

2021

February

VOL: 6, NO.: 2,

TOLL FREE 18003450092 / 1800110910

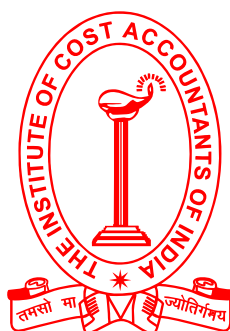


WAKE UP!

# CMA Student E - Bulletin

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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**



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# 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.



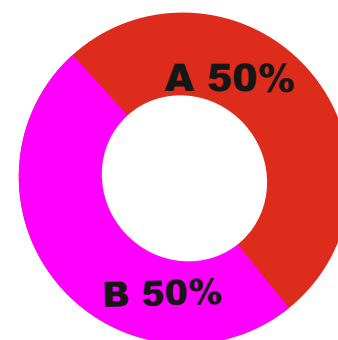
PAPER: 1, PART: I

# 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](mailto: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 !! Happy New Year !!! We fervently hope that 2021 will be better than 2020 for the whole world. Corona virus has played havoc and brought all the countries in the world on their knees. The entire scientist community in the world was caught napping while corona virus took its toll by killing crores of people across the world. Now we are happy that the scientists have come up cannot give 100% protection. So we have to arrange our own protection by using masks and sanitisers. Of course, we have to avoid crowd gatherings and maintain social distancing. Nevertheless our preparation for the exam should not wait for the pandemic to go. So we begin with our mock tests.

**I. Choose the correct answer:**

- For an inferior good, the shape of the income-demand curve is
  - Upward rising
  - Downward falling
  - Parallel to the income axis
  - Parallel to the demand axis
- What is/are the cause/causes of the downward slope of the demand curve?
  - Law of diminishing marginal utility
  - Income effect
  - Substitution effect
  - All of the above
- In the case of a Giffen good, what will be the shape of the demand curve?
  - Upward rising
  - Downward falling
  - Parallel to the x-axis
  - None of the above
- If the Marginal rate of Transformation is increasing, what will be the shape of the production possibility curve?
  - Rectangular hyperbola
  - Concave to the origin
  - Convex to the origin
  - Straight line curve
- What will be the short run equilibrium condition of the firm under perfect competition?
  - $AC = MC$
  - $AC = MR$
  - $AR = AC$
  - None of the above
- Which one of the following is one of the features of Monopoly market?
  - Many buyers and many sellers
  - Product differentiation
  - Free entry and free exit
  - None of the above
- What is the ratio of Cournot's output to the competitive output in equilibrium?

- A.  $\frac{1}{2}$   
 B.  $\frac{1}{3}$   
 C.  $\frac{2}{3}$   
 D. None of the above
8. Which bank is called lender of the last resort?  
 A. Co-operative bank  
 B. Central bank  
 C. Commercial bank  
 D. None of the above
9. What is the technical term used to define the membership contribution of the members to the IMF?  
 A. Quota  
 B. SDR  
 C. Exchange rate  
 D. None of the above
10. What is bank rate?  
 A. The rate of interest charged by the commercial bank  
 B. The rate of interest charged by the co-operative bank  
 C. The rate of interest charged by the central bank  
 D. None of the above

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

## II. Fill in the blanks

- The ..... cost of anything is the next best alternative cost which is foregone.
- The rate of change of Total Revenue with respect of output is called ..... Revenue
- Actual payments made by a firm for purchasing or hiring resources are called ..... costs
- Financial market are classified into money market and capital market on the basis of .....
- According to Fisher's theory, money is demanded for ..... purposes

KEY: 1. Opportunity, 2. Marginal, 3. Explicit, 4. Term of credit, 5. Transaction

## III. True or false

- In monopoly market there is no difference between firm and industry
- The supply curve for labour is upward rising to the right
- When production is stopped, the variable cost becomes zero
- As a result of external diseconomies, the LAC curve of the firm shifts upward
- The objective of an oligopolist is to maximise his profit always

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

## IV. Matching

1. Bank rate policy	A. Duopoly
2. Monopolistic competition	B. Creation of credit
3. Commercial bank	C. SDR
4. IMF	D. Central bank
5. Cournot	E. Selling cost

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

Friends, I do hope that you have enjoyed this mock test. Please go through the Study Material thoroughly. Remember, all your questions in the Final Exam will be given from your study material only. After solving all the problems in the mock test, consult the keys and find out for yourself how much you are prepared for the exams. Best of luck!!!



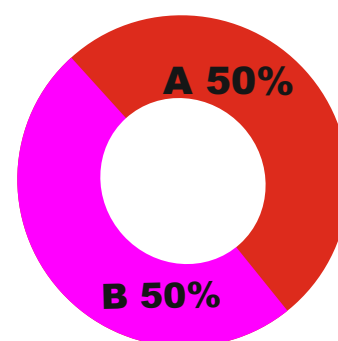
PAPER: 1, PART: II

# FUNDAMENTALS

OF ECONOMICS & MANAGEMENT  
(FEM) - MANAGEMENT

CMA (Dr.) Sumita Chakraborty  
Additional Director,  
Research & Studies  
She can be reached at:  
[research.hod@icmai.in](mailto:research.hod@icmai.in)  
[studies.addldir1@icmai.in](mailto: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 Management is what a manager does:

- a. Peter F Drucker
- b. Terry
- c. Louis Allan
- d. Hendry Fayol

2. To manage is to forecast and plan, to organize, to compound, to coordinate and to control. This definition was given by-----  
-----

- a. Peter F Drucker
- b. Hendry Fayol
- c. Louis Allan
- d. Terry

3. Motivation means a process of stimulating people to action to accomplish desired goals is said by-----

- a. Owen
- b. Scott
- c. Shartle
- d. Flippo

4. Motivation available only after the completion of a job is:

- a. Negative Motivation
- b. Positive Motivation
- c. Extrinsic Motivation
- d. Intrinsic Motivation

5. The person who receives the message is called:

- a. Sender
- b. Receiver
- c. Encoding
- d. Decoding

6. Theory of work motivation was propounded by:

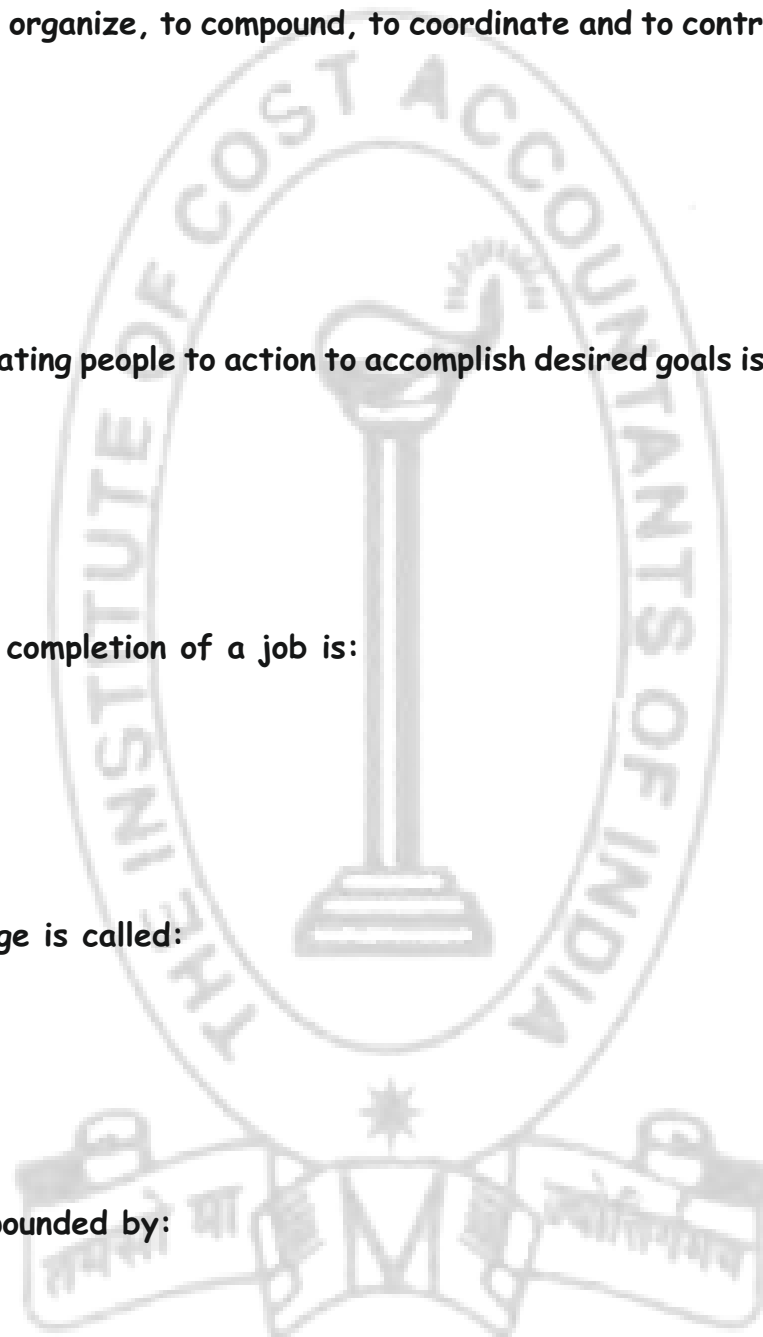
- a. Mc. Gregor
- b. Heizberg
- c. Maslow
- d. F.W. Taylor

