

2022

May

VOL: 7, NO.: 5,

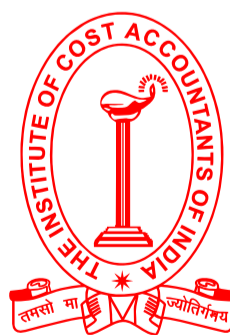
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CMA Student E - Bulletin

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CONTENTS

Knowledge Update -	1
Paper: 1, Part: I - Fundamentals of Economics and Management (FEM) - Economics -	2
Paper: 1, Part: II - Fundamentals of Economics and Management (FEM) - Management -	5
Paper: 2 - Fundamentals of Accounting (FOA) -	8
Paper: 3 - Fundamentals of Laws and Ethics (FLE) -	11
Paper: 4 - Fundamentals of Business Mathematics and Statistics (FBMS) -	15
Exam Time Table -	21
Practical Advice -	22
Submission -	23
Message from the Directorate of Studies -	24
Few Snapshots -	25

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.



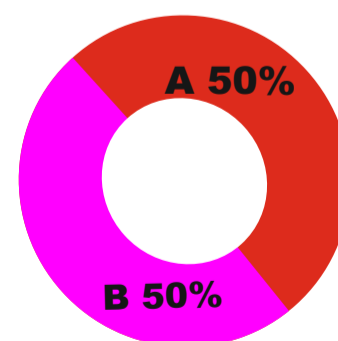
PAPER: 1, PART: I

FUNDAMENTALS

OF ECONOMICS & MANAGEMENT
(FEM) - ECONOMICS

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Your Preparation Quick Takes



Syllabus Structure

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

Learning Objectives:

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

Economics

Hi friends! Hope all of you are hale and hearty. As I predicted earlier the Corona virus has started its fourth wave. Slowly and steadily it is spreading its tentacles. So you have to be very careful. Continue to use mask whenever you go out. Wash your hands frequently with soap when you are at home. Use hand sanitizer while you are out. Avoid crowd and also avoid touching any surface like display counter, cash counter etc., if you touch, then do not forget to use hand sanitizer immediately. Only you have to be a bit cautious. Covid 19 is a dangerous disease which not only consumes a good chunk of your vitality but it may also be fatal depending on the fighting capability of an individual. Only you have to follow a few simple steps as mentioned above to stave off this monster. Do not forget to have the vaccine when your turn comes. Good luck! Let us now turn to our mock test.

I. Choose the correct answer:

- Which is the first order condition for profit of a firm to be maximum?
 - $AC=MR$
 - $MC=MR$
 - $MR=AR$
 - $AC=AR$
- The horizontal line under perfect competition represents
 - Average revenue
 - Marginal revenue
 - Price line
 - All the above
- According to Marshall, the minimum price which will induce the firm to produce in short period is one which just equals its
 - Marginal cost
 - Average variable cost
 - Average fixed cost
 - Average total cost
- Normal profit is part of
 - Total cost
 - Total profit
 - Both A and B
 - None of the above
- A discriminating monopolist will charge a higher price in a market if the price elasticity of demand is
 - More than 1
 - Equal to 1
 - Less than 1
 - None of the above
- In a monopoly market, there will be
 - Many sellers
 - Few sellers
 - Single seller
 - None of the above
- When price of a commodity falls, and total revenue diminishes, the price elasticity of demand will be

- A. More than unity
- B. Less than unity
- C. Equal to unity
- D. None of the above

8. Which one of the following is a Neo-classical economist

- A. Malthus
- B. Mill
- C. Senior
- D. Hicks

9. Inductive method of reasoning moves

- A. From particular to general
- B. From universal to individual
- C. From the whole to a part
- D. None of the above

10. The consumer will be in equilibrium when

- A. $(M_{ux}/M_{Uy}) > (P_x/P_y)$
- B. $(M_{ux}/M_{Uy}) < (P_x/P_y)$
- C. $(M_{ux}/M_{Uy}) = (P_x/P_y)$
- D. None of the above

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

II. True or False:

1. Giffen good follows the law of demand
2. Law of diminishing marginal productivity is a short run phenomenon
3. Product differentiation is the other name of price discrimination
4. Ceteris paribus means other things remaining the same
5. Marginal utility begins to be negative when total utility starts to increase

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

III. Fill in the blanks:

1. If some body keeps money for rainy days, the demand for money is called demand for money.
2. If supply of goods can be increased freely, deficit financing does not lead to.....
3. Lack of divisibility of commodities is one the major difficulties of the system
4. If the bank rate is increased, the demand for bank loan will.....
5. External diseconomies of scale implies LAC will be shifting

Key: 1. Precautionary, 2. Inflation, 3. Barter, 4. Decrease, 5. Upward

IV. Matching:

1. Fiscal policy	A. Credit creation
2. Interdependence	B. Public debt
3. Commercial bank	C. Oligopoly
4. Speculative money demand	D. Marshall
5. Utility theory of demand	E. Rate of interest

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

So friends, hope you have enjoyed solving the problems given in the mock test. I also hope that you have not consulted the keys to the questions before answering them on your own. From the past records of your performance in the mock test you must have improved a lot. Please study hard and follow the study material thoroughly in order to have a good grasp on the subject - economics. Try to follow the logic all theories of economics and do not, for Heaven's sake, try to mug up. Best of luck!!



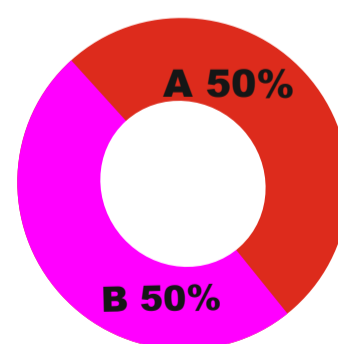
PAPER: 1, PART: II

FUNDAMENTALS

OF ECONOMICS & MANAGEMENT
(FEM) - MANAGEMENT

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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. The main reason why Principles of Management do not provide readymade solutions for all management problems is that _____.
 - a. They act as general guidelines for business-related issues
 - b. The real business issues are pretty complex
 - c. The real business issues are very dynamic
 - d. All of the above

Answer: d
2. Which of the following is the main reason for the existence of an organization?
 - a. The vision of an organization
 - b. The mission of an organization
 - c. The objectives of an organization
 - d. The Chief Executive Officer (CEO) of an organization

Answer: b
3. Which of the following is the main motive behind carrying out a fatigue study?
 - a. It helps to calculate the standard output for employees within a task
 - b. It helps to calculate the expected time taken for employees to complete their tasks
 - c. It helps to calculate the duration of rest intervals given to employees
 - d. None of the above

Answer: c
4. The principles of management serve as a general guideline for _____.
 - a. Decision making
 - b. Managerial actions
 - c. Both a and b are correct
 - d. Both a and b are incorrect

Answer: c
5. Which of the following is the correct meaning of concentration of decision-making authority?
 - a. Span of management
 - b. Centralization
 - c. Decentralization
 - d. None of the above

Answer: b
6. Which of the following is true for discipline according to Henri Fayol?
 - a. Proper application of penalties
 - b. Good superiors across all levels in an organization
 - c. Agreements between two parties that are always clear and fair
 - d. All of the above

Answer: d
7. Which of the following is the main objective of standardization within a business?
 - a. It helps to establish standards of excellence within a company
 - b. It helps to reduce products to fixed sizes, features or types
 - c. It helps to bring in more significant exchangeability of various parts
 - d. All of the above

Answer: d
8. Management is the art and science of decision making and leadership _____.
 - a. Harold Koontz.

- b. Donald J. Clough.
- c. Louis Allan.
- d. Terry.

ANSWER: b

9. Which of the following describes the principle of harmony, not discord?

- a. The management should properly investigate any task
- b. The management should engage in scientific enquiry
- c. The management should focus on observation and analysis
- d. The management should share the gains or profits of a company with their workers

Answer: d

10. The principles of management serve as a general guideline for _____.

- a. Decision making
- b. Managerial actions
- c. Both a and b are correct
- d. Both a and b are incorrect

Answer: c

11. ISO emphasizes on:

- a. Prevention
- b. Inspection
- c. Rejection
- d. All the above

Answer: a

12. -----provides all relevant information needed by the managers at different levels for taking for taking correct decisions:

- a. MBO
- b. MIS
- c. DBMS
- d. None

Answer: b

13. TQM & ISO both focusses on:

- a. Customer
- b. Employee
- c. Supplier
- d. All the above

Answer: a

14. Ethics is a system of-----

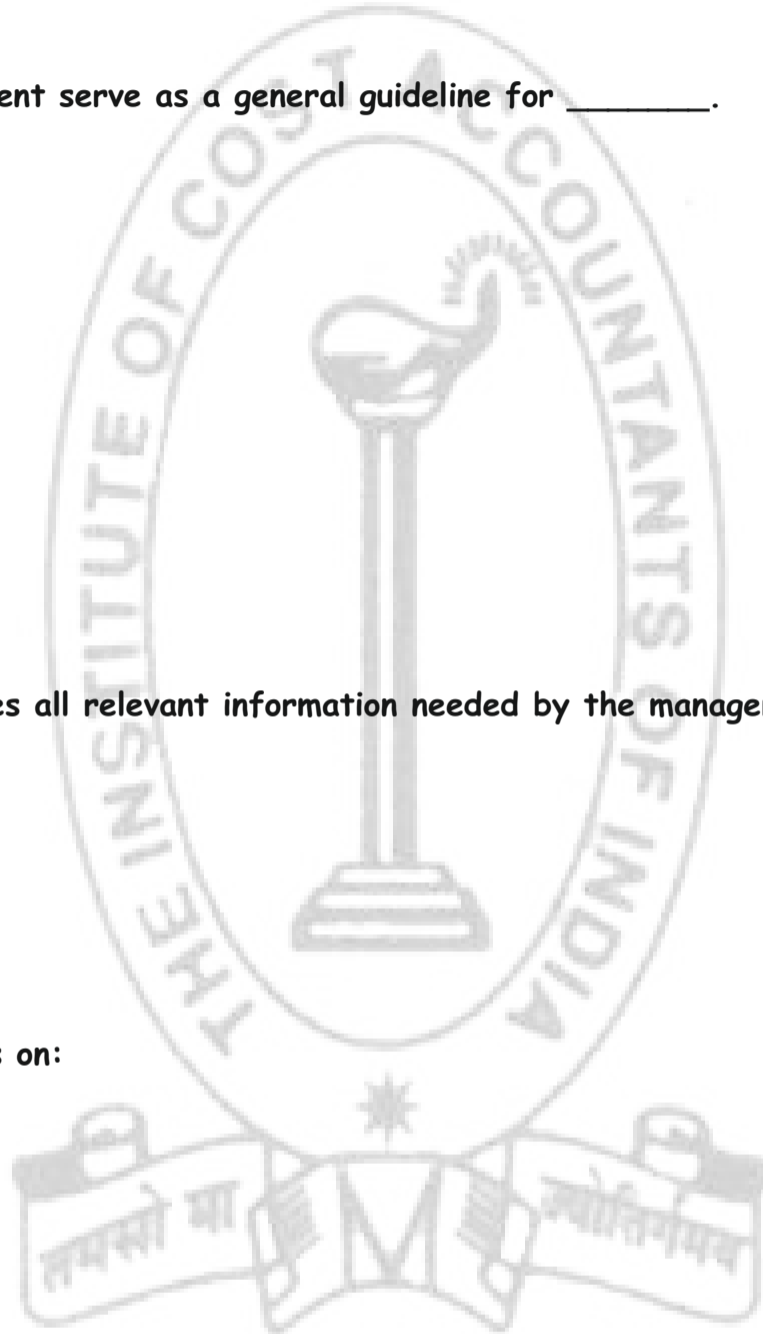
- a. Moral
- b. Guiding
- c. Value
- d. None

Answer: a

15. -----needs are need for survival:

- a. Safety
- b. Esteem
- c. Social
- d. Physiological

Answer: d



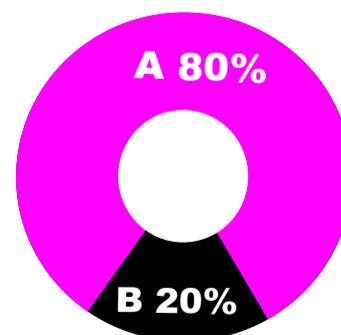


PAPER: 2

FUNDAMENTALS OF ACCOUNTING (FOA)

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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 OF ACCOUNTING

Here is again a story to start with- to give you the lesson of life : keep your focus of own thought. There will be plenty of advices to choose a course to study. Give importance to your own preference and fond. Do not get confused in making choice.

There was an old man and boy who worked in a farmhouse. The owner of the farmhouse told them to go to the town and buy some food grain for the animals, with the help of a Donkey. They started going to the town. The boy rode on the Donkey, while the old man walked alongside. As they were going, a man who is known to both the boy and old man told them, "See, the old man was walking and the young boy was riding comfortably. It's a shame". After some time, they saw a group of people who were passing by, scolding them, "You both don't have any sympathy. You are putting so much load on the poor donkey". The man and the boy got down and started discussing. After some time they decided to carry the donkey. Both of them carried the donkey on the shoulder and started walking. They were struggling, as the donkey was heavy to carry. Then they came near a small bridge over a river. As they crossed, both of them lose their grip on the donkey and it fell into the river and drowned. Seeing the donkey drowned, people started abusing the old man and the boy.

In life , you will come across many situations or people where you are forced to please them. If you do so, then you have to face the consequences. Remember, you cannot please everyone or every situation. Just give importance to the purpose and what is really required for that situation and stick to that. If you start pleasing, throughout your life you have to keep on pleasing someone. So, stop doing it.

Here are some exercises for you this time like earlier issues:

Indicate the correct answer:**(1) The output of financial accounting is**

- (a) the measurement of accounting income
- (b) the measurement of taxable income
- (c) the preparation of financial statements
- (d) the preparation of financial position

(2) External reporting is the result of

- (a) financial accounting
- (b) management accounting
- (c) cost accounting
- (d) social accounting

(3) The basic objective of financial accounting is to

- (a) provide quantitative information to users of financial statements
- (b) satisfy the legal requirements.
- (c) report income to the shareholders
- (d) satisfy listing requirements of stock exchanges

(4) Income of an enterprise

- (a) can be measured objectively to give an accurate figure
- (b) is subjective and influenced by the policies followed by the accountant
- (c) is measured as per the Articles of Association
- (d) is measured as per the requirements of tax authorities

(5) Information about performance is disclosed by

- (a) Balance sheet
- (b) Statement of cash flows
- (c) Both (b) and (c)
- (d) Profit and loss account

(6) Special purpose financial statements are prepared by

- (a) management accountant
- (b) cost accountant
- (c) financial accountant
- (d) both (a) and (c)

(7) Which is the accounting concept that requires the practice of crediting closing stock to the trading account.

- (a) Going concern
- (b) Cost
- (c) Realisation
- (d) Matching

(8) Assets in the balance sheet are shown at cost less depreciation rather than their replacement cost because of the accounting convention.

- (a) Going concern
- (b) Matching
- (c) Realisation
- (d) Money Measurement

[Answers : (1) c, (2) a, (3) a, (4) b, (5) d, (6) a, (7) d (8) a]

State whether the following statements are True' or 'False'

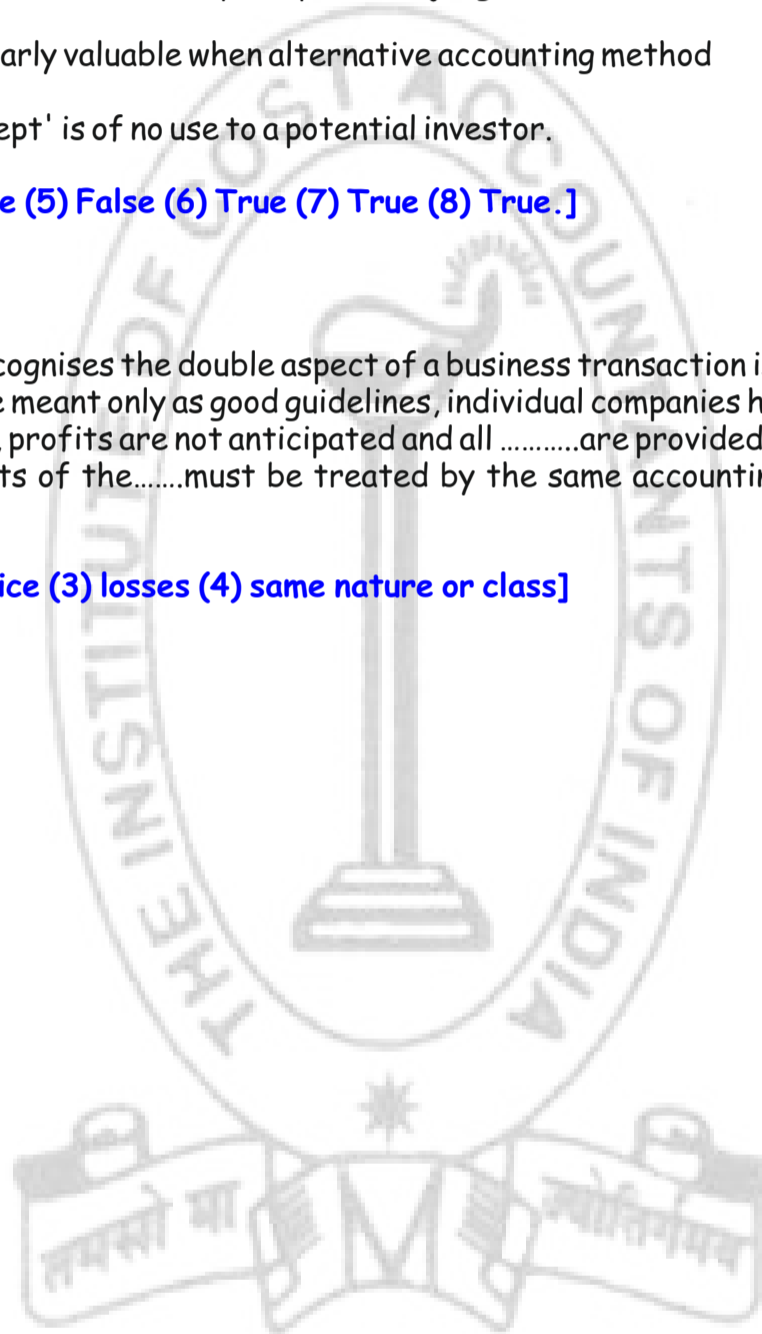
- (1) The 'entity concept' of accounting is not applicable to sole trading concerns and partnership concerns.
- (2) The dual aspect' concept results in the accounting equation $\text{Capital} + \text{Liabilities} = \text{Assets}$.
- (3) Assets are to be shown in the balance sheet at the values realisable on liquidation.
- (4) The convention of conservatism has usually the effect of overstating losses and understating the income.
- (5) Money measurement' concept takes into account changes in the value of monetary unit.
- (6) Accounting records are, to a great extent, affected by the personal judgment of the accountant.
- (7) The principle of consistency is particularly valuable when alternative accounting method is equally acceptable.
- (8) The balance sheet based on 'cost concept' is of no use to a potential investor.

[Ans. (1) False (2) True (3) False (4) True (5) False (6) True (7) True (8) True.]

Fill in the blanks :

- (1) The principle of accountancy, which recognises the double aspect of a business transaction is known as.....concept.
- (2) Since general accounting principles are meant only as good guidelines, individual companies have.....in observing them.
- (3) Under the convention of conservatism, profits are not anticipated and allare provided for.
- (4) Under the consistency concept, events of the.....must be treated by the same accounting method, unless there are compelling reasons to change the method.

[Ans. (1) Dual aspect (2) freedom or choice (3) losses (4) same nature or class]



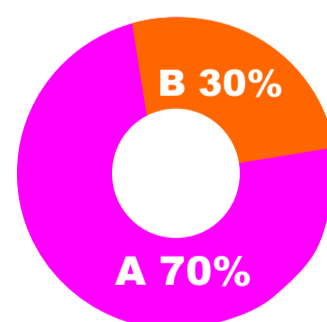


PAPER: 3

FUNDAMENTALS OF LAWS AND ETHICS (FLE)

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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

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 start studying the subject and raise questions to yourself first and then find your own answers. Even as a student now, you must start thinking like A Teacher.

Indian Contract Act, 1872 (continued)

Now you have a fair idea about - Offer, Acceptance and a Contract. The obvious question that will come to mind is -
What are the Essentials of a Contract ?
Just remember the following:

OAL3 - where **O** is Offer, **A** is Acceptance, first **L** is Legal Relationship and second **L** is Lawful Consideration and the third **L** is Legally Capable. Next remember

CFL - where **C** is Capacity, **F** is Free Consent, **L** is Legality. Next remember

WNP - where **W** is Written and Registered, **N** is Not Vague and **P** is Possibility of Performance.

Please **Note** : Oral contract is legal but not always valid, for example - Sale of House Property has to be written and registered. If you revise and recapitulate what you have read above, you can now raise the following question - **On what grounds can you revoke an offer ?** The answer is given in Sec.6 and those are :

1. When the offer is expressly revoked ;
2. When the proposer prescribes a time for acceptance of the offer, that proposal expires as soon as the time expires.
3. If there is no prescribed time, in that case the offer expires after a reasonable time depending on the circumstances of the case
4. If the proposer lays some conditions and the acceptor fails to fulfill any condition ; and
5. An offer lapses on the death or insanity of the proposer provided the acceptor gets to know about the death or insanity before acceptance.

So, two questions immediately arise - regarding **Communication of Revocation** (please read Sec.3 of the Contract Act, 1872) and regarding **Revocation of Acceptance** please read Section 5 of the Contract Act, 1872

Void and Voidable Agreements

Read Sec.2(g) and you will know that an agreement not enforceable by law is said to be void. Here, the question arises - **What are void agreements ?**

The answer is - a) An agreement made by a minor (b) an agreement made without consideration (with certain exceptions); (c) certain agreements with unlawful object ; (d) agreement in restraint of marriage (except marriage of a minor); (e) agreement in restraint of trade (with exceptions); (f) agreement in restraint of legal proceedings ; (g) agreements where the meaning contained therein is not certain or cannot be made certain (h) agreement where the money payable depends on the happening or non-happening of a future or uncertain event (example - gambling etc.) ; (i) agreement that cannot be enforced due to change of law ; and (j) agreement to do an impossible act. Please remember that a void agreement is not necessarily illegal but an illegal agreement is always void.

There is something which is called **Voidable Contracts**, let us understand that with a simple example. Suppose Mr.A enters into an agreement at Gunpoint with Mr.Z to sell his Stationery Shop. Mr. Z can avoid the agreement and Mr.A cannot enforce it. However, if Mr.Z desires, he can enforce it against Mr. A. Avoidable Contracts can be due to Coercion, Undue Influence, etc. The example above is a case of coercive threat to cause injury.

Negotiable Instruments Act, 1881 (continued)

Now let us know the difference between a Promissory Note and a Bill of Exchange .

1. In a Promissory Note, there are 2 parties - the **Maker** and the **Payee**
2. In a Bill of Exchange, there are 3 parties - The **Drawer**, the **Drawee** and the **Payee**.
3. In a Promissory Note, there is a **Promise to pay**
4. In a Bill of Exchange, there is an **Order to pay**
5. In a Promissory Note, no acceptance is required but **it has to be signed by the person liable to pay**.
6. A Bill of Exchange (barring exceptions) has to be accepted by the Drawee before it becomes binding on him.
7. **The maker of a Promissory Note is Primarily liable on the instrument ;**
8. **The Drawer of the Bill of Exchange is liable only when** the Drawee does not accept the instrument or pay the money amount due.
9. In case of a Promissory Note, the **Notice of Dishonour to the Maker is not required** but a **Notice of dishonor is required in case of a Bill of Exchange**, when there is a non-payment or non-acceptance.

So, the next question is **What is a Notice of Dishonour ?**

Please note that when there is a non-payment or non-acceptance of a Bill of Exchange, a notice has to be given to all the persons liable to pay, except the Drawee. Such a notice is called Notice of Dishonour.

At this stage, let us understand the **difference between Bill of Exchange and Cheque :**

1. A **Cheque** is a bill of exchange but it can be drawn only upon a bank.
2. A **Bill of Exchange** can be drawn upon any person including a bank. Every Bill of Exchange is not a cheque.
3. A Bill of Exchange required acceptance, except under certain circumstances. (The exceptions are - 1. The Bill of Exchange have already been protested because of non-acceptance ; and 2. The presentation of the bill is barred by obstacles caused by superior force without human intervention such as earthquake, tornadoes, hurricane and acts of God.
4. A cheque is always payable on demand
5. A Bill of Exchange may be either payable on demand or after a period of time.
6. The acceptor of a bill of exchange is allowed 3 days of grace to make the payment, after the maturity of the bill
7. The Banker is not allowed any days of grace after being presented for payment
8. The Drawer of the bill is discharged from liability if the bill is not presented to the acceptor for payment at the due time.
9. The drawer of a cheque is discharged from liability only if he suffers damage due to delay in presenting the cheque for payment
10. A banker does not have to give a Notice of Dishonour to the drawer to make him liable to compensate the Payee, if the banker fails to pay a cheque.
11. In case of Bills of Exchange, it is necessary to give Notice of Dishonour to the drawer, **except in special cases**.
12. A cheque may be crossed but there is no provision to cross a Bill.
13. The payment of cheque may be countermanded by the Drawer. (**Countermand means - to reverse, revoke, repeal, retract, rescind, withdraw, quash, scrap, over-rule, cancel, negate an order.**)
14. The payment of a bill of Exchange cannot be countermanded.
15. A Cheque does not require any stamp
16. A Bill of Exchange must be stamped.

As said above, In case of Bills of Exchange, it is necessary to give Notice of Dishonour to the drawer, **except in special cases given below :**

No Notice of Dishonour is required when -

1. It is dispensed with by the party entitled thereto ;
2. In the Order to change the Drawer, when he has countermanded payment (**countermand means - to reverse, revoke, repeal, retract, rescind, withdraw, quash, scrap, over-rule, cancel, negate an order.**);
3. When the party charged could not suffer damages for want of notice ;
4. When the party entitled to notice, cannot be found ;
5. When the acceptor is also a Drawer
6. When the promissory note is not negotiable ;
7. When the party entitled to notice, after knowing the facts, promises unconditionally to pay the amount due on the instrument.

Sale of Goods Act, 1930 (continued)

After reading what was discussed in the previous issue, we can raise a question that - there is a contract of sale between a buyer and a seller, but **when does the property, pass on from the seller to the buyer in a contract for the sale of such goods ?- Transfer of ownership**

You will find the answer in Sec.18 to 25 of the Sale of Goods Act. You have to reply keeping in mind each type of goods.

1. **In case of Specific Goods**, where there is an unconditional contract for sale of specific goods in a deliverable state, the property passes as soon as the contract is made. The time of payment or the time of delivery is not material.

2. **In case of Unspecified/Unascertained Goods**, the property is not transferred until the goods are ascertained. For example, there are bags of cement in a godown. The property gets transferred to the buyer only when the requisite number of bags are separated, taken out and kept aside for delivery to that buyer.
3. **The Intention of the Parties** is very important in case of sale of Specific goods. The property passes when the parties to the contract intend it to pass as stated in the terms of the contract.
4. In case of sale of Specific Goods, **if there is something which the seller has to do**, before making the goods ready in a deliverable condition, the property passes only after the seller has done that thing. For example, M agrees to sell 1000 tins of milk powder to N and promises to pack them in Card Board Boxes before delivery, the property passes only after those tins are properly packed and made ready for delivery.
5. In case of Specific goods, **where the seller has to measure, weigh or test the goods**, for the purpose of ascertaining the price, the property does not pass to the buyer as long as that thing has been done and the buyer is intimated.
6. Property in the goods is transferred to the buyer when the **goods is delivered to the carrier**. However, in case of conditional delivery, the property is transferred only if that condition is fulfilled. For example if M -the seller, sends goods by courier to N - the buyer, the property is transferred as soon as the goods are handed over to the courier, but if there is a condition of Cash on Delivery (COD), the property passes only after N -the buyer pays the requisite Cash before collecting delivery of the goods.
7. Where **goods are sent on Approval or on Sale or Return Basis**, the property in the goods is transferred only - I) when the buyer informs his approval or acceptance of the goods; II) In another case, if the buyer does not intimate his approval or acceptance of the goods, or his rejection of the same, but still retains those goods, the property passes after expiry of a reasonable time.

As long as the property in the goods is not transferred to the buyer, the goods remain at the risk of the seller. After the ownership passes to the buyer, the goods are at the Buyer's Risk, since Risk follows ownership.

Ethics and Business (continued)

Having understood what was covered in the previous issue, let us remember the points laid as **Seven Guiding Principles to be followed in our daily Public Life**, with the help a Slogan -

I Should Organize And Operate with Honest Leaders, where -

- I** = **Integrity** while discharging duties
- S** = **Selflessness** without personal gains and bias
- O** = **Openness** and transparency
- A** = **Accountability** for decisions taken
- O** = **Objectivity** and focused approach
- H** = **Honestly** in discharging Public Duties
- L** = **Leadership** with sound principles and practices

To sum up, one must remember that there is a subtle **Relationship between Ethics and Law**. Both are complementary and inter-related in order to link social rules, customs, regulations and restrictions prescribed by Society through social customs and beliefs. That is perhaps why it is said that Convention is more than law. That is the reason why Law ends where Business Ethics begin - Ethics is one step forward.



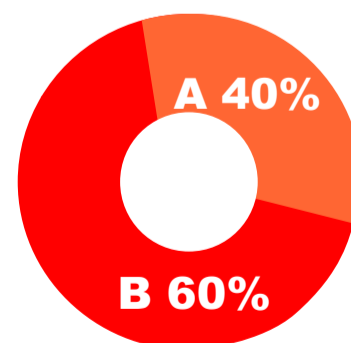


PAPER: 4

FUNDAMENTALS OF BUSINESS MATHEMATICS AND STATISTICS (FBMS)

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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 discuss mainly on some conventional problems

Q1. Find the co-efficient of correlation from the following data:

X	1	2	3	4	5	6	7
Y	6	8	11	9	12	10	14

Answer:

We know that $r = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}}$ where $x = X - \bar{X}$ & $y = Y - \bar{Y}$

	X	Y	$x = X - \bar{X}$	$y = Y - \bar{Y}$	x^2	y^2	xy
	1	6	-3	-4	9	16	12
	2	8	-2	-2	4	4	4
	3	11	-1	1	1	1	-1
	4	9	0	-1	0	1	0
	5	12	1	2	1	4	2
	6	10	2	0	4	0	0
	7	14	3	4	9	16	12
Σ	28	70	0	0	28	42	29
Mean	4	10					

$$\text{So } r = \frac{29}{\sqrt{28} \sqrt{42}} = 0.8457$$

Q2. Joint probabilities of events A & B under statistical independence is

- $P(AB) = P(A) + P(B)$
- $P(AB) = P(A) \times P(B)$
- $P(AB) = P(A) \times P(AB)$
- $P(AB) = 1 - P(A) \times P(B)$

Answer: (b)

Q3. For a group of 10 items, $\sum X = 452$, $\sum X^2 = 24270$, and Mode = 43.7 find the Pearson's coefficient of Skewness

Answer:

$$\text{Mean } (\bar{X}) = \frac{\sum X}{n} = \frac{452}{10} = 45.2$$

$$\text{S.D. } (\sigma) = \sqrt{\frac{\sum X^2}{n} - \left(\frac{\sum X}{n}\right)^2} = \sqrt{\frac{24270}{10} - (45.2)^2} = 19.59$$

Pearson's coefficient of skewness:

$$Sk = \frac{\text{Mean} - \text{Mode}}{\text{Standard Deviation}} = \frac{45.2 - 43.7}{19.59} = 0.08$$

Q4. Draw the pie diagram from the following information
Vehicles sales by type at a Car Dealers shop are as:

Type	Numbers Sold
Wagon R	72
S-Cross	54
Amaze	27
Punch	18
City	9
Total	180

Answer: The detail computations are as follows:

Type	No Sold	Area (degrees)
Wagon R	72	144
S-Cross	54	108
Amaze	27	54
Punch	18	36
City	9	18
Total	180	

Areas in Degrees are

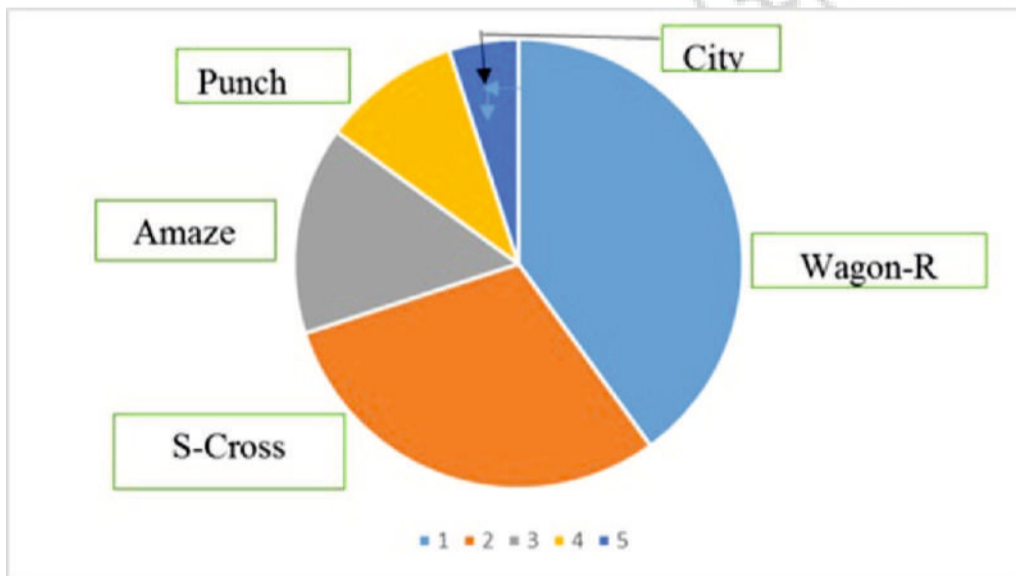
$$\text{Wagon R} = \frac{360}{180} \times 72 = 144$$

$$\text{S-Cross} = \frac{360}{180} \times 54 = 108$$

$$\text{Amaze} = \frac{360}{180} \times 27 = 54$$

$$\text{Amaze} = \frac{360}{180} \times 18 = 36$$

$$\text{City} = \frac{360}{180} \times 9 = 18$$



Q5. Prepare a statistical table from the following information of Daily earnings (in R) by Doctors:

88	23	27	28	86	96	94	93	86	99
82	24	24	55	88	99	55	86	82	36
96	39	26	54	87	100	56	84	83	46
102	48	27	26	29	100	59	83	84	48
104	46	30	29	40	101	60	89	46	49
106	33	36	30	40	103	70	90	49	50
104	36	37	40	40	106	72	94	50	60
24	39	49	46	66	107	76	96	46	67
26	78	50	44	43	46	79	99	36	68
29	67	56	99	93	48	80	102	32	51

Answer: Detailed calculations are as follows:

Class	Tally Marks	No of Workers	Class Boundaries
20 - 29	HHH HHH III	13	19.5 - 29.5
30 - 39	HHH HHH I	11	29.5 - 39.5
40 - 49	HHH HHH HHH III	18	39.5 - 49.5
50 - 59	HHH HHH	10	49.5 - 59.5
60 - 69	HHH I	6	59.5 - 60.5
70 - 79	HHH	5	60.5 - 79.5
80 - 89	HHH HHH IIII	14	79.5 - 89.5
90 - 99	HHH HHH II	12	89.5 - 99.5
100 - 109	HHH HHH I	11	99.5 - 109.5
Total		100	

Q6. The national income of a country for the year 1999-2000 to 2001-2002 at current prices was 8650, 9010 and 9530 crores of rupees respectively and per capita income for these years was 250, 256 and 267 rupees. The corresponding figures of national income and per capita income at 1999-2000 prices for the above years were 8650, 8820 and 8850 crores of rupees and 250, 252 and 248 respectively. Present the above data in a table.

Answer:

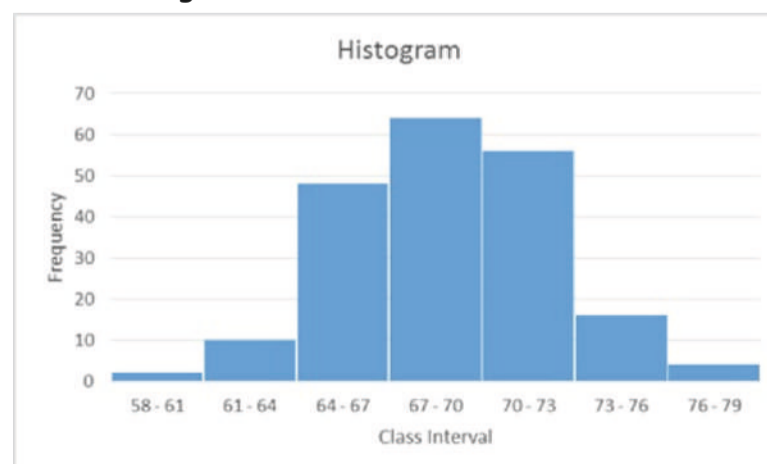
National Income and Per capita income of a country
For the year 1999-2000 to 2001-2002

Year	National Income		Per Capita Income	
	At Current Prices (R crores)	At 1999-2000 Prices (R crores)	At Current Prices	At 1999-2000 Prices
1999-2000	8650	8650	200	250
2000-2001	9010	8820	256	251
2001-2002	9530	8850	267	248

Q7. Draw a Histogram of the frequency distribution given below:

Class Interval	Frequency	Class Interval	Frequency
58 - 61	2	70 - 73	56
61 - 64	10	73 - 76	16
64 - 67	48	76 - 79	4
67 - 70	64		

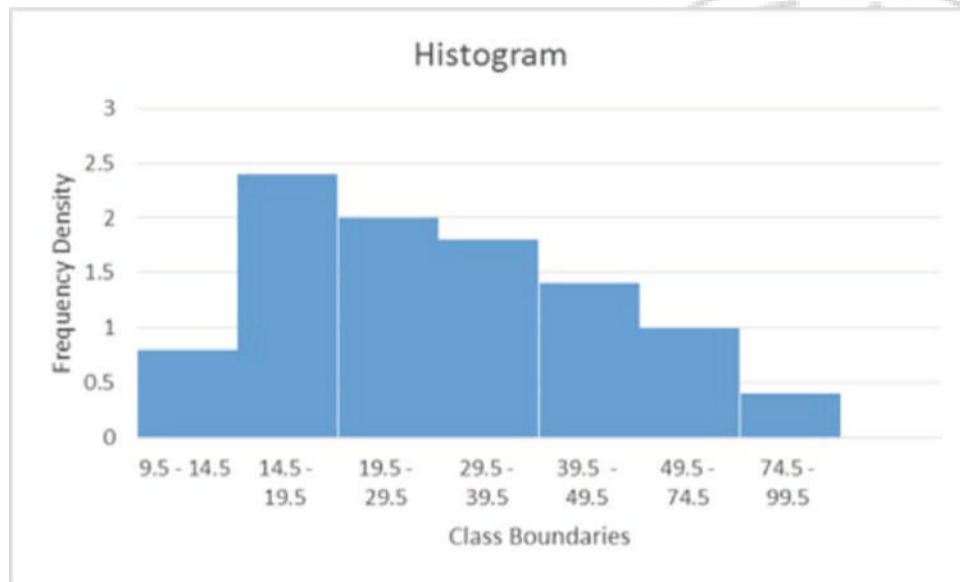
Answer: In this case classes are of equal magnitude throughout, each class interval is drawn on the X axis i.e. base of each rectangle is proportional to the magnitude of the class interval. On each class interval as base a rectangle is drawn with height proportional to the corresponding frequency of the class. Histogram is as follows:



Q8. Draw a Histogram of the frequency distribution given below:

Class Interval	Frequency	Class Interval	Frequency
10-14	4	40 - 49	14
15 - 19	12	50 - 74	25
20 - 29	20	75 - 99	10
30 - 39	18		

Answer: In the given data it is to be noted that the class intervals are unequal and class limit and class boundaries are also unequal. There is a gap of 1 between the limits of any two adjacent classes. Since rectangle in a histogram should have area proportional to the class frequencies, the height of each rectangle should be made proportional to the frequency density. Secondly we can eliminate the gap between the limits of two adjacent classes as the common limit of both the classes. Thus in this case the class boundaries are 9.5 - 14.5, 14.5 - 19.



The histogram above was thus drawn by plotting the class boundaries on X axis and frequency density on Y axis

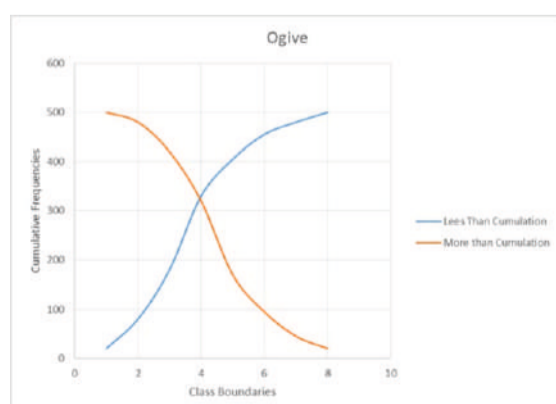
Q9. Draw Ogive (both less than type and more than type) from the following frequency distribution:

Class	Frequency
50-59	20
60-69	60
70-79	100
80-89	150
90-99	75
100-109	50
110-119	25
120-129	20

Answer: The detail computations are as follows:

Class Boundaries	Less than Cumulation	More than Cumulation
49.5 - 59.5	20	500
59.5 - 69.5	80	480
69.5 - 79.5	180	420
79.5 - 89.5	330	320
89.5 - 99.5	405	170
99.5 - 109.5	455	95
109.5 - 119.5	480	45
119.5 - 129.5	500	20

Ogive is drawn with class boundaries on X axis and cumulative frequencies on Y axis



Q10. Kolkata telephones is considering the distribution of funds for a campaign to increase long distance calls in the state. The following table lists the markets in the state that the company considers worthy of focused promotions:

Market Segment	Cost of Special Campaign aimed at group
A) Minorities	Rs.500000
B) Businesspeople	Rs.750000
C) Women	Rs.250000
D) Professionals	Rs.250000
E) Working Class	Rs.500000

There is up to Rs1 million available for these special campaigns.

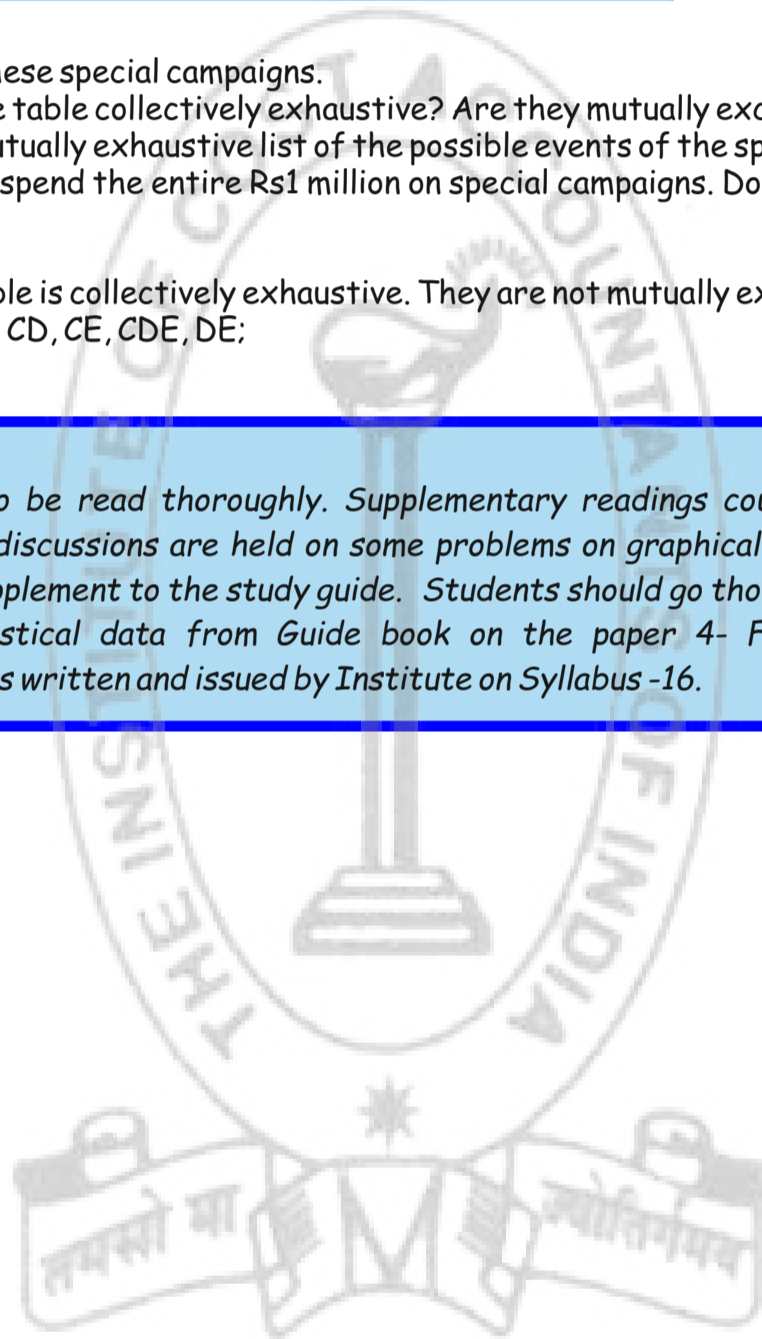
- Are the market segments listed in the table collectively exhaustive? Are they mutually exclusive?
- Make a collectively exhaustive and mutually exhaustive list of the possible events of the spending decision.
- Suppose the company has decided to spend the entire Rs1 million on special campaigns. Does this change your answer to part (b)? If so what is your new answer?

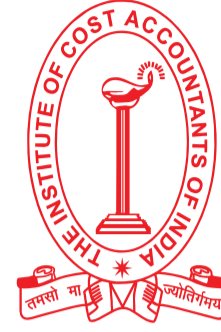
Ans:

- The market segments listed in the table is collectively exhaustive. They are not mutually exclusive
- A, B, C, D, E, AC, AD, AE, ACD, BC, BD, CD, CE, CDE, DE;
- AE, ACD, BC, BD, CDE;

Suggestions:

The study guide needs to be read thoroughly. Supplementary readings could be made from other resources. In this issue discussions are held on some problems on graphical representation of data.. These could be used as supplement to the study guide. Students should go thoroughly for clear concept on preliminaries of statistical data from Guide book on the paper 4- Fundamental of Business mathematics and Statistics written and issued by Institute on Syllabus -16.

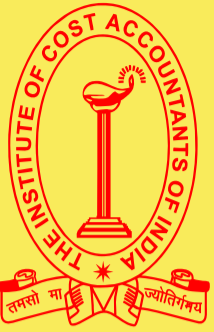




Examination TIME TABLE

Day & Date	Foundation Examination Syllabus-2016	
	Time 10.00 A.M. to 12.00 NOON. Paper - 1 & 2 (200 Marks)	Time 2.00 P.M. to 4.00 P.M. Paper - 3 & 4 (200 Marks)
Friday, 8th July, 2022	Paper - 1 : Fundamentals of Economics & Management (100 Marks 50 Multiple Choice Questions)	Paper - 3 : Fundamentals of Laws & Ethics (100 Marks 50 Multiple Choice Questions)
	Paper - 2 : Fundamentals of Accounting (100 Marks 50 Multiple Choice Questions)	Paper - 4 : Fundamentals of Business Mathematics & Statistics (100 Marks 50 Multiple Choice Questions)

STAY HOME STAY SAFE



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

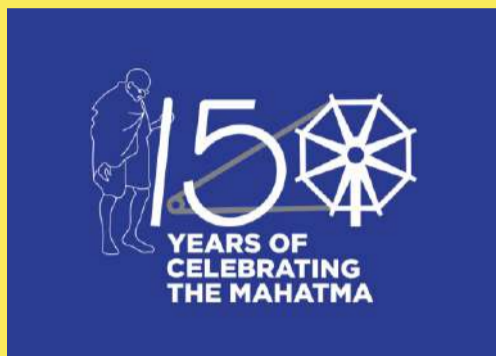
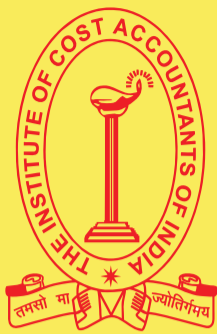
03

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.

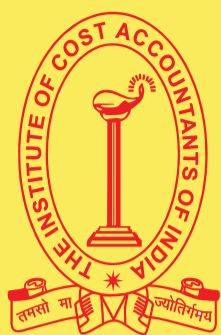
Please put your opinions so that we can make your e-bulletin everything that you want it to be.

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

Updation of E-Mail Address/Mobile:

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



Dear Students,

Message from Directorate of Studies

Heartfelt wishes to you for passing the exam!! All who passed out have been sincere and diligent since day one and never failed to amaze us with your dedication. You've proved that dedication and learning end at resulting in excellent outcomes. Best wishes for achieving the best place. So proud to call you our student! Congratulations and best wishes for your life. May your future be filled with many great achievements like this.

Those who could not pass out please be steady and we believe, everyone has intellect and presence of mind. But only a few students who can deliver the right thing at right time and with right courage become the winner in the examination. So, please try to deliver your best in your next examination.

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. If you sincerely follow those tips, we hope, you will be successful in your endeavor.

To celebrate **75 years of independence and commemorate it as India is celebrating, 'Azadi Ka Amrut Mahotsav'**, across the country and amid the coronavirus pandemic and also organizing various events. India's freedom fighters fought a long and hard struggle for the country's independence from the British and, for years, their words have inspired us. We hope that our students will also participate and pay their homage to the freedom fighters.

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

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

Please refer the link mentioned below :

<https://icmai.in/studentswebsite>

- Don't give up
- Don't give in
- Don't give out
- You can win!

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

GOOD LUCK

Be Prepared and Get Success;

Disclaimer:

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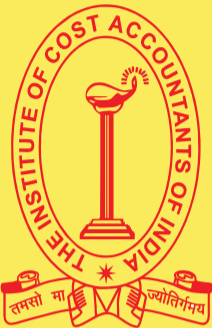
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Few Snapshots



60th National Cost Convention - 2022



Glimpses of National Students Convocation 2022 on 29 April 2022 at Kolkata



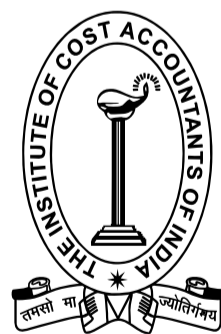
Glimpses of National Students Convocation 2022 on 29 April 2022 at Kolkata



CMA P Raju Iyer, President of the Institute with Swami Shukadevananda, Secretary, RKM Vivekananda College [Autonomous], Chennai & Other Officials of the College during the Board of Studies meeting held on 19th March 2022 at College Campus in Chennai.



Inauguration of CMA Classes & Mentoring of Students for CMA Curriculum, Value Added Courses such as GST, Forensic Audit, Internal Audit Members Present - CMA P Raju Iyer, President Along with [L to R] CMA Rakesh Shankar, Dr. S. Padmavathi, Principal of Shri Shankarlal Shasun Jain College for Women, Dr. S Rukmani, Vice Principal, Dr. C. Vimaladevi, Ms. Deepa Shridhar, Co-ordinator - CMA Support Centre



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