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THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

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Follow us on



Behind every successful business decision there is always a CMA

message from the president

Dear Students,

“Education is the best friend. An educated person is respected everywhere. Education beats the beauty and the youth”- Chanakya

Today's World needs innovation and skill the most. Professionals without dedication and determination cannot deliver their best. To meet your commitment towards the course and to encourage your efforts, the Directorate of Studies has implemented this E-bulletin. The dictum is providing you the guidance of subjects, with the help of reputed teachers who can up- date your knowledge base in the concerned subjects in your curriculum.

My request to all Future CMAs is; you please develop the capacities in you to meet the needs of the country, hence, build the needed skill in you by reading all the subjects carefully. This course will help you take away your best and in turn will help you equally to deliver the society at large.

In this digital World, modern generation students prefer to study in the electronic mode. Hence, I am sure they will enjoy reading this **E-bulletin**.

I am thankful to the Professors who, out of their affection and love to the students have extended their support to the Directorate of Studies during this short period of time.

I pay my sincere thanks to the Directorate of Studies for the new initiative taken to motivate the students.

A positive mind can deliver the best. So, think positive and stay healthy.

I will put an end with the words of one of the great philosophers of all time; Aristotle, who said - ***“The roots of education are bitter, but the fruit is sweet”.***

CMA Manas Kumar Thakur
President
The Institute of Cost Accountants of India



Be a CMA, be a Proud Indian

Behind every successful business decision there is always a CMA



message from the chairman

It is my pleasure indeed to address to the budding Cost and Management Accountants through this E-bulletin to facilitate your study plan to learn and perform during Examinations to achieve success.

Swami Vivekananda said on concentration ***"The very essence of education is concentration of mind not the collection of facts."*** Therefore, to learn one has to develop the power of concentration without which no learning process can take place be it any field like education, games etc.

Now to equip you, Institute has provided the required and sufficient information to the students for preparation of subjects received from experts of various disciplines, who have extended tips on the subjects for betterment in your preparation.

Time is possibly the most important factor in the preparation, thus, students should manage their time for its optimum utilisation. First and foremost before starting preparation a student should prepare a time-table preferably on weekly basis covering the topics for each of the subjects. To prepare the study plan, map out all of the material content that has to be covered and make a schedule showing what, when and how much you will study each day for each of the subjects. Set clear and specific goals for the study and mind it that mere planning would not deliver unless you implement it properly. Check the answers to the practice questions to diagnose your strengths and weaknesses. If you are weak in an area, go back and study it further to address the gaps.

The sample questions can be sourced from old exams and Mock Test Papers (MTPs). Practice those meticulously parallel to your study notes. Even though you are only practicing, it is better to write full answers during your preparation to the questions so you can work through the entire thought process.

I wish you all a great success.

**CMA Pappa Rao Sunkara,
Chairman,
Training & Education Facilities (T&EF) Committee**

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KNOWLEDGE UPDATE

As the examination is approaching we would like to share some of the thoughts progress which will help students towards their preparation.

PAPER I: FUNDAMENTALS OF ECONOMICS AND MANAGEMENT (FEM)

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**How
to
perform
better
in your
examination;**

This paper is divided into two parts of 50 marks each.

- ⊙ Part A deals with core concepts of Economics and
- ⊙ Part B deals with core concepts of Management.

Here, you will find first the tips for the preparation of your '**Economics**' part.

Part A: Economics (50 marks)

First possible mistake you must avoid is to avoid reading your study material first. If you have already studied Economics at your school keep that text book on your table and reread it. If you have any doubt while studying Economics I advise you to talk with your friend / or who have already done it. You may listen to some video lectures from NPTEL or MIT open course. After 10-15 days you will be able to decide which text book is suitable for you and just get it and finish it from page one to the last.

Here, specific, guidance is given on two topics from part A:

- i. Market
- ii. Banking

Market:

Your study note 2 deals with 'Market'.

A substantial part of your study is in relation to market. Unless you have a fair idea of market, your further developments in the areas of Financial Management, Securities Analysis and Portfolio Management, Foreign Exchange Management and Capital and Money Market will remain incomplete.

Any market must have five core elements:

- i. Buyers,
- ii. sellers,
- iii. products,
- iv. intermediaries and
- v. regulator.

Most importantly market does even refer to a particular place a location.

Your study material (Pp2.1 to 2.17) offers good scope of learning about

- a. market
- b. different competitive forces that constitute prices and
- c. 40 multiple choice question (MCQ) to practice.

But the most question remains, do you after you digest just one text book and finish all exercise with utmost honesty and reading your study material, and take up all assignments given, answer past questions papers and evaluate your own performance.

Always try to stay in a group of friends who are trying the same examination in the same term and help them.

Feel '**market**' around you, everywhere all the time? The study material mentions "**Dynamic Pricing**" at page 2.15. Don't you find dynamic pricing strategies around you not only in air ticket booking but also in ticket fares of some special trains running between good metro cities in India?

Once you rotate the issues to your real life situations, you get interest in your study and you will understand different problems (viz; Pp2.6 to 2.10) and which may not be difficult for you to understand.

Banking:

Your study note 5 deals with banking. It starts with a point "A bank is said to be a financial institution which acts as an intermediary. Instead of putting a question as to "**Why bank is an intermediary and if it is an intermediary, whom it is working**"?

Please close your study material and remember the services you enjoy with bank. Just begin with savings accounts you must have a savings account with cheque operating operation facilities. You must have an automated Teller Machine card and only for having ATM card and savings bank account you enjoy following facilities.

- (1) Your hard earned savings are saved with security
- (2) You earn interest
- (3) You shop around almost everywhere & need not stand on due to withdraw cash
- (4) You transfer fund to any other account
- (5) You use your cheque where it is compulsory.

If a savings account may have so many advantages what could be the tremendous advantages of the banking system in the national economy?

Enjoy reading study note 5 on Banking.

Part B: Management (50 marks):

In section B you are to know the basics of 'Management'. It is organized into 5 study notes from 7 to 11.

In section B you are to know the basics of 'Management' it is organized into 5 study notes from 7 to 11. In note 7 Principles of Management by Taylor, Fayol and Weber have been explained and the term management has been defined.

Different functional areas of Management like:

- ⊙ Planning,
- ⊙ Organizing,

- ⊙ Staffing,
- ⊙ Directing,
- ⊙ Coordination &
- ⊙ Control etc. have been explained in study note 8 and study notes cover Leadership and Motivation.

Note 10 explain group dynamic whereas reasons of organizational conflict and its possible solutions have been investigated in study no 11. Questions are MCQ type.

But the control issue is to find and managerial issues in your everyday life.

- ⊙ Don't you find problems arising from communication in everyday life?
- ⊙ Are you not getting excited due to lack of proper leadership?
- ⊙ What comes in adequate motivation in your day to day activities?
- ⊙ After spending your entire monthly budget do you really go for variance analysis to bring effective control to your personal expenditure?

Your key to success not just in succeeding FEP paper but also in endless managerial problem lies in getting answer to above questions.

- ⊙ Go for case study,
- ⊙ See how your set of possible solutions differ with those from your peers,
- ⊙ Just find the subject relevant in your day to day life and just not for passing the exam.

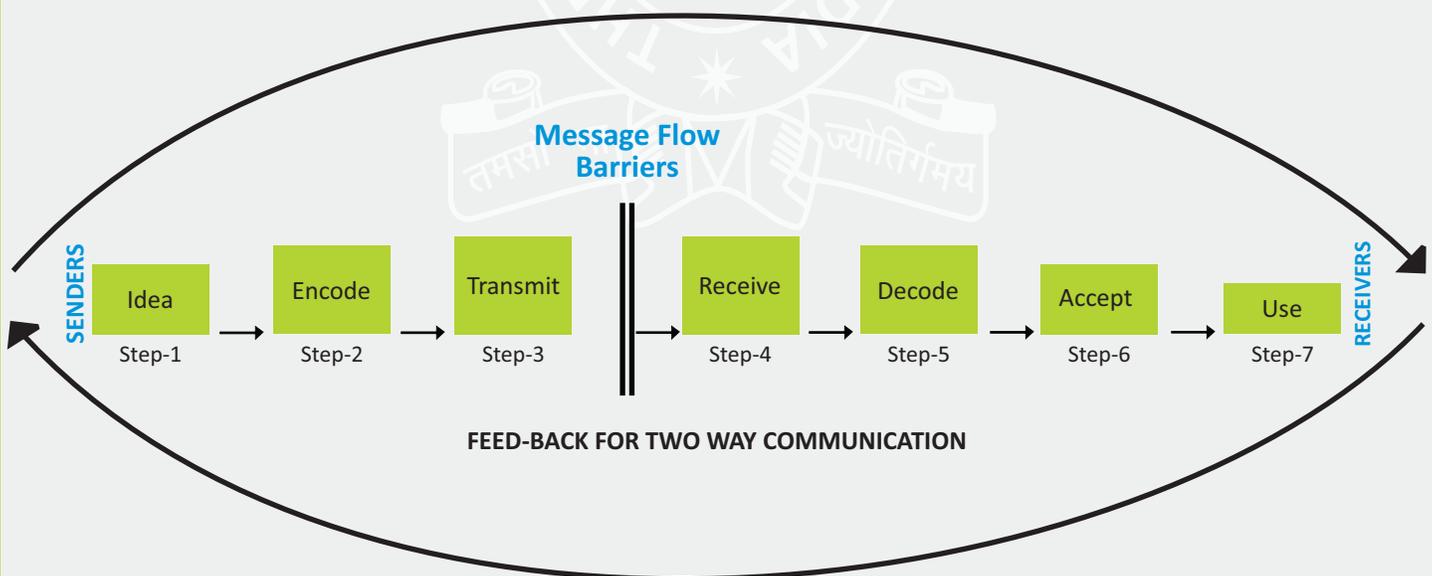
Communication [8.37-8.39]

Study material offers importance and effectiveness of communication but your experience is much more important than it.

- ⊙ Do you use same level of language when you communicate with your teacher and sister?
- ⊙ Do you use same control mechanism when you communicate with your banks and friends?
- ⊙ Do you attach similar importance to the office notice board and a personal mail from your immediate boss?

In order to make communication effective it is absolutely essential to overcome the barriers following ways like;

- ⊙ Simplifying language,
- ⊙ Effective listening,
- ⊙ Regulating the flow of information,
- ⊙ Having feedback, both verbal & non-verbal,
- ⊙ Understanding the non-verbal cues,
- ⊙ Fostering interpersonal trust etc.



Your success depends on finding answers to these questions and how you relate those to your study mats.

PAPER 2: FUNDAMENTALS OF ACCOUNTING (FOA)

**How
to
perform
better
in your
examination;**

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FOA is divided in two papers:

- ⊙ Part A deals with core concepts of Financial Accounting and
- ⊙ Part B deals with core concepts of Cost Accounting and Management Accounting.

Accounting means a procedure of writing transactions and a system of:

- ⊙ recording
- ⊙ classification,
- ⊙ summarizing, and
- ⊙ reporting, in monetary terms.

It provides information that can be drawn upon by those responsible for decisions affecting the future of firm. With fast progress in business and industry the importance of Accounting becomes wider.

Accounting can be classified into:

- ⊙ *Financial Accounting*,
- ⊙ *Cost Accounting*,
- ⊙ *Management Accounting* etc.

All these are very interesting subjects and included in foundation course.

Part A: Financial Accounting (60 marks):

Financial Accounting deals with the measurement and communication of financial information. It is mainly concerned with the provisions of information of economic activities of firm for:

- ⊙ managers,
- ⊙ owners,
- ⊙ creditors,
- ⊙ consumers,
- ⊙ government,
- ⊙ employees,
- ⊙ people etc.

Please follow the study material and a text book and finish carefully, each

topics mentioned in the course.

Your questions will be of two types:

- ⊙ Subjective questions and
- ⊙ Multiple choice questions (MCQ).

Your Study Note 3 deals with 'Depreciation Accounting.'

Here, some ideas on depreciation are given for the better understanding in the preparation.

The term 'Depreciation' means gradual and permanent decrease in the value of asset from any cause. Depreciation is derived from the Latin word "Depretium", where "De" means decline and "Pretium" means Price. This decline in price is due to constant use, wear and tear.

Before proceeding further to solve the problems, relevant terms you should understand are:

- ⊙ *Fixed Assets* – assets of permanent nature, like, Land, Building, Furniture etc.

⊙ *Wasting Assets* – assets of fixed nature but depleted gradually, like, a mine, an oil well etc.

⊙ *Intangible Assets* – assets, which can't be seen or touched e.g., goodwill, trade marks etc.

⊙ *Obsolescence* - a kind of loss of usefulness on account of new inventions.

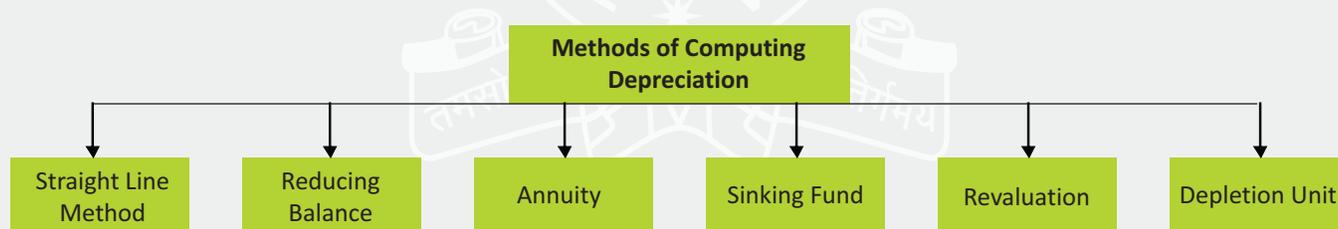
⊙ *Amortization* - a process of goodwill write-off.

⊙ *Wear & tear, exhaustion, obsolescence* etc. - main causes of depreciation.

If depreciation is not charged properly, it will be difficult to:

- ⊙ arrive at the current profit measurement,
- ⊙ fair financial position of the organization &
- ⊙ to measure the capital erosion etc.

There are various methods for computing Depreciation like:



⊙ *Straight Line Method* - original cost of asset is written off every year till the estimated life; basically applied on patent, lease etc.

⊙ *Reducing Balance Method* - a fixed percentage is written off on written down value of asset each year; basically applied on plant, machinery etc

⊙ *Annuity Method* – the asset account is debited with interest, which is ultimately credited with amount of depreciation which remains fixed year after year. The annual amount of depreciation is determined with the help of annuity table; is particularly applicable to those assets whose cost is heavy and life is long and fixed, e.g. leasehold property, land and building etc.

⊙ *Sinking Fund Method* - a sinking fund is a fund created with a specific purpose. When a sinking fund is created to provide for replacement of wasting assets, it is in effect depreciation; the installments are charged against profits. Sinking fund method is especially applicable to costly machines in large scale industries.

⊙ *Revaluation Method* - this method should be accepted only where the asset is represented by a large number of small and adverse items of small unit cost; applied on hand tools, live-stock, sacks etc.

⊙ *Depletion Unit Method* - under this method the cost of the asset is divided by the total workable deposits of the mine etc. This method is applicable to mines, oil wells, quarries, sandpits etc.

Illustrations are given in your study notes. You should understand the concepts and practice those illustrations meticulously.

Causes of Depreciation:

A. Internal Causes:

- Wear and Tear
- Depletion

B. External Causes:

- Obsolescence
- Inadequacy

C. Time Element

D. Abnormal Occurrences

Study Note 4 deals with the Preparation of Final Accounts.

Here tips relating to the preparation of Final Accounts are discussed for your good understanding.

Preparation of Financial Statements of Non-Trading Concern:

Non-Trading Concern includes:

- ⊙ Educational Institutions,
- ⊙ Sports Club,
- ⊙ Libraries etc.

They maintain:

- ⊙ Receipt and Payment Account,
- ⊙ Income and Expenditure Account and

- ⊙ Balance Sheet.

Terms you will have to understand like:

- ⊙ *Capital Expenditure* - non - recurring nature, like, purchase of building, furniture etc.
- ⊙ *Revenue Expenditure* - recurring nature, e. g. payment of rent, wages etc.
- ⊙ *Capital Fund* - like, Capital A/C of trading concern.
- ⊙ *Receipts & Payments Account* - a short form of Cash Book.
- ⊙ *Income & Expenditure Account* - contains all revenue expenditure (with adjustment) in Dr. side and all revenue income (with adjustment) in Cr. side, balancing figure - Surplus or Deficit.
- ⊙ *Balance Sheet* - remaining transactions from Income & Expenditure Account (with Capital Fund ,Surplus or Deficit and adjustment) as usual.

Please follow your study material (Pg 4.48 to 4.72) and read it carefully to know about donation, subscription, entrance fees, bar trading, and restaurant trading etc.

Study Note 5 deals with - Accounting for Special Transactions

Now, what is meant by 'Consignment Accounting'

Consignment means a shipment of goods by a trader to an agent for sale on commission basis. Terms important in relation to 'Consignment Account' are:

- ⊙ *Consignor* - principal, sender of goods to the agent for sale at a profit.
- ⊙ *Consignee* - agent, who sells the goods on behalf of consignor for commission.
- ⊙ *Proforma Invoice* - a document, send by consignor to consignee, contains particulars of goods.
- ⊙ *Account Sales* - a document, send by consignee to consignor, shows the details of sales, commission, expenses etc.
- ⊙ *Del - Credere - commission* - a commission allowed to the consignee to cover risk of loss due to bad debts.
- ⊙ *Normal Loss* - natural loss, due to inherent qualities of product, unavoidable, e.g., drying, evaporation etc.
- ⊙ *Abnormal Loss* - not natural, avoidable, caused by fire, theft, pilferage etc.

⊙ *Unsold stock* - valued at cost price or market price whichever is less, for computation, consider only proportionate non-recurring expenses, like, carriage on purchase, freight, import duties etc.

You please practice from your study material; Journal entries and other important accounting entries that are to be maintained in the books of consignor and consignee. (Pg 5.26 to 5.40).

Part B: Fundamentals of Cost and Management Accounting (40 marks)

Part B of your study material deals with cost and management accounting. Now, important points relating to 'Cost Accounting' are discussed below.

Cost Accounting:

Cost Accounting deals with classification, recording and summarization of costs.

It includes:

- ⊙ cost ascertainment,
- ⊙ cost analysis,
- ⊙ cost control,
- ⊙ cost reduction
- ⊙ cost comparison.

Your Study Note 7 deals with the 'Preparation of Cost Sheet'.

Before preparation of 'Cost Sheet, you should understand clearly the terms mentioned below:

- ⊙ *Cost Sheet* - a statement of costs incurred during a given period for product/cost centre/cost unit etc. to analyze elements of cost.
- ⊙ *Estimated Cost Sheet* - prepare for future work order.
- ⊙ *Elements of Cost* - material, labour and overhead (all are direct and indirect).
- ⊙ *Cost Accumulation* - a method where costs are accumulated and analyzed under various elements.
- ⊙ *Prime Cost* - sum total of direct material, labour and overhead.

Draw a proforma of Cost Sheet and practice for computation of:

- ⊙ Raw Material consumed,
- ⊙ Prime Cost,
- ⊙ Work Cost,
- ⊙ Production, Total Cost etc. Follow study material (p7.1 to 7.9).

Your Study Note 8 deals with 'Fundamentals of Management Accounting'.

Here is a brief discussion on management accounting. Management Accounting means accounting for the management. It is the presentation of accounting information in order to plan the strategies to be approved by the management. The most interesting topic in Management Accounting is 'Cost-Volume-Profit' (CVP) Analysis.

Before proceeding further on this particular topic, you should know few basics of it like:

- ⊙ *Marginal Costing* - a cost accounting technique of product costing and decision-making.
- ⊙ *CVP analysis* - relationship of variables, viz., cost, volume and profit, an important tool for profit planning.
- ⊙ *Contribution* - sales minus variable cost, a measure of efficiency of operations of various segments of business.
- ⊙ *P/V ratio* = contribution / sales, used to compute BEP, profitability of products etc.
- ⊙ *Break-Even-Point (BEP)* = $FC / P/V \text{ ratio}$ or $BEP = FC / \text{Unit contribution}$ or $BEP = \text{Change in profit} / \text{Change in sales}$, at BEP, total sales = total costs, no profit no loss.
- ⊙ *Margin of Safety (MOS)* = actual or budgeted sales minus BE sales, an indicator of the strength of business.

Practice for computation of Contribution, P/V ratio, BEP, MOS etc. from your study material (Pg 8.1 to 8.14) & Draw a BE Chart and mention different information available from it.

Follow your study material and also follow a standard Text Book. Consult past Question Papers and evaluate your own performance. Read the problem and answer in time. Your answers should be precise and clean.

Promise to be a Cost and Management Accountant.

PAPER 3: FUNDAMENTALS OF LAWS AND ETHICS (FLE)

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**How
to
perform
better
in your
examination;**

This paper is divided into three parts:

- ⦿ Part I deals with Fundamentals of Commercial Laws
- ⦿ Part II deals with Fundamentals of Insurance Laws
- ⦿ Part III deals with Ethics

Here, first, you will find tips for the preparation of your - 'Indian Contract Act' which comes under Part I (70 marks)

Study Note 1: The Indian Contract Act

The Indian Contract Act is the basis of all of the laws of the country where there is the need for contracts. In business vis-à-vis for all practical purposes there is always the requirement of contracts.

By the term '**Contract**' we mean an agreement made between two or more parties which is enforceable in court of Law.

Thus, **Agreement = Proposal of Offer + Acceptance.**

After understanding what an 'Agreement' is; we can simply understand that agreement and its enforceability leads to formation of a contract. Now, an agreement to become a contract must give rise to a legal obligation or duty.

Thus, **Contract = Agreement + Enforceability by Law.**



Contracts can be classified in terms of their:

- ⊙ Enforceability
- ⊙ Method of Formation
- ⊙ Extent of Performance &
- ⊙ Obligation

Based on Enforceability; they can be further classified as:

- i. Valid Contract
- ii. Void Agreement
- iii. Voidable Contract
- iv. Void Contract
- v. Unenforceable Contract &
- vi. Illegal Contract

Based on method of Formation, they can be further divided as:

- i. Formal Contract &
- ii. Simple Contracts

Based on extent of performance, they can be further divided as:

- i. Executed Contracts &
- ii. Executory Contracts

Finally, based on Obligation, they are to be further divided as:

- I. Unilateral Contract

- ii. Bilateral Contract &
- iii. Multilateral Contract

Before proceeding further, you should try to clearly understand the meaning of those stated above.

*For example; if we go to a milk booth and buy milk and then pay for it, it is an agreement whereby we pay or agree to pay the vendor on delivery of milk. Non-delivery of milk or non-payment of price to the vendor may amount to breach of contract and for which remedy can be sought. **It has all the elements of a valid agreement / contract.***

Please go through the following terms carefully and clearly understand the meanings expressed thereby:

- ⊙ Communications,
- ⊙ Acceptance and
- ⊙ Revocation of Proposals,
- ⊙ Free Consent,
- ⊙ Quasi Contracts,
- ⊙ Discharge of Contract etc.

By this Act, you will be able to solve your day to day problems provided you simply understand the inherent meanings in it. It will be helpful to overcome the obstacles you may face subsequently in your life:

After you digest just one text book try to finish all exercises with utmost clarity and sincerity. Reading to your study material, and carrying out all assignments given will help you to score in this paper.

Always try to stay in a group of friends who are trying the same examination in the same term and help them.

Now, about your Study Note 3: The Negotiable Instruments Act, 1881.

Negotiable Instruments Act, 1881 primarily contains the law relating to negotiable instruments. The term '**negotiable**' means transferable and the term '**instrument**' means any written document creating a right in favour of some person.

Section 13 of the Act defines a negotiable instrument as a '**promissory note, bill of exchange or cheque payable either to order or to bearer**'.

There are two types of Negotiable Instruments:

- ⊙ Negotiable by statute &
- ⊙ Negotiable by custom or usage.