7. Esteem needs are also called as:

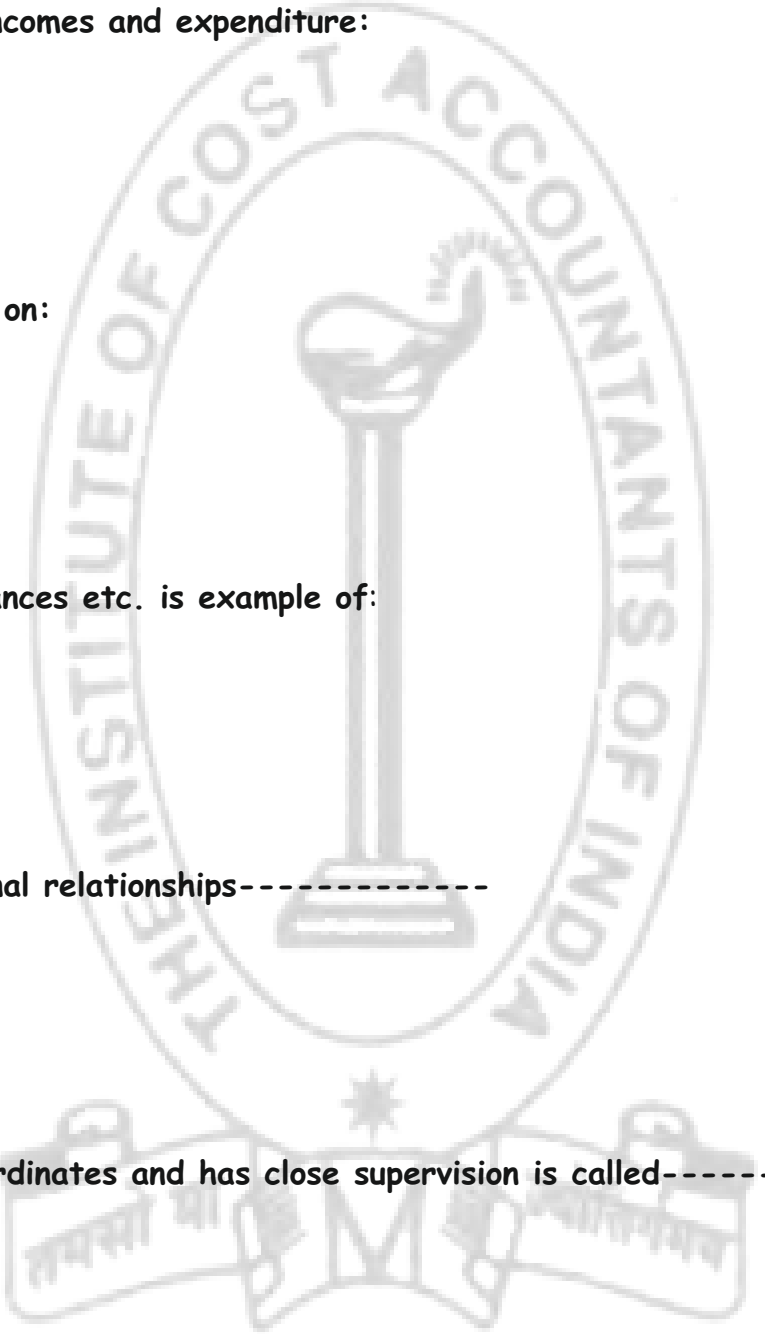
- a. Social needs
- b. Self-realization needs
- c. Ego needs
- d. Safety needs

8. The management function which regulates the activities:

- a. Coordination
- b. Control





- c. Direction  
d. Planning
9. Cost volume profit analysis is otherwise called as:  
a. Budgeting techniques  
b. Statistical controls  
**c. Break even analysis**  
d. Cost control
10. A statement which reflects future incomes and expenditure:  
a. Profit and Loss  
**b. Budget**  
c. Balance Sheet  
d. Cash Account
11. Maslows motivation theory is based on:  
a. Satisfaction  
**b. Needs**  
c. Maintenance factors  
d. Rewards
12. Reports, suggestions, appeals, grievances etc. is example of:  
a. Downward communication  
**b. Upward communication**  
c. Horizontal communication  
d. Informal communication
13. Devices which shows the organizational relationships-----  
**a. Organizational charts**  
b. Scalar chain  
c. Overall plan  
d, Budgets
14. When the supervisor commands subordinates and has close supervision is called-----  
a. Free-rein  
**b. Autocratic**  
c. Consultative  
d. Democratic
15. Leadership theory explain the leadership style available to leaders is:  
**a. Followers theory**  
b. Trait theory  
c. Situational theory  
d. Managerial grid
- 

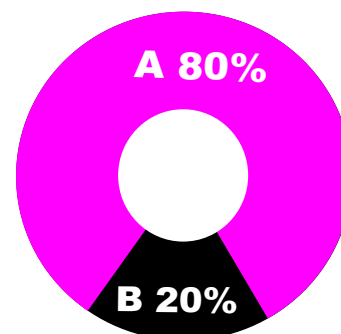


PAPER: 2

# FUNDAMENTALS OF ACCOUNTING (FOA)

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

A marine biologist put a shark into a big tank at the time of a research experiment. Followed by that, he released some tiny bait fishes into it.

