

2021

April

VOL: 6, NO.: 4,

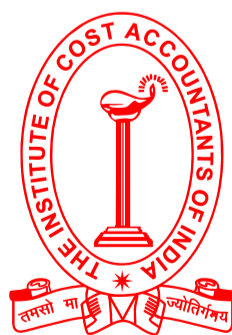
TOLL FREE 18003450092 / 1800110910



CMA Student E - Bulletin

FOUNDATION

FOLLOW US ON



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

(Statutory Body under an Act of Parliament)

www.icmai.in

Headquarters: CMA Bhawan, 12 Sudder Street, Kolkata - 700016

Ph: 091-33-2252 1031/34/35/1602/1492

Delhi Office: CMA Bhawan, 3 Institutional Area, Lodhi Road, New Delhi - 110003

Ph: 091-11-24666100

Behind every successful business decision, there is always a **CMA**



CONTENTS

Knowledge Update -	1
Paper: 1, Part: I - Fundamentals of Economics and Management (FEM) - Economics -	2
Paper: 1, Part: II - Fundamentals of Economics and Management (FEM) - Management -	5
Paper: 2 - Fundamentals of Accounting (FOA) -	8
Paper: 3 - Fundamentals of Laws and Ethics (FLE) -	13
Paper: 4 - Fundamentals of Business Mathematics and Statistics (FBMS) -	17
Practical Advice -	24
Submission -	25
Message from the Directorate of Studies -	26
Few Snapshots -	27

KNOWLEDGE Update



In this section of e-bulletin we shall have a series of discussion on each of these chapters to provide a meaningful assistance to the students in preparing themselves for the examination at the short end and equip them with sufficient knowledge to deal with real life complications at the long end.



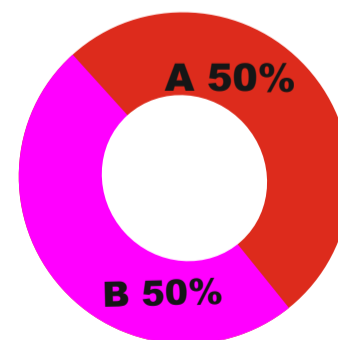
PAPER: 1, PART: I

FUNDAMENTALS

OF ECONOMICS & MANAGEMENT
(FEM) - ECONOMICS

Dr. Bibekananda Raychaudhuri
Associate Professor,
Department of Economics,
N.S.O.U., Kalyani, W.B.
He can be reached at:
brchaudhuri@gmail.com

Your Preparation Quick Takes



Syllabus Structure

A Fundamentals of Economics 50%
B Fundamentals of Management 50%

Learning Objectives:

- Studying economics, one will be able to develop the analytical skills needed to work successfully in the field, including the study of logical analysis.
- Students will be able to identify and explain economic concepts and theories related to the behaviour of economic agents, markets, industry and firm structures, legal institutions, social norms, and government policies.
- Students will be able to integrate theoretical knowledge with quantitative and qualitative evidence in order to explain past economic events and to formulate predictions on future ones.
- Students will be able to evaluate the consequences of economic activities and institutions for individual and social welfare.

Economics

Hi friends!! hope you are doing fine. I would love to see you hale and hearty. But the second wave of Corona virus is knocking at the door. So, please take all the precautions like wearing of musks whenever you go out and do not forget to maintain a social distance of at least 7 feet from others. This precaution you have to take even if you have taken the vaccine. Scientists had never been so vulnerable before. They never know whether the available vaccines are at all sufficient to fight the pandemic of Corona virus. So, it will be wise to take necessary precautions. Particularly when your exams are not far away. We start our usual exercise of mock test.

I. Choose the correct answer:

- 1. If the right-ward shifting change of the supply curve is more than the left-ward shifting change of the demand curve, then**
 - A. The equilibrium price and quantity both will rise
 - B. The equilibrium price will fall but the equilibrium quantity will rise
 - C. The equilibrium price and quantity both will fall
 - D. None of the above
- 2. If the demand curve is shaped like a rectangular hyperbola, then**
 - A. Price elasticity of demand is greater than 1
 - B. Price elasticity of demand is less than 1
 - C. Price elasticity of demand is equal to zero
 - D. None of the above
- 3. Micro economic theory is also called**
 - A. Income theory
 - B. Employment theory
 - C. Welfare theory
 - D. Price theory
- 4. Which one of the following is correct?**
 - A. Net investment = Gross investment / Depreciation
 - B. Net investment = Gross investment + Depreciation
 - C. Net investment = Gross investment - Depreciation
 - D. None of the above
- 5. Which one of the following is the portfolio investment?**
 - A. Purchasing of new shares
 - B. Purchasing of existing shares from other share holders
 - C. An increase in the real capital stock
 - D. None of the above.
- 6. The formula for marginal product is**
 - A. dAR/dQ
 - B. AR/Q
 - C. TR/Q
 - D. dTR/dQ
- 7. The shape of the MC curve depends on**
 - A. $d(dTC/dQ)/dQ$
 - B. $d(dAC/dQ)/dQ$

- C. $d (dMC/dQ)/dQ$
D. None of the above

8. SDR is related to

- A. World Bank
B. IMF
C. Asian Development Bank
D. None of the above

9. OPEC countries form a cartel to maximize joint profits. This comes under

- A. Stackelberg model of oligopoly
B. Bertrand model of oligopoly
C. Edgeworth model of oligopoly
D. Collusive oligopoly

10. Price set by a monopolist to discourage rival's economic entry into a market is called

- A. Cost-plus pricing
B. Dynamic pricing
C. Limit pricing
D. Absorption pricing

KEY: 1. B, 2. D, 3. D, 4. C, 5. A, 6. D, 7. C, 8. B, 9. D, 10. C

II. Fill in the blanks:

- Wealth is a owned at a point of time, whereas income is a flow over a period of time.
- Economics is a science which studies human behaviour as a relationship between ends and means which have uses
- Perfectly inelastic demand curve is to the y-axis
- A discriminating monopolist would fix up a lower price in a market, where demand is
- With diminishing returns to scale, when we double the inputs, the output will bedouble

KEY: 1. Stock, 2. Scarce, alternative 3. Parallel, 4. Elastic, 5. Less than

III. True or false:

- The opportunity cost of anything is next best alternative cost which is foregone
- Even if production is stopped, the variable costs can become positive
- AVC curve is normally a bell-shaped curve
- Reduction in taxation always leads to inflation
- A bank must keep sufficient cash in hand to meet the claims of the depositors

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

IV. Matching:

1. Perfectly elastic demand curve	A. money market controller
2. Adam Smith	B. Chamberlin
3. RBI	C. Certificate of Deposit
4. NRI	D. Perfect Competition
5. Monopolistic Competition	E. Father of Economics

KEY: 1. D, 2. E, 3. A, 4. C, 5. B

So, friends!! How do you like the mock test? Don't mind if you cannot solve them all. Try to study hard. One day you will be able to solve them all on your own. Don't consult the key at the beginning. First complete the mock test, then consult the key to find out your performance. Practice will make you perfect. Go through the Study Material, you may consult some reference books as well. Your exam days are inching forward. So be careful and take care. Best of luck!!!



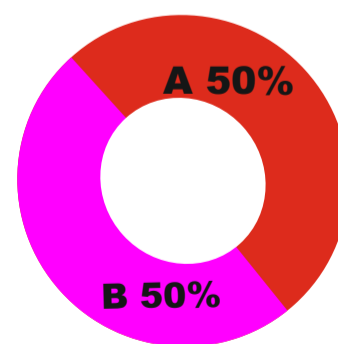
PAPER: 1, PART: II

FUNDAMENTALS

OF ECONOMICS & MANAGEMENT
(FEM) - MANAGEMENT

CMA (Dr.) Sumita Chakraborty
Additional Director,
Research & Studies
She can be reached at:
research.hod@icmai.in
studies.addldir1@icmai.in

Your Preparation Quick Takes



Syllabus Structure

A Fundamentals of Economics 50%
B Fundamentals of Management 50%

Learning Objectives:

- Students will demonstrate their knowledge of business and management principles
- Students will reveal effective written and oral communication
- Students will exhibit an awareness of the global environment in which businesses operate
- Students will display the ability to recognize when change is needed, adapt to change as it occurs, and lead

MANAGEMENT

1. While guiding organization members in appropriate directions, a manager exhibits _____
 - a. Consideration behavior
 - b. Authoritarian behavior
 - c. Theory y behavior
 - d. **Leadership behavior**
2. Which role of manager that needs to resolve major and minor crisis that may occur unexpectedly?
 - a. Negotiator
 - b. Entrepreneur
 - c. Resource allocator
 - d. **Disturbance handler**
3. _____ is not one of the eight steps in the decision making process.
 - a. Identifying the problem
 - b. Analyzing alternative solutions
 - c. Implementing the decision
 - d. **Delegating the decision making**
4. In which organizational form are there dual or multiple lines of authority?
 - a. **Matrix**
 - b. Modular
 - c. Multidivisional
 - d. Decentralized
5. Which of the following is the determinant of organization structure?
 - a. **Technology**
 - b. Centralization
 - c. Size of the work unit
 - d. Coordination of activities
6. Group brainstorming encourages all of the following except _____
 - a. Team building
 - b. Analysis of alternatives
 - c. **Convergent thinking**
 - d. Uninhibited verbalization
7. All of the following are the levels of communication except _____
 - a. Intrapersonal Communication
 - b. Interpersonal Communication
 - c. Mediated Communication
 - d. **Frame Communication**
8. _____ is an individual's capacity to influence decisions.

- a. Span of control
b. Line authority
c. Staff authority
d. **Power**
9. Some policies are imposed by external forces, such as _____
- a. **Governmental regulatory agencies**
b. Employee demands
c. Management decisions
d. Lack of funding
10. Which management concept suggests that low-importance decisions be handled by subordinates, so that managers can focus on high-importance decisions?
- a. management by objective
b. **management by exception**
c. participatory management
d. inclusionary management
11. Authority, discipline, unity of command, and unity of direction are _____
- a. Principles of the human relations movement.
b. Taylor's four principles of management.
c. Elements of Weber's ideal bureaucratic structure.
d. **Four of Fayol's fourteen principles of management.**
12. Organization structure primarily refers to _____
- a. **how activities are coordinated and controlled**
b. how resources are allocated
c. the location of departments and office space
d. the policy statements developed by the firm
13. The problem-solving process begins with _____
- a. Clarification of the situation
b. Establishment of alternatives
c. **Identification of the difficulty**
d. Isolation of the cause
14. Scalar chain refers to _____
- a. **The line of authority from top management to the lowest rank**
b. Degree to which subordinates are involved in decision making
c. Every employee should receive orders from only one superior
d. People and materials should be in the right place at the right time
15. The communication process must have a medium to convey information between two or more parties. The three common media are _____.
- a. Written, spoken, and signalized
b. **Visual, audio, and tactile**
c. Seeing, talking, and listening
d. Seeing, listening, and touching

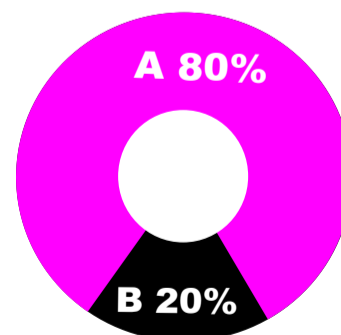


PAPER: 2

FUNDAMENTALS OF ACCOUNTING (FOA)

CMA (Dr.) Nibir Goswami
Associate Professor in Commerce
Vidyasagar Mahavidyalaya, W.B.
He can be reached at:
drnibirgoswami@gmail.com

Your Preparation Quick Takes



Syllabus Structure

A Fundamentals of Financial Accounting 80%

B Fundamental of Cost Accounting 20%

Learning Objectives:

In order to internalize the concepts of subjects like accountancy one has to have an understanding of the learning objectives of the chapters. Try to go through the Statement of Objects and Reasons issued for every topics as it would give you a background to your study.

FINANCIAL ACCOUNTING

There is no glory in practice, but without practice, there is no glory.

Here are some practice materials once again:

Question 1.

The Mathematical Expression defining the comparative relationship between Assets and Liabilities of any person, institution or Business concern is called-

- (a) Accounting
- (b) Accounting Equation
- (c) Book-keeping
- (d) None of these.

Answer : b

Question 2.

Liabilities and Assets amount to Rs. 50,000 and Rs. 7,800 respectively. The difference Amount shall represent-

- (a) Creditors
- (b) Debentures
- (c) Profit
- (d) Capital.

Answer : d

Question 3.

The basis of recording transactions is-

- (a) Vouchers
- (b) Profit
- (c) Order form
- (d) Quotation list.

Answer : a

Question 4.

As per American Belief, Accounts are of how many types-

- (a) Two
- (b) Three
- (c) Five
- (d) Four.

Answer: b

Question 5.

Which of the following is entered in cash - book-

- (a) Only cash transactions
- (b) Only credit transactions
- (c) Both cash and credit transactions
- (d) None of these.

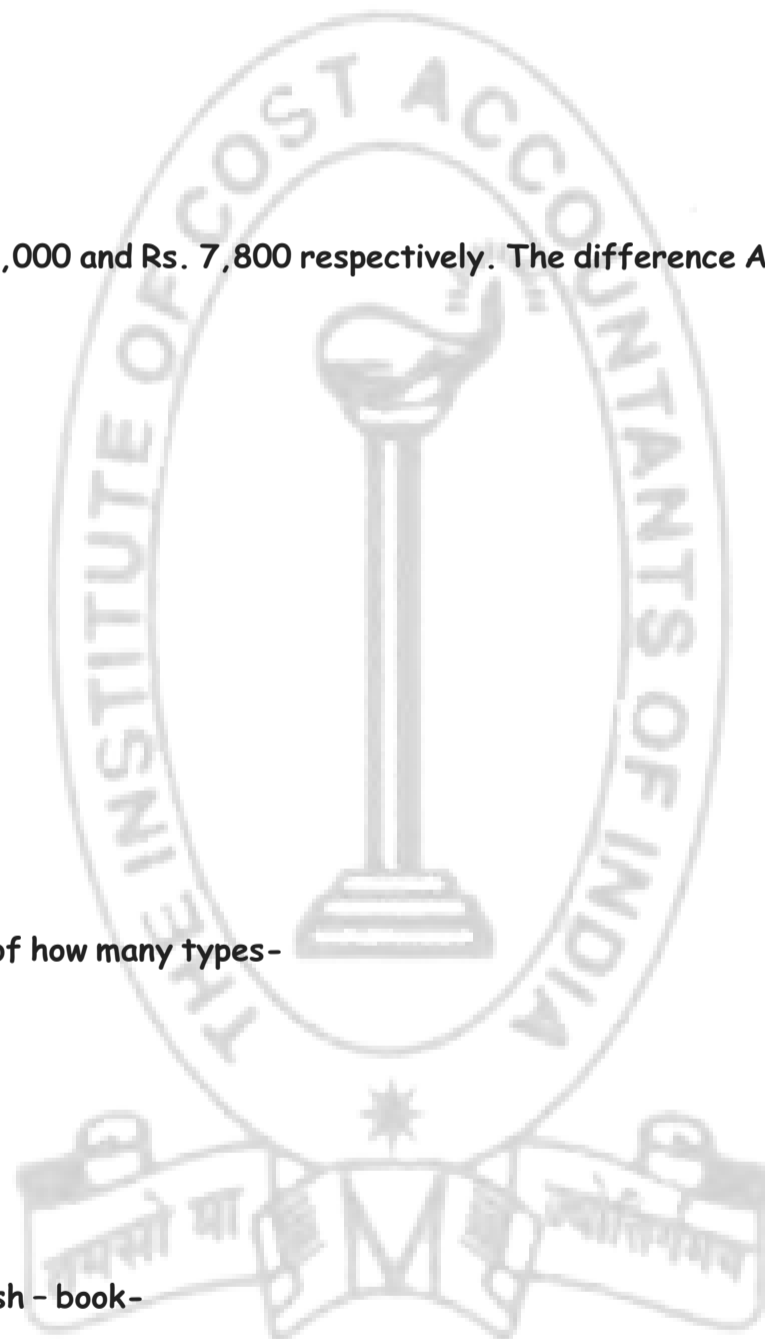
Answer: a

Question 6.

Cash - book always show-

- (a) Debit balance
- (b) Credit balance
- (c) Debit or Credit balance
- (d) None of these.

Answer: c



Question 7.

The cash - book meant for recording petty expenses is called -

- (a) Simple cash - book
- (b) Petty cash - book
- (c) Triple column
- (d) None of these.

Answer: b

Question 8.

The entry which affects cash and bank column of a triple column cash - book is known as -

- (a) Compound entry
- (b) Contra entry
- (c) Journal entry
- (d) None of these.

Answer: b

Question 9.

What statement is used while closing a Drawing Account-

- (a) Balance c/d
- (b) By Trading A/c
- (c) By P & L A/c
- (d) By Capital Account.

Answer: d

Question 10.

The entry which is passed for bringing forward the balances of personal and Real Account as shown in the last year's balance sheet is called -

- (a) Closing entry
- (b) Journal entry
- (c) Opening entry
- (d) None of these.

Answer: c

Fill in the blanks:

1. Only transactions are recorded in cash - book.

Answer: cash

2. Cash - book is a main book as well as book.

Answer: subsidiary

3. entry is passed in triple column cash - book for depositing cash in bank.

Answer: contra

4. Advancing money to petty cashier is called

Answer: Float

5. Contra entry is made in book.

Answer: cash

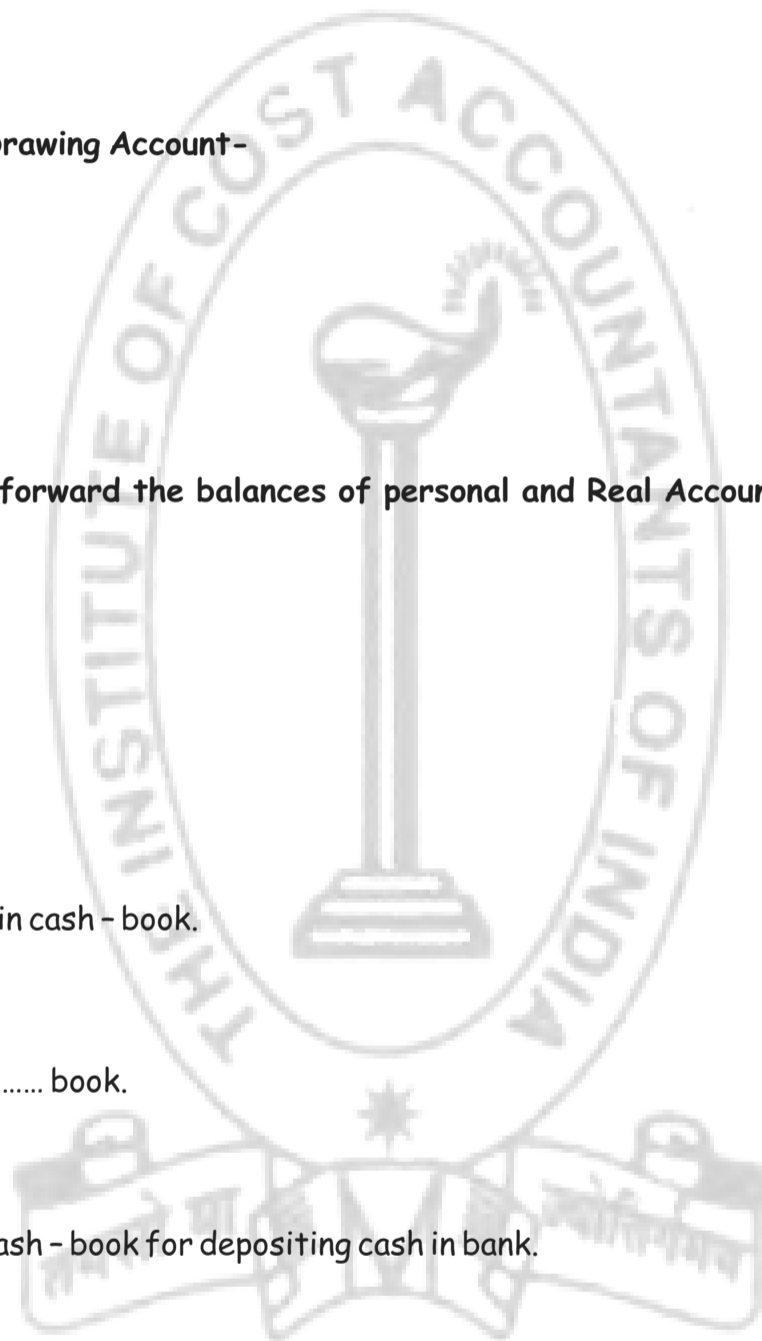
6. Ledger posting is done on the basis of

Answer: Journal book and Subsidiary book

7. of transaction is not written in Ledger Account.

Answer: Narration

8. The recording of page number from subsidiary books to Ledger book and vice versa is called



Answer: Folioing

9. The balance of Income and Expenditure Accounts is transferred to

Answer: Profit and loss Account.

State True or False:

1. Assets = Liabilities - Capital.

Answer: F

2. The sum of Assets is equal to the sum of liabilities.

Answer: T

3. Capital Account represents owner's Account in Business.

Answer: T

4. Assets - Liabilities = Capital.

Answer: T

5. No need of voucher to be written.

Answer: F

6. Cash - book is only a subsidiary book.

Answer: F

7. When a cheque is received, it is recorded in both sides of cash - book?

Answer: F

8. Cash - book always shows debit balance.

Answer: T

9. The cash balance as per cash-book is tallied daily with the physical cash balance.

Answer: T

10. The word 'By' should be used always while making an entry in debit side of an account.

Answer: F

11. The debit balance of personal accounts denotes debtors.

Answer: T

12. The balance of goods accounts is transferred to trading account.

Answer: T

13. Ledger book does not possess legal acceptability.

Answer: F

14. In ledger narration is not required.

Answer: F

Match the following:

1.



Column A	Column B
1. Increase of Assets & Liabilities	(a) Investment of capital in business.
2. Decrease of Assets and Liabilities	(b) Drawings or Expenses.
3. Increase of Capital and Assets	© Payment of Liabilities.
4. Decrease of Capital and Assets	(d) Credit purchase of Assets.

Answer: 1-d 2-c 3-a 4 -b

2.

Column A	Column B
1. Amount withdrawn from bank	(a) Credit
2. Petty cash book	(b) Debit
3. Balance of cash-book	© Contra entry
4. Bank overdraft	(d) Petty cashier.

Answer: 1-b 2-d 3-b 4-a



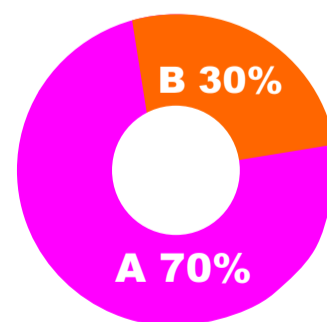


PAPER: 3

FUNDAMENTALS OF LAWS AND ETHICS (FLE)

CA Partha Ray
He can be reached at:
prapray@rediffmail.com

Your Preparation Quick Takes



Syllabus Structure

- A Fundamentals of Commercial Laws 70%
- B Fundamentals of Ethics 30%

Learning Objectives:

- Read the Study Material minutely.
- For details or if you don't understand Study Material or the section is important to identify the topic, then refer to Bare Act, otherwise reference to Bare Act is not necessary. For Company Law, book by Avtar Singh is recommended. For other laws Institute Study Material is sufficient.
- The words used in any of the texts as mentioned above should be understood by immediate reference to the Dictionary.
- The main points coming out in any of the provisions should be either underlined or written in separate copy which has to be repeated again and again.
- Theoretical knowledge should be adequate and clear before solving practical problems.
- Don't write wrong English. It changes the meaning and therefore answer may be wrong even when the student's conception is clear. Also don't make spelling mistakes.

LAWS & ETHICS

First of all, please appreciate why this paper is really very important for all of you who are aspiring to be true professionals and are all eager to proudly proclaim aloud that - **Yes, behind every successful decision, there is a CMA.** With Mission CMA in mind, you the students, are advised to study this paper with a practical approach, as if the points concern you and you are given to deal with it as a professional. As a CMA in the making whether you decide to get employed or be self-employed and employ people, you will have to deal with people and establishments legally and establish Legal relationship for lawful consideration and perform your professional duties. Keeping that in mind, you have to study this subject seriously.

It is hoped that you keep on reading and recapitulating all that you have read for which you must prepare a time-table with time allotted for each subject - to read, write and revise.

The first TIP is that you start studying the subject and raise questions to yourself first and then find your own answers. Even as a student now, you must start thinking like A Teacher. Now, we will deal with the full Syllabus -Paper 3 Chapter by Chapter.

Indian Contract Act, 1872

To start with, let us cover **Essential Elements of Contract, Offer and Acceptance.**

In every contract, there has to be two or more persons. One party will offer/propose to do something and the other party will agree/accept the offer /proposal. However, a party may even offer not to do something and the other party may agree/accept that.

The question arises - Will all agreements be contracts ? The answer is - No, only those agreements that can be enforced in the court of law are contracts. For example, an agreement to play chess or sing a song just for fun.

So, now ask yourself - **What is an Offer ?**

The Answer is simple. An offer is just an act of making a Proposal. Read Sec.2(a) and understand that. The person making the Offer is the Offeror /Proposer/Promisee and the person to whom you propose is the Offeree. The offer has to be for a Consideration and when that is accepted by the other party, the other party becomes the Acceptor and there is a contract.

Well, ask yourself - **How do I make an offer ?**

The answer is that there are certain **Rules regarding Offer** which are : 1. (i). **An offer can be in words spoken or written** and (ii). **An offer can be implied by conduct.** For example : X tells Y by word of mouth or in writing that he wants to sell his Mobile Phone for Rs.5000 that is an offer when Y accepts it, there is a contract.

The State Transport Corporation runs a Bus from Location A to location B along a fixed route. Here it is implied by conduct that the bus is offering to carry passengers against a specific fare structure. When a passenger boards the bus it is implied that he accepts to offer and wants to become a passenger. Here too, there is a implied contract. 2. **The terms of offer must be certain.** Example :When the passenger boards the bus, he accepts to pay the specific fare and follow certain terms offered. 3. **A simple intention to sell is not an offer or an advertisement is an invitation to make an offer but is not an offer.** For example : A told C that his old mobile phone was fetching him Rs.5000 but he did not say that he was willing to sell at that price. Here there is no contract between A and C. 4. **An offer must be communicated and the offeree must be aware of such offer.** 5. **If an offer is conditional, such conditions must be clearly communicated to the offeree.**

So, we arrive at the obvious question -

How should I communicate the offer to other person /s ?

As said above, **an offer can be in words spoken or written** and (ii). **An offer can be implied by conduct.** The offer by the bus to move along a specified route and carry passengers is a clear example of an offer by conduct.

Section 2(b) states that a proposal when **accepted** becomes a promise. So, the question arises - **What are the Rules regarding Acceptance ?**

The answer is that -1. Sec.7(1) lays that **an acceptance must be absolute and unqualified.** Even, if a insignificant point of variation between the terms of offer and the terms of acceptance is found, there is no contract. For example : You offer to sell your Office Premises to Y for Rs.5,00,000 and no payment term was laid.Y sends you a bank draft for Rs.1,00,000 and promises to pay the balance

Rs.4,00,000 after 2 months. So, here the acceptance is conditional and so there is no contract. 2. **An acceptance must be expressed in a usual or reasonable manner.** (Refer Sec.7(2)). Such acceptance can be by word of mouth, in writing or by post or even by conduct, but the offeree must do what the offeror wants him to do. (Refer Sec.8). 3. **A mental acceptance is not a contract. Moreover, an acceptance which is not communicated is not a contract.** For example: You write to your friend X that you want to sell your Motorcycle for Rs.10,000. Your friend mentally decides to buy the motorcycle and even writes a letter addressed to you, but forgets to post the letter to you or verbally inform you. This does not result in a contract. 4. **If the Offeror prescribes a specific mode of acceptance, the Offeree must follow that particular mode unless the offeror waives it.** (Read Sec.7(2)), 5. Both the Communication of the Offer and the communication of the Acceptance must be complete. Another point is that the acceptance must be made till the offer is in force. For example: A desires to sell his Motor Car for Rs.50,000 before 31st January, 2018, such an offer is not valid after 31st January, 2018.

NEGOTIABLE INSTRUMENTS ACT

To start with, let us ask ourselves a basic question - **What is a Negotiable Instrument ?**

For that we need to understand two things - 1. Meaning of "Negotiable"; and 2. Meaning of "Instrument".

Negotiable means transferable by delivery.

Instrument means a written document. Such written document creates a right in favour for some person.

The written document can be a - a Promissory note, a bill of exchange or a cheque payable either to Order or to the Bearer of such document.

Naturally, the obvious question coming to mind shall now be - **What is a Promissory Note ? ;**

A Promissory Note is not a currency note. It is an instrument (document) in writing which contains unconditional undertaking, duly signed by the maker, **who agrees to pay** a certain sum of money, only to the order of a certain person or to the bearer holding the instrument.

The person signing the instrument is called the **Maker** and the person who will get the money is called the **Payee**.

Next question is - What is a Bill of Exchange ?

A Bill of Exchange is also an instrument in writing containing an unconditional order, duly signed by the **Maker**, **directing a certain person to pay** a certain sum of money only to, or to the order of a certain person or to the bearer of the instrument.

The **Maker** of the Bill of Exchange is called the **Drawer** and the person who is directed to pay is called the **Drawee**. Here, the **Payee** must present the bill to the **Drawee** for his acceptance by signing on the bill and thereby signifying his acceptance. After Acceptance, the **Drawee** becomes the **Acceptor**.

The remaining question is - what is a Cheque ?

A Cheque is a Bill of Exchange drawn upon a **specified banker** and payable on demand. A cheque can be either a Bearer Cheque or an Order cheque but in both cases, it is **payable on demand**. The **Specified banker**, named has to pay the cheque, when it is presented to him during official banking/office hours at his office. However, the cheque must be validly drawn and the **Drawee** must have sufficient funds to his credit in his bank account in order to be duly honoured for payment.

Now, let us deal with the Sale of Goods Act, 1930

In respect of such papers, the students are reminded that since they are taking an exam, they must first focus on securing marks. For that, they must study the relevant Sections of the Act, write what the question wants and then attempt to elaborate by analyzing and commenting on the interpretations of the Act.

At the very start, let us be clear that **Sale of Goods Act** relate to sale and purchase of goods, but the contract of sale is regulated by the Indian Contracts Act, 1872.

At the very start, we must clear our conception about the following terms -

Goods, Specific Goods, Unascertained goods, Future goods and Contingent goods.

The immediate question coming to mind is - **What are goods ?** It is clarified that **every kind of movable property** is goods but - Actionable Claims and Money are excluded. (All things attached to the earth are not movable and are therefore not goods under the Act. However, standing crops, grass and fruits on trees that can be separated are covered under the definition of movable goods).

So, the question arises - **What are Actionable Claims ?** Actionable claims are debt or a claim for money which a person may have from another person, which may be recovered by suit.

So, what is **Money ?** Money here simply means legal tender.

Specific Goods are goods that can be clearly identified and recognized

Unspecific Goods are those goods that can be indicated by description but cannot be separately identified. For example, as long as the bags of sugar, kept in a godown for sale, are not identified with any specific buyer, they remain Unspecified Goods. As soon as some bags are brought out, marked, separated and issued to a buyer, they become identifiable and become Specific goods.

Future Goods are goods which have not yet been manufactured or produced or acquired by the seller after entering into a contract of sale. For example, X agrees to sell Apples to Z that he will grow in his orchard in the coming fruit season. Such a contract is for sale of

future goods.

Contingent Goods, are goods that can be sold only depending on the happening of an uncertain event, called a Contingency. For example, M enters into a contract to sell a particular watch to N if M manages to buy it from C - the current owner of the watch. The watch here is considered - Contingent Goods.

ETHICS AND BUSINESS

let us discuss **Ethics and Business - Meaning , importance**

Ethics : Please remember that Ethics is truly the pillar on which you, - the would-be professionals will be expected by the society and the world-at-large, to stand, during your professional career.

Right from the day an individual is born, the world accepts him/her as a member of a Society, a Clan, a Culture and a Tradition and each of those categories are governed by respective Standards and Ethics. We may therefore, explain that **Ethics are such standards that are consistently followed over the years depending on the philosophy that , that system has been following based on the terms of right, obligations and the benefits derived by the society depending on their geographical location and demographic characteristics.**

It is known that, right after his/her birth, from the day a person, begins to see, hear, understand and realize the customs, beliefs, traditions and culture into which he/she is born, he/she is told to do or not to do something, to speak or not to speak something, to wear or not to wear certain dresses, to eat or not to eat certain foods and vegetables or to behave in a certain manner, etc. However, **we must never be confused but should be able to distinguish between Morals and Ethics.**

It must be appreciated that all *ethical traditions and customs are generally followed based on systematic and scientific reasons depending on how much the individual has bonded and established his relationship within that category where he/she belongs or interacts with*, but such reasons may not be always known to every individual existing within that system. Let us take an example. When you enter or pass through a place where the environment is good, peaceful and congenial, you tend to prolong your stay over there, but in a reverse situation, you will definitely either avoid such place or quickly leave that place. In the former case, the individuals gathered there have not breached their ethics but in the latter case, the ethics have been definitely breached and violated.

That prompts us to raise a question - should ethics be rigid or does it need changes ? The answer is that we must remember that **ethics is something which is generally prompted by your conscience. Ethics, helps us to realize what is right and wrong and what we should refrain from doing.** Moreover, since the time- machines keeps ticking and changes are bound to take place depending on situations and circumstances, ethics actually guides us to study and analyze an existing system first before showing the path towards development and fine-tuning of an existing system that needs a change.

Ethics : Please recollect what you read in the initial paragraph, that Ethics is truly the pillar on which you, - the would-be professionals will be expected by the society and the world-at-large, to stand, during your professional career.

Moral and Ethics , depends on how we interpret the meaning. **Morals**, deal with customs and practiced principles followed by certain groups, depending on religion, culture and traditions. **Ethics**, on the other hand, lays emphasis on character , conduct and individual behavior . What is ethically moral, may not be morally wrong. For example, eating fish on Saturdays may not be ethically wrong but it may be morally wrong for certain community members.

Ethics and Morals are certain laid practices which reminds the members of the society about their duties and restrictions, so that those community members stay within set acceptable limits. Breaching the restrictions cause conflicts and disturbs human peace and harmony between different social relationships such as - father and son, husband and wife, between friends and relatives and even between communities.

Ethics , demands that we follow certain disciplines , standard practices and conventions more than what is prescribed by law. It all depends on how we apply and practice ethics in our daily life and general practices.

Ethics in general life must be followed differently. Ethics in office must not be mixed with ethics at home. For example, watching television (TV) during working hours in office may not be permitted but, at home it is allowed. However, playing a TV at home while a student is studying there is ethically wrong if it disturbs or distracts the attention of that student there. This is called **Value-based Ethics and discipline.**

Ethics is linked to Principles and principles are aimed at bringing methods, systems, procedures, orderliness, happiness and for leading the path towards good mutual co-existence between individuals and their way of life. These are Social Ethics, but what the society expects from the businessman can be called Professional Principles and Practices.

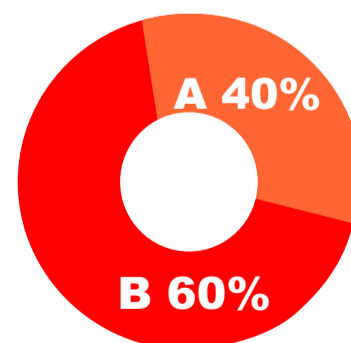


PAPER: 4

FUNDAMENTALS OF BUSINESS MATHEMATICS AND STATISTICS (FBMS)

CMA Ankan K Bandyopadhyaya
He can be reached at:
abanerjee8533@gmail.com

Your Preparation Quick Takes



Syllabus Structure

A Fundamentals of Business Mathematics 40%

B Fundamentals of Business Statistic 60%

Learning Objectives:

- To understand the basic concepts and needs of Business Mathematics.
- To Know the reasonableness and explanation in calculation.
- To know the application of various mathematical techniques.

BUSINESS MATHEMATICS AND STATISTICS

In this issue we are placing some conventional numerical problems on Arithmetic Mean

Q1. Compute the arithmetic average if the changes in the prices of securities in a certain stock exchange are as follows:

Class	frequency	Class	frequency
10% & over	54	-2% to 0%	149
8% to 10%	30	-4% to -2%	100
6% to 8%	50	-6% to -4%	74
4% to 6%	71	-8% to -6%	31
2% to 4%	119	-10% and under	51
0% to 2%	346	Total frequency	1075

Ans: Classes are open ended type. So for open ended class AM can be found out by the relation
Mean - Mode = 3 (Mean - Median)
Median is calculated from the formula

$$M_d = l_1 + \frac{\frac{N}{2} - C}{f} * h$$

$$M_d = 0 + \frac{537.5 - 405}{346} * 2 = 0.7659$$

& Mode is calculated from the formula

$$M_o = l_1 + \frac{f_1 - f_0}{(f_1 - f_2) + (f_1 - f_0)} * h$$

$$M_o = 0 + \frac{346 - 149}{(346 - 119) + (346 - 149)} * 2 = 0.9292$$

So Mean - 0.9292 = 3 × (Mean - 0.7659) = 2 Mean = 1.3685. So Mean = 0.684 Details computation for lower than cumulative frequencies are as follows:

Class	Frequency	Cumulative frequency
below (-10)	51	51
-8-(-6)	31	82
-6-(-4)	74	156
-4-(-2)	100	256
-2-0	149	405
0-2	346	751
2-4	119	870
4-6	71	941
6-8	50	991
8-10	30	1021
10-12	54	1075
Total	1075	

Q2. From the following data of income distribution, calculate the arithmetic mean. It is given that (i) the total income of persons in the highest group is Rs. 435 and (ii) none is earning less than Rs.20.

Income (Rs)	No of persons
Below 30	16

Below 40	36
Below 50	61
Below 60	76
Below 70	87
Below 80	95
80 and above	5

Ans:

The above table is cumulative. From this we should find simple frequencies. Since none is earning less than 20 and there are 16 persons below 30, we could take 20-30 as our first class with a simple frequency 16. Next class is taken as 30-40. Since there are 36 persons below 40, so in 30-40 class the simple frequency will be $36 - 16 = 20$. In this way we make a simple frequency table and AM is found by formula

$$\bar{x} = \frac{\sum fX}{\sum f} = \frac{\sum fX}{N}$$

And thereby we get the mean as 48 as shown below in detailed computation:

Class	f	x	fx	
20-30	16	25	400	
30-40	20	35	700	
40-50	25	45	1125	
50-60	15	55	825	
60-70	11	65	715	
70-80	8	75	600	
80-anbove	5	NA	435	(given)
Total	100		4800	
mean	48			

Q3. From the following result of an examination out of 50 compute the mean marks of the students of 50 schools in a city:

Marks Obtained	35 & above	30-35	25-30	20-25	15-20	Below15
No of School	7	10	15	9	5	4
Average no of students in a school	200	250	300	200	150	100

Ans: Since the examination is conducted out of 50, so highest class will be 35-50. Since there is no information on negative marking, the lowest class we could safely take as 0-15
AM is found by formula

$$\bar{x} = \frac{\sum fX}{\sum f} = \frac{\sum fX}{N}$$

& detail computation is as follows

Class	School	Average Students	TotalStudents (x)	x	fx	Mean
0-15	4	100	400	7.5	3000	
15-20	5	150	750	17.5	13125	
20-25	9	200	1800	22.5	40500	
25-30	15	300	4500	27.5	123750	
30-35	10	250	2500	32.5	81250	
35-50	7	200	1400	42.5	59500	
Total frequency			11350		321125	28.29295

Q4. Put the following information into a frequency distribution and obtain the arithmetic mean. On a range of salary zero to Rs. five hundred, for a group of wage earners 20%, 40%, 70% and 80% of the wage earners receive less than Rs.50, Rs.120, Rs.300 and Rs.350 respectively and 5% are receiving Rs.400 and over.

Ans:

In this problem Cumulative frequency (Cf) is given for respective classes except class 350-400
From Cf of respective classes we calculated relative frequency (rf). rf of last class 400-500 is already given in the question. And thereby rf of class 350-400 we could find as balancing figure (marked in red). Mean is determined by

$$\bar{X} = \frac{\sum fX}{\sum f} = \frac{\sum fX}{N}$$

Detail computations are

Class	Cf	rf	f	X	Xf
0-50	0.2	0.2	20	25	500
50-120	0.4	0.2	20	85	1700
120-300	0.7	0.3	30	210	6300
300-350	0.8	0.1	10	325	3250
350-400	?	0.15	15	375	5625
400-500	?	0.05	5	450	2250
			100		19625
Red Bal fig	MEAN	196.25			

Q5. A appeared in three test of full marks 20, 50 and 30 marks respectively. He obtained 75% marks in the first and 60% marks in the second test. What should be his percentage of marks in the third test if his aggregate is 60%?

Ans:

Here the mean is obtained by the formula

$$\text{Average} = \frac{\sum_{i=1}^3 (\text{Full Marks in test } i * \% \text{age of marks in test } i)}{20 + 50 + 30}$$

$$\text{Or, } 0.6 = \frac{20 * 0.75 + 50 * 0.6 + 30 * x}{15 + 30 + 30x}$$

$$\text{Or, } 60 = 45 + 30x$$

$$\text{Or, } 15 = 30x$$

$$\text{Or, } x = 50\%$$

Q6. A firm of readymade garments make both men's and women's shirts. Its profits average 6% of sales. Its profits in men's shirts average 8% of sales and women's shirts comprise 60% of output. What is the average profit per sales rupee in women's shirts?

Ans:

Women's shirts comprise 60% of output. So men's shirts comprise 40% of output. So by question we can write

$$\text{Average profit} = \frac{\sum_{i=1}^2 (\text{output percentage in } i \text{ class} * \% \text{age of profit in class } i)}{60 + 40}$$

$$\text{Or, } 0.06 = \frac{60 * x + 40 * 0.08}{100}$$

$$\text{Or, } 6 = 60x + 3.2$$

$$\text{Or, } 2.8 = 60x, \text{ Or, } x = 4.67\%$$

Q7. A certain number of salesmen were appointed in different territories and the following data were compiled from their sales reports:

Sales ('000 Rs)	No of Salesmen
4-8	11
8-12	13
12-16	16
16-20	14
20-24	?
24-28	9
28-32	17
32-36	6
36-40	4

If the average sale is believed to be Rs.19,920 find the missing information.

Ans:

In this problem mean is obtained by the formula

$$\bar{X} = A + \frac{\sum fd}{\sum f}$$

Here d = deviation of respective class mark we derived from A = 22 and the detail computations are as follows:

Class	f	x	d=X-22	fd
4-8	11	6	-16	-176
8-12	13	10	-12	-156
12-16	16	14	-8	-128
16-20	14	18	-4	-56
20-24	?	22	0	0
24-28	9	26	4	36
28-32	17	30	8	136
32-36	6	34	12	72
36-40	4	38	16	64
Total				-208

Now by question we can write

$$\bar{X} = A + \frac{\sum fd}{\sum f}$$

$$\text{Or, } 19920 = 22000 + \frac{(-)208000}{\sum f}, \text{ as sales are in thousands}$$

$$\text{Or, } 19920 - 22000 = \frac{-208000}{\sum f}$$

$$\text{Or, } -2080 = \frac{-208000}{\sum f}$$

$$\text{Or, } \sum f = 100. \text{ So missing frequency is } = 10$$

Q8. The mean monthly salary paid to all workers in a firm was Rs.310. The number of male workers was twice the number of female workers. If the mean salary of a male worker was Rs.350, find the mean salary of a female worker.

Ans:

Average salary

$$= \frac{\sum_{i=1}^n (\text{No of workers in } i \text{ class} * \text{mean salary of worker in class } i)}{x + 2x}$$

Where x = the no of female workers

So by question we can write

$$310 = \frac{(x * F + 2x * 350)}{3x}, \text{ where } F \text{ is the mean salary of a female worker}$$

$$\text{Or, } 930 = F + 700$$

$$\text{Or, } F = 230$$

Q9. You are given the following information

Year	National Income (Rs. Crore)	Per Capita Income (Rs)	GDP
2000-2001	34,412	636.1	34,696
2001-2002	34,871	629.4	37,019
2002-2003	34,323	606.4	40,693
2003-2004	36,183	626.0	50,821
2004-2005	36,455	617.9	59,696
2005-2006	39,626	659.3	60,851
2006-2007	40,164	655.2	64,534

Find the average national income, average per capita income and average GDP.

Ans:

This is a question of simple average and computations are as follows:

	SUM	Average
NI	256034	36576.29
Per Capita	4430.3	632.9
GDP	348310	49758.57

Q10. A market with 168 operating firms has the following distribution of average number of workers in various income groups:

Income Groups	No of Firms	Average No of workers
150-300	40	8
300-500	32	12
500-800	26	7.5
800-1200	28	8.5
1200-1800	42	4

Find the average salary paid in the whole market

Ans:

In respective class the total no of workers = No of firms * Average no of workers

Say in first class (150-300) total no of workers = 40 * 8 = 320

Mean is obtained by the formula

$$\bar{x} = \frac{\sum fX}{\sum f} = \frac{\sum fX}{N}$$

Therefore detail computation of mean is as follows:

Income groups	No of firms	Average no of workers	f	X	Xf
150-300	40	8	320	225	72000
300-500	32	12	384	400	153600
500-800	26	7.5	195	650	126750
800-1200	28	8.5	238	1000	238000
1200-1800	42	4	168	1500	252000
Total			1305		842350
Mean	645.478927				

Q11. The number 3.2, 5.8, 7.9 and 4.5 have frequencies x, x+2, x-3 and x+6 respectively. If the arithmetic mean is 4.876 find the value of x.

Ans:

Mean is obtained by the formula

$$\bar{x} = \frac{\sum fn}{\sum f}$$

So detail computations are

Number (n)	frequency (f)	fn
3.2	x	3.2x
5.8	x+2	5.8x+11.6
7.9	x-3	7.9x-23.7
4.5	x+6	4.5x+27
Total	4x+5	21.4x+14.9

So we can write

$$\text{mean} = 4.876 = \frac{21.4x + 14.9}{4x + 5}$$

So x = 5

Q12. Average monthly production of minerals in the first eight months in a country was 407.5 T. For the next four months the average was 412.5 T. What is the average for the whole year?

Ans:

Average for year

$$= \frac{\sum_{i=1}^n (\text{No of months in } i\text{th part of a year} * \text{average monthly production in } i\text{th part})}{8 + 4}$$

$$\text{Or, Average} = \frac{8 * 407.5 + 4 * 412.5}{12}$$

$$\text{Or, Average} = 409.1667$$

Q13. The mean of a certain number of items is 42. If one more item, 64, is added to the data the mean becomes 44. Find the number of items in the original data.

Ans:

Let the number of items in the original data = x

So total value in the original data = $42x$

By question we can write $44 = \frac{42x + 64}{x + 1}$

Or $44x + 44 = 42x + 64$

Or, $2x = 20$

So $x = 10$

Q14. 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.

Ans:

In this problem mean is obtained by the formula

$$\bar{X} = A + \frac{\sum d}{n}$$

So by question we can write that

$$4 + \frac{72}{n} = 7 - \frac{3}{n}$$

$$\text{Or, } 4n + 72 = 7n - 3$$

$$\text{Or, } 3n = 75$$

$$\text{Or, } n = 25$$

$$\text{So mena} = 4 + \frac{72}{25} = 6.88$$

Q15. The marks of a student in written and oral tests in subjects A, B and C are as follows: The written test marks are out of 70 and the oral test marks are out of 30. Find the weighted mean of the marks in written test taking the percentage of marks in oral test as weights

Subjects	Marks in Written test	Marks in Oral test
A	43	15
B	32	12
C	29	18

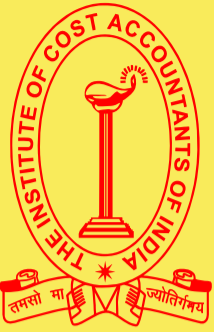
Ans:

Oral	Oral wt out of 30 (x)	Written test marks (y)	xy
15	0.5	43	21.5
12	0.4	32	12.8
18	0.6	29	17.4
Total	1.5		51.7
Mean	51.7/1.5 =	34.46666667	

Suggestions:

The study guide needs to be read thoroughly. Supplementary readings could be made from other resources. This issue is based totally on teachings imparted in study guide issued by the institute. Standard books could be referred for additional expertise to attend conventional questions. Detail discussions on different AM formulae are not done here for which Guide book could be referred. Discussions with MCQs on central tendencies will be done in next few issues. This lesson is purely an aid to study guide on paper 4- Fundamental of Business mathematics and Statistics written and issued by Institute on Syllabus -16.

Best Wishes



PRACTICAL Advice

ABOUT YOUR STUDIES - FOUNDATION COURSE

Practical support, information and advice to help you get the most out of your studies.

START

01

**Read Study Notes,
MTPs, E-Bulletin,
Work Books, Attend
Webinar sessions**

**Solve Exercises
given in Study Note**

02

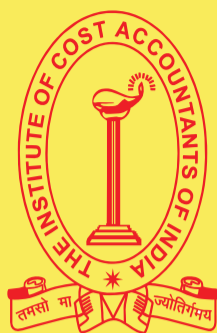
03

Assess Yourself

Appear For Examination

04

FINISHED



SUBMISSIONS

Dear Students,

We are very much delighted to receive responses from all of you; for whom our effort is!

We have noted your queries and your requests will definitely be carried out. Further, requesting you to go through the current edition of the bulletin. All the areas will be covered gradually. Expecting your responses further to serve you better as we believe that there is no end of excellence! One of the mails received is acknowledged below.

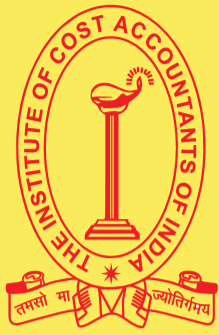
Please put your opinions so that we can make your e-bulletin everything that you want it to be.

All rights reserved. No part of this Bulletin may be translated or copied in any form or by any means without the prior written permission of the Institute of Cost Accountants of India.

Send your Feedback to:
e-mail: studies.ebulletin@icmai.in
website: <http://www.icmai.in>

Updation of E-Mail Address/Mobile:

Students are advised to update their E-Mail id and Mobile Numbers timely so that important communications are not missed as the same are sent through bulk mail/SMS nowadays. Student may update their E-Mail id/ Mobile Number instantly after logging into their account at www.icmai.in at request option.



Message from Directorate of Studies

Dear Students,

Passing the exam is a happy event. Congratulations on all that you have accomplished! There is no secret of success. It is the result of preparation, hard work and learning from failure. Well done! It is clear that the future holds great opportunities for you.

Those who could not pass, failing in an exam does not mean failing in life. All of us face failure at one time or another. Try to focus your attention on the importance of perseverance and mind it that dedication and determination plays the lead role in shaping a person's life.

We from the Directorate of studies know your expectations from us and accordingly we are trying to deliver some meaningful tips through the publications of monthly E-bulletins. Other than this we are trying to help you through, Mock Test Papers (MTPs), Work Books, MCQs and we have conducted Webinar sessions.

You know that the nation is celebrating 150th birth anniversary of the father of the nation **M.K. Gandhi**. One of his inspirational message towards the students were:

"You must be the Change you wish to see in the World",

Let us observe his memory, following the above message.

Certain general guidelines are listed below and which will help you in preparing yourselves:

- Conceptual understanding & Overall understanding of the subject should be clear.
- Candidates are advised to go through the study material provided by the Institute in an analytical manner.
- Students should improve basic understanding of the subject with focus on core concepts.
- The Candidates are expected to give to the point answer, which is a basic pre-requisite for any professional examination.
- To strengthen the answers candidates are advised to give answer precisely and in a structured manner.
- In-depth knowledge about specific terms is required.
- Write question numbers correctly and prominently.
- Proper time management is also important while answering.

Please refer the link mentioned below :

<https://icmai.in/studentswebsite/>

- Don't give up
- Don't give in
- Don't give out

You can win!

The Institute is pleased to inform that the University Grants Commission (UGC) Ministry of Education, Govt. of India has announced that CMA qualification be Considered equivalent to PG Degree.

GOOD LUCK

Be Prepared and Get Success;

Disclaimer:

Although due care and diligence have been taken in preparation and uploading this E-bulletin, the Institute shall not be responsible for any loss or damage, resulting from any action taken on the basis of the contents of this E-bulletin.





ज्ञान-विज्ञान विमुक्तये

डॉ. सुरेन्द्र सिंह
संयुक्त सचिवDr. Surender Singh
Joint Secretary

सत्यमेव जयते

विश्वविद्यालय अनुदान आयोग
University Grants Commission(शिक्षा मंत्रालय, भारत सरकार)
(Ministry of Education, Govt. of India)बहादुरशाह जफर मार्ग, नई दिल्ली-110002
Bahadur Shah Zafar Marg, New Delhi-110002

दूरभाष Phone : कार्यालय Off : 011-23238865

ई-मेल E-mail : ssingh.ugc@nic.in

D.O.No.9-35/2016 (CPP-II)

March, 2021

15 MAR 2021

Sub: To consider CA/CS/ICWA qualification equivalent to PG Degree for appearing in UGC-Net

Sir/ Madam,

UGC had received requests from the Institute of Chartered Accountants of India, the Institute of Company Secretaries of India and the Institute of Cost Accountants of India to consider the qualification being awarded by them, i.e., Chartered Accountant (CA), Company Secretary (CS) and Cost and Works Accountants (ICWA) respectively, equivalent to Post Graduation Degree.

To consider this, a Committee was constituted by the UGC. The Commission, in its 550th meeting held on 18th February, 2021 considered the recommendation of the Expert Committee and resolved as under:

“CA/CS/ICWA qualification be considered equivalent to PG Degree.”

This is for your kind information.

With kind regards,

Yours sincerely,

(Dr. Surender Singh)
Joint Secretary

The President
The Institute of Cost Accountants of India
3, Institutional Area
Lodhi Road
New Delhi- 110 003



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

Statutory Body under an Act of Parliament

Headquarters:

CMA Bhawan, 12 Sudder Street, Kolkata - 700016

Delhi Office:

CMA Bhawan, 3 Institutional Area, Lodhi Road, New Delhi - 110003

www.icmai.in



CMA LEADS

Last Date for Admission
June Exam
31st January
of the same Calendar Year

December Exam
31st July
of the same Calendar Year

5,00,000⁺
Students

75,000⁺
Members

4 Regional
Councils

98
Chapters

9
Overseas
Centres

Largest
CMA body
in Asia

2nd
Largest
CMA body
in the
Globe

The Institute of Cost Accountants of India is a premier professional Institute and a statutory body constituted under an Act of Parliament under the administrative control of **Ministry of Corporate Affairs (MCA), Govt. of India** to regulate and develop the profession of Cost and Management Accountancy (CMA) in the country. The Institute established in **1944** is now celebrating the **Platinum Jubilee year** of its glorious presence.

Cultivating and Enhancing Skills of Success

- CMA Course Curriculum is designed to meet Industry requirements and challenges in Global Economic Scenario
- Hands on Computer and Soft skills training
- Industry oriented practical training programme
- Six Skill Sets - Knowledge, Comprehension, Application, Analysis, Synthesis and Evaluation
- Four Knowledge Pillars - Management, Strategy, Regulatory Function and Financial Reporting
- Our Motto - Student friendly Syllabus and Industry friendly Students

ADMISSIONS OPEN 2020-2021

✉ studies@icmai.in

☎ 1800 345 0092/1800 110 910

For Online Admission

<http://cmaicmai.in/students/Home.aspx>

Excellent Campus Placement Record in renowned Public and Private Sector Companies

Highest Salary Offered **Rs.18 Lakh p.a.** | Average Salary **Rs.7.5 Lakh p.a.**

Few of Our Proud Recruiters



✉ placement@icmai.in / cpt@icmai.in

☎ + 91 33 40364770

Behind every successful business decision, there is always a **CMA**



Few Snapshots



Dignitaries sharing the screen with Shri Arjun Ram Meghwal Hon'ble Union Minister of State for Parliamentary Affairs and Heavy Industries & Public Enterprises during National Corporate Laws Summit. Left to Right CMA Neeraj D. Joshi, CCM; CMA Mahesh Shah, Past President; Shri Debarshi Duttgupta, MD, East India Pharmaceuticals Works Limited; Shri Arjun Ram Meghwal, Hon'ble Union Minister, CMA Dr. Ashish P. Thatte, Chairman, Corporate Laws Committee; CMA Biswarup Basu, President; CMA Chittaranjan Chattopadhyay, CCM; CMA Amal Kumar Das, Past President; CMA Vijender Sharma, CCM



Shri Arjun Ram Meghwal Hon'ble Union Minister of State for Parliamentary Affairs and Heavy Industries & Public Enterprises is giving his live online speech on occasion of inauguration of National Corporate Laws Summit.



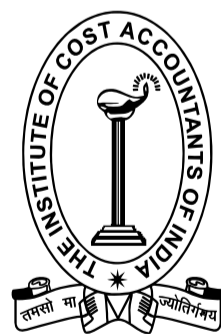
CMA Biswarup Basu, President facilitating Shri Debarshi Duttgupta, MD, East India Pharmaceuticals Works Limited on the occasion of National Corporate Laws Summit organised at Kolkata on 26th February 2021. Sharing the dias is CMA Dr. Ashish P. Thatte, Chairman Corporate Laws Committee and CMA Neeraj D. Joshi, Central Council Member.



From Left to Right CMA Balwinder Singh, Immediate Past President and Council Member, Shri S.K. Kaushik, CAO (AR), Indian Railways, Shri Naresh Salecha, Member (Finance) Railway Board, CMA Biswarup Basu, President, CMA P. Raju Iyer, Vice-President, CMA Chandra Wadhwa, Past President, CMA B.B. Goyal, Advisor ICWAI MARF, CMA J.K. Budhiraja, CEO ICWAI MARF, Ms. Tripti Guraha, Executive Director, (S & E), Indian Railways, Sh. Abhishek Kumar, CPM (AR), Indian Railways



Presentation of Final Report on Performance Costing System in Indian Railways at Rail Bhawan, New Delhi on 19th February, 2021 by CMA Biswarup Basu, President, ICAI to Shri Naresh Salecha, Member (Finance), Railway Board.
From Left to Right CMA Balwinder Singh, Immediate Past President and Council Member, Shri S.K. Kaushik, CAO (AR), Indian Railways, Shri Naresh Salecha, Member (Finance) Railway Board, CMA Biswarup Basu, President, CMA P. Raju Iyer, Vice-President, CMA Chandra Wadhwa, Past President, CMA B.B. Goyal, Advisor ICWAI MARF, CMA J.K. Budhiraja, CEO ICWAI MARF.



FOLLOW US ON



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

(Statutory body under an Act of Parliament)

Headquarters: CMA Bhawan, 12, Sudder Street, Kolkata - 700 016

Phone: +91-33-2252-1031/34/35/1602/1492/1619/7373/7143

Delhi office: CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi - 110 003

Phone: +91-11-2462-2156/2157/2158

Behind every successful business decision, there is always a **CMA**