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# CMAStudent E - Bulletin FOUNDATION





## THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

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## Knowledge Update -

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Paper: 1, Part: I - Fundamentals of E	Economics	
and Management (FEM) - Economics -	2	
Paper: 1, Part: II - Fundamentals of	Economics	
and Management (FEM) – Management	· _ 5	
Paper: 2 - Fundamentals of Accountir	ng (FOA) - 8	
Paper: 3 - Fundamentals of Laws and	Ethics (FLE) - 11	
Paper: 4 – Fundamentals of Business		
Mathematics and Statistics (FBMS) -	. 15	
Practical Advice –	21	
Submission -	22	
Message from the Directorate of Stud	dies – 23	

Few Snapshots

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

1

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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

# Your Preparation Quick Takes



## **Syllabus Structure**

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

2



3

#### Learning Objectives:

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

## Economics

Hi friends!! Hope you are all safe and keeping fine. Corona virus has thrown the biggest challenge to the younger generation in the form of Delta strain which is the most virulent form of corona virus which will attack the children and the young people. This strain is said to be 300 times more powerful than the previous ones. The most shocking part is that this strain will flourish during the festival month, that is the month of October. So friends, be very careful. While going out always use mask and maintain safe distance from the crowd. Wash your hands frequently with soap. Please do not forget to carry sanitizer spray when you are away from home. Now let us start our routine mock test.

#### I. Choose the correct answer:

#### 1. Who introduced the concept of "invisible hand "?

- A. Adam Smith
- B. John maynard Keynes
- C. Alfred Marshall
- D. Lionel Robbins

#### 2. Which diagram is used to explain the basic problems of any economy?

- A. Indifference curve
- B. Production function
- C. Production possibility frontier
- D. None of the above
- 3. If the demand curve is perfectly elastic and the supply curve is normal, how the price will behave if the number of supplier increases?
  - A. Price will rise
  - B. Price will remain the same
  - C. Price will fall
  - D. None of the above
- 4. If the supply curve is unit elastic and the demand curve is elastic, how the total expenditure will change if there is a rise in population?
  - A. Total expenditure will rise
  - B. Total expenditure will fall
  - C. Total expenditure will remain the same
  - D. None of the above
- 5. What will happen to the LAC if the production process is having an external dis economies of scale?
  - A. LAC will shift downward throughout its length
  - B. LAC will shift upward throughout its length
  - C. LAC will remain in the same position
  - D. None of the above
- 6. Given that AC=15, AVC=6, MC=10, q=50. Find out whether the firm under perfect competition should produce or not
  - A. Firm should stop production
  - B. Firm should continue production
  - C. Firm is indifferent between production and shut down
  - D. None of the above
- 7. If demand curve is inelastic in market 1 and elastic in market 2, what will be the relationship between P1 and P2, if

the firm is a discriminating monopolist?

- A. P1>P2
- B. P1 < P2
- *C*. P1 = P2
- D. None of the above
- 8. Suppose the equilibrium competitive output is 600. Calculate the equilibrium duopoly output and the individual output of the duopolists with the help of Cournot's model.
  - A. 300; (150, 150)
  - B. 400; (200, 200)
  - *C*. 500; (250, 250)
  - D. None of the above
- 9. Given that P = 10, T = 1000, V = 5, what will be the value of M? If the Govt.increases the money supply by 3000, in the face of full employment, how P will be affected?
  - A. M = 2000, P = 50
  - B. M = 1000, P = 25
  - *C*. M = 2000, P = 25
  - D. None of the above

#### 10. Which is the apex bank for agricultural credit in India?

- A. RBI
- B. SIDBI
- C. IDBI
- D. None of the above

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

II. Fill in the blanks:

- 1. The demand curve for a necessary good is perfectly .....
- 2. The supply curve for labour is .....
- 3. When the total revenue is equal to total economic cost, the firm will earn ......
- 4. SIDBI is a subsidiary bank of .....
- 5. ARDC has been merged with .....

KEY: 1. Inelastic, 2. Backward bending, 3. Normal profit, 4. RBI, 5. Nabard

#### III. True or False:

- 1. In the Inductive Method, the logic proceeds from general to particular
- 2. The marginal product can be obtained when total output is divided by the total no. of labour employed
- 3. Normal profit is part of the total cost
- 4. Moral suasion is a qualitative technique of credit control
- 5. Collateral loans are given by commercial banks with security

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

IV. Matching:

1. Giffengood	A.interdependence
2. IMF	B. Welfare Definition
3. Duopoly	C. monopoly
4. Supernormal profit	D. SDR
5. Marshall	E. inferior good

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

So friends, hope you have enjoyed the solving of the problems. I also hope that you have solved the problems on your own and honestly. You must have consulted the key only after solving the problems. Try to keep a record of your performance so that you can judge yourself whether your preparation is up to the mark or not. Best of luck for your exam !!!



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## PAPER: 1, PART: II

# FUNDAMENTALS

## OF ECONOMICS & MANAGEMENT (FEM) - MANAGEMENT

# Your Preparation Quick Takes





## **Syllabus Structure**

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

6



6

#### Learning Objectives:

- Students will demonstrate their knowledge of business and management principles
- $\cdot$  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. In management process, the most misinterpreted word is:
  - (A) Organizing
  - (B) Delegating
  - (C) Controlling
  - (D) Planning

Answer: A

2. The word\_\_\_\_\_denotes a function, a task, a discipline:

- (A) Management
- (B) Leadership
- (C) Motivation

(D) None of the above

#### Answer: A

- 3. Which theory assumes that people are naturally lazy and will avoid work and responsibilities if possible?
  - (A) Theory X
  - (B) Theory Y
  - (C) Theory Z
  - (D) None of the above
  - Answer: A

4. Under mechanism of scientific management, scientific task setting includes:

- (A) Time study
- (B) Motion study
- (C) Method study
- (D) All of the above
- Answer: D
- 5. The department(s) that an event management company will have is (are):
  - (A) Creative
  - (B) Production
  - (C) Client servicing
  - (D) All of the above
  - Answer: D

6. Who is the person you have to give importance under the company's checklist before making call to the consultant?

- (A) Managers
- (B) Employees
- (C) Customer
- (D) All of the above
- Answer: B
- 7. Advantage of delegation of authority results in prompt \_\_\_\_\_:
  - (A) Understanding
    (B) Decision making
    (C) Both (A) and (B)
    (D) None of the above
  - Answer: B

8. Learning organizations are adaptive to their \_\_\_\_\_\_environment:
(A) Internal
(B) External
(C) Work
(D) None of the above Answer: B

9. Who is the father of the three-needs theory?

(A) Vroom

(B) McClelland

(C) Peter Drucker

(D) None of the above

Answer: B

10. Costliness of the \_\_\_\_\_ is the overriding factor determining the extent of decentralization:

- (A) Decision
- (B) Staffing(C) Controlling
- (D) Managing
- Answer: A

11. Positive motivation makes people willing to do their work in the best way they can and improve their \_\_\_\_\_: (A) Skills

(B) Performance

(C) Both (A) and (B)

(D) None of the above

Answer: B

12. Which law states that 'you get what you deserve and not what you desire'?

- (A) Law of destiny
- (B) Law of Karma
- (C) Law of vision
- (D) Law of peace

Answer: A

13. The factors coming under philosophy of scientific management are:

- (A) Co-operation
- (B) Maximum output
- (C) Harmony
- (D) All of the above
- Answer: D
- 14. Under the principles of effective \_\_\_\_\_, it is said that never delegate and disappear:
  - (A) Delegation
  - (B) Management
  - (C) Organisation
  - Answer: A

#### 15. Communication barrier(s) in the international environment is (are):

- (A) Loss by transmission
- (B) Loss by poor retention
- (C) Poor listening
- (D) All of the above
- Answer: D

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# PAPER: 2 FUNDAMENTALS OF ACCOUNTING (FOA)

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## Syllabus Structure

A Fundamentals of Financial Accounting 80%

8

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.



Once a king asked his people of the state that he wants a pond of milk. He orders the people of the state to pour a glass of milk by everyone in the night to fill the dry pond so that in the next morning he can see the pond of milk. One crooked man thinks there are lakhs of people in the state who will pour milk in the pond, let me pour a glass of water. This will not make a significant difference. As he thought, he did so and in the midnight, he poured a glass of water secretly.

Next morning the king started shouting to his ministers when he saw that the pond is filled with water only.

In fact, everybody thought that there are lakhs of people who will pour milk - what goes wrong if I put a glass of water. The whole mission thus became a lost venture.

In recent past due to pandemic many examinations were held under open book system without any invigilation. Students had the liberty to write from own or by copying. You are your best judge.

Moral is: Its up to you whether you will pour your brain with the knowledge like milk or water. Remain honest to self. Don't think what rest are doing. I am sure this purity will repay you in future.

Hope you are studying well. Utilise this time to pour your brain with loads of new learnings. Here is again some exercise to brush up your minds.

1. IF THERE IS OPENING BALANCE OF PROVISION FOR BAD DEBT OF RS. 5000 AND THERE IS A BAD DEBT DURING THE YEAR OF RS. 2000 WHAT SHOULD BE THE JOURNAL ENTRY?



- b. ADMINISTRATION OVERHEAD
- c. CARRIAGE INWARD
- d. SALARY TO ACCOUNTANT
- 4. WHAT IS THE REASON OF MAKING INTEREST RECEIVABLE ACCOUNT TO DEBIT?
  - a. DECREASE IN LIABILITY
  - b. DECREASE IN ASSET
  - c. NOMINAL ACCOUNT
  - d. INCREASE IN ASSET
- 5. HOW WILL YOU WRITE THE ACCOUNTING EQUATION IF GOODS ARE PURCHASED IN CREDIT?
  - a. INCREASE IN STOCK = INCREASE IN CREDITORS
  - b. DECREASE IN STOCK = INCREASE IN CREDITORS
  - c. DECREASE IN ASSET = DECREASE IN LIABILITY
  - d. INCREASE IN LIABILITY = INCREASE IN ASSET

- 6. WHAT IS "ACCOUNT SALES?"
  - a. AN ACCOUNT WHERE SALES FIGURE IS RECORDED
  - b. AN ACCOUNT WHERE ONLY CASH SALES FIGURE IS RECORDED
  - c. DETAILS SENT BY CONSIGNEE TO THE CONSIGNOR REPORTING HIS SALES, EXPENSES AND COMMISSION
  - d. DETAILS OF GOODS SENT BY THE CONSIGNOR TO THE CONSIGNEE

#### 7. WHEN CURRENT ACCOUNT IS OPENED IN PARTNERSHIP?

- a. WHEN CAPITAL IS MAINTAINED UNDER FIXED SYSTEM
- b. WHEN CAPITAL IS MAINTAINED UNDER FLUCTUATING SYSTEM
- c. BOTH A AND B
- d. NONE OF THESE
- 8. PRE-RECEIVED INCOME IS DEDUCTED FROM INCOME IN THE CURRENT YEAR'S P&L ACCOUNT, THE UNDERLYING ASSUMPTION BEING
  - a. MATCHING COST AGAINST REVENUE
  - b. CONSERVATISM
  - c. **REALISATION**
  - d. NONE OF THE ABOVE
- 9. WHY ARE THE TOTAL OF TWO SIDES OF THE BALANCE SHEET EQUAL ?
  - a. COST CONCEPT
  - b. DUAL ASPECT CONCEPT
  - c. ENTITY CONCEPT
  - d. ALL OF THE ABOVE
- 10. WHICH OF THE FOLLOWING ITEMS IS NOT INCLUDED IN THE 'ACCOUNT SALE?'
  - a. GOODS SOLD BY CONSIGNEE
  - b. EXPENSES OF CONSIGNMENT INCURRED BY CONSIGNEE
  - c. CLAIM PAID BY INSURANCE COMPANY
  - d. ADVANCE AGAINST CONSIGNMENT PAID TO CONSIGNEE
- 11. WHICH OF THE FOLLOWING ACCOUNTS IS NOT OPENED UNDER JOINT VENTURE ACCOUNTS:
  - a. STOCK RESERVE ACCOUNT
  - b. JOINT BANK ACCOUNT
  - c. OTHER PARTNER'S ACCOUNT
  - d. JOINT VENTURE ACCOUNT
- 12. IN POPULAR SINGLE ENTRY, FOLLOWING BOOKS ARE KEPT
  - a. ONLY CASH BOOK
  - b. PURCHASE AND SALE BOOK
  - c. ALL LEDGER ACCOUNT IN LEDGER
  - d. ALL SUBSIDIARY BOOKS

#### 13. GENERALLY, DEPRECIATION ON FIXED ASSETS IS CALCULATED ON WHICH BALANCE?

- a. OPENING
- b. CLOSING
- c. ONLY ON ADDITIONAL
- d. AMOUNT REALIZED ON ASSET SOLD

#### 14. WHAT DOES IT MEAN IF MACHINERY CLOSING AMOUNT IS LESS THAN OPENING AMOUNT -?

- a. SALE
- b. PURCHASE
- c. FRAUD
- d. THEFT

#### 15. A SINGLE-ENTRY SYSTEM IS -

- a. COMPLETE AND SCIENTIFIC SYSTEM
- b. INCOMPLETE AND UNSCIENTIFIC
- c. INCOMPLETE AND SCIENTIFIC
- d. COMPLETE AND UNSCIENTIFIC





## PAPER: 3 FUNDAMENTALS OF LAWS AND ETHICS (FLE)

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# Your Preparation Quick Takes



## **Syllabus Structure**

A Fundamentals of Commercial Laws 70%

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B Fundamentals of Ethics 30%



12

#### 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

Under the MCQ pattern, you will be given several questions first and then asked to answer among a set of options where there may be one or more wrong answers. You must try to lay emphasis on details and therefore keep studying regularly every day and make short notes and keep revising repeatedly until your brain can retain it for a long term. You must pay particular emphasis on getting your concept clear with sound fundamentals. You must learn to think logically in normal sequence and develop the knack to distinguish between similarities and differences which might be confusing, yet be the basis used to distinguish correct choices from among the choices given with each question. Always remember that MCQ tests are designed to test your knowledge and ability.

Now, you will realize the importance of reading the Sections and definitions so that you understand what the Sections lays and/or what the definition means. You will notice that the question-setter will actually be rephrasing the words in the Section and/or definition and placing them before you as MCQs. Therefore, please study carefully because under the MCQ pattern you can fall prey to misleading options that will distract you as the options will look similar to the correct answer.

So, now please note the few suggestive Rules to be kept in mind for taking MCQ type exams :

- 1. Start a few deep breathing exercise before starting to read the entire question. Never read the answers before reading the question.
- 2. After reading the question, repeat the question mentally and find the correct answer .Now check whether your answer matches with any of the options given. Select the best answer.
- 3. In this manner keep answering the questions you know confidently. If you have doubts, simply mark (CROSS OUT) that question with a PENCIL and continue with the next question. DO NOT WASTE ANY TIME. Attempt to any these Crossed Out questions at the end.
- 4. In case you have confusion with words, in the options given, try to find your own logic. Answers that seem logical are generally ultimately incorrect. If your mind prompts you with a logical alternative, that means that, that word is just to misguide you. Therefore, that option is not correct.
- 5. Please remember that when you are given options such as "All the above" and "None of the above", never select "All the above" if you think that any one answer is incorrect. Similarly never select "None of the above" option, if you feel that at least one option is true. Interestingly, if you notice two correct options to a MCQ, you can choose "All the above".
- 6. A study of MCQ pattern reveals that generally the correct answer gives out more information than the other options given with that question.

#### Sale of Goods Act, 1930

We will ask ourselves a question-Who is an unpaid vendor/seller of goods?

The answer must be thought logically . A seller is considered unpaid if -

1. If the entire price of the goods sold has not been paid or remitted; or

2. If a Bill of Exchange or Negotiable Instrument has been received from the buyer by the seller as a conditional payment but that instrument has been dishonoured or the conditions on which it was issued has not been fulfilled. Please refer Sec.45(1)

That obviously raises a question - What shall be the Unpaid Seller's / Vendor's Right . It has may be remembered that the Vendor can exercise his rights even where the property in the goods has passed to the buyer. The following are the Rights of the Unpaid Vendor/Seller :-

1. Vendor's Lien :

The unpaid Vendor, who still holds possession of the goods, is entitled to retain possession of the goods ( **this is called exercising the right of lien**, for non-payment of the price but not for any other charges. For example, the godown charges, if any, paid by the seller for storing the undelivered goods cannot be a reason for exercising lien) until the payment is made or remitted provided -

- a) The goods were sold without any stipulation as to credit '
- b) The goods were sold on credit, but the terms of credit has expired (it may be noted that the seller cannot refuse to hand over possession of the goods unless the terms of credit has expired); or

B

#### c) The buyer has become insolvent.

A question may come to mind - what happens if the seller has made part delivery of the goods? in such a case, the seller can exercise lien on the balance of the goods not yet delivered provided the part delivery was not made with an intention to waive the lien.

#### 2. The Right of Stoppage in Transit.

Suppose the goods were dispatched to the buyer, but before the goods were delivered or before the seller got payment of the price, the buyer became insolvent, in such a case, the seller can resume possession of the goods from the carrier.

#### This is called the right of stoppage in transit. Please note the following points :

- a. Goods are in transit from the time they are delivered to the carrier, till the time they are delivered to the buyer or his agent.
- b. The right to stoppage in transit comes to an end as soon as the goods are delivered to the buyer or his agent. However, if the after arrival of the goods at the destination, the carrier intimates to the buyer that the goods are being held by him (the carrier) on behalf of the buyer, the seller's right to take back possession comes to an end.
- c. If the carrier wrongfully refuses to deliver the goods to the buyer, the transit of the goods comes to an end and the seller's right to stop transit too ceases.
- d. Where the seller made part delivery of the goods, in such a case, the seller can only stop the goods in transit, provided it can be proved that the part delivery was not made with an intention to waive the lien.
- e. The buyer need not be declared insolvent in the court of law. Insolvency here, denotes that the buyer has become financially embarrassed.
- f. The vendor/seller can exercise right of stoppage, by either taking actual possession of the goods or by directing the carrier to send back the goods to him or his agent and the expense of such return delivery shall be borne by the seller.

#### The Right to Resale

The unpaid seller/vendor who has retained possession of the goods by exercising his lien or has taken back possession from the carrier upon insolvency of the buyer **can resell the goods**, under the following circumstances:

- a) If the goods are perishable, those can be sold off without notice to the buyer; otherwise
- b) By first giving notice to the buyer and allowing him reasonable opportunity and time to pay/remit the price, and then resell only if the buyer fails to pay;

Here too, if the seller , upon resale, gets more value for the goods, he can retain the excess amount, but , if the sale value is less than what was due from the buyer, the seller can sue the buyer for the balance. The buyer remains liable to compensate the seller for damages, if any, suffered by the seller. The next buyer gets good title of the goods.

- 3. Suit for Price :
  - a) Under a contract of sale, where the property in the goods has passed on to the buyer, and the buyer does not act as per term s of the contract and fails to pay or neglects to pay, the seller can sue the buyer for the price of the goods;
  - b) If under the terms of a contract, the buyer is to pay the price on a certain day irrespective of the actual delivery of the goods and the buyer fails to pay or neglects to pay, the seller can sue the buyer for the price even though the property in the goods has not passed to the buyer.

#### Now, let us start revising part by part, what we have read in the previous issues.

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

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

Ethics and Morals are certain laid practices which reminds the members of the society about their duties and restrictions, so that

those community members stay within set acceptable limits. Breaching the restrictions cause conflicts and disturbs human peace and harmony between different social relationships such as – father and son, husband and wife, between friends and relatives and even between communities.

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

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

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

Having understood the above, let us remember the points laid as 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, **Ethics and Law** are both 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.

#### Now let us partly revise the Sale of Goods Act, 1930

A question that now comes to mind is 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? 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 Unspecifed/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.

#### Now, let us continue to revise , partly the Negotiable Instruments Act, 1881

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.





## 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

B Fundamentals of Business Statistic 60%



#### Learning Objectives:

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

## BUSINESS MATHEMATICS AND STATISTICS

In this issue we are placing some MCQs in Quadratic Equation of Mathematics part



6. The quadratic equation whose roots are 1 and (-)  $\frac{1}{2}$ 

(a)  $2x^{2} + x - 1 = 0$ (b)  $2x^{2} - x - 1 = 0$ (c)  $2x^{2} + x + 1 = 0$ (d)  $2x^{2} - x + 1 = 0$ 

7. The quadratic equation whose one rational root is 3 +  $\sqrt{2}$  is

(a)  $x^{2} - 7x + 5 = 0$ (b)  $x^{2} + 7x + 6 = 0$ (c)  $x^{2} - 7x + 6 = 0$ (d)  $x^{2} - 6x + 7 = 0$ 

8. The equation  $2x^2 + kx + 3 = 0$  has two equal roots, then the value of k is

- (a) ±√6
- (b) ± 4
- (c)±3√2
- (d)±2√6

9. The roots of the quadratic equation x + 1/x = 3,  $x \neq 0$  are.

(a)  $3 + \sqrt{5}$ ,  $3 - \sqrt{5}$ (b) 2 + √5, 2 - √5 (c)  $\frac{3+\sqrt{5}}{2}$ ,  $\frac{3-\sqrt{5}}{2}$ (d)  $\frac{3+\sqrt{5}}{2}$ ,  $\frac{3-\sqrt{5}}{2}$ 

10. The roots of the quadratic equation  $2x^2 - 2\sqrt{2x} + 1 = 0$  are

(a)  $\frac{1}{\sqrt{2}}$ ,  $\frac{1}{\sqrt{2}}$ (b) √2, √2 (c)  $\frac{1}{\sqrt{2}}$ ,  $-\frac{1}{\sqrt{2}}$ (d)  $\sqrt{2}, \frac{1}{\sqrt{2}}$ 

11. The sum of the roots of the quadratic equation  $3x^2 - 9x + 5 = 0$  is

- (a) 3
- (b)6
- (c)-3
- (d) 2

12. If the roots of  $ax^2 + bx + c = 0$  are in the ratio m: n, then

(a) mna<sup>2</sup> = (m + n) c<sup>2</sup>  $(b) mnb^{2} = (m + n) ac$  $(c) mnb^{2} = (m+n)^{2} ac$  $(d) mnb^{2} = (m - n)^{2} ac$ 

13. If one root of the equation  $x^2 + px + 12 = 0$  is 4, while the equation  $x^2 + px + q = 0$  has equal roots, the value of q is

(a)  $\frac{49}{4}$ (b)  $\frac{4}{49}$ 

- (c) 4
- (d) 49

14. a and  $\beta$  are the roots of  $4x^2 + 3x + 7 = 0$ , then the value of  $1/a + 1/\beta$  is

- (a)  $\frac{-3}{4}$
- (b)  $\frac{-3}{7}$

(c)  $\frac{3}{7}$ (d)  $\frac{7}{4}$ 

- 15. Mohini and Sohini solve an equation. In solving Mohini commits a mistake in constant term and finds the roots 8 and 2. Sohini commits a mistake in the coefficient of x but she found the correct constant term as 9. The correct roots are (a) 9,1 (b)-9,1 ©9,-1 (d)-9,-1
- 16. If a and  $\beta$  are the roots of the equation  $2x^2 3x 6 = 0$ . The equation whose roots are 1/a and  $1/\beta$  is  $(a) 6x^2 - 3x + 2 = 0$ (b)  $6x^2 + 3x - 2 = 0$



 $(c) 6x^2 - 3x - 2 = 0$ (d)  $x^{2}$  + 3x-2 = 0

- 17. If the roots of  $p \times 2 + q \times + 2 = 0$  are reciprocal of each other, then
  - (a) p = 0(b)p = -2 $(c) p = \pm 2$
  - (d)p=2

18. If one root of the quadratic equation  $2x^2 + kx - 6 = 0$  is 2, the value of k is

- (a)1
- (b)-1
- (c)2
- (d)-2

#### 19. The roots of the quadratic equation $\frac{1}{a+b+x}$ when a + b 0 is ٥

- (a) a, b
- (b)-a, b
- (c)a,-b
- (d)-a,-b
- 20. The roots of the equation  $2x^2 + x 1 = 0$  are
  - (a) Real and distinct
  - (b) Real and equal
  - (c)Notreal
  - (d) None of these
- 21. The equation  $12x^2 + 4kx + 3 = 0$  has real and equal roots, if
  - $(a)k = \pm 3$
  - (b)  $k = \pm 9$
  - (c)k = 4
  - $(d)k = \pm 2$

#### 22. If -5 is a root of the quadratic equation $2x^2 + px - 15 = 0$ , then

- (a) p = 3
- (b)p=5
- (c)p = 7
- (d) p = 1

23. If the roots of the equations  $ax^2 + 2bx + c = 0$  and  $bx^2 - 2\sqrt{ac}x + b = 0$  are simultaneously real, then

- (a) b = ac (b)  $b^2 = ac$
- (c)  $a^2 = bc$
- (d)  $c^2 = ab$

24. The roots of the equation  $(b - c) x^2 + (c - a) x + (a - b) = 0$  are equal, then

- (a) 2a = b + c
- (b) 2c = a + b

(c)b=a+c(d) 2b = a + c

```
25. If the roots of ax^2 + bx + c = 0 are in the ratio p:q, then a^2 is
```

(a) cq / ap(b) aq / pc (c) ap / cq (d) pc / aq

26. Which one of the following value of m will make the equation  $(m+1)x^2 + 2(m+3)x + (2m+3) = 0$  have equal roots? (a) 2 (b)-2 (c)1





19

27. If a and  $\beta$  are the roots of  $2x^2 - 4x + 1 = 0$ , then the equation whose roots are  $a^2 + \beta$  and  $\beta + \alpha$  is

- (a)  $x^2 5x + 6 = 0$ (b)  $4x^2 20x + 23 = 0$ (c)  $3x^2 15x + 18 = 0$ (d)  $5x^2 23x + 26 = 0$
- 28. If  $\alpha$ ,  $\beta$  are roots of  $2x^2 + 3x + 7 = 0$  then value of  $\alpha^4 + \beta^4$ 
  - (a) 165/16 (b) 361/16
  - (c)-196/16
  - (d) 1/16
- 29.  $(x a)(x b) = h^2$  has (a) One real root
  - (b) Two distinct real roots
  - (c) Two equal real roots
  - (d) No real roots

#### 30. The equation $3x^2 + kx + 2 = 0$ has equal roots if k is

- (a)  $\pm 2\sqrt{3}$
- (b) ± 2√5
- (c)  $\pm 2\sqrt{6}$
- (d)  $\pm 2\sqrt{8}$

#### Ans:

		Remarks
Q1	b	Since it has degree 3
Q2	c	
Q3	d	
Q4	۵	x (x + 1) + 8 = (x + 2) {x - 2) Or, x <sup>2</sup> + x + 8 = x <sup>2</sup> - 4 or, x + 12 = 0 a linear equation
Q5	с	$6x^{2} - x - 2 = 0$ Or, $6x^{2} - 4x + 3x - 2 = 0$ Or, $2x (3x - 2) + (3x - 2) = 0$ or, $(3x - 2) (2x + 1) = 0$ Hence the result
Q6	Ь	The required quadratic equation is $x^2 - (a + \beta)x + a\beta = 0$ or, $x^2 - (1 - \frac{1}{2})x + 1(-)\frac{1}{2} = 0$ or, $2x^2 - x - 1 = 0$
Q7.	d	As one root is $3 + \sqrt{2} = a$ , the other root is $3 - \sqrt{2} = \beta$ The required quadratic equation is $x^2 - (a + \beta) \times + a\beta = 0$
Q8.	d	a = 2, b = k & c = 3 Since the equation has two equal roots then $b^2$ - 4ac = 0 Or, $k^2$ - 4.2.3 = 0 or, $k^2$ = 24 Hence the result
Q9	с	Apply Acharya and find $b^2 - 4ac$ where $a = 1, b = -3, c = 1$
Q10	۵	Apply Acharya and find $b^2 - 4ac$ where $a = 2, b = -2\sqrt{2}, c = 1$
Q11	a	$3x^2 - 9x + 5 = 0$ Or, $x^2 - 3x + \frac{5}{3} = 0$ hence the result
Q12	с	$\frac{\alpha}{\beta} = \frac{m}{n} Or \frac{\alpha}{m} = \frac{\beta}{n} Or \frac{\alpha+\beta}{m+n} = \frac{\sqrt{\alpha\beta}}{\sqrt{mn}} \text{ (By Ratio proportion)}$ Squaring both sides $mn(\alpha+\beta)^2 = (m+n)^2 \alpha\beta$ Now put sum of the roots = $-\frac{b}{a}$ & product of the roots = $\frac{c}{a}$ & hence the result
Q13	۵	Since 4 is a root of $x^2 + px + 12 = 0$ we have $4^2 + p4 + 12 = 0$ Or $p = -7$ . Now since $x^2 + px + q = 0$ has equal roots so $p^2 - 4q = 0$ Or, $49 = 4q$ Hence the result
Q14	Ь	$\alpha + \beta = -\frac{3}{4} \& \alpha \beta = \frac{7}{4} \&$ hence the result
Q15	۵	Mohini found two roots as 8 & 2. So sum of the roots is 10 & this is correct. Sohini found the constant term correct as 9. So the correct equation is $x^2 - (\alpha + \beta)x + \alpha\beta = 0$ Or, $x^2 - 10x + 9$ Hence the result
Q16	b	$\alpha + \beta = \frac{3}{2} \& \alpha \beta = -3 \&$ hence the result
Q17	d	Here $\alpha = \frac{1}{\beta}$ So $\alpha\beta = 1 = \frac{2}{p}$

Q18	Ь	$2 + \beta = -\frac{k}{2} \& 2\beta = -3 \text{ Or}, \beta = -\frac{3}{2} \text{ Or } k = -2(2 - \frac{3}{2}) \text{ Or},$ -1
Q19	d	$\frac{1}{a+b+x} = \frac{1}{a} + \frac{1}{b} + \frac{1}{x} \text{ Or, } \frac{1}{a+b+x} - \frac{1}{x} = \frac{1}{a} + \frac{1}{b} \text{ Hence the result}$
Q20	a	$b^2 - 4ac = 1^2 - 4.2.(-1) = 9 > 0$ Hence the result
Q21	۵	Roots are real & equal if $b^2 - 4ac = 16k^2 - 4.12.3 = 0$ Hence
Q22	с	
Q23	b	For real roots Discriminant of both the equation must be $\ge 0$ Discriminant of first equation $(2b)^2 - 4ac \ge 0$ i.e. $b^2 \ge ac$ The discriminant of second equation $(2\sqrt{ac})^2 - 4b^2 \ge 0$ i.e. $ac \ge b^2$ . By comparing the two inequalities only one can conclude that $b^2 = ac$
Q24	d	Discriminant $(c-a)^2 - 4(b-c)(a-b) = 0$ Or, $c^2 - 2ac + a^2 - 4ab + 4ac + 4b^2 - 4bc = 0$ $c^2 + a^2 + 2ac + 4b^2 - 4ab - 4bc = 0$ Or $(c+a)^2 - 2.2b.(c+a) + 4b^2 = 0$ Or $(c+a-2b)^2 = 0$ Hence the result
Q25	d	$\alpha + \beta = -\frac{b}{a} \& \alpha \beta = \frac{c}{a}; As \frac{\alpha}{\beta} = \frac{p}{q}, \frac{\alpha}{\beta} * \alpha \beta = