Dec'25 MQP(2) Dec'25)

- (a) Geometric Mean (b) Harmonic Mean
(c) Mode (d) Progressive Average

Ans. (c)

Solution: Positional average is Mode, as it is the value with highest frequency.



2. Because of heavy rain on Sunday average rainfall of a city for the week increased to 0.6 inch from the average rainfall 0.3 inch measured from Monday to Saturday. The rainfall on Sunday was (SM, MCQ-Bank) (MQP(1) 2 Marks-June'23 and Dec'23 and June'24 and Dec'25, (MQP(2) 2 Marks-Dec'24)

- (a) 2.4 inch (b) 0.3 inch
(c) 2.1 inch (d) 1.5 inch

Ans. (a)

Solution: Average rainfall for 7 days
 $= 0.6$ inch, so total rainfall $= 0.6 \times 7$
 $= 4.2$ inch. Rainfall Mon – Sat $= 0.3 \times 6$
 $= 1.8$ inch. Rainfall on Sunday
 $= 4.2 - 1.8 = 2.4$ inch.

3. The mean of the frequency distribution $((x_1, f_1), (x_2, f_2), (x_3, f_3) \dots \dots, (x_n, f_n))$ is (SM, MCQ-Bank) (MQP(2) 2 Marks-Dec'24)

- (a) $\frac{\sum x}{\sum f}$ (b) $\frac{\sum x}{n}$
(c) $\frac{\sum fx}{n}$ (d) $\frac{\sum fx}{\sum f}$

Ans. (d)

4. $\sum_{x=1}^{20} x = 54120$ is ; While computing this, it was observed that two entries were wrongly entered as 850 and 320 instead of 580 and 230. Correct value of $\bar{x}$ is (SM, MCQ-Bank) (MQP(1) 2 Marks-Dec'24, Dec'25)

- (a) 2688 (b) 2746.5;
(c) 2720 (d) 2662

Ans. (a)

Solution: Incorrect sum $= 54120$, Correct sum
 $= 54120 - 850 - 320 + 580 + 230$
 $= 53760, n = 20, \bar{x} = \frac{53760}{20} = 2688$



5. $\sum(X - \bar{X})$ is always equal to
(SM, MCQ-Bank) (MQP(1) 2 Marks-Dec'24, MQP(2) 2 Marks-Dec'25)

(a) 1 (b) -1
(c) 0 (d) ∞

Ans. (c)

6. The sum of the squares of deviations of a set of observations is the minimum when deviations are taken from the _____. (SM, MCQ-Bank) (MQP(1) 2 Marks-June'23 and Dec'23 and (MQP(2) 2 Marks-Dec'24, Dec'25)

(a) Geometric Mean (b) Harmonic Mean
(c) Arithmetic Mean (d) Mode

Ans. (c)

7. If each of the values of a variable x with mean $\bar{x}$, is multiplied by K then the new mean of the variable is (SM, MCQ-Bank)

(a) $\frac{\bar{x}}{K}$ (b) $K\bar{x}$
(c) $\bar{x}$ (d) Kx

Ans. (b)

8. Assumed mean is 35, $\sum fd = -425$ and $\sum f = 63$. $\bar{x}$ is (SM, MCQ-Bank) (MQP(1) 2 Marks-Dec'24)

(a) 20 (b) 25.87
(c) 28.25 (d) 19.34

Ans. (c)

Solution: $\bar{X} = \text{Assumed mean} + \left(\frac{\sum fd}{\sum f}\right) = 35 + \left(-\frac{425}{63}\right) = 35 - 6.746 = 28.254$

9. If $A = 500$, $i = 1000$ and $\sum fd' = 232$ and $\sum f = 120$ $\bar{x}$ is (SM, MCQ-Bank) (MQP(2) 2 Marks-June'25)

(a) 2433.33 (b) 527.84
(c) 527.84 (d) 1017.24

Ans. (a)

Solution: $\bar{X} = A + \left(\frac{\sum fd'}{\sum f}\right) \times i = 500 + \left(\frac{232}{120}\right) \times 1000 = 500 + 1.9333 \times 1000 = 500 + 1933.33 = 2433.33$

10. The mean daily salary paid to all employees in a certain company was ₹600. The mean daily salaries paid to the male and female employees were ₹620 and ₹520 respectively. Male to female employees ratio in the company is

Marks	4	5	6	7	8	9
No of Students	8	10	9	6	4	3

(SM, MCQ-Bank) (MQP(1) 2 Marks-June'23 and Dec'23 and June'24 and Dec'24 and June'25, MQP(2) 2 Marks-Dec'25)

(a) 3:2 (b) 4:5
(c) 5:7 (d) 4:1

Ans. (d)

Solution: Let ratio be $m:f$.

Then $620m + 520f = 600(m + f)$,
solving gives $20m = 80f$, so $m:f = 4:1$

11. The pass result of 50 students who took up a class test is given below:

If the average marks for all the fifty students was 5.16, the average marks of the students who failed is. (SM, MCQ-Bank) (MQP(1) 2 Marks-Dec'24, Dec'25)

(a) 0.42 (b) 3.06
(c) 4.74 (d) 2.1

Ans. (d)

Solution: Total passed students = 40 students.
Total marks = $50 \times 5.16 = 258$ marks.

Sum = $32 + 50 + 54 + 42 + 32 + 27 = 237$ marks.

Total marks of failed students = Total marks - Passed students' marks
= $258 - 237 = 21$ Marks

Average marks of failed students

$$= \frac{\text{Total marks of failed students}}{\text{Number of failed students}} = \frac{21}{10} = 2.1$$

12. For a certain frequency table which has only been partly reproduced below for which the mean is 1.46

No of accidents	0	1	2	3	4	5
Frequency	46	f_1	f_2	25	10	5

If $\sum f = 200$ Unknown frequencies are

(SM, MCQ-Bank, MQP(1) 2 Marks-Dec'25)

(a) $f_1 = 0, f_2 = 114$ (b) $f_1 = 114, f_2 = 0$
(c) $f_1 = 76, f_2 = 38$ (d) $f_1 = 57, f_2 = 57$

Ans. (c)

Solution: $\sum f = 200$, so $46 + f_1 + f_2 + 25 + 10 + 5 = 200$, $f_1 + f_2 = 114$.

Mean = $1.46 = \frac{0 \times 46 + 1 \times f_1 + 2 \times f_2 + 3 \times 25 + 4 \times 10 + 5 \times 5}{200}$

$$= \frac{f_1 + 2f_2 + 75 + 40 + 25}{200} = \frac{f_1 + 2f_2 + 140}{200}. \text{ So } 1.46 \times 200 = f_1 + 2f_2 + 140, 292 = f_1 + 2f_2 + 140,$$

$$f_1 + 2f_2 = 152.$$

$$\text{Solving: } f_1 + f_2 = 114, f_1 + 2f_2 = 152, \text{ subtract: } f_2 = 38, f_1 = 76.$$



13. The sum of the deviations of a certain number of observations measured from 4 is 72 and the sum of the deviations of the observations from 7 is -3. Mean of the observations is. (SM, MCQ-Bank) (MQP(1) 2 Marks-June'23 and Dec'23 and June'24 and (MQP(2) 2 Marks-Dec'24, Dec'25)

(a) 6.88
(b) 25
(c) 3.63
(d) Cannot be ascertained with given data

Ans. (a)

Solution: Let n be number of observations.

$$\sum(x - 4) = 72 \mid \sum x - 4n = 72.$$

$$\sum(x - 7) = -3 \mid \sum x - 7n = -3.$$

$$\text{Subtract: } (\sum x - 4n) - (\sum x - 7n)$$

$$= 72 - (-3) \mid 3n = 75 \mid n = 25.$$

$$\text{Then } \sum x = 72 + 4 \times 25 = 172 \mid$$

$$\text{mean} = \frac{172}{25} = 6.88.$$



14. The mean of a certain number of items is 42. If one more item 64 is added to the data, the mean becomes 44. The no. of items in the original data is _____ (SM, MCQ-Bank) (MQP(1) 2 Marks-June'23 and Dec'23 and June'25, Dec'25)

- (a) 20 (b) 10
(c) 43 (d) 440

Ans. (b)

Solution: Let original number be n .

Original sum = $42n$ | New sum = $42n + 64$.

New mean = 44

$$= \frac{42n + 64}{n+1} | 44(n+1) = 42n + 64 |$$

$$44n + 44 = 42n + 64 | 2n = 20 | n = 10.$$

15. The weighted average from the following observation is ₹46.23

Price per tonne (₹)	45.60	50.70	?
Tonnes Purchased	135	40	25

Simple average of the observation is. (MCQ-Bank) (SM, MQP(1) 2 Marks-June'23 and Dec'23 and (MQP(2) 2 Marks-Dec'24 and June'25, Dec'25)

- (a) ₹46.23 (b) ₹46.26
(c) ₹66.63 (d) ₹46.24

Ans. (b)

Solution: Weighted average

$$= \frac{45.60 \times 135 + 50.70 \times 40 + P \times 25}{135 + 40 + 25} = 46.23.$$

$$\text{Solve: } \frac{6156 + 2028 + 25P}{200} = 46.23, 8184 + 25P$$

$$= 9246, 25P = 1062 | P = 42.48.$$

$$\text{Simple average} = \frac{45.60 + 50.70 + 42.48}{3} = \frac{138.78}{3} = 46.26.$$



16. In a certain factory a unit of work is completed by A in 4 minutes, by B in 5 minutes, by C in 6 minutes, by D in 10 minutes, and by E in 12 minutes. Average number of units of work completed per minute is. (SM, MCQ-Bank) (MQP(1) 2 Marks-June'24 and Dec'24)

- (a) $\frac{25}{4}$ (b) $\frac{5}{48}$
(c) $\frac{4}{25}$ (d) $\frac{25}{48}$

Ans. (c)

Solution: Work rate of each worker:

Work rate = Work done per minute

$$= \frac{1 \text{ unit}}{\text{time in minutes}}. \text{ Total work done per minute:}$$

$$= \frac{15}{60} + \frac{12}{60} + \frac{10}{60} + \frac{6}{60} + \frac{5}{60} = \frac{15+12+10+6+5}{60} = \frac{48}{60} = \frac{4}{5}.$$

Average work done per minute:

$$\text{Average} = \frac{\text{Total units per minute}}{5} = \frac{\frac{4}{5}}{5} = \frac{4}{25}$$

17. A person walks 8 km at 4km an hour, 6km at 3km an hour and 4km at 2km an hour. Average speed per hour is (MCQ-Bank) (SM, MQP(1) 2 Marks-June'24 and (MQP(2) 2 Marks-Dec'24, Dec'25)

- (a) 0.33 (b) 2
(c) 3 (d) 0.5

Ans. (c)

Solution: Total distance = $8 + 6 + 4 = 18$ km.

$$\text{Time for 8km at } \frac{4\text{km}}{\text{h}} = 2\text{h} | 6\text{km at } \frac{3\text{km}}{\text{h}} = 2\text{h} |$$

$$4\text{km at } \frac{2\text{km}}{\text{h}} = 2\text{h. Total time} = 6\text{h.}$$

$$\text{Average speed} = \frac{18}{6} = \frac{3\text{km}}{\text{h}}$$

18. It is the most suitable average when it is desired to give greater weight to smaller observations and less weight to larger ones. It is _____. (SM, MCQ-Bank) (MQP(1) 2 Marks-June'23 and Dec'23 and June'24 and (MQP(2) 2 Marks-June'25, Dec'25)

- (a) AM (b) HM
(c) GM (d) Median

Ans. (b)

19. Which one of the following is not a feature of Arithmetic Mean (AM)? (SM, MCQ-Bank, MQP (1 & 2) 2 Marks Dec'25)

- (a) AM is affected very much by extreme values.
(b) AM is widely used in the study of qualitative phenomenon.
(c) AM provides a good basis for comparison.
(d) AM is rigidly defined so different interpretation by different people are not possible.

Ans. (b)

20. Which one of the following is a feature of Geometric Mean (GM)? (SM, MCQ Bank)

- (a) GM is affected much by the presence of externally small or large observations.
(b) GM gives the actual value of the series
(c) GM is useful when a given phenomenon has a limit for lower value.
(d) GM is imaginary if any of the observations is zero

Ans. (c)

21. If $y = 3x + 30$ and mean of x is 20, then the mean of y is (MQP (2) 2 Marks-Dec'24)

- (a) 90 (b) 80
(c) 70 (d) 100

Ans. (a)

Solution: $y = 3x + 30$,

$$\text{Mean of } y = 3 \times 20 + 30 = 90$$

22. $\bar{X}$ of 20 terms was found to be 35. But afterwards it was detected that two terms 42 and 34 were misread as 46 and 39 respectively. Find correct $\bar{X}$ (MQP (1) 2 Marks-June'25)

- (a) 34.55 (b) 36.67
(c) 31.63 (d) 35.51

Ans. (a)



Solution: $\bar{X}$ of 20 terms = 35 | Incorrect Total of 20 terms = $35 \times 20 = 700$
 Correct Total = $700 + 42 + 34 - 46 - 39 = 691$
 Correct $\bar{X} = \frac{691}{20} = 34.55$

23. The mean of wages in factory A of 100 workers is ₹720 per week. The mean wages of 30 female workers in the factory is ₹650 per week. Find out average wage of male workers in the factory (MQP 1) 2 Marks-June'25)

- (a) 850 (b) 700
 (c) 750 (d) 800

Ans. (c)

Solution: $N_f + N_m = 100 = N$ |
 $\bar{X} = 720 =$ Mean wage of total workers
 $= \frac{\text{Total wage of all workers}}{N}$ | So total wage of all workers = $720 \times N = 720 \times 100 = 72000$ $\bar{X}_f = 650$
 $=$ Mean wage of total female workers
 $= \frac{\text{Total wage of female workers}}{N_f}$, So total wage of female workers = $650 \times N_f = 650 \times 30 = 19500$
 So total wage of male workers = $72000 - 19500 = 52500$. No of male workers in the factory = $100 - 30 = 70$, So Mean wage of total male workers = $\bar{X}_m = \frac{52500}{70} = ₹750$ per week

24. The sum of deviations of a certain number of observations (ungrouped data) measured from 4 is 72 and the sum of the deviations of the observations from 7 is -3. Find the number of observations and their mean. (MQP 2) 2 Marks-June'25)

- (a) 30 observations, mean = 7.2
 (b) 25 observations, mean = 6.88
 (c) 25 observations, mean = 7
 (d) 30 observations, mean = 6.5

Ans. (b)

Solution: In this problem mean is obtained by the formula $\bar{X} = A + \frac{\sum d}{n}$, So by question we can write that $4 + \frac{72}{n} = 7 - \frac{3}{n}$ | $4n + 72 = 7n - 3$
 $3n = 75$ | $n = 25$ | so mean = $4 + \frac{72}{25} = 6.88$

25. In a class of 50 students, 10 students failed with an average of 2.5 marks. The total marks of the class were 200. Find the average marks of the passed students. (MQP 2) 2 Marks- June'25)

- (a) 4 (b) 4.5
 (c) 4.375 (d) 5

Ans. (c)

Solution: Average marks of passed students
 $= \frac{200 - 10 \times 2.5}{40} = \frac{200 - 25}{40} = \frac{175}{40} = 4.375$

26. A class has 50 students with average weight of 45 kgs. Out of these there are 30 girls with average weight of 42.5 kgs. Find average weight of boys. (MQP 2) 2 Marks- June'25)

- (a) 48.25 (b) 49.50
 (c) 50.90 (d) 48.75

Ans. (d)

Solution: $\bar{X} = \frac{X_1 \times n_1 + X_2 \times n_2 + \dots + X_n \times n_n}{n_1 + n_2 + \dots + n_n}$ |

$\bar{X}$ = combined mean of boys and girls = 45 and
 n = Total of boys and girls = 50 | $\bar{X}_1$ = Mean of girls = 42.5 and n_1 = Total of girls = 30 | Total of boys = $n_2 = n - n_1 = 50 - 30 = 20$ | Total weight of boys and girls = $\bar{X} \times n = 45 \times 50 = 2250$ | Total weight of girls = $\bar{X}_1 \times n_1 = 42.5 \times 30 = 1275$ | Total weight of boys = Total weight of boys and girls - Total weight of girls = $2250 - 1275 = 975$,
 So Average weight of boys = $\frac{975}{20} = 48.75$

27. Mean weight of students in a class is 48 kg. If mean weight of girl students is 40 kg. and that of boys is 60 kg. (MQP 2) 2 Marks- June'25)

- (a) Boys = 50%, Girls = 50%
 (b) Boys = 40%, Girls = 60%
 (c) Boys = 30%, Girls = 70%
 (d) Boys = 60%, Girls = 40%

Ans. (b)

Solution: Let there are x no of boy students. So there are $75 - x$ no of girls So by question we can write: $48 = \frac{x \times 60 + (75 - x) \times 40}{75}$ | $75 \times 48 = 60x + 75 \times 40 - 40x$ | $3600 = 20x + 3000$ | $x = \frac{600}{20} = 30$ | So no of girls students = $75 - 30 = 45$ % age of boys and girls = $\frac{30}{75} \times 100 = 40\%$ and $\frac{45}{75} \times 100 = 60\%$

28. For a shoemaker, which one of the following measures is most suitable to decide on the shoe sizes to manufacture? (PYP 1 Mark June'13)

- (a) Median (b) Arithmetic mean
 (c) Mode (d) Geometric mean

Ans. (c)

29. _____ is known as positional average. (PYP 1 Mark Dec'15)

- (a) Median (b) Mean
 (c) Mode (d) Range

Ans. (a)

30. The average discovers: (PYP 1 Mark Dec'15)

- (a) Uniformity in variability
 (b) Variability in uniformity of distribution
 (c) Both (a) and (b)
 (d) None of these

Ans. (a)

31. Median is: (PYP 1 Mark June'16)

- (a) Average point
 (b) Mid-point
 (c) Most likely point
 (d) Most remote point

Ans. (b)



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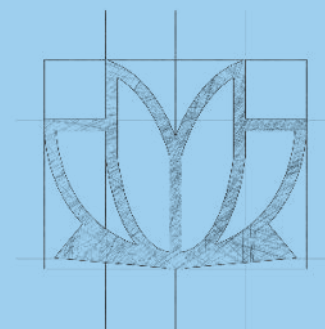
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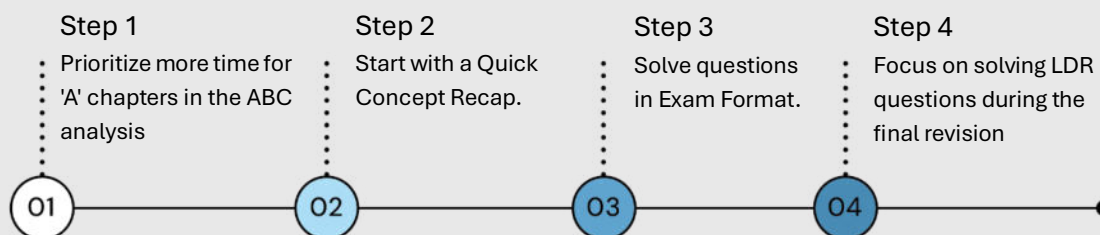
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Use this powerful summary for a quick brush-up on key concepts before you attempt the chapter. This helps you identify and understand the core principles. If a question gives you trouble, return to this section / main study material to solidify the concept, then come back and solve it again.

**Step 3: Practice in Exam Format**

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**Step 4: Last Day Revision (LDR)**

Focus on solving LDR questions during the final revision. On the day before your exam, prioritize these questions as they cover the most critical concepts from each chapter. You'll find a quick summary of LDR question numbers listed right before each chapter for easy reference.

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3.3	Commercial Banks and Central Bank	16	12	8	4	8	5.6	3.5 - 3.8
3.4	Measures of Credit Control and Money Market		4	2	8	8	4.4	3.8 - 3.11
4	Economic and Business Environment							4.1 - 4.11
4.1	Political, Economic, Social, Technological, Environmental and	2	14	12	10		8	4.1 - 4.9
4.2								4.9 - 4.11
5								5.1 - 5.48
6								5.1 - 5.5

05

Prioritize using ABC Analysis

Each chapter is categorized as A , B or C

A : Very Important, Read on priority

B : Moderately Important

C : Less Critical but still essential



44. Who introduced the concept of the five functions of management? (PYP 2 Marks Dec'20)

- (a) Peter Drucker (b) Frederick Taylor
(c) Henri Fayol (d) Elton Mayo
Ans. (c)

5.2

STEWARDSHIP THEORY AND AGENCY THEORY OF MANAGEMENT

Quick Review of Important Concepts

04

Topic-wise Break up

Stewardship Theory

- Developed by Davis, Schoorman and Donaldson (2005).
- View: Managers are stewards of the organization's resources and are accountable to the shareholders for the growth, reputation, and financial performance of the organization.
- No conflict of interest between managers and shareholders.
- Governance: Managers are expected to separate CEO and Chairman roles.
- Motivation: Intrinsic (integrity, responsibility, autonomy).
- Outcome: Maximization of shareholders' wealth and satisfaction of multiple stakeholders.

Agency Theory

- Developed by Michael and Jensen (1972), Jensen and Meckling (1976).
- View: Managers are agents, i.e. self-interested, opportunistic, may misuse resources.
- Conflict (Agency costs) between principals and managers (agents).
- Problem: Information asymmetry, risk shifting, asset substitution.
- Agency Costs:
 - Bonding (paying the agent to do the right thing)
 - Monitoring (supervising, independent directors, incentive contracts)
 - Mutual benefit (corporate benefits, promotions, salaries)

Key Differences

Issue	Stewardship Theory	Agency Theory
Basic	Psychology and sociology	Economics
Model of Man	Self-actualizing	Economic
Behavior	Collective serving	Self-serving
Motivation	Intrinsic (growth, responsibility)	Extrinsic (money, rewards)
Performance Focus	Stakeholder value	Shareholder value
Control	Self-control	External control
Objectives	Multiple	Single
Culture	Cooperative	Competitive
Time Frame	Long-term	Short-term
Approach to monitoring	Trust	Suspicion
Governance Role	Advice, advisory	Monitoring, control
Decision-making	Managers have discretion	Shareholders have control

Includes 100% coverage of SM + MCQ Bank + MQP + PYP

03

Multiple Choice Question (MCQ)

45. Agency theory suggests that managers are agents, particularly those of large companies. (a) Workers (b) Shareholders (c) Subordinates (d) Employees

(SM, MCQ Bank, MQP [2] 2 Marks

Dec'25, June'26)



Quick Review of Important Concepts

Pricing Strategies

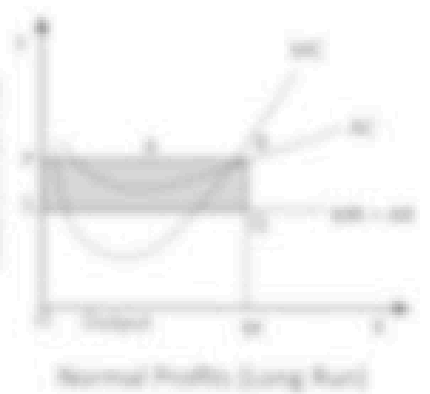
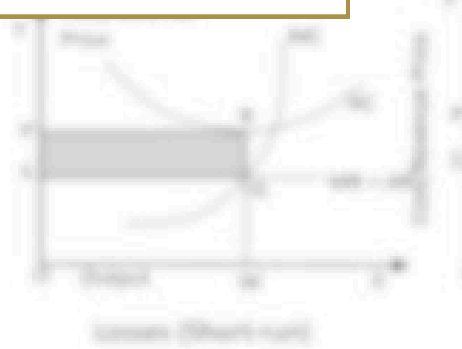
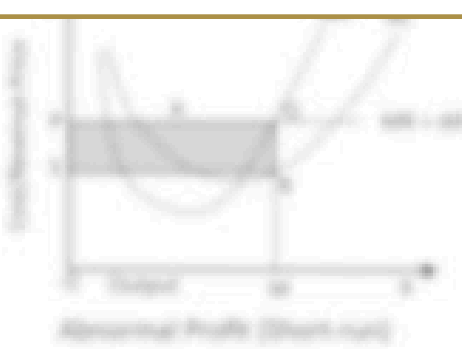
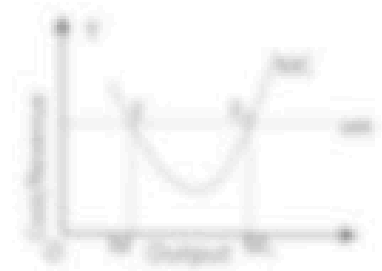
- ⇒ **Cost-plus pricing** – Add a profit % to production cost.
- ⇒ **Limit pricing** – Low price to prevent new entrants.
- ⇒ **Penetration pricing** – Low initial price to gain market share.
- ⇒ **Price discrimination** – Different prices for different segments.
- ⇒ **Psychological pricing** – Prices like ₹3.99 instead of ₹4.
- ⇒ **Dynamic pricing** – Flexible pricing via technology (common online).
- ⇒ **Price leadership** – Dominant firm sets price; others follow.
- ⇒ **Target pricing** – Price to achieve a specific ROI.
- ⇒ **Absorption pricing** – Cost + proportion of fixed costs.
- ⇒ **High-low pricing** – Regular high prices with discounts/promotions.
- ⇒ **Marginal-cost pricing** – Price = extra cost of producing one more unit.



02

Concept Summary

Sharpen your memory with lightning-fast concepts recap before you hit the questions. Also perfect for the final 1.5-day revision!





Quick Review of Important Concepts

Meaning of Management

- Management = managing people tactfully to achieve goals
- Provides leadership, coordination, and resource utilization
- Without management → resources remain idle

Definitions (Key Authors)

- **Agne Hasan Ali**: "Getting work done through people, but real management is developing people through work."
- **Henry Fayol**: Forecast, plan, organize, command, coordinate, control
- **Bassett and O'Donnell**: Creation of environment for group efficiency
- **Peter Drucker**: Manage business, managers, and workers
- **George R. Terry**: Planning, organizing, actuating, controlling

Nature of Management

1. Result oriented – aims at productivity and profits	1. Human approach – done through people
2. Process driven – ongoing activity	2. Dynamic – adapts to social and business changes
3. Science + Art – systematic knowledge + skills	3. Levels – top, middle, lower management
4. System of authority – rules and compliance	4. Intangible – results felt in performance and productivity
5. Leadership – managers influence subordinates	
6. Multidisciplinary – draws from economics, sociology, psychology, etc.	
7. Goal oriented – aims at set objectives	
8. Managers + owners – ownership and management overlap	

Management: Science vs Art

As Science	Practical knowledge and personal skill
• Universally accepted principles • Cause-effect relations • Based on observation, experiments • Predictability and validity	• Creativity and innovation • Perfection through practice • Goal oriented • Practical knowledge and personal skill
• Conclusion: Management = Knowledge + application	

Scope of Management

- **Economic Resource** – customer base, labour, capital, entrepreneur
- **System of Authority** – ensures rules and compliance
- **Class/Class** – managerial class as a distinct group with values

Management as a Profession

- Features of profession: body of knowledge, formal training, consultancy, association, code of conduct, societal service
- Management partially qualifies as a profession, efforts ongoing

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3.3	Commercial Banks and Central Bank	16	12	8	4	8	9.6	3-5 – 3-8	A
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ABC Analysis



Very Important,
Read on priority



Moderately
Important



Less critical but still
essential

Ensure you thoroughly read all chapters without skipping any. The ABC analysis is designed to help you prioritize based on past trends, but it should not replace comprehensive preparation.

WHAT DOES REVIEWER INCLUDE?

This Reviewer offers 100% coverage, including all questions from:

- SM: ICMAl Study Material Questions
- MCQ Bank
- PYP: Past Year Papers
- MQP: Model Question Papers (1 or 2 denotes MQP 1 or MQP 2)

CHAPTER 1: BASIC CONCEPTS



LDR Questions

Q 1, Q22, Q 49, Q 51, Q53, Q 143, Q146, Q 217, Q222, Q 225

1.1

THE FUNDAMENTALS OF ECONOMICS

Quick Review of Important Concepts

Definition of Economics

Economics is a social science that studies human activities related to earning and spending money. The central problem is: Unlimited human wants but Limited resources. This creates the problem of choice (deciding what to produce, how to produce, and for whom)

Subject Matter (4 parts)

1. **Consumption** → Using goods/services to satisfy wants.
2. **Production** → **Creating** utility using factors:
 - Land, Labour, Capital, Organisation.
3. **Exchange** → Trading **goods** (Barter → Money system).
4. **Distribution** → Sharing income as Rent, Wages, Interest, Profit.

Economist	Definition	Focus	Criticism
Adam Smith (1776)	Wealth definition	Economics = science of wealth	Ignored welfare
Alfred Marshall (1870)	Welfare definition	Economics = study of mankind in ordinary business of life	Ignored goods not linked to welfare
Lionel Robbins (1932)	Scarcity definition	Economics = choice under scarcity	Not universal, ignores growth
Samuelson (1948)	Growth definition	Economics = resource allocation now and future (dynamic)	Most accepted modern definition

Aspect	Microeconomics	Macroeconomics
Meaning	Study of individual units (consumer, firm, industry).	Study of aggregate economy (nation as a whole).
Focus	Price of goods, wages, individual incomes.	National Income, employment, output, inflation.
Also called	Price Theory	Income and Employment Theory
Founder/Developer	Alfred Marshall	J. M. Keynes, Ragnar Frisch

Aspect	Positive Economics	Normative Economics
Meaning	Describes “what is”	Suggests “what ought to be”
Nature	Objective, fact-based.	Subjective, value-judgment based.
Key Economist	Lionel Robbins	Alfred Marshall

Aspect	Economics as Science	Economics as Art
Meaning	Systematic body of knowledge (laws, theories).	Practical application of economics (policy, planning).
Nature	Theoretical, cause-effect.	Applied, rule based.
Key Point	“To Know”	“To Do”

Central Economic Problems

1. **What to produce?** Consumer goods vs Capital goods.
2. **How to produce?** Labour-intensive vs Capital-intensive techniques.
3. **For whom to produce?** Distribution among rich and poor (decided by government policies).



Multiple Choice Question (MCQ)



1. Who was the father of Economics (SM, MCQ Bank, MQP(1) 2 Marks-Dec'23 and June' Dec'24, Jun'23, Dec'25, PYP 1 Mark, Dec'17, MQP (2) 2 Marks June'26)
- (a) Marshall (b) Adam Smith
(c) Robbins (d) Keynes
Ans. (b)
2. Normative Economic theory deals with (SM, MCQ Bank, MQP (2) 2 Marks Dec'25, MQP (2) 2 Marks June'26)
- (a) What to produce
(b) How to produce
(c) Whom to produce
(d) How the problem should be solved
Ans. (d)
3. Microeconomics theory deals with. (SM, MCQ Bank, PYP 2 marks Jun'15, Jun'23, Jun'16, Jun'18, MQP (2) 2 Marks Dec'25)
- (a) Economy as a whole
(b) Individual units
(c) Economic growth
(d) all the above
Ans. (b)
4. Human wants are (SM, MCQ Bank, PYP 2 Mark Sep'15, Jun'16, Dec'23, Jun'24, MQP [1] 2 Marks Dec'25)
- (a) limited (b) unlimited
(c) undefined (d) None
Ans.(b)
5. The book "Principles of Economics" was written by _____ (SM)
- (a) Adam Smith (b) A. Marshall
(c) L. Robbins (d) J.B.Say
Ans. (b)
6. What is the central problem of all economies (SM)
- (a) What to produce?
(b) How to produce?
(c) Whom to produce?
(d) All the above.
Ans. (d)
7. Which is not the scope of macroeconomics. (SM)
- (a) Theory of Economic welfare
(b) Theory of Inflation
(c) Theory of Economic Growth
(d) Theory of Trade cycles.
Ans. (a)
8. Deductive method is also called (SM, MCQ Bank) (MQP(2) June'25_ 2 Marks)
- (a) Prior method (b) Abstract Method
(c) Analytical Method (d) All the above
Ans. (d)
9. Which of the following is an objective of business? (MQP(1) 2 Marks-June'23 and Dec'23)
- (a) Sales maximization
(b) Customer Satisfaction
(c) Financial Solvency
(d) All of the above
Ans. (d)
- 10.What does "Y" represent in the equilibrium equation $Y = C + I$? (MQP(1) 2 Marks-June'25)
- (a) Consumption demand
(b) National income (or output)
(c) Investment demand
(d) Savings
Ans. (b)
- 11.According to Adam Smith invisible hands are also called (MQP [1] 2 Marks Jun'25)
- (a) Price mechanism
(b) Demand-supply equilibrium
(c) Self-regulating market system
(d) Competitive market forces
Ans. (a)
- 12.In a Mixed Economy which sector is found? (PYP 1 Mark Sep'14, Dec'15)
- (a) Private only (b) Public sector only
(c) None (d) Both (a) and (b)
Ans.(d)
- 13.Economics cannot be given the status of science because (PYP 1 Mark Mar'16, Mar'15)
- (a) Of non-uniformity of opinion and approach of economist
(b) Economic behaviour of human being is unpredictable
(c) Measuring rod of money is unstable
(d) All the three
Ans.(d)
- 14.The central problem of how to produce is resolved by: (PYP 1 mark Mar'15)
- (a) Demand and supply of factor inputs
(b) Demand and supply of goods
(c) Relative prices and availability of factors of production
(d) Government intervention.
Ans.(c)
15. Economic resources are: (PYP 1 mark Jun'15)
- (a) Unlimited
(b) Limited in supply and use
(c) Limited in supply but has alternative uses
(d) Unproductive
Ans.(c)



16. Which of the following is not a central problem of a society? (PYP 1 mark Jun'15)

- (a) What to produce
- (b) How to produce
- (c) For whom to produce
- (d) What to eat

Ans.(d)

17. Which of the following is a central problem of every economy? (PYP 1 Mark Sep'15)

- (a) Abundance of resources
- (b) Scarcity of economic resources
- (c) Poverty
- (d) Moral and ethical

Ans.(b)

18. The Terms Microeconomics and Macroeconomics were coined by:

(PYP 1 Mark, Dec'15)

- (a) Professor A Samuelson
- (b) Griffen
- (c) Prof. Ragnar Frisch
- (d) Eagle

Ans.(c)

19. The famous book "An enquiry into the nature and causes of wealth of nation" was published in:

(PYP 1 Mark, Dec'15)

- (a) 1776
- (b) 1750
- (c) 1850
- (d) 1886

Ans.(a)

20. The terms "micro" is derived from the word which means (PYP 1 Mark, Jun'16)

- (a) Latin, Small
- (b) Greek, Small
- (c) English, Tiny
- (d) Roman, Small

Ans.(b)

21. Which of the following issue relates to micro-economic? (PYP 1 Mark, Jun'16)

- (a) Impact of crude price hike on inflation
- (b) Impact of change in bank rate on bank saving and investment
- (c) Impact of information technology on economics growth
- (d) Impact of shortage of wheat production on wheat prices

Ans.(d)



22. _____ defined "Economics as a science which inquired into the nature and cause of wealth of Nations". (PYP 1 Mark, Dec'16, Jun'17, SM, PYP 1 Mark Mar'15, Sep'15, Jun'16, Dec'18, Jun'26, MQP (1) 2 Marks June'26)

- (a) Adam Smith
- (b) Alfred Marshall
- (c) Robbins
- (d) Paul. A Samuelson

Ans.(a)

23. _____ changed the name of the subject from political economy to Economics.

(PYP 1 Mark, Dec'16)

- (a) Adam Smith
- (b) Alfred Marshall
- (c) Robbins
- (d) Paul. A Samuelson

Ans.(b)

24. _____ economics is also called as Income and Employment Theory. (PYP 1 Mark, Jun'17)

- (a) Macro
- (b) Micro
- (c) Both
- (d) None

Ans.(a)

25. Macro-economic studies the economy as a _____ unit. (PYP 1 Mark, Dec'17)

- (a) Whole
- (b) Double
- (c) Triple
- (d) Quadruple

Ans.(a)

26. The 'Welfare definitions' of Economics was introduced by (PYP 1 Mark, Jun'18, Jun'24'Jun'19)

- (a) Adam Smith
- (b) Alfred Marshall
- (c) Lionel Robbins
- (d) Jerick's

Ans.(b)

27. _____ goods are known as scarce goods. (PYP 1 Mark, Dec'18)

- (a) Economic
- (b) Durable
- (c) Free
- (d) Consumer

Ans.(a)

28. The subject matter of economics is distributed into parts (PYP 1 Mark, Dec'19)

- (a) 2
- (b) 3
- (c) 4
- (d) 5

Ans.(c)

29. Which is not a characteristic of human wants? (PYP 2 Mark Jun'24)

- (a) Satisfiable
- (b) Recurring
- (c) Limited
- (d) Competitive

Ans.(c)

30. Which one of the following is a central problem of an economy? (PYP 2 Mark Dec'25)

- (a) When to produce?
- (b) Where to produce?
- (c) How much to produce?
- (d) None of the above

Ans. (d)

31. The Savings always equal to (MQP (1) 2 Marks June'26)

- (a) Income
- (b) Investment
- (c) Profits
- (d) Consumption

Ans. (b)



32. Which one of the following points does not support "Economics as a positive science"? (PYP 2 Mark Jun'26)

- (a) It explains "What it is".
- (b) It explains about the things as they are.
- (c) It does not relate to value judgements.
- (d) It deals with right and wrong.

Ans. (d)

33. The subject matter of economics includes _____ types of distribution. (PYP 2 Mark June'26)

- (a) 4
- (b) 3
- (c) 5
- (d) 2

Ans. (a)

1.2

UTILITY, WEALTH, PRODUCTION

Quick Review of Important Concepts

Utility: Satisfaction from consuming a good/service.

Wealth is the stock of transferable goods owned at a point of time

- **Personal wealth** → Owned by an individual (houses, land, cash, shares).
- **National wealth** → Owned by the nation (roads, parks, hospitals, natural resources).
- ⌘ Govt. bonds = personal wealth (asset for citizen, liability for govt.).

Welfare means well-being; more wealth may increase welfare but only if it is well-distributed and does not harm health or peace.

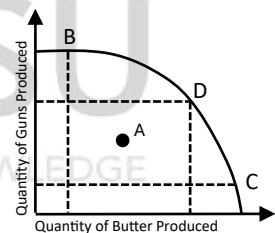
Wealth vs Income: Wealth is a stock at a point of time, while Income is a flow over time. Wealth is accumulated from past savings of income.

Production

- Creation of goods/services for sale.
- **Factors of Production (Inputs):** Land, Labour, Capital, Organization.
- **Outputs** = goods/services produced from inputs.

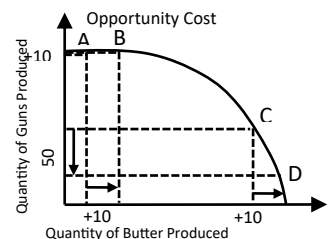
Production Possibility Curve (PPC):

- Definition: Shows maximum combinations of two goods with given resources and technology.
- Shape: Downward sloping, concave to origin (due to increasing opportunity cost).
- Slope: Marginal Rate of Transformation (MRT) = opportunity cost.
- Positions: On PPC = efficient use, inside = unemployment, outside = unattainable.
- Shift: Outward shift = economic growth.
- Special case: Straight line PPC = constant opportunity cost.



Money

- Anything widely accepted in exchange of goods/services.
- **Forms:** Rupee notes, coins, credit cards, traveller's cheques.
- Replaced barter due to indivisibility and double coincidence of wants problem.



Income, Saving and Market

- **Income:** Net inflow of money over time (daily, monthly, yearly).
- **Saving:** Income – Consumption.
- **Market:** System enabling exchange of goods/services (not just a place).
 - * **Functions:** Price determination, quantity determination.
 - * **Market mechanism:** Interaction of all markets determining prices and quantities

Capital Stock and Investment

- **Capital stock** = total productive capacity (e.g., no. of machines).
- **Investment** = increase in capital stock.

Types:

- Real Investment → machines, raw materials, buildings.
- Portfolio Investment → new shares (but not resale).

Relationship with Savings and National Income:

In macroeconomic equilibrium, total output (Y) equals aggregate demand (AD), which is consumption (C) plus investment (I):

$$Y = C + I$$



Aggregate supply (AS) equals consumption plus savings (S):

- $Y = C + S$

Equilibrium condition: $C + S = C + I$ or $S = I$

Note: Savings may not always equal investment due to different motives of households and businesses. Foreign investment can also disrupt the $S = I$ equality.

Gross vs Net Investment:

- Gross Investment = Fixed + Inventory investment.
- Net Investment = Gross Investment – Depreciation

Multiple Choice Question (MCQ)

34. In economics goods includes material things which ... (MCQ Bank PYP 1 Mark Jun'15 Jun'16)

- (a) can be transferred
- (b) can be visible
- (c) both A and B
- (d) None

Ans. (c)

35. The stock of the goods under the ownership of a person is called. (SM)

- (a) International wealth
- (b) National wealth
- (c) Social wealth
- (d) Personal wealth

Ans. (d)

36. The Savings are accumulated into _____ (SM)

- (a) Income
- (b) Wealth
- (c) Investment
- (d) None

Ans. (b)

37. The Purchasing of new shares of a company is called (SM)

- (a) Real Investment
- (b) Net Investment
- (c) Portfolio investment
- (d) Total investment

Ans. (c)

38. PPF is negative sloped due to (PYP 1 Mark Jun'15)

- (a) Scarcity of production resources
- (b) Unlimited wants
- (c) Improvement in technology
- (d) Increasing opportunity cost.

Ans. (a)

39. Which event will shift the butter/guns production possibilities frontier outward? (PYP 1 Mark Mar'16)

- (a) An increase in the production of guns
- (b) A reduction in the production of butter
- (c) A new and superior method of producing butter
- (d) A decrease in the resources devoted to the production of investment goods.

Ans. (c)

40. Production possibility curves show maximum combinations of products. (PYP 1 Mark Jun'16)

- (a) 1
- (b) 2
- (c) 3
- (d) 4

Ans. (b)

41. Income minus Savings is equal to _____. (PYP 1 Mark Jun'17)

- (a) Consumption
- (b) Production
- (c) Investment
- (d) Demand

Ans. (a)

42. _____ is an act to use the goods or service to satisfy the wants. (PYP 1 Mark Dec'17)

- (a) Production
- (b) Consumption
- (c) Savings
- (d) Distribution

Ans. (b)

43. The Production Possibility Curve (PPC) shows: (PYP 2 Mark Dec'22)

- (a) The various combinations of two commodities that can be produced by an economy
- (b) The maximum production of goods
- (c) Both (a) and (b)
- (d) None of the above

Ans. (a)

44. Production Possibility Curve is _____. (PYP 2 Mark Dec'25)

- (a) Downward sloping and convex to the origin
- (b) Downward sloping and concave to the origin
- (c) Upward sloping and convex to the origin
- (d) Upward sloping and concave to the origin

Ans. (b)

CHAPTER 2: FORMS OF MARKET



LDR Questions

Q 1, Q 5, Q 6, Q 7, Q 9, Q 16, Q 26, Q 109

2.1

PRICING OF PRODUCTS AND SERVICES IN VARIOUS FORMS OF MARKETS – PERFECT COMPETITION, DUOPOLY, OLIGOPOLY, MONOPOLY, MONOPOLISTIC COMPETITION

Quick Review of Important Concepts

Pricing Strategies

- ⇒ **Cost-plus pricing** – Add a profit % to production cost.
- ⇒ **Limit pricing** – Low price to prevent new entrants.
- ⇒ **Penetration pricing** – Low initial price to gain market share.
- ⇒ **Price discrimination** – Different prices for different segments.
- ⇒ **Psychological pricing** – Prices like ₹3.99 instead of ₹4.
- ⇒ **Dynamic pricing** – Flexible pricing via technology (common online).
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- ⇒ **Absorption pricing** – Cost + proportion of fixed costs.
- ⇒ **High-low pricing** – Regular high prices with discounts/promotions.
- ⇒ **Marginal-cost pricing** – Price = extra cost of producing one more unit.

Meaning and Classification of Market

Market: Place or mechanism where buyers and sellers exchange goods/services.

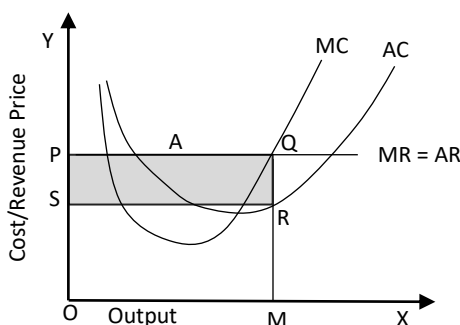
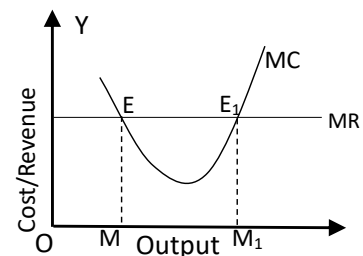
By Area: **Local:** Sold within same locality (e.g., vegetables). **National:** Sold across the country (e.g., wheat, sugar). **International:** Sold in multiple countries (e.g., gold, cotton).

By Time: Very short, short, long period markets.

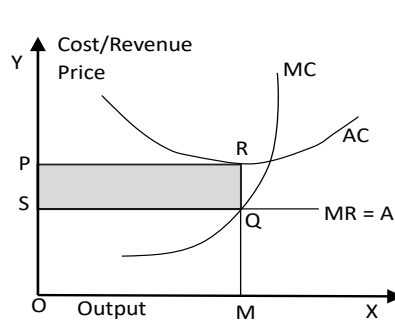
By Competition: Perfect and Imperfect Competition.

Perfect Competition

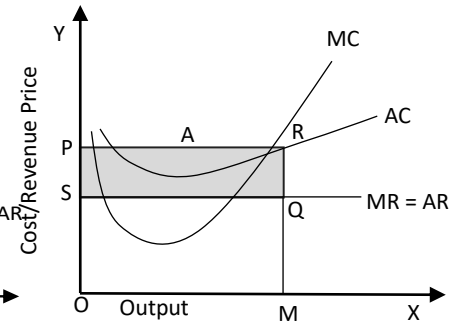
- Many buyers and sellers, homogeneous products, free entry/exit.
- **Price taker:** Single firm cannot control price.
- **Features:** Large number of sellers, mobility of factors, perfect knowledge, no transport costs.
- **Equilibrium:**
 - $MC = MR$ and MC cuts MR from below.
 - Short-run: abnormal profits or losses.
 - Long-run: normal profits ($TR = TC$).



Abnormal Profit (Short-run)



Losses (Short-run)



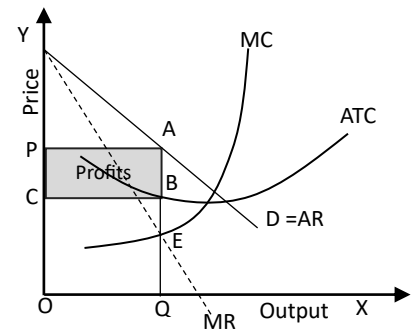
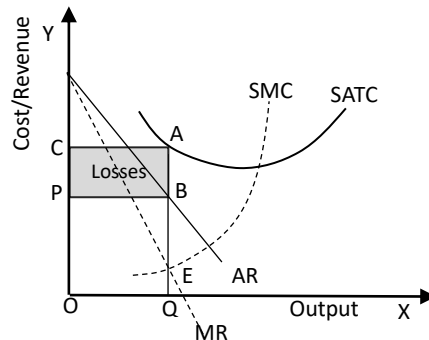
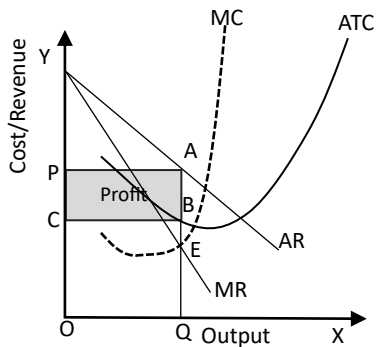
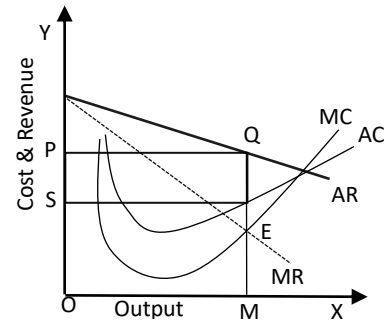
Normal Profits (Long Run)



Imperfect Competition

Monopoly:

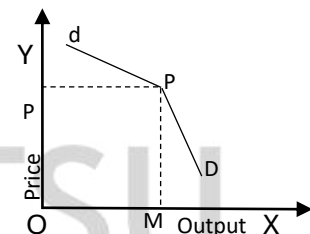
Single seller, no close substitutes, high barriers to entry, price maker, AR and MR curves slope downward, Can practice **price discrimination**.
Pricing and Output: Monopolist sets output where $MR = MC$; price is determined by AR curve. Abnormal profits possible ($AR > AC$).



Duopoly: Two firms dominate; special case of oligopoly.

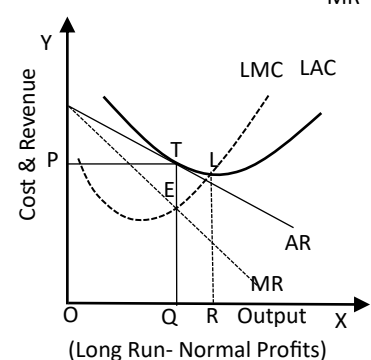
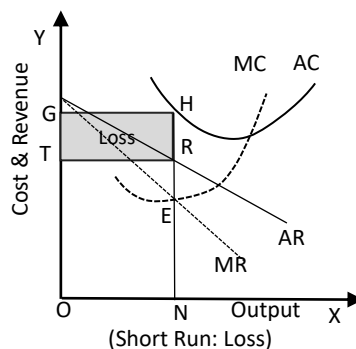
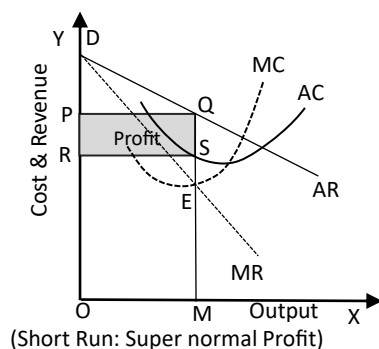
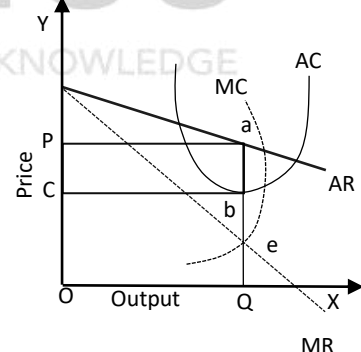
Oligopoly

- ⇒ Few firms; products may be homogeneous/differentiated.
- ⇒ **Features:** Interdependence, selling costs, price rigidity, uncertainty.
- ⇒ **Models:** Cournot, Stackelberg, Bertrand, Edgeworth, Collusive (cartels, e.g., OPEC).



Monopolistic Competition

- Many firms, differentiated products, free entry/exit.
- Firms spend on **advertising/selling costs** to highlight differences.
- **Equilibrium:**
 - * Short-run: abnormal profits possible.
 - * Long-run: normal profits, **excess capacity** exists.
- **Selling costs** create product preference and inelastic demand.





Multiple Choice Question (MCQ)



1. Which of the following is/are an essential feature of the market (SM, MCQ Bank) (MQP(1) 2 Marks-June'24, PYP 2 Marks June'23, MQP (2) 2 Marks June'26)

- (a) Buyers (b) Sellers
(c) Price (d) All the three

Ans. (d)

2. In the long run price is governed by (SM, MCQ Bank, MQP Dec'23, Jun'23, MQP[1]2Marks Jun'24, June'26)

- (a) Cost of Production
(b) Demand supply forces
(c) Marginal utility
(d) None

Ans. (a)

3. In the long run a firm in perfect competition earns (SM, MCQ Bank) (MQP(1) 2 Marks-June'23 and Dec'23 and June'24, June'26, PYP 2 Marks Dec'18, Dec'23, MQP (2) 2 Marks Dec'25, June'26)

- (a) Normal profit only
(b) Abnormal profit
(c) Average profit of past five years
(d) 12.33% profits on capital employed

Ans. (a)

4. A firm faces the shut down situation when (SM, MCQ Bank, MQP (2) 2 Marks Dec'25, June'26)

- (a) Price is less than average variable cost
(b) Price is more than the average variable cost
(c) Price is equal to fixed cost
(d) Price is more than the average fixed cost

Ans. (a)



5. A firm that makes profit in excess of normal profit is earning (SM, MCQ Bank, MQP [1] 2 Marks Dec'23, Jun'23, Dec'25 MQP[2] 2 Marks Jun'25, PYP 2 Mark Dec'14, June'23)

- (a) Economic profit (b) Costing profit
(c) Normal profit (d) Super normal profit

Ans. (d)



6. The market state that satisfy all the essential features of a perfect competitive market except identity of product is known as (SM, MCQ Bank, MQP(1) 2 Marks-June'23 and Dec'23 and June'24, Dec'25, PYP 2 Marks June'15, June'23, June'24, MQP (2) 2 Marks June'26)

- (a) Oligopoly
(b) Duopoly
(c) Monopoly
(d) Monopolistic competition

Ans. (d)



7. In the short run if the price is above the average total cost in a monopolistic competitive market, the firm makes (SM, MCQ Bank) (MQP(1) 2 Marks-Dec'24, Dec'25 and MQP(2) 2 Marks-June'25, PYP 2 Marks Dec'23)

- (a) Profits and new firms join the market
(b) Profit and bar entry to new firms
(c) Makes losses and exit the market
(d) Quick profit and disappears

Ans. (a)

8. Which of these is associated with a monopolistic competitive market. (SM, MCQ Bank) (MQP(1) 2 Marks-June'23 and Dec'23 and June'24, June'26, PYP 2 Marks Dec'23, Dec'22)

- (a) Product differentiation
(b) Homogeneous Product
(c) Normal in short run
(d) Single buyer

Ans. (a)



9. In a competitive market is the price maker (SM, MCQ Bank, MQP 2 Marks Dec'23, Jun'23 MQP[2] 2 Marks Dec'24, PYP 2 Marks Sep'15, June'17, Dec'23, MQP [1] 2 Marks Dec'25, June'26)

- (a) Firm (b) Industry
(c) Consumer (d) Trade association

Ans. (b)

10. A Monopoly demand curve is (SM, MCQ Bank) (MQP(1) 2 Marks-June'23 and Dec'23 and June'24 and Dec'24, June'26, PYP 2 Marks Dec'23)

- (a) Same as its average revenue curve
(b) Same as its supply curve
(c) Same as marginal cost curve
(d) None of these

Ans. (a)

11. Which is the first order condition for the profit of a firm be maximum? (SM, MQP[1] 2 Marks Jun'25, PYP 1 Mark June'19, MQP (2) 2 Marks June'26)

- (a) $AC=MR$ (b) $MC=MR$
(c) $MR=AR$ (d) $AC=AR$

Ans. (b)

12. The AR curve and industry demand curve are identical (SM, MQP(2) 2 Marks-Dec'24, PYP 1 Mark June'19)

- (a) In case of monopoly
(b) In case of oligopoly
(c) In case of monopolistic competition
(d) In case of perfect competition

Ans. (a)



13. OPEC is an example of _____ (SM, MQP(1) 2 Marks-Dec'24, PYP 1 Mark June'19, MQP (2) 2 Marks June'26)

- (a) Perfect competition
- (b) Monopolistic competition
- (c) Monopoly
- (d) Cartel

Ans. (d)

14. _____ Means absence of competition (SM, MQP[2] 2 Marks Jun'25)

- (a) Perfect Competition
- (b) Monopoly
- (c) Imperfect Competition
- (d) Discrimination

Ans. (b)

15. Oligopoly means (SM, MQP(2) 2 Marks-Dec'24, June'26, PYP 2 Marks Dec'18, June'24)

- (a) Single seller
- (b) Few sellers
- (c) Large numbers of sellers
- (d) No buyers

Ans. (b)

16. Penetration Pricing is adopted by following a (SM, MQP(2) 2 Marks-June'25, Dec'25, MQP(1) 2 Marks-June'25, PYP 2 Marks Dec'18, June'24)

- (a) Low Price
- (b) High Price
- (c) Dual Price
- (d) Support Price

Ans. (a)

17. On the basis of area, markets are classified into _____ types (SM, PYP 1 Mark June'18, MQP (2) 2 Marks Dec'25, June'26)

- (a) 2
- (b) 3
- (c) 4
- (d) 5

Ans. (b)

18. Which of the following does not characterize monopolistic competition? (SM, MQP(2) 2 Marks-June'25, PYP 1 Mark June'18, Dec'19)

- (a) Product differentiation
- (b) Many producers
- (c) Absence of advertising
- (d) Partial control over price

Ans. (c)

19. When the firm is in the long period equilibrium it gets only : (MCQ Bank, MQP[2] 2 Marks Dec'24)

- (a) Normal profit
- (b) No loss no profit
- (c) Super normal profit
- (d) Loss

Ans. (a)

20. Equilibrium of the firm under perfect Market means ,when (MCQ Bank, MQP[2] 2 Marks Dec'24, MQP [1] 2 Marks Dec'25)

- (a) MR curve cuts the MC curve from below
- (b) MC curve cuts the MR curve from below
- (c) MC curve cuts the MR curve from above
- (d) AR curve is Equal to MC curve

Ans. (b)

21. Penetration pricing means. (MCQ Bank, MQP [1] 2 Marks Dec'24, June'24, June'26)

- (a) price will reduce after gaining market share
- (b) reduce price when losing market share
- (c) price will be raised later after gaining market share
- (d) None of these

Ans. (c)

22. One of the examples of Oligopoly market is : (MCQ Bank, MQP [1] 2 Marks Dec'25, June'26)

- (a) Cosmetic industry
- (b) Cartel
- (c) Automobile industry
- (d) Technology

Ans. (c)

23. Excess profits earned by each firm during short time would attract (MCQ Bank)

- (a) New firms to enter into the market
- (b) Market share of each firm will be less
- (c) Firm will be less there is no barrier on the entry into the market
- (d) All of the above

Ans. (d)

24. In monopoly market there is. (MCQ Bank, MQP[1] 2 Marks Jun'24, Dec'25, June'26)

- (a) A single firm ,single product
- (b) A single firm, many substitute identical product
- (c) A single product , many firm
- (d) None of the above

Ans. (a)

25. The concept of monopolistic competition market was introduced by

(MCQ Bank, MQP[1] 2 Marks Jun'24, June'26)

- (a) Alfred Marshall
- (b) Prof. Chamberlin
- (c) Karl Marx
- (d) John Rbinson

Ans. (b)

26. Perfect competition and monopolistic competition are having a common assumption. Find out which one of the following is the appropriate common Assumption (MQP (2) 2 Marks June'23, Dec'23, June'25)

- (a) The product is homogeneous
- (b) Perfect knowledge
- (c) Existence of selling cost
- (d) Free entry and free exit

Ans. (d)



27. Which one of the following oligopolistic model insists on co-operation?
(MQP 2 Marks Dec'23, Jun'23)

- (a) Cournot's model
- (b) Bertrand model
- (c) Collusive oligopoly model
- (d) Edgeworth model

Ans. (c)

28. In imperfect market, When the seller wants to increase the sales he must reduce the price. When the price is decreased, then the average revenue and marginal revenue are
(MQP(1) 2 Marks-Dec'24)

- (a) Decreased
- (b) Increased
- (c) Equal
- (d) No change

Ans. (a)

29. In a Collusive Oligopoly, firms form a cartel to:
(MQP(1) 2 Marks-June'25)

- (a) Fix the price and output to maximize joint profit
- (b) Increase market share by undercutting each other's prices
- (c) Engage in non-price competition to attract consumers
- (d) Compete aggressively and lower prices

Ans. (a)

30. Which type of market does a firm typically have excess production capacity in the long run?
(MQP(1) 2 Marks-June'25)

- (a) Perfect competition
- (b) Monopoly
- (c) Monopolistic competition
- (d) Oligopoly

Ans. (c)

31. In which market structure do firms have no control over the price and are considered price takers? (MQP(1) 2 Marks-June'25, Dec'25, PYP 2 Mark Dec'22)

- (a) Monopoly
- (b) Oligopoly
- (c) Monopolistic Competition
- (d) Perfect Competition

Ans. (d)

32. What are the two key conditions that a firm in a monopolistic market must satisfy to reach equilibrium? (MQP(1) 2 Marks-June'25)

- (a) Marginal Cost = Marginal Revenue and Average Cost = Marginal Revenue
- (b) Marginal Cost = Marginal Revenue and MC curve cuts MR curve from Below
- (c) Marginal Cost = Marginal Revenue and MC curve cuts MR curve from Above
- (d) Marginal Cost = Average Revenue and MC curve cuts MR curve from below

Ans. (b)

33. In the Bertrand Duopoly Model, each producer can always lower the price until:
(MQP(1) 2 Marks-June'25) (PYP 2 Marks Jun'26)

- (a) Price is equal to the competitive price
- (b) Price is equal to the cost of production
- (c) Price is higher than the rival's price
- (d) Price is equal to the monopoly price

Ans. (b)

34. Automobile industry, Gas industry is an example of market (MQP(1) 2 Marks-June'25, PYP 2 Marks Jun'26)

- (a) Perfect competition
- (b) Monopoly
- (c) Oligopoly
- (d) Monopolistic competition

Ans. (c)

35. Long-run equilibrium price is known as
(MQP(2) 2 Marks-Dec'24)

- (a) Market Price
- (b) Reserve Price
- (c) Normal Price
- (d) Support Price

Ans. (c)

36. Cartel is one form of (MQP[2] 2 Marks Dec'24, PYP 1 Mark Dec'19)

- (a) Monopoly
- (b) Duopoly
- (c) Collusive oligopoly
- (d) Non-collusive oligopoly

Ans. (c)

37. Price rigidity is the feature of which market?
(MQP[2] 2 Marks Jun'25, PYP 2 Marks Dec'23, PYP 1 Mark Dec'15)

- (a) Monopoly
- (b) Oligopoly
- (c) Monopolistic Competition
- (d) Perfect Competition

Ans. (b)

38. The demand for monopoly product is elastic
(MQP[2] 2 Marks Jun'25)

- (a) Perfectly
- (b) Less
- (c) More
- (d) Unitary

Ans. (b)

39. Monopolists: (PYP 1 Mark Sept'14)

- (a) Are guaranteed at least a zero economic profit
- (b) Are guaranteed more than a normal profit
- (c) Are guaranteed an economic profit
- (d) None of the above is correct

Ans. (d)

40. For the perfectly competitive firm, the profit maximising level of output is where:
(PYP 1 Mark Sept'14)

- (a) Marginal revenue equals price
- (b) Marginal revenue equals marginal cost
- (c) Price equals average variable cost
- (d) Price equals average total cost

Ans. (b)

CHAPTER 5: FUNDAMENTALS OF MANAGEMENT



LDR Questions

Q 2, Q 12, Q 38, Q 65, Q 67, Q 68, Q 70, Q 72, Q 79, Q 84, Q 167, Q 182, Q 269, Q 283, Q 339, Q 355, Q 359, Q 370, Q 371, Q 491, Q 492, Q 508

5.1

INTRODUCTION TO MANAGEMENT

Quick Review of Important Concepts

Meaning of Management

- Management = **managing people tactfully to achieve goals.**
- Provides **leadership, coordination, and resource utilization.**
- Without management → resources remain idle.

Definitions (Key Authors)

- **Agha Hasan Abedi:** “Getting work done through people, but real management is developing people through work.”
- **Henry Fayol:** Forecast, plan, organize, command, coordinate, control.
- **Koontz and O'Donnell:** Creation of environment for group efficiency.
- **Peter Drucker:** Manages business, managers, and workers.
- **George R. Terry:** Planning, organizing, actuating, controlling.

Nature of Management

1. Result-oriented – aims at productivity and profits.	2. Humane approach – done through people.
3. Process-centric – ongoing activity.	4. Universal – applies in business, politics, education, etc.
5. Science + Art – principles (science) + skills/creativity (art).	6. Group activity – not individual-based.
7. System of authority – rules and compliance.	8. Decision-making – essential role of managers.
9. Leadership – managers influence subordinates.	10. Dynamic – adapts to social and business changes.
11. Multidisciplinary – draws from economics, sociology, psychology, etc.	12. Levels – top, middle, lower management.
13. Goal-oriented – aims at set objectives.	14. Intangible – results felt in performance and productivity.
15. Managers ≠ owners – ownership and management separate.	

Management: Science vs Art

As Science	Practical knowledge and personal skill
• Universally accepted principles.	• Creativity and innovation.
• Cause-effect relations.	• Perfection through practice.
• Based on observation, experiments.	• Goal-oriented.
• Predictability and validity.	• Practical knowledge and personal skill.
• Conclusion: Management = (knowledge + application)	

Scope of Management

- **Economic Resource** – optimizes land, labour, capital, entrepreneur.
- **System of Authority** – ensures rules and compliance.
- **Class/Elite** – managerial class as a distinct group with values.

Management as a Profession

- Features of profession: body of knowledge, formal training, consultants, association, code of conduct, societal service.
- Management **partially qualifies** as a profession, efforts ongoing.



Multiple Choice Question (MCQ)

1. Which of the following statements is not correct? (SM, MCQ Bank) (MCQ Bank) (MQP(1) 2 Marks-June'24, Dec'25, MQP (2) 2 Marks June'26)

- (a) Management is a goal-oriented process
- (b) Management is a universal process
- (c) Management is a continuous process
- (d) Management is a rigid process

Ans. (d)



2. Which of the following is not a function of managers? (SM, MCQ Bank) (MQP(1) 2 Marks-June'23 and Dec'23 and June'24, MQP (2) 2 Marks June'26)

- (a) Designing
- (b) Organizing
- (c) Leading
- (d) Planning

Ans. (a)

3. Which of the following does not corroborate the concept of 'Management as a Science'? (SM, MCQ Bank) (MCQ Bank) (MQP(2) 2 Marks-june'25, June'26, MQP [1] 2 Marks Dec'25)

- (a) Cause and Effect Relationship
- (b) Test of Validity
- (c) Personal Skill
- (d) Experimentation and Observation

Ans. (c)

4. Management is what a manager does (SM, MCQ Bank, PYP 1 Mark June'23)

- (a) Peter F. Drucker
- (b) Terry
- (c) Louis Allan
- (d) Henry Fayol

Ans. (c)

5. Management is the art and science of decision making and leadership. (SM, MCQ Bank)

- (a) Harold Koontz.
- (b) Donald J. Clough.
- (c) Louis Allan.
- (d) Terry

Ans. (b)

6. In the context of management, what is the "Class or Elite" scope referring to? (MQP (1) 2 Marks-June'25)

- (a) A group of subordinates responsible for execution of tasks
- (b) The owners of the company who make critical decisions
- (c) A collective group of individuals performing managerial activities who form a distinct class
- (d) The employees responsible for non-managerial tasks

Ans. (c)

7. Which of the following is NOT one of the three broad groups of the scope of management according to Herbison and Myres? (MQP (1) 2 Marks-June'25)

- (a) Organizational Structure
- (b) Economic Resource
- (c) System of Authority
- (d) Class or Elite

Ans. (a)

8. Scientific management focuses on an approach to motivation. (PYP 1 Mark Sept'14, Dec'15)

- (a) Social economic
- (b) Human
- (c) Rational economic
- (d) None of the above

Ans. (c)

9. Henry Fayol divided all activities of industrial undertakings into group (PYP 1 Mark Sept'15)

- (a) Technical final
- (b) Security Psychological
- (c) Financial Security
- (d) Accounting, Managerial

Ans. (c)

10. Taylor's thoughts are based on studies at:

- (a) The Arsenal
- (b) The Watertown Steel Corporation
- (c) The Bethlehem Steel Corporation
- (d) The American Steel Arsenal

Ans. (c)

11. Which organization is characterized by very formal rules, centralized authority, and narrow spans of control? (PYP 1 Mark June'16)

- (a) Boundary less
- (b) Matrix
- (c) Virtual
- (d) Bureaucracy

Ans. (d)



12. Who proposed "bureaucratic structure" is suitable for all organizations?

(PYP 2 Mark June'16, June'17, Dec'22)

- (a) Elton Mayo
- (b) Henry Fayol
- (c) F.W. Taylor
- (d) Max Weber

Ans. (d)

13. Which of the following is part of the 14 principles of management identified by Henry Fayol? (PYP 1 Mark June'16)

- (a) Scalar Chain
- (b) Innovation
- (c) Efficiency
- (d) Motivation

Ans. (a)



14. Taylor put forward the idea of ?

(PYP 1 Mark June'16)

- (a) Purposeful foremanship
- (b) Motivational foremanship
- (c) Functional foremanship
- (d) Social foremanship

Ans. (c)

15. The book "Principles of Scientific Management" was written by (PYP 1 Mark Dec'16)

- (a) F.W. Taylor
- (b) Henry Fayol
- (c) Max Weber
- (d) Simon

Ans. (a)

16. Henry Fayol classified industrial activities into groups. (PYP 1 Mark Dec'16, June'17)

- (a) 2
- (b) 3
- (c) 4
- (d) 6

Ans. (d)

17. _____ is called as the father of management. (PYP 1 Mark Dec'16, Dec'17, June'18)

- (a) F.W. Taylor
- (b) Henry Fayol
- (c) Max Weber
- (d) Simon

Ans. (b)

18. The concept of 'Management by Objectives' was introduced by

(PYP 1 Mark June'17, June'18, Dec'19)

- (a) Frederick Herzberg
- (b) F.W. Taylor
- (c) Elton Mayo
- (d) Peter F. Drucker

Ans. (d)

19. Under Fayol's 14 Principles of Management, which one of the following factor is related to Esprit de Corps? (PYP 1 Mark June'17, June'19)

- (a) Division of Work
- (b) Team Work
- (c) Personal Ability
- (d) Personal Interest

Ans. (b)

20. According to Fayol's 14 Principles of Management, Division of Work is necessary: (PYP 1 Mark June'17)

- (a) To enjoy the benefits of specialization
- (b) To give orders to subordinates
- (c) To receive orders from superior
- (d) To ask for obedience

Ans. (a)

21. Management is a: (PYP 1 Mark June'17)

- (a) Discreet process
- (b) Continuous process
- (c) One-way process
- (d) Two-way process

Ans. (b)

22. Which one of the following is not a function of management? (PYP 1 Mark June'17, Dec'18)

- (a) Grouping
- (b) Planning
- (c) Staffing
- (d) Leading

Ans. (a)

23. _____ has been accepted as the Father of Scientific Management.

(PYP 1 Mark Dec'17)

- (a) Frederick Herzberg
- (b) F.W. Taylor
- (c) Elton Mayo
- (d) Peter F. Drucker

Ans. (b)

24. Which one of the following was suggested by Fayol? (PYP 1 Mark Dec'17)

- (a) Management by Exception
- (b) Unity of Direction
- (c) Delegation of Authority
- (d) Centralisation

Ans. (b)

25. Management is the art of (PYP 1 Mark June'18)

- (a) Managing customers
- (b) Making super-normal profit
- (c) Keeping competitors under pressure
- (d) Getting things done by groups of people

Ans. (d)

26. Scientific Management is concerned with _____. (PYP 1 Mark June'18)

- (a) Co-operation, not individualism
- (b) Increased production through long experience
- (c) Application of scientific principles to the management of production
- (d) Increased sales

Ans. (c)

27. The elements of the management process are known as the _____ of (PYP 1 Mark June'18)

- (a) Functions
- (b) Nature
- (c) Concept
- (d) Scope

Ans. (a)

28. Administrative function is the managerial function. (PYP 1 Mark Dec'18)

- (a) Top-level
- (b) Middle-level
- (c) Lower-level
- (d) Supervisory-level

Ans. (a)



29. _____ forms the basis for the functioning of an organisation. (PYP 1 Mark Dec'18)

- (a) Profits (b) Objectives
- (c) Policies (d) Strategies

Ans. (b)

30. _____ defines management as the process of getting things done by and through others (PYP 1 Mark Dec'18, PYP 2 Marks June'24)

- (a) Hicks (b) Massie
- (c) Fayol (d) Drucker

Ans. (a)

31. Which one of the following is not included in Scientific Management technique? (PYP 1 Mark June'19)

- (a) Division of labour
- (b) Scientific selection
- (c) Training and placement of workers
- (d) Hierarchical structure

Ans. (d)

32. Scalar Chain denotes: (PYP 1 Mark Dec'19)

- (a) Production Process
- (b) Appraisal Process
- (c) Span of the Management
- (d) Authority from the highest to the lowest ranks

Ans. (d)

33. Which one of the following elements is odd with Weber's Six Major Principles? (PYP 1 Mark Dec'19)

- (a) Hierarchical Structure
- (b) Unity of Command
- (c) "In-focused" Mission
- (d) Technical Qualifications

Ans. (d)

34. Which one of the following characteristics signifies Management as an Art? (PYP 1 Mark Dec'22)

- (a) Experimentation and observation
- (b) Universally accepted principles
- (c) Test of validity
- (d) Perfection through practice

Ans. (d)

35. Operative level comprises of: (PYP 1 Mark Dec'22)

- (a) Middle-level and Lower-level management
- (b) Top-level and Lower-level management
- (c) Top-level and Middle-level management
- (d) Only Lower-level management

Ans. (a)

36. The idea of 'Management as a Science' focuses on: (PYP 1 Mark June'23)

- (a) Personal skill (b) Experimentation
- (c) Intuition (d) None of the above

Ans. (a)

37. Laws to be considered by a business organisation are: (PYP 1 Mark June'23)

- (a) Employment laws
- (b) Copyright and patent laws
- (c) Health and safety laws
- (d) All of the above

Ans. (b)



38. "Management is a multi-purpose organ that manages a business and manages managers and manages workers and work". This definition of management was given by (PYP 1 Mark Dec'23)

- (a) Schulze (b) Drucker
- (c) Massie (d) Wheeler

Ans. (b)

39. The idea of 'Management as an Art' focuses on (PYP 1 Mark Dec'23)

- (a) Observation
- (b) Individual skill
- (c) Cause-effect relationship
- (d) None of the above

Ans. (b)

40. What is the process of completing tasks efficiently and effectively by and through people? (MQP [1] 2 Marks Dec'25)

- (a) Organizing (b) Coordination
- (c) Management (d) Leadership

Ans. (c)

41. Which of the following is not a characteristic of management? (MQP [1] 2 Marks Dec'25)

- (a) Goal-oriented (b) Continuous
- (c) Universal (d) One-time activity

Ans. (d)

42. Which level of management is responsible for formulating organizational policies? (MQP [1] 2 Marks Dec'25)

- (a) Top-level (b) Middle-level
- (c) Lower-level (d) Operational-level

Ans. (a)

43. Which one of the following statements is correct? (PYP 1 Mark Dec'25)

- (a) Management is a goal-oriented process
- (b) Management is a continuous process
- (c) Management is a dynamic process
- (d) All of the above

Ans. (b)



44. Who introduced the concept of the five functions of management? (PYP 1 Mark Dec'25)

- (a) Peter Drucker (b) Frederick Taylor
(c) Henri Fayol (d) Elton Mayo

Ans. (c)

5.2

STEWARDSHIP THEORY AND AGENCY THEORY OF MANAGEMENT

Quick Review of Important Concepts

Stewardship Theory

- ⇒ **Developed by:** Davis, Schoorman and Donaldson (1997).
- ⇒ **View:** Managers are **stewards** → trustworthy, collectivist, motivated by growth, recognition, responsibility.
- ⇒ **No conflict** between owners and managers; both work towards **organizational success**.
- ⇒ **Governance:** Favors autonomy for managers, more executive directors, less need to separate CEO and Chairman roles.
- ⇒ **Motivation:** Intrinsic (achievement, responsibility, altruism).
- ⇒ **Outcome:** Maximization of **shareholders' wealth** and satisfaction of multiple stakeholders.

Agency Theory

- **Developed by:** Alchian and Demsetz (1972), Jensen and Meckling (1976).
- **View:** Managers are **agents** → self-interested, opportunistic, may misuse resources.
- **Conflict** between owners (principals) and managers (agents).
- **Problems:** Information asymmetry, risk aversion, opportunism.
- **Agency Costs:**
 - Monitoring (by owners), || ▪ Bonding (by agents), || ▪ Residual loss (inefficiency).
- **Governance:** Needs strict monitoring, independent directors, incentive contracts.
- **Motivation:** Extrinsic (money, promotions, sanctions).

Key Differences

Issue	Stewardship Theory	Agency Theory
Basis	Psychology and Sociology	Economics
Model of Man	Self-actualizing	Economic
Behaviour	Collective-serving	Self-serving
Motivation	Intrinsic (growth, responsibility)	Extrinsic (money, security)
Performance Focus	Stakeholder value	Shareholder value
Owner–Manager Relation	Goal alignment	Goal conflict
Objective	Collectivism	Individualism
Culture	Low power distance	High power distance
Time Frame	Long-term	Short-term
Approach to Uncertainty	Trust	Distrust
Governance Role	Advice, autonomy	Monitoring, control
Decision-making	Managers have discretion	Shared/checked by owners

Multiple Choice Question (MCQ)

45. Agency theory suggests that managers (the agents), particularly those of large, publicly-owned firms, may have different objectives from those of the: (SM, MCQ Bank, MQP [2] 2 Marks Dec'25, June'26)

- (a) Workers (b) Subordinates
(c) Shareholders. (d) Employees

Ans. (c)