As expected, the shark didn't wait to attack those fishes and ate them. Later, a clear fiberglass was inserted into the tank which partitioned the tank into two and the shark remained in one side.

A similar set of bait fish was sent to the other side of the tank like before. And the shark attempted to attack those fishes but failed by hitting on the fiberglass.

The shark attempted for several days until it gave up. Later, the biologist removed the glass from the tank but the shark didn't try to attack the small fishes.

The shark always continues to see a false barrier in the tank and stopped his attempts.

**Moral:** It is quite common for many people to give up after many setbacks and failures. The story is an example for keep trying always and to never give up despite multiple failures.

With this backdrop let us start our journey today. Be bold in life and be confident. Never give up.

**Here is again a very simple assignment****1. Write true or false:**

- A. Preparation of trial balance is mandatory f/t
- B. Error of omission can easily be traced by preparing a trial balance f/t
- C. Patent is a non current asset t/f
- D. Bad debt is recorded in journal proper t/f
- E. Trade discount is calculated on 'list price' t/f

**2. Fill up the blanks**

- A. Assets = liabilities + .....
- B. FIFO method of pricing is suitable during .....
- C. Formula for calculating depreciation under SLM is.....
- D. Revenue receipt is .....in nature
- E. Debtors in trial balance ₹60000. Bad debt ₹2000 in trial balance. Further bad debt ₹1000. Provision for doubtful debt is to be made @ 5 %. The amount of such provision will be .....

**3. Why are the total of two sides of the balance sheet equal ?**

- a. Cost Concept
- b. Dual aspect concept**
- c. Entity concept
- d. All of the above

**4. Which one of the following accounting conventions stipulates that contingent assets appear as a footnote in the balance sheet?**

- a. Materiality
- b. Consistency
- c. Disclosure**

d. Conservatism

5. Which one of the following items is considered revenue expenditure?

- a. Expenditure by way of maintenance that has increased productivity
- b. Repair of gearbox in a car that has enhanced its operational life
- c. Complete overhaul of a machine, spending around 20% of its value
- d. Changing a small component of a machine to maintain its operating efficiency**

6. Preparation of Trial Balance helps, mainly, in

- a. summarizing business transactions
- b. verifying that 'generally accepted accounting principles' have been observed
- c. finalizing the 'sources and uses of funds' statement
- d. locating errors, if any, in books of accounts**

7. Match List I with List II and select the correct answer:

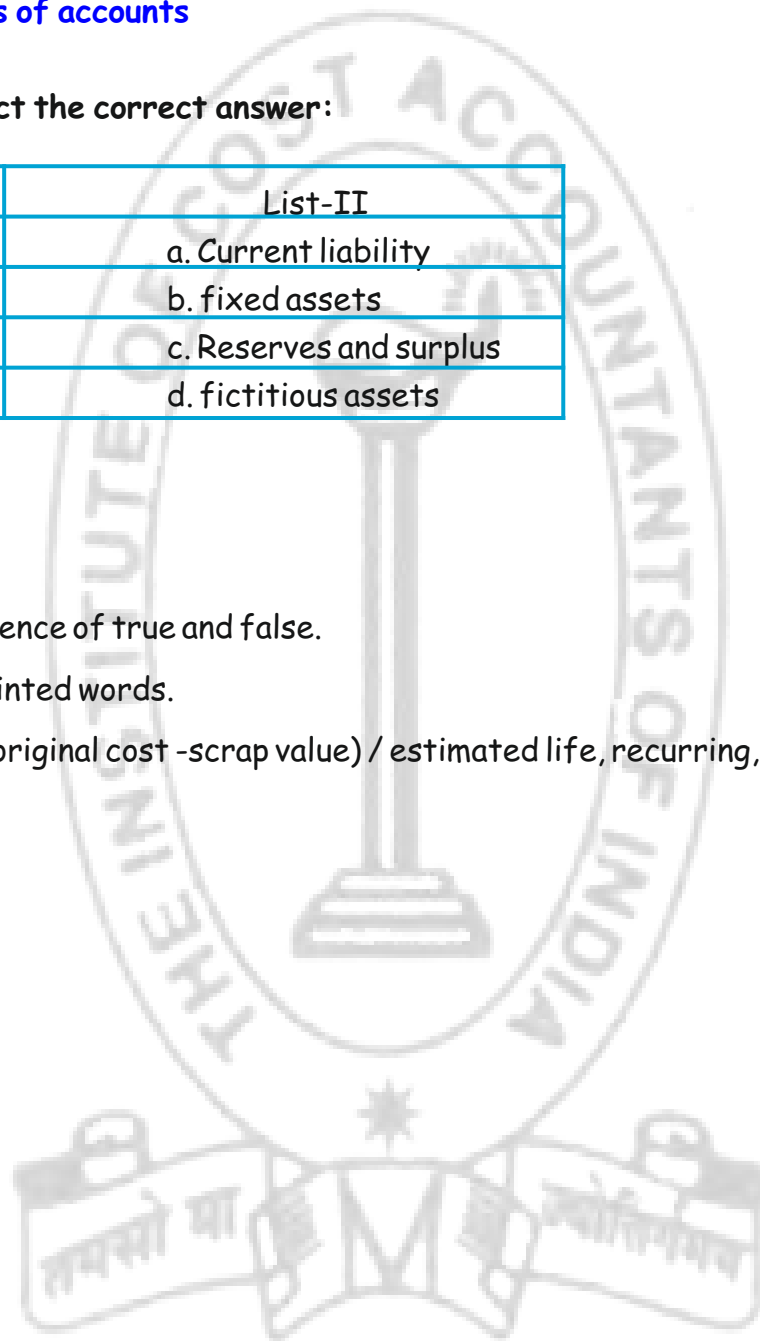
List-I	List-II
a. Goodwill	a. Current liability
b. Overdraft	b. fixed assets
c. Preliminary expenses	c. Reserves and surplus
d. Premium on issue of Shares	d. fictitious assets

**[a-b, b-a, c-d, d-c.]**

For correct answer follow the sequence of true and false.

For correct answer see the bold printed words.

Equities, deflationary situations, (original cost - scrap value) / estimated life, recurring, ₹2950





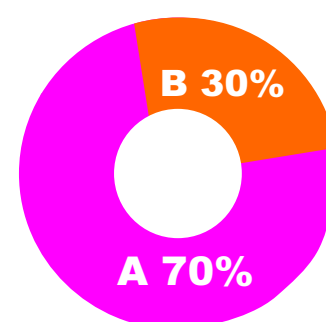


PAPER: 3

# FUNDAMENTALS OF LAWS AND ETHICS (FLE)

CA Partha Ray  
He can be reached at:  
[prapray@rediffmail.com](mailto: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**

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

Now, let us understand 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.**

*The first TIP is that you must start thinking like A Teacher. You must start studying the subject and raise questions to yourself and find your own answers.*

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

*In respect of such papers, the students are reminded 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.*

To start with, let us explain the difference between a Condition and a Warranty.

Sec.12 of the Sale of Goods Act defines conditions and warranties.

In a Contract of Sale, the terms or the stipulations laid, with reference to purchase and sale of goods, can be conditions or warranties.

We must understand that, a **Condition** is a stipulation which is **Essential** to the main objective/purpose of the contract. Any breach/violation of such condition/s may call for repudiation of the contract.

On the other hand, a **Warranty** is also a stipulation but such stipulation is **Collateral** to the main objective/purpose of the contract. Any breach/violation of such warranty may call for **Claim for damages**, but the contract can neither be repudiated nor can the goods be rejected.

So, we understand that both Condition and Warranty are terms/stipulations laid in a Contract of Sale, but whether the terms/stipulations are conditions or stipulations, depends on how the terms are laid, meant and construed to be understood in the contract. In many cases it is seen that a term in a contract is called as warranty but is actually a condition laid and such interpretations are left for the courts to decide.

Sec.11 of the Sale of Goods Act, lays that a stipulation as to time of payment, must not be deemed as conditions unless the terms of contract throws some indication to such intentions. Both conditions and warranties can be indicated in writing or may be implied on case to case basis, depending on the terms of the contract.

Suppose a contract of sale specifies a condition that goods sold shall be repaired at the premises of the buyer. This condition can be waived by the buyer who decides to carry the goods to the repair shop himself for repairs. In such a case the condition can be treated as a warranty. A buyer may even decide to treat a breach of condition as a breach of warranty and in such cases the buyer cannot repudiate or reject the goods but can accept the goods and sue for damages suffered.

That takes us to the question - **what are the implied conditions and warranties in a contract of sale of goods?**

Please read Sections 14 to 17 of the Sale of Goods Act. **The implied conditions and warranties in a contract of sale of goods are as**

follows :

#### Implied Conditions -

1. Title - that the seller has the right to sell the goods and that he shall have the right to sell the goods at the time when the property in the goods is to pass.
2. Description - that the goods shall correspond to the description - physical characteristics, mention of trade mark, brand, etc. under which the sale agreement was made or those goods are normally sold. It is expected that the goods will be same as the goods described.
3. Sample - that goods shall be supplied as per the sample shown and agreed upon. That the buyer will get the opportunity of comparing the goods supplied with the earlier sample shown and the quality of the goods supplied matches with the quality of the sample shown and that the defects, if any, cannot be detected apparently on reasonable examination and inspection.
4. Sample and Description - where goods are sold by sample as well as by description, it is expected that the goods will correspond both - with the sample and the description.
5. Fitness or Quality - Where the buyer tells the seller about the purpose for which the goods are required, and relies on the seller's skill or judgment, it is implied that the seller agrees to the implied condition of fitness and description of the goods. Where the supplier deals in goods of such description laid by the buyer, it is implied that the goods shall be of desired quality and fit for sale - whether manufactured or traded by the supplier. However, if the goods are bought after inspection by the buyer, it will be implied that the inspection of the goods bought ought to have detected and revealed the defects.

#### Implied Warranties -

1. That the buyer shall have quiet possession of the goods, that is, the vendor has the right to transfer the goods,
2. That the goods are free from any charge or encumbrances in favour of any third party, not known to the buyer or not revealed to the buyer at the time of the contract.
3. That a warranty as to fitness for a particular purpose may be annexed to a contract of sale by normal practice in trade or a custom or usage.

#### Now, let us discuss about - Performance of the Contract of Sale

In any contract of sale, there has to be two parties - the **Buyer and the Seller**. Both are expected to perform as per agreed terms - **The Seller to deliver the goods and the buyer to accept the goods and pay the price.**

**The seller is obliged to deliver the goods as per the terms of contract at the specified - time, place, quantity and quantity. The buyer is obliged to accept the goods and pay the agreed price.** Depending on the terms of the contract, the payment can be taken in advance, or on stipulated period of credit and the delivery too can be off-the-shelf, ex-godown, free-on-board, staggered etc.

Performance of a contract depends on two criteria - **timely delivery by the supplier and agreed payment terms of the buyer.** The seller shall be ready to give possession of the goods in exchange for payment of the price and the buyer to be ready to take possession of the goods from the seller in exchange for price.

- 1) **Delivery can mean Physical or actual transfer of possession from one person to another**
- 2) **Delivery can be through different modes - viz.**
  - a) **Actual Delivery** - where the goods are physically delivered to the buyer by the seller - directly or through an agent.
  - b) **Symbolic** - just as we see in reality shows where the keys of a motor car is handed over to the winner
  - c) **Constructive** - where the delivery order is issued to a third party for making delivery - Example - A Company selling Potatoes, issuing Delivery Order to the Cold Storage in a different location asking them to deliver certain Number of Potato Bags to the buyer on receipt of the Issue Slip.

#### Auction Sale :

In an auction sale, there is an Auctioneer who is appointed by the owner of a property to sell property by inviting bids publicly and the property is sold to the highest bidder. However, the Auctioneer warrants the following :-

1. That the auctioneer has authority to sell
2. That the auctioneer has no knowledge that property under sale on behalf of his principal has any defects as to title ; and
3. The buyer shall get quiet title to the possession of the property against payment of a price.

The question arises, what could be the **Rules regarding Sales by auction ?**

**Section 64 of the Sale of Goods Acts** lays the rules which are as follows :

1. Where the goods are put to sale in lots, each lot is deemed to be subject to separate contract of sale;
2. The sale is complete only after the customary fall of the hammer when the auctioneer repeats the final offer **three times and** announces the completion of the sale. Until the fall of the hammer the bidder may retract his/her bid. The fall of the hammer amounts to acceptance of the offer.
3. The Seller may expressly reserve his right to bid in the auction. Such a sale has to be notified in advance. If such a right is expressly reserved, seller or any other person on his behalf may, bid at the auction. It may be kept in mind that without any express reservation and advance notification, the seller or any person on his behalf, cannot bid at an auction as it shall not be lawful and considered as fraudulent by the buyer acting on behalf of the seller.
4. The sale may be notified to be subject to a Reserved Price , that is, a price below which the goods/property will not be sold. The Reserve Price can be kept secret.
5. Where the seller resorts to pretended bidding, just to raise the price, the sale becomes voidable at the opinion of the buyer.





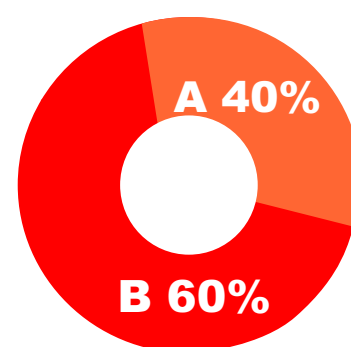


PAPER: 4

# FUNDAMENTALS OF BUSINESS MATHEMATICS AND STATISTICS (FBMS)

CMA Ankan K Bandyopadhyaya  
He can be reached at:  
[abanerjee8533@gmail.com](mailto: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 will discuss the preliminaries on statistics.

What is Statistics?

The science of collecting, organising, presenting, analysing and interpreting data to assist in making more effective decision.

What is Data?

Data are collections of any number of related observations:

- Yearly Profits made by ITC in last ten years
- No of students placed by Institute of Business Management in MNC in each year during last 5 years
- State wise no of health workers vaccinated in first week of Covid Vaccination programme

A collection of data is called a *data set* & a single observation a *data point*

Year Profit (Rs. Cr)	Profit of COMPANY in LAST 5 Years				
	1	2	3	4	5
	100	150	87	200	220

Diagram illustrating Data Set and Data Point:

The entire table is labeled as **DATA SET**. A single cell (Year Profit, 100) is labeled as **DATA POINT**. Another single cell (Year Profit, 200) is also labeled as **DATA POINT**.

In statistical analysis with the help of data we simultaneously use two terms—*Population* & *Sample*

Population is a whole of data pertaining to our object of interest and Sample is a fraction or segment of that whole

Say marks obtained by 9 students in a class in an examination is as follows:

Sr. No	Name	Marks Obtained Full Marks: 50
1	Anurpupa Das	41
2	Tanmoy Singh	41
3	Richa Gupta	41
4	Debanjan Banerjee	44
5	Siddhartho Mitra	38
6	Amrita Mondal	46
7	Aniruddha Mukherjee	38
8	Madhurima Biswas	42
9	Jyotishko Banerjee	43

This is a population of 9 students. From this if we segregate marks obtained by male students and female students separately we get

Sr. No	Name	Marks Obtained Full Marks: 50
1	Anurpupa Das	41
2	Richa Gupta	41
3	Amrita Mondal	46
4	Madhurima Biswas	42

Sr. No	Name	Marks Obtained Full Marks: 50
1	Tanmoy Singh	41
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3	Siddhartho Mitra	38
4	Aniruddha Mukherjee	38
5	Jyotishko Banerjee	43

These two are called Sample

In Statistics we study samples in order to be able to describe population

Thus a population is a collection of all the *elements* we are studying and about which we are trying to draw conclusions &

A sample is a collection of some but not all of the *elements* of the population

When we use statistics to generate information for decision making from data our first three steps will be (Refer definition of Statistics)

- Collection of data
- Organising data
- Presenting data

Collection of data gives Statistician the access to *Raw Data*

A data before it is organised and processed is called *Raw Data*

Before a data is put to analysis and interpretation raw data is to be organised and to be presented in a meaningful way.

The purpose of organising and presenting data is to enable us to see quickly all the possible characteristics in the data we have collected

Suppose the admission desk of a university is comparing its students' college performance with other achievements such as high school grades.

If this record is made for all the students in the university then a *Population* is created

But instead of studying every student from every year the administrative staff could make the same study by drawing few students from each year and thereby a *Sample* is formed

Following is such a sample:

Average of High School & College grade points of 40 Students							
Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade
9.6	8.5	9.5	9.6	9.4	9.6	8.2	8.8
8.6	8.7	9.5	9.8	8.9	9	9.4	9.4
8.7	8.2	8.2	9.5	9.9	10	9.6	9
9.7	9.2	9.9	9.7	9.2	9.5	8.6	7.7
10	9.8	10	9.9	8.1	8.5	8.4	9.2

↓  
This is raw data

Now this raw data we have to organise and present in a meaningful way

Data Array is one of the simplest ways to present raw data in a meaningful way. It arranges (organise & present) raw data in ascending or descending order. The data array in ascending order of our university students' raw data is as flows:

Average of High School & College grade points of 40 Students							
Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade
7.7	8.4	9.7	9	9.4	9.5	9.7	9.9
8.1	8.5	8.7	9.2	9.4	9.6	9.7	9.9
8.2	8.5	8.8	9.2	9.5	9.6	9.8	10
8.2	8.6	8.9	9.2	9.5	9.6	9.8	10
8.2	8.6	9	9.4	9.5	9.6	9.9	10

Data arrays offer several advantages over raw data

- We can quickly notice the lowest and highest values in the data
  - In our example lowest value is 7.9 and highest value is 10
- We can easily divide the data into sections
  - In our example first half of data are between 7.9 to 9.4 and second half of data are between 9.4 to 10
- We can see whether any values appear more than once in the array
  - In our example grade 8.2, 8.5, 8.6, 8.7, 9, 9.2, 9.4, 9.5, 9.6, 9.7, 9.8, 9.9, 10 appear more than once
- We can see which grade/s appear maximum times
  - In our example grade 9.5 and 9.6 both appear 4 times
- We can observe the distance between succeeding values in the data
  - In our example grade 9.2 and grade 9.4 are succeeding values. The distance between them is 0.2. Similarly grade 8.6 and 8.7 are succeeding values

In spite of these advantages sometimes a data array has some disadvantages also. Since it lists all observations, it is a cumbersome form of displaying large volume of data and these large volume poses problem in handling the data in an efficient way for the purpose of statistical analysing and interpretation.

One way to sort out this disadvantage of data array is by organising and presenting data through use of a *frequency table* or *frequency distribution*

A frequency distribution is a table that organises data into classes i.e. into groups.

To form this frequency table we have to ---

- Divide the data into groups of similar values
- Record the number of data points that fell in each group

Say in our example let us make 8 groups starting from 7.7 and in steps of 0.2 and record the data points that fell into each group. Our result will be----

Class (Groups of Similar Values of data points)	Frequency (No of observations in each class)
7.7 to 7.9	1
8 to 8.2	4
8.3 to 8.5	3
8.6 to 8.8	5
8.9 to 9.1	3
9.2 to 9.4	6
9.5 to 9.7	10
9.8 to 10	8



In constructing the frequency distribution we lose some information-

- We no longer could find that the grade 9.5 or 9.6 appear 4 times
- We no longer could find which one is the minimum & which one is the maximum
- We no longer could find the distance between succeeding values

Frequency distribution sacrifices some information but offer us new insights into patterns of data which are very much helpful in statistical analyses and interpretation

In our frequency table we have expressed the frequency with which values occur in each class as the total number of data points that fall within that class. We can also express the frequency of each value as a fraction or a percentage of the total number of observation. If we show the frequency of each class as a percentage of total frequency then we get *Relative Frequency Distribution*

In our example relative frequency distribution is

Class (Groups of Similar Values of data points)	Frequency (No of observations in each class)	Relative frequency
7.7 to 7.9	1	0.025
8 to 8.2	4	0.100
8.3 to 8.5	3	0.075
8.6 to 8.8	5	0.125
8.9 to 9.1	3	0.075
9.2 to 9.4	6	0.150
9.5 to 9.7	10	0.250
9.8 to 10	8	0.200
Total	40	1.000

The sum of all the relative frequencies equal to 1.000 or 100%

This is true because a relative frequency distribution pairs each class with its appropriate fraction or percentage of the total data.

Therefore the classes in any relative or simple frequency distributions are *all inclusive* type i.e. all the data points fit into one class or another.

The simple frequency table or relative frequency table are also *mutually exclusive* type i.e. no data point falls into more than one category. The following table illustrates the concept by comparing mutually exclusive classes with ones that overlap

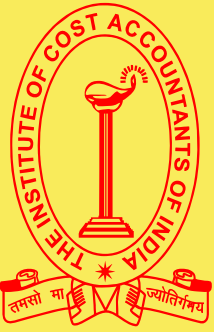
Mutually Exclusive Class	Non Mutually exclusive class
1 to 5	1 to 5
6 to 10	3 to 7
11 to 15	5 to 9
16 to 20	7 to 11
20 to 24	9 to 13

If data point is 5 then it will fall in class 1 to 5 in Mutually Exclusive class whereas data point 5 will fall in class 1 to 5 and class 3 to 7 both in Non-Mutually exclusive class.

In our frequency distribution we made 8 groups. We can reduce the number of groups or we can increase the number of groups. Details of construction of frequency distribution will be discussed in next issue.

#### 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. Further discussions on preliminaries 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.



# 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

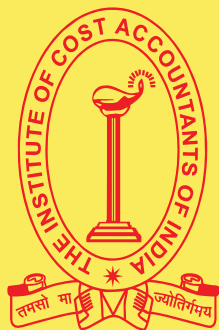
03

**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.

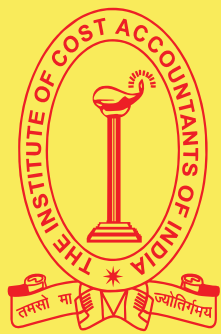
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Send your Feedback to:  
e-mail: [studies.ebulletin@icmai.in](mailto:studies.ebulletin@icmai.in)  
website: <http://www.icmai.in>

### 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](http://www.icmai.in) at request option.





## Message from Directorate of Studies

Dear Students,

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!**

**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.







# 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](http://www.icmai.in)



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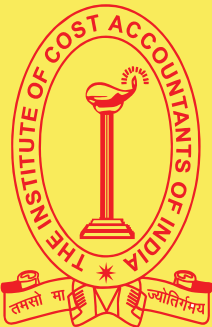
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Behind every successful business decision, there is always a **CMA**





# Few Snapshots



Republic Day Celebrations at the Institute Headquarters



Release of "Aide Memoire on Lending to Micro Small and Medium Enterprises Sector" (including restructuring of MSME credits) at the hands of Shri Anurag Singh Thakur, Hon'ble Union Minister of State for Finance and Corporate Affairs on 30th December 2020.



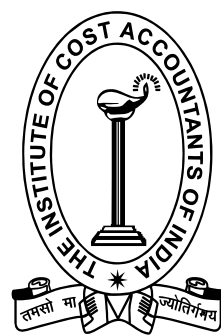
Republic Day Celebrations at the Institute Headquarters



CMA Biswarup Basu, President and CMA Chittaranjan Chattopadhyay, Chairman of Indirect Taxation Committee Chairman as well as Banking, Financial Services & Insurance Committee extending greetings to Novel Roy, IRS, Central Board of Direct Taxes, New Delhi, Ministry of Finance, Government of India and also handed over Representation on Transfer Pricing in Income Tax on 27th January 2021 at his office in New Delhi.



CMA Chittaranjan Chattopadhyay, Chairman, Banking, Financial Services & Insurance Committee and Indirect Taxation Committee presented copy of "Aide Memoire on Lending to Micro Small and Medium Enterprises Sector" (including restructuring of MSME credits) to Shri Pankaj Jain, IAS, Additional Secretary, Department of Financial Services, Ministry of Finance, Government of India on 27th January 2021 at his office in New Delhi.



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(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

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