

CMA STUDENTS' E-BULLETIN

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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.

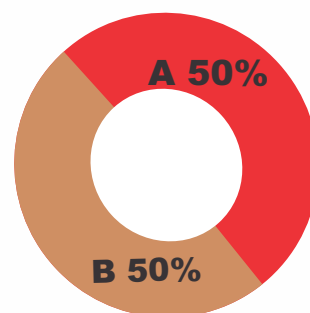
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Paper : 1, Part : - I

Fundamentals of Economics & Management (FEM) - Economics

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Syllabus Structure

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

Learning Objectives:

In this issue of e-bulletin we refine our learning process through few M.C.Qs on Economics.

Try to choose the correct answer from the alternatives provided and thereafter check yourself from Answers given at the end of M.C.Qs.

Economics

Study Note 1 deals with Basic concepts of Economics. These basic concepts are nothing but the foundation of a grand edifice called Economics. So if the understanding of the basic concepts is weak the whole structure will crumble down. Therefore, it is utmost necessary to have a solid base of the super structure.

What is Economics?

It is a social science which deals with the abilities of human being involving money. The guiding force of all such human activities is economic demand which is nothing but 'wants' backed up purchasing power. If any want is not backed by purchasing power that want is not economic demand eg, wish to have a trip to the moon is not economic demand.

Economic science analyses 4 types of activities (a) Consumption (b) Production (c) Exchange (d) Distribution. What is the basic difference between consumption and production?

Utility is being created while producing goods, that utility is destroyed while consuming those goods. So production involves creation of utility and consumption involves destruction of utility.

'Barter System' in which goods are exchanged for goods has been scrapped because of the problem of indivisibility of goods. For example $\frac{1}{2}$ a cow or $\frac{1}{3}^{\text{rd}}$ of a goat cannot be exchanged. This ushered in the money exchange system.

Distribution activity mainly depends on the nature of the economy whether it is capitalistic or socialistic. Under capitalism, efficient workers are reordered while under socialism all workers are treated equally by dividing the national bread equally.

Economics has been defined by different economists

differently viewing it from different angles.

1. Wealth definition by Adam Smith – studied wealth can be produced, consumed, exchanged and distributed.
2. Welfare definition- by Alfred Marshall- studied how human welfare can be maximized.
3. Scarcity definition – by Lionel Robbins – studied how limited resources, having alternative uses can be pressed into service in the most efficient manner possible.
4. Growth definition- by Paul A. Samuelson – studied how an economy can grow in a dynamic environment.

Economics is both a positive science and also a normative science. Positive science means it explains 'what it is'. Normative Science means it explains 'what it ought to be'. Micro economics deals with smaller economic units like a single producer, and a single consumer etc. Macro economics deals with larger economic units on a national scale like National income, national investment, national capital stock etc.

Classical economists used deductive method to arrive at economic laws and economic theories based on fundamental assumptions. It is an abstract approach. Modern economists used inductive method to arrive at economic Laws and theories based on statistical data. It is called statistical method.

Fundamental Concepts

The concepts of wealth, welfare and money are straightforward. The most important concept is that of 'Market'. Market had got two market forces operating – (1) Demand (2) Supply.

These two forces come from two different groups of people – demand from consumers and supply from producers. These two forces interact with each other to determine the price and the quantity that are fixed up in equilibrium.

Investment is the most difficult concept which sometimes gets confused with capital.

Investment is a flow concept while capital is a stock concept. Capital stock consists of all plants and machinery that have already been produced. Investment is the new machineries that have been produced during every year. That is why Investment is also called 'capital formation' or the new capital formed. Suppose we start with the capital stock K_0 in the bench mark period '0'. Throughout the period '0' (one year) suppose the number of the new machines that are produced is I_0 . So, the investment in the period '0' (one year) is I_0 . Now, in period '1' the capital stock with which the organization will start functioning is K_1 (say). This K_1 can be calculated by $K_0 + I_0$ or $K_1 = K_0 + I_0$. Similarly, if the investment during the period '1' (one year) is I_1 then the capital stock for the period '2' will be $K_2 = K_1 + I_1$ and so on. We can also find K_2 by adding all the investments in different consecutive periods to the capital stock in the bench mark year.

Therefore,

$$K_2 = K_0 + I_0 + I_1$$

$$K_3 = K_0 + I_0 + I_1 + I_2 \text{ And so on.}$$

In the commodity market, aggregate demand is the summation of consumption demand and investment demand.

Therefore, $Y = C + I$ this is the demand side.

Aggregate supply is the summation of consumption and savings that the national product is comprised of.

Therefore, $Y = C + S$ this is the supply side.

In equilibrium, Supply = Demand.

$$C + S = C + I$$

$$\text{Or, } S = I.$$

So, the equilibrium in the commodity market warrants equality between savings and investment.

For a consumer the most important law of economics is the Law of Diminishing Marginal Utility. Alfred Marshall developed this law which states that the additional utility derived from the additional units of consumption will go on diminishing as the level of consumption increases.

Marginal utility is defined as:

$$MU_{nth} = TU_n - TU_{n-1}$$

Marginal utility from the n th unit of consumption will be the difference between the total utility from n and $n-1$ units. Marginal utility is the value of the slope of the Total utility curve at the corresponding point.

Therefore, $MU_x = \frac{dTU_x}{dx}$

In other words, total utility is the summation of all marginal utilities.

$$TU_x = \sum MU_x$$

Production possibility curve shows the various combinations of two commodities that can be produced by an economy with given resource and given technology. This production possibility curve explains the central problem of all economies

- What to produce
- How to produce, and
- For whom to produce.

Once we land up at any point of the production possibility curve all these three problems are solved immediately for any economy. The real problem is to choose the point on the curve. Once we know the relative price of the two commodities we can choose the point easily. That is why Adam Smith considered the price system as the 'invisible hand' that guides any economy to determine what to produce. Given the technology we can find out how to produce that combination. The nature of the commodities indicates for whom we are producing these.

Use your common sense to analyse economic phenomenon. Try to understand each and every point. For heaven's sake do not try to mug up. A little amount of flexing the muscles of your brain will make Economics an enjoyable subject. Enjoy your reading of the study notes of the institute.

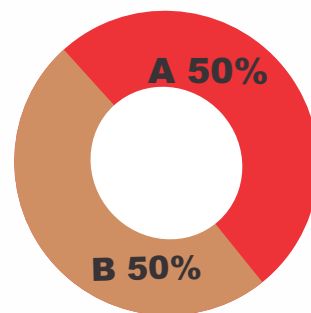
Best of Luck!!

Paper : 1, Part : - II

Fundamentals of Economics & Management (FEM) - Management

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Syllabus Structure

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

Behind every successful business decision, there is always a CMA

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 change

Management Concepts

The term 'Power' refers to the ability or capacity to influence the behaviour or attitudes of other individuals. A manager's power may be considered as his ability to cause subordinates to do what the manager wished them to do.

A manager's power may be measured in terms of his ability to –

- (a) Give rewards,
- (b) Punish individuals,
- (c) Withdraw rewards, etc.

Thus, reward, coercion, dominating personality, expertise, etc. are the main sources of power. Authority may be described as an institutionalized power since it is formally bestowed by the organization.

Concept of Power:

Power is an important means to enforce obedience to the rules, regulations and decisions of the organization. Power may be derived on personal or institutional bases. The use of power may affect the behaviour of people in the desired manner.

Sources of Power:

There are several bases or sources of power. John French and Bertram Raven have identified five bases of sources of power:

Reward power- The ability to grant or withhold rewards is a key source of power. Rewards may be financial, social or psychological. Financial rewards include salaries, wages, fringe benefits, etc. support, praise, recognition, status, etc., are non-financial rewards.

Coercive power- This is the ability to punish others for not carrying out orders or for not meeting certain requirements. The person who is in a position to coerce others forces or compels them to do or not to do something.

Expert power- A person having expertise or specialized knowledge or information has power over those who seek his expertise.

Referent power- This is based on the personality attributes or personal virtues of a person. Such a person has a charisma which attracts people towards him.

Legitimate power- This is derived from the formal position of a person in the organization. Formal legitimate power is called authority and it is vested on the individual.

Delegation of Authority:

Delegation of authority is “the process a manager follows in dividing the work assigned to him so that he performs that part which only he, because of his unique organisational placement, can perform effectively and so that he can get others to help with what remains.”

Importance of Delegation:

Delegation is the dynamics of management and the essence of sound organisation. The importance of delegation is due the following advantages that it provides:

1. It enables the managers to distribute their workload to others, thus, they can concentrate on more important policy matters.
2. Delegation facilitates quick decisions because the authority to make decisions lies near the point of action.
3. Delegation helps to improve the job satisfaction, motivation and morale of subordinates.
4. Delegation increases interaction and understanding among managers and subordinates.
5. Delegation establishes superior-subordinate relationships and provides a basis for efficient functioning of the organisation.
6. Delegation enables a manager to obtain the specialized knowledge and expertise of subordinates.
7. Delegation helps to ensure continuity in business because managers at lower levels are enabled to acquire valuable experience in decision making.

Distinction between Delegation and Decentralisation:

Decentralisation is much more than delegation. Delegation means transfer of authority from one individual to another. But decentralisation implies diffusion of authority throughout the organisation.

The main points of distinction between delegation and decentralisation are presented as follows:

1. Delegation is the process of devolution of authority whereas decentralisation is the end result which is achieved when delegation is systematically repeated up to the lowest level.
2. Delegation can take place from one individual (superior) to another (subordinate) and -be a complete process. But decentralisation is completed only when the fullest possible delegation is made at all levels of organisation.
3. In delegation control rests entirely with the superior. But in decentralisation the top management exercises only overall control and delegates the authority for day today control to the departmental managers.
4. Delegation is a must for management as subordinates must be given sufficient authority to perform their duties. But decentralisation is optional in the sense that top management may or may not disperse authority.
5. Delegation is a technique of management used to get things done through others. However, decentralisation is both a philosophy of management and a technique.

Concept of Responsibility:

According to M.E. Hurley, "Responsibility is the duty to which a person is bound by reason of his status or task. Such responsibility implies compliance with directives of the person making the initial delegation."

The main characteristics of responsibility are as follows:

1. Responsibility can be assigned to human beings only.
2. Responsibility arises from a superior-subordinate relationship.
3. Responsibility may be a continuing obligation or confined to the performance of a single function.
4. Responsibility may be defined in terms of functions or targets or goals.
5. The essence of responsibility is obligation of a subordinate to perform the duty assigned to him.
6. Responsibility is a derivative of authority.
7. Responsibility is absolute and cannot be delegated.
8. Responsibility flows upward. A subordinate is always responsible to his superior.
9. The person who accepts responsibility is accountable for his performance.

Management can use various techniques to define responsibilities so as to actively involve members of an organization in its coordination effort. Two such techniques are:

- i. Responsibility charting, and

- ii. Role negotiation.

i. Responsibility Charting –

A responsibility chart is a nice way of summarizing the relationship between tasks and actors (performers). The chart lists activities that are complicated or the decisions that must be made and the individuals who are responsible for each of them. On the vertical axis we show the tasks and on the horizontal axis we show the actors.

The following four roles are important:

- a. The individual is responsible for the activity (decision).
- b. The individual must approve the activity or decision.
- c. The individual must be consulted before completing the activity or making the decision.
- d. The individual has to be informed about the activity or the decision.

ii. Role Negotiation –

Role negotiation is an important technique that can supplement the use of responsibility charting. If used properly, The primary objective of this approach is to identify the independent clusters of tasks completed by the organization. The second objective is to match the personal needs and work preference of individuals with the tasks that must be completed.

Authority, Responsibility & Accountability:

Authority- Henri Fayol, regarded authority as 'the right to give orders and the power to exact obedience'. This is the power to assign duties to subordinates and to ensure that they are carried out, and involves the acceptance of accountability for the proper exercise of this authority. Authority can be regarded as the right or power to delegate responsibility and it emanates in a company from the shareholders to the board of directors, and down the scalar chain.

Responsibility-responsibility flows from the bottom of the organizational structure to the top since each supervisor or manager is accountable to his immediate superior for the proper use of his authority and the proper performance of those duties, whether done personally or not, for which he is responsible.

Accountability- Accountability is concerned with the fact that each person who is given authority and responsibility must recognize that the executive above him or her will judge the quality of his/her performance.

“Management is, above all, a practice where art, science, and craft meet”

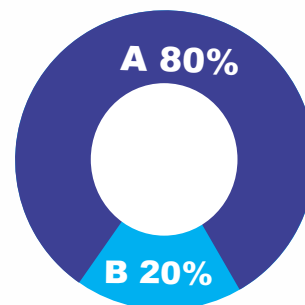
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Paper : 2

Fundamentals of Accounting (FOA)

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Syllabus Structure

A Fundamentals of Financial Accounting **80%**

B Fundamental of 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.

Accounting treatment of bad debts

For any business purchase and sales are the most regular and main activity. This attracts business connection with lots of people either giving or taking benefits of credit.

Debtors are those persons who take the benefit of delayed payment and creditors allow credit period to pay later. That means in each case there is a time gap between the date of sale or purchase and the date of recovery of cash or payment of cash. During this period there are three possibilities regarding the activities of debtors:

1. The debt will be collected in time.
2. The debt may not be collected at all.
3. The debt may be cleared before due date.

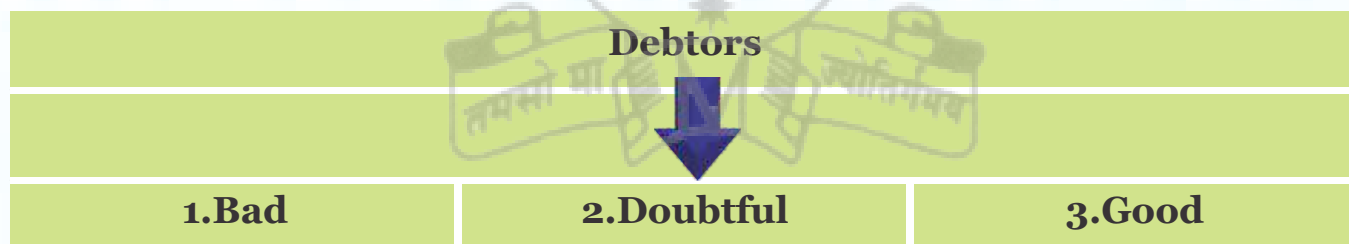
Similarly during this period there are three possibilities regarding the activities of creditors:

1. The debt will be paid in time.
2. The debt may not be paid at all.
3. The debt may be cleared before due date.

In this issue we will discuss the cases related to debtors.

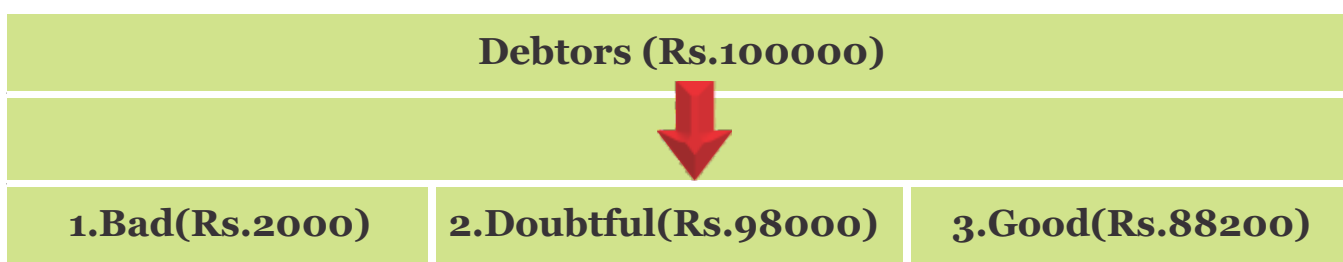
1. In the above explanation in case 1 when the debts are collected in time we call the debtors to be good.
2. In the above explanation in case 2 when the debts are not collected at all we call the debtors to be bad.
3. In the above explanation in case 3 when the debts are collected before due date we call the debtors to be good and they are allowed cash discount as a reward to pay earlier.

Whatever be the case, from the date of sale to the date of ultimate collection of debt there remains an anxiety on behalf of the seller for which a seller makes provision from profit and loss account to protect such loss beforehand. Let us see the following chart:



The debtors becoming bad are deleted from the list of debtors and the amount is deducted for the amount of gross debtors. The balance remains is all doubtful and hence provision for doubtful debt is maintained on the amount of doubtful debt. When such provision is also deducted from the net debtors the balance remains is expected to be good and are supposed to clear their dues in due time. Therefore a provision for discount allowed is made on such amount.

Let us see the same chart with some figure added :



The above chart is explained below which will help to solve sums.

	Rs.
Debtors	100000
Less bad debt	2000
Doubtful	98000
Less provision for doubtful debt @10 % (say)	9800
Good	88200
Less provision for discount @ 5% (say)	4410
Net balance	83790

Example:

The provision for doubtful debt a/c shows a balance of Rs.5000 on jan 01, 2014. The bad debt during the year 2014 amounted to Rs.3000. The sundry debtors on dec 31 2014 were Rs. 50000. On dec 31 2014 there was an additional bad debt of Rs. 3000.

Create a new provision @ 10 % on debtors. Bad debt recovered Rs. 500

You are required to show necessary ledger accounts and balance sheet

Solution :

Provision for doubtful debt account

To bad debt	6000	By balance b/d	5000
(3000+3000)			
To balance c/d	4700	By P/L A/C	5700
(50000-3000)x10%			
	10700		10700

Bad debt a/c

To sundry debtors	6000	By Provision for doubtful debt a/c	6000
(3000+3000)			
	6000		6000

Bad debt Recovery a/c

To P/L a/c	500	By Bank	500
	500		500

Profit and Loss a/c (includes)

To Provision for doubtful debt a/c :		By	
	4700		
Add bad debt	6000		
	10700		
Less old provision	5000		
	5700		

Balance sheet (includes)

	Sundry debtors	50000
	Less further bad debt	3000
		47000
	Less new provision	4700
		42300

Note 1. Similar treatment will be done for discount allowed and provision for discount allowed.

Note 2. Further bad debt should only be deducted from the debtors because the bad debt during the year is already adjusted with debtors.

Keep practicing the sums from study material and past year question papers.

With best wishes

Paper : 3

Fundamentals of Laws and Ethics (FLE)

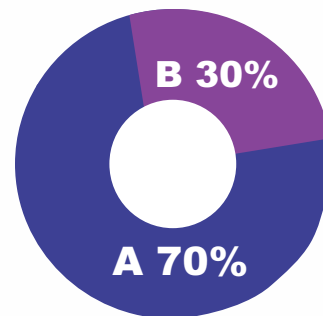
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Syllabus Structure

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.

BUSINESS LAWS & ETHICS

In the November issue of E-bulletin; we had discussed about 'Ethics & Business'. Further in continuation; here is few more points discussed like-

- I. The relationship between Ethics and Law &
- II. Ethics in Business.

The relationship between Ethics and Law:

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

Ethics Law

Thus, in one sense, business ethics can be said to begin where law ends. Business ethics is primarily concerned with those issues not completely covered by law, or where there is no definite consensus on whether something is right or wrong. Hence, it is often remarked, that business ethics is about the "grey areas" of business where values are in conflict.

Ethics in Business:

The business world is an important part of society, as it is concerned with the livelihoods of people. Business activity too is subjected to the code of conduct without any exception. Therefore, there is no separate business ethics for businessmen, as ethics applies to all the activities of people. Consequently, we have to keep business within the bounds of ethics.

The business world is an important part of society, as it is concerned with the livelihoods of people. Business activity too is subjected to the code of conduct without any exception.

Therefore, there is no separate business ethics for businessmen, as ethics applies to all the activities of people. Consequently, we have to keep business within the bounds of ethics.

According to Andrew Crane " Business ethics is the study of business situations, activities and decisions where issues of right and wrong are addressed". Business ethics concerns itself with adhering to the social principles of the situations in which business takes place.

Need for Business Ethics:

Business ethics is currently a very prominent business topic, and the debates and dilemmas surrounding business ethics have attracted enormous amount of attention from different quarters of organizations and society. Hence, it has emerged as an increasingly important area of study. Some of the major reasons why a good understanding of business ethics is important can be stated as follows:

1. Stop business malpractices,
2. Improve customer's confidence,
3. Mandatory for survival of business,
4. Safeguards consumer rights,
5. Protect interests of customers, shareholders, employees, competitors, dealers, suppliers etc.,
6. Develops good relation between business and society,
7. Creates good image for the business and businessmen,
8. Helps in the smooth functioning of the business,
9. Helps to boost up consumer movement and satisfaction thereafter,
10. Healthy competitive environment is created.

Now, try to solve the questions mentioned below:

- A. Business Ethics is ----- important in nature

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- (i) Absolute
(ii) Not absolute
(iii) Permanent
(iv) Not anyone of the above.
- B. Business Ethics relates to:
(i) Society's decision
(ii) An individual's decision
(iii) Customer's decision
(iv) Governments decisions.
- C. Which of the following is an unethical business practice?
(i) Collusion
(ii) False communication
(iii) Insider trading
(iv) All the above.
- D. Business Ethics has a ----- application
(i) Natural
(ii) Practical
(iii) Universal
(iv) None of the above.
- E. Business Ethics calls for avoidance of:
(i) Competition
(ii) Publicity
(iii) Monopoly
(iv) Self interest.
- F. The Society for Business Ethics was started in-----
(i) 1950
(ii) 1960
(iii) 1970
(iv) 1980.
- G. Ethics has evolved with the evolution of:
(i) Culture
(ii) Value
(iii) Moral
(iv) Society.
- H. Law is ----- of Ethics
(i) No connection
(ii) Decodification
(iii) Codification
(iv) Visualisation.
- I. The study of Ethics is divided in to----- operational areas
(i) Six
(ii) Four
(iii) Five
(iv) Nine.
- J. Which of the following is not a 'code of conduct'?
(i) Code of ethics
(ii) Code of practices
(iii) Code of behaviour
(iv) Code of management

Answer:

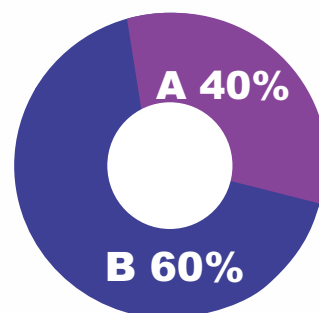
- A – (ii)
B - (ii)
C- (iv)
D- (i)
E- (iii)
F- (iv).
G- (iv)
H-(iii)
I- (ii)
J- (iv)

Paper : 4

Fundamentals of Business Mathematics and Statistics (FBMS)

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Vidyasagar Mahavidyalaya

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Syllabus Structure

A Fundamentals of Business Mathematics 40%

B Fundamentals of Business Statistic 60%

Learning Objectives:

- appreciate the usefulness, power and beauty of mathematics
- enjoy mathematics and develop patience and persistence when solving problems
- understand and be able to use the language, symbols and notation of mathematics
- develop mathematical curiosity and use inductive and deductive reasoning when solving problems
- become confident in using mathematics to analyse and solve problems both in professional and in real-life situations

INTRODUCTION:

If it is told to collect all numbers together, then a question must arise which numbers are to be collected? Whether the numbers be rational or irrational or fractional or decimal or only integers? Therefore a problem will be created during collection. Now if it is told to collect integral numbers then in this case problems will be minimized but not at all unambiguous. Because the numbers collected may be positive integers or negative integers or both. Again if it is told to collect positive integers only, then the collector can easily understand which numbers are to be collected. In this case the mode of collection is well-defined for which it is easy to choose which number should belong to the collection. It is to be noted that these number are also well-distinguished. This collection of positive integral numbers can be termed as well defined collection of distinguished objects and as such it is known as a self of positive integers. the idea of set theory was invented by the famous jerman mathematician George Cantor. This theory has wide application in Modern Science, Technology, Commerce and Economies. The Theory of Probability has been developed widely with the help of the Set Theory.

1.2 DEFINITION OF A SET:

A set is a collection of well defined and well – distinguished objects. The collected objects are the Elements of the set. Hence a set has the following basic charesteristries:

- (i) It should be well-defined
- (ii) The elements of the set should be well-distinguished
- (iii) The elements of the set should be in depended of order.
- (iv) It should be independent of order of the elements
- (v) Repetition of the elements has no effect on the set.

1.3 IMPORTANT SYMBOLS USED:

<u>SYMBOLS</u>	<u>MEANING</u>
\wedge	And
\vee	Or
\Rightarrow	Implies that
\Leftrightarrow	If and only if
\in	Belongs to
\notin	Does not belong to
$: \text{ or } \{$	Such that
	Contained in or proper subset

	Not contained in
\supset	Contains
$\not\supset$	Does not contain
\cong	Approximately equal
A^c or A^c or \bar{A}	Complement of the set A
\exists	There exists
\forall	For all
Δ	Symmetric difference

<u>SYMBOLS</u>	<u>MEANING</u>
U	Union
\cap	Intersection
\emptyset	Null Set
I	Set of Integers
I^+	Set of Positive Integers
I^-	Set of Negative Integers
N	Set of natural Numbers
Q	Set of rational numbers
R	Set of real Numbers
R^+	Set of Positive real Numbers
i	Imaginary Numbers

1.4 METHODS OF DESCRIBING A SET:

A set can be described by two methods:

- (I) The method under which the elements of a set are listed within brackets is known as tabular or roster or Enumeration Method
- (II) The method under which the nature or characteristics and the limit within which the elements lie are stated is known as property or set-Builder or Rule Method.

(a) Tabular or Roaster or enumeration method:

Under this method we list all the elements of the Set within a bracket where the elements are separated by commas.

EXAMPLES: (a) A set of first six even Natural numbers: $N = \{2, 4, 6, 8, 10, 12\}$

(b) A set of consonants of the English Alphabet $E = \{b, c, d, f, g, h, j, k, l, m, n, p, q, r, s, t, v, w, x, y, z\}$

NOTE:

(i) A Set is to be denoted by capital letter like letter like A, B, C, and the elements by small letters a, b, c,

(ii) This method is suitable when the elements are small in number.

(III) Property or Set – Builder or Rule Method

Under this method the characteristics of the element are described instead of listing them.

Examples: (a) Let A is a set of all odd natural numbers and x represents an arbitrary elements of the set. Then

$$A = \{x : x \text{ is an odd natural numbers}\}$$

(b) Let P is the set of all numbers divisible by 3 between 4 and 22. hen

$$P = \{x : x \text{ is the numbers divisible by 3 and } 4 < x < 22\}$$

In Tabular Method, this set can be described as $P = \{6, 9, 12, 15, 18, 21\}$

Note: This method is suitable when the elements are numerous.

1.5 **TYPES OF SETS:**

Sets are of various types as follows

(i) **FINITE SET:**

A set is said to be finite if it contains a finite number of elements i. e., the number of elements of the set is countable:

Examples: $A = \{2, 4, 6, 8, 10\}$

$B = \{1, 2, 3, 4, \dots, 800\}$

$C = \{x : x \text{ is an integer and } 5 \leq x \leq 18\}$

All the above sets are finite sets.

(ii) **INFINITE SET:**

A set is said to be infinite if it is impossible to count the number of elements of the set i. e., the number of elements of the set is innumerable.

Examples: $A = \{1, 2, 3, 4, \dots\}$

$B = \{x : x \text{ is a set of all real numbers}\}$

$C = \{x : x \text{ is } 4 < x < 7\}$

All the sets mentioned above are infinite sets.

NOTE: The set $R = \{x : x \text{ is a famous city in the world}\}$. Though counting of the elements of the set is quite difficult but still is a finite set.

(iii) **SINGLETON SET:** A set is said to be Singleton if it contains only one elements.

Examples: $A = \{7\}$

$B = \{x : x \text{ is on odd number and } 4 < x < 6\}$

$C = \{x : x \text{ is a perfect square and } 47 < x < 57\}$

All these sets are Singleton Sets.

(iv) **NULL OR VOID SET:** A sets is said to be Null or void set if it contains no element. Sometimes it happens that the characteristic of the set is such that no element can be included in the set. In that case the set becomes a Null or Void Set.

Examples: $A = \{x : x \text{ is a positive integer and } 5 < x < 6\}$

$$B = \{x : x \text{ is a real part of the equation } x^2 + 25 = 0\}$$

$$C = \{x : x \text{ is a prime number and } 23 < x < 25\}$$

All the above – mentioned sets are Null or Void sets.

- (v) **EQUAL SET:** Two sets are said to be Equal if they contain the same elements. Hence two sets A and B are said to be equal if every element of the set A is an element of the set B, and every element of the set B is also an element of the set A. In symbol $A = B$; if and only if $\{x \in A \iff x \in B\}$.

Examples: (a) let $A = \{3, 5, 7, 9\}$ and $B = \{5, 9, 3, 7\}$

Therefore $A = B$

(b) If $A = \{a, b\}$, $B = \{b, a, b, a\}$ and

Then $A = B$

(c) Let $A = \{3, 4\}$, $B = \{4, 3, 3, 4\}$

And $C = \{x : x^2 - 7x + 12 = 0\}$

Therefore $A = B = C$

These are the examples of Equal Sets. Since in the above examples it appears that $x \in A \iff x \in B$

$\Delta Y \in B \iff Y \in A$ in case examples (a) and (b) and

$X \in A \iff X \in B \cap C$, $Y \in B \iff Y \in A \cap C$ and $Z \in C \iff Z \in A \cap B$ in case of C.

- (vi) **EQUIVALENT SET:** Two sets are said to be equivalent set if the elements of one set have one – to-one correspondence with the elements of the other set.

Examples: Let $A = \{3, 4, 5, 7, 8, 9\}$

And $B = \{k, l, m, n, o, p\}$

Here $A \approx B$, since the elements of the set A have one- to- one correspondence with those of B follows:

3	4	5	7	8	9
↓	↓	↓	↓	↓	↓
k	l	m	n	o	p

Note: Alternatively, if the total number of elements of one set is equal to the total number of elements of the other set, then the two sets are said to be Equivalent set.

- (vii) **SUB SET:** If every element of a set A is an element of a set B, then the set A is called subset of the set B or A is contained in B or B contains A. This can be written as $A \subseteq B$ or $B \supseteq A$.

By symbol: $A \subseteq B$ if $x \in A \implies x \in B$

EXAMPLES: (a) Let $A = \{4, 7, 9\}$

And $B = \{2, 3, 4, 5, 7, 9, 10\}$

Here $A \subseteq B$, but $B \not\subseteq A$.

(b) if $A = \{x : x \text{ is a letter of English consonants}\}$ and

$B = \{x : x \text{ is a letter of English Alphabet}\}$

Then $A \subseteq B$, Here also $B \not\subseteq A$.

- (viii) **PROPER SUBSET AND SUPER SET:** If every element of a set A is also an element of the set B and there exists at least one element in the set B. Which is not an element of the A, then the set A is the proper sub set of the set B. This is written as $A \subset B$. The set B is called super set.

EXAMPLES: (a) Let $A = \{3, 4, 5, 6\}$

and $B = \{3, 4, 5, 6, 7, 9\}$

Here, $A \subset B$ and B is the super Set

(ix) **FAMILY OF SETS:** If all the elements of a set A are sets themselves, then the set containing these subsets as its elements then the set called a family of sets. It is also called a set of sets.

Examples: Let $A = \{2, 3\}$, then the set containing the subsets $\emptyset, \{2\}, \{3\}$ and $\{2, 3\}$ formed by the elements of the set A is known as a family of sets i.e, the set $[\emptyset \{2\}, \{3\}, \{2, 3\}]$ is a family of sets whose elements are the subsets of the set A.

(x) **POWER SET:** If A is a set, then the set of all possible subsets of the set A is called the power set of the set A and it is denoted by $P(A)$

Examples:

(a) Let $A = \{a\}$, its subsets are $\emptyset, \{a\}$. Hence $P(A) = [\emptyset, \{a\}]$.

The number of elements of $P(A) = 2 = 2^1$

(b) Let $A = \{a, b\}$. Its subsets are $\emptyset, \{a\}, \{b\}, \{a, b\}$

Hence $P(A) = [\emptyset, \{a\}, \{b\}, \{a, b\}]$

The number of elements is 4, i. e., $4 = 2^2$

(c) Let $A = \{a, b, c\}$, Its subsets are $\emptyset, \{a\}, \{b\}, \{c\}, \{a, b\}, \{a, c\}, \{b, c\}, \{a, b, c\}$

Hence $P(A) = [\emptyset, \{a\}, \{b\}, \{c\}, \{a, b\}, \{a, c\}, \{b, c\}, \{a, b, c\}]$

The number of element is 8, i. e. $8 = 2^3$

Therefore it is observed that if A contains one element, then $P(A)$ contains 2 elements i. e., 2^1

If A contains 2 elements, then $P(A)$ contains 4 elements i. e., $4 = 2^2$

Again if A contains 3 elements, then $P(A)$ contains 8 elements i. e., $8 = 2^3$

Proceeding in this way it can be concluded that if the set contains n elements, then its power set contains 2^n elements.

(xi) **UNIVERSAL SET:** A set is said to be universal set if it contains the total elements of all subsets under consideration in a particular situation. The Universal set is generally denoted by U.

Examples:

(a) A set of integers is the Universal set for sets of Even and odd integers.

(b) The graduates of an University is the Universal set for the sets of graduates of the colleges attached to the University.

Note: (i) every set is a subset of its own.

Proof: Let A is a set. It is to be proved that $A \subseteq A$.

Again LET if possible $A \not\subseteq A$ (i)

From (i) it implies that there is at least one element in A which is not an element A. But it is impossible

$A \subseteq A$.

(ii) Null set is a subset of every test.

Proof: Lets A is a given set. Now it is to prove that $\emptyset \subseteq A$(i)

Now (i) implies that there is at least one element in \emptyset which is not an element of A. But it is not possible. Hence $\emptyset \subseteq A$

(iii) If $A \subseteq B$ and $B \subseteq C$, then $A \subseteq C$

Proof: Given that $A \subseteq B$

It implies that $x \in A$ means $x \in B$(i)

\therefore Again given that $B \subseteq C$

\therefore It also implies that $x \in B$ means $x \in C$(2)

From (1) and (2) it is to be concluded that $x \in A \Rightarrow x \in C$

Hence $A \subseteq C$

(iv) If $A \subseteq B$ and $B \subseteq A$, then $A = B$ and conversely i. e.

if $A = B$, then $A \subseteq B$ and $B \subseteq A$

Proof: Given that $A \subseteq B$

\therefore Any element $x \in A \Rightarrow x \in B$(1)

i.e. Every element of the set A is also an element of the set B.

Again given that $B \subseteq A$

\therefore Any element $Y \in B \Rightarrow Y \in A$ (2)

i.e. Each element of the set B is also an element of the set A.

Hence by the definition of Equal Set, it can be concluded, with the helps of (1) and (2) that $A = B$

Conversely if $A = B$, then $x \in A \Rightarrow x \in B$(3)

By (3) $A \subseteq B$ and by (4) $B \subseteq A$

Hence $A = B$



Perceive Yourself with Wisdom

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01.00 Time Tested Wisdom

There are several ways and means of inculcating wisdom nodes from generation to generation. The instances could be drawn from mythological stories, religious preachings, historical tales, or even from one's own anecdotes. The enshrined objective is to carry forward the learnings drawn from the time tested wisdom.

Fools perceive themselves with an inflated supremacy and get stuck to their ego. Wise-men perceive themselves as humble learners and continue inventing forever. It is one's own perception, through time tested wisdom, that can make a whole lot of difference.

Assuming that two fools happen to cross each other from opposite directions on a single lane-way, each one expects the other to step aside and give him the way. In the process, they stick to their own lane and remain standstill without allowing the neither to move forward. In a situation when a fool and a wise man happen to come across, the wise one steps aside, carves out a new lane for him to stead forward, at the same time allowing the fool to continue the onward journey in the existing lane. When two wise men happen to cross each other, each one steps aside and invents two more new lanes for them to go ahead. The existing trail is left free for the commoners to continue the normal course.



The inferred moral is that foolishness halts the progress whereas wisdom multiplies the ways and means of prosperity. Every wise man acts as a teacher for the contemporary folks. It is the wise teachers who guide the current generation as also build the future generations. And that is how humanity can grow in leaps and bounds.

02.00 Self-Perception

Self-Perception is the primary source for our feelings and actions. As such, our actions and reactions are a product of our own perception. Self-perception is the way you think of and understand yourself; It is a means of analyzing your inherent attributes as also the needs. Practically speaking, perception is an integrated sensor. The key elements of perception include life style, likes and dislikes, passion and aspirations. One of the obvious exercises to move forward the carrier path, therefore, is an analysis of each of the key elements of perception.



02.01 Life Style

Life style is the way in which a person lives. It reveals the standards of life of an individual. A life style typically reflects an individual's attitudes, way of life, values, or world view. Therefore, a lifestyle is a means of forging a sense of self that creates cultural symbols and resonates with personal identity.

Life style is a combination of tangible and intangible factors. Tangible factors relate specifically to demographic variables, such as an individual's education, race, religion, income level, consumption pattern, etc., whereas intangible factors concern the psychological aspects of an individual such as personal values, preferences, and outlooks.

Life style is the way in which a person lives.

Before carving out your onward path, be sure to identify the key characteristics of your ideal lifestyle; analyze your current and future lifestyle; and elicit answers to the three vital questions:

- a. Are you happy with your current lifestyle?

- b. Do you want to maintain it or change it?
- c. Does your current career path allow you the lifestyle you seek?

02.02 Likes & Dislikes

Like is Proposition. Dislike is Opposition. Likes reflect things one is fond of doing whereas dislikes are the things one does not want to do. Likes are reverberated by enthusiastic functioning whereas dislikes throw up repulsive working. Enthusiasm adds to efficiency whereas repulsiveness diminishes the output.

**Like is Proposition.
Dislike is Opposition.**

We all differ in many ways. Out of them all, one major area is on account of our likes and dislikes. The difference exists owing to our family background, company of friends and climatic conditions. Our likes and dislikes, however, give us an insight into our inner-self. They are the sum and substance of our character, temperament and disposition.

An important step is carrying out an unambiguous analysis of your likes and dislikes. Find out: What kinds of activities -- both at work and at play -- do you enjoy? What kind of activities do you avoid? You can make a list of both the types of activities. Now take a close look at your current job and career path in terms of your list of likes and dislikes. Jot down the factual answer to the question: Does your current job have more likes or dislikes?

02.03 Passion

Passion is an intense emotion, a compelling enthusiasm or desire for something. Passion is reflected when extra energy is voluntarily infused into something than is normally warranted. It is much more than simple enthusiasm or excitement.

Passion is an ambition that is crystalized into action with heart, mind, body and soul acting together. Feelings of satisfaction and fulfillment turn the passion into a hobby. Passion leads to perpetual happiness.

Passion is an intense emotion, a compelling enthusiasm or desire for something.

You can ask friends, family members and others who know you well if they can provide clues as to what they believe are your strengths and abilities, but it is only YOU who can figure out where your passion lies.

Analyze your passion with a pragmatic approach. Reflect on the times and situations in which you feel most passionate, most energetic, most engaged - and see if you can develop a common profile of these situations. Develop a list of your passions. List out: How many of these items keep occurring while you are at work?

02.04 Aspirations

Aspirations reflect the ambitions. One of the key elements to achieving career success is to clearly define your aspirations.

Begin the analysis of your aspirations by taking time and sitting in a quiet location and answer these questions:

Aspirations reflect the ambitions.

What were my original childhood career hopes and dreams?

What are the things that are important to me in life?

What am I good at in accomplishing at work?

What are the things I don't enjoy?

Three to five years from now, what would I like to be doing? What could I envision myself doing? What would I like to have achieved?

How would I describe my perfect job?

Spend some time thinking about how you define success. What is success to you: wealth, power, control, contentment...

03.00 An Example

Appended hereto is an example titled 'As you perceive Yourself...' that depicts the self-perception of an illustrative character of a Cost Manger

04.00 Quick Take

Chart out a true perception of yourself with Wisdom; Choose the best-fit career path that is available to you; And Move Forward!

AS You perceive Yourself...

1	Life Style	<p>Leads the life of a semi rich urban Hindu vegetarian; Intends to be richer Lives in an air-conditioned bed room in a two-room rented apartment; Intends to own an air conditioned three room apartment Commutes by a two-wheeler; intends to own a four-wheeler Works six days a week; Intends to have five days a week</p> <ul style="list-style-type: none"> • Goes for monthly outings; Intends to go for weekly outings
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Observation: In order to catch up with my intended lifestyle, the current carrier path needs an upliftment.

2 (a)	Likes	<p>Appreciation of my work by seniors Ethical and supportive work culture Exposure to new avenues</p> <ul style="list-style-type: none"> • Incentives and Promotions
2 (b)	Dislikes	<p>Being bossed over Interference from colleagues in my work Working on holidays</p> <ul style="list-style-type: none"> • Monotonous work

Observation: The only limitation in my current job is that of 'Working on holidays'

3	Passion	<p>Acquiring additional professional knowledge Reading and writing articles on professional matters Training juniors</p> <ul style="list-style-type: none"> • Developing social contacts
---	---------	---

Observation: All the items keep recurring in my present job.

4	Aspirations	<p>To be regarded as a Cost Manager of par excellence during the next ten years To be a National Council Member of my profession during the next fifteen years</p> <ul style="list-style-type: none"> • To become a role model professional by the next twenty years
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Observation: Success to me implies wealth and contentment.



Practical

ADVICE

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

Submission

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.

I am CMA Vijay Pal Singh and I am a regular reader of e-bulletin which is being published every month and uploaded in our Institutes website for students. During my studies I always studied and referred Students Newsletter that helped me a lot to update my self and keep on doing value addition.

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Message from the Directorate of Studies

Dear Students,

For the smooth and flawless preparation. Directorate of studies have provided meaningful tips which will help you to gain sufficient knowledge about each subject.

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

Take the course seriously from the very beginning but don't be panicky. Please try to follow the general guidelines, mentioned below; which may help you in your preparation.

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 answer 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.

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.

Photo Gallery



Release of Guidance Note on Anti Profiteering by Shri P.P.Chaudhary, Hon'ble Minister of State for Law & Justice and Corporate Affairs during Workshop on "Paradigm Shift in Valuation - Opportunities for Professionals" on November 23, 2017 at India Habitat Centre, Lodhi Road, New Delhi.

Shri P. P. Chaudhary, Hon'ble Union Minister of State for Law & Justice and Corporate Affairs was Chief Guest at Workshop on "Paradigm Shift in Valuation – Opportunities for Professionals" on November 23, 2017 at New Delhi.



Shri P. P. Chaudhary, Hon'ble Union Minister of State for Law & Justice and Corporate Affairs was Chief Guest at Workshop on "Paradigm Shift in Valuation – Opportunities for Professionals" on November 23, 2017 at New Delhi.



CMA Sanjay Gupta, President presenting a bouquet to Mr. Robert Thomason, Executive General Manager, CPA Australia on 4th December, 2017 at CMA Bhavan, New Delhi



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