The above act is the basis for all business monetary transactions. Without this act business activities will come to a halt. You must read the act meticulously and rigorously.

- ⊙ Please go through the following carefully:
- ⊙ Parties to a Negotiable Instrument,
- ⊙ Capacity to become a party to a Negotiable Instrument,
- ⊙ Comparative analysis of Promissory Note, Bill of Exchange and Cheque,
- ⊙ Crossing of Cheque,
- ⊙ Negotiation and Assignment,
- ⊙ Dishonour of Negotiable Instrument,
- ⊙ Banker and Customer etc.

Now, coming to Part II of your Study Note 5: The Factories Act, 1948 (20 marks)

Factories Act, 1948 is one of the major Central Act aimed to regulate the working conditions in the factories.

It is one of the **social enactments** intended to achieve social reforms by regulating the working conditions, working hours of the workers employed in a factory wherein:

- ⊙ ten or more workers are employed if manufacturing

process is being carried on with the aid of power and

- ⊙ twenty or more workers without the aid of power.

The Act lays down all essential provisions relating to:

- ⊙ Proper working conditions,
- ⊙ Working hours,
- ⊙ Holidays,
- ⊙ Overtime,
- ⊙ Employment of children,
- ⊙ Women and young person,
- ⊙ Safety,
- ⊙ Health and
- ⊙ Welfare of the workers; employed in a factory.

The Factories Act, 1948 came into force on the 1st day of April, 1949. Its object is to regulate the conditions of work in manufacturing establishments which come within the definition of the term 'factory' as used in the Act.

Thus, reading of the following terms of the Act carefully will help you to get the proper concept about the application of the Act:

- ⊙ Factory,
- ⊙ Manufacturing process,,
- ⊙ Worker,
- ⊙ Occupier,
- ⊙ Shift & relay,
- ⊙ Provisions relating to Hazardous Process,
- ⊙ Provisions relating to Welfare of employees,
- ⊙ Fixation of Working hours,
- ⊙ Penalties etc.

You will enjoy your reading of the Act, once you will come across all the terms in their proper perspective.

Your Study Note Part III deals with Fundamentals of Ethics (10 marks)

The study of Ethics is a **Systematic Science**. Its scope encompasses all human relationships in a society.

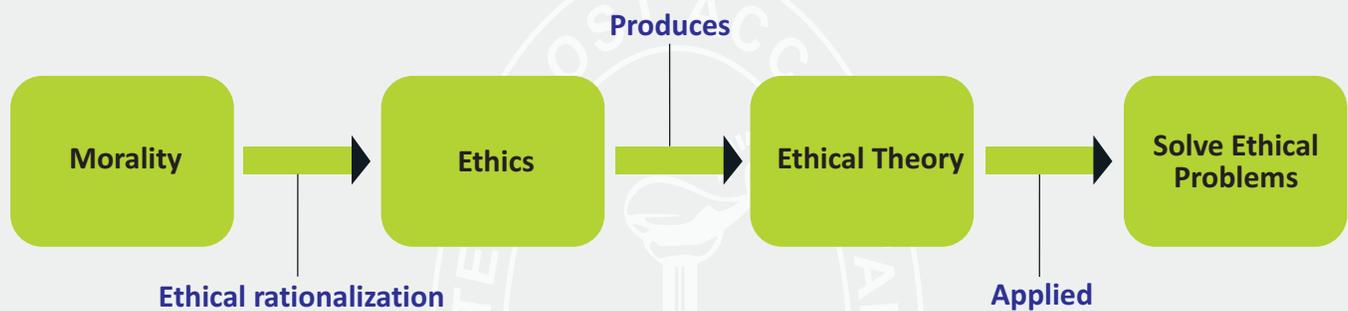
Ethics fundamentally comprises of two elements:

- ⊙ Firstly, ethics refers to well founded standards of right and wrong that describe what humans ought to do in terms of rights, obligations, benefits to society etc.,
- ⊙ Secondly ethics refers to the study and development of one's ethical standards.

You should try to analyse the terms 'ethics' and 'morals', first.

The word 'ethikos' in Greek means-'Character' and the word 'mos' in Greek again means 'Custom'.

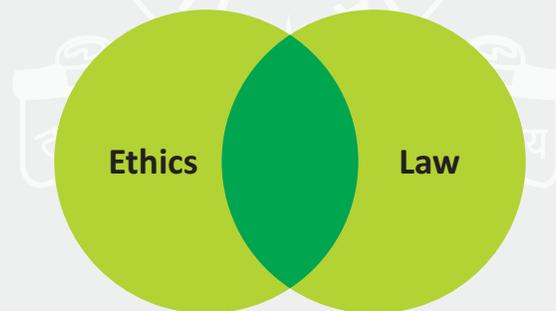
In formal study, we need to understand the meaning of the terms in a qualified way thus to make the study precise and meaningful:



You should know the 'Nature of Ethics as Moral Value':

- ⊙ Value-free Ethics,
- ⊙ Concept of Value-free Ethics,
- ⊙ Ethics as a Principle,
- ⊙ Business Ethics and Professional Code &
- ⊙ The Seven Principles of Public Life

Ethics and Law – The Interface



Law is essentially an institutionalization or codification of ethics into specific rules, regulations and prescriptions. Perhaps, the best way of visualizing ethics and law is in terms of two intersecting domains; as depicted in the above figure.

Read your study note carefully and deliver the best in your exam!

PAPER 4: FUNDAMENTALS OF BUSINESS MATHEMATICS AND STATISTICS (FMS)

**How
to
perform
better
in your
examination;**

Shri Ashutosh Kar
Assistant Professor

NSHM College of Management Technology,
Kolkata

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This paper is divided into two parts:

- ⊙ Part A deals with core concepts of Mathematics and
- ⊙ Part B deals with core concepts of Statistics

Here, you will find first the tips for the preparation of your 'Mathematics' part.

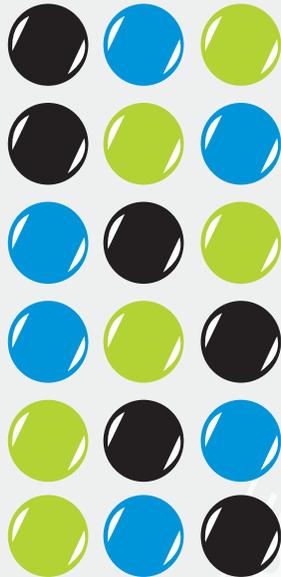
Part A: Mathematics (40 Marks)

Let us take a topic Permutation and Combination

In Section 2 of PART A of your study note; there is a Chapter called Permutation and Combination. Before solving the problems given under this chapter you should understand the basic concept.

The key is to identify the concept of Permutation and Combination.

- ⊙ When we are **arranging** something it means- **Permutation** and
- ⊙ When we are **selecting** something it is **Combination**.



Permutation Vs Combination

Permutation implies all the possible arrangement or rearrangement of the given set, into distinguishable order. For example, All possible permutation created with letters l, m, n –

- ⊙ By taking all three at a time are lmn, lnm, mln, mnl, nlm, nml.
- ⊙ By taking two at a time are lm, ln, mn, ml, nm, nl.

Total number of possible permutations of 'n' things, taken 'r' at a time, can be calculated as:

$${}^n P_r = \frac{n!}{(n-r)!}$$

The **Combination** is defined as the different ways, of selecting a group, by taking some or all the members of a set, without the following order.

For example, All possible Combinations chosen with letter 'p', 'q', 'r' –

- ⊙ When three out of three letters are to be selected, then the only combination is pqr
- ⊙ When two out of three letters are to be selected, then the possible combinations are pq, qr, rp.

Total number of possible combinations of n things, taken r at a time can be calculated as:

$${}^n C_r = \frac{n!}{(r!)(n-r)!}$$

Permutation answers:

- ⊙ How many different arrangements can be created from a given set of objects?

Combination explains:

- ⊙ How many different groups can be picked from a larger group of objects?

The term Permutation refers to - **several ways of arranging a set of objects in a sequential order**. Combination implies **several ways of choosing items from a large pool of objects, such that their order is not relevant**.

Now, the question may arise that:

- ⊙ How we **distinguish** them?

Let us take an example:

Suppose, there is a situation where you have to find out the total number of possible samples of two, out of three objects e.g.; X, Y, Z.

In this question, first of all, you need to understand, whether the question is related to **permutation** or **combination** and the only way to find this out is to check whether the order is important or not.

If the order is significant, then the question is related to permutation, and possible samples will be, XY, YX, YZ, ZY, XZ, ZX. Where, XY is different from YX, YZ is different from ZY.

If the order is not relevant, then the question is related to the combination, and the possible samples will be XY, YZ and ZX.

The sums can also be a combination of Permutation & Combination. This is also a core topic for solving the probability sums.

Part B: Statistics (60 marks):

This part of the syllabus is very important as it consists of more marks. This part is also scoring part. The part consists of Statistics and Probability.

In case of calculating Median, Quartile Deviation, Decile and Percentile (Grouped data) the better process is to learn interpolation formula. It will be helpful in the following cases:

- ⊙ The classes with equal length.
- ⊙ The classes with unequal length
- ⊙ The open ended class.

For calculating median the following formula can be used:

$$(\text{Med} - \text{p.c.b}) / (\text{s.c.b} - \text{p.c.b}) = (N/2 - \text{p.c.f}) / (\text{s.c.f} - \text{p.c.f})$$

Med = median

p.c.b = Preceding class boundary

s.c.b = Succeeding class boundary

s.c.f = Succeeding class cumulative frequency,

p.c.f = Preceding class cumulative frequency.

N = total frequency

For calculating the Quartile Deviation the following formula can be used:

$$(Q1 - \text{p.c.b}) / (\text{s.c.b} - \text{p.c.b}) = (N/4 - \text{p.c.f}) / (\text{s.c.f} - \text{p.c.f})$$

Q1 = First Quartile

p.c.b = Preceding class boundary

s.c.b = Succeeding class boundary

s.c.f = Succeeding class cumulative frequency,

p.c.f = Preceding class cumulative frequency.

N = total frequency

$$(Q3 - \text{p.c.b}) / (\text{s.c.b} - \text{p.c.b}) = (3N/4 - \text{p.c.f}) / (\text{s.c.f} - \text{p.c.f})$$

Q3 = Third Quartile

p.c.b = Preceding class boundary

s.c.b = Succeeding class boundary

s.c.f = Succeeding class cumulative frequency,

p.c.f = Preceding class cumulative frequency.

N = total frequency.

Quartile deviation can be calculated easily as $(Q3 - Q1)/2$
Probability Distribution is an important concept which turns to be very useful in the practical life of the students.

The distribution can be classified into:

- ⊙ Discrete and
- ⊙ Continuous, Probability Distribution.

Binomial and Poisson distributions are two discrete distributions in the syllabus. The problem is to **identify the distribution**.

As for example, for Binomial distribution, the following two things are the key to identify it:

- ⊙ The trials are independent.
- ⊙ The outcomes can be classified into two possible outcomes.

All the other parts should be thoroughly studied to score good marks in the examination.

Wish you best of luck.

SUBMISSIONS

Give your thoughts on the Student-bulletin. Do you have some news, an achievement, or an aspect of achievement that you would like to share? If so, we would love to hear from you.

e-mail: studies.ebulletin@icmai.in

If you do not think you are getting the e-bulletin via email, please let us know, as all students should receive it.





Examination TIME TABLE



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

(Statutory body under an Act of Parliament)

EXAMINATION TIME TABLE & PROGRAMME – DECEMBER - 2016 FOUNDATION COURSE EXAMINATION

Day & Date	Foundation Course Examination Syllabus - 2012 Time 2.00 p.m. to 5.00 p.m.
14th December, 2016 Wednesday	Fundamentals of Economics & Management
15th December, 2016 Thursday	Fundamentals of Accounting
16th December, 2016 Friday	Fundamentals of Laws & Ethics
17th December, 2016 Saturday	Fundamentals of Business Mathematics & Statistics

PRACTICAL ADVICE

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1

2

3

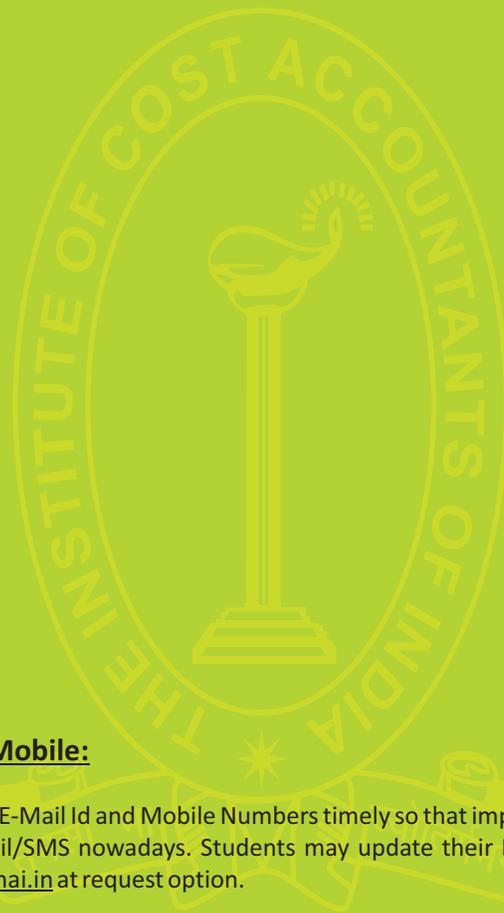
5

4

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Please **share** your **thoughts** so that we can make your **e-bulletin** everything that you want it to be.

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message from the **Directorate of Studies**

Dear Students,

Your December term of examination is almost 'knocking the door'. Those who will be appearing in your forthcoming term of examination, we are sure, they are almost prepare to face the challenges of this professional course and busy in their last time preparation!

'Tips' are given in this E-bulletin by the knowledge experts, for the smooth encouragement in your preparation. We are sure that all aspirants will definitely be benefitted by those tips and that will help them to brush up their knowledge and also to swim across.

Take the examination seriously but don't be panicky. Please try to follow the general guidelines, mentioned below; which may help you to get success in your examination.

Essentials for Preparation:

- ⊙ Conceptual Understanding & Overall Understanding of the subject both 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 answers precisely and in a structured manner,
- ⊙ In-depth knowledge about specific terms required. Write question numbers correctly and prominently.
- ⊙ Proper time management is also important while answering.

We are very much thankful to the Directorate of Research & Journal for providing us the support in Designing and Composition of this E-bulletin.

Be Prepared and Get Success;

Goodbye and good luck to all of you!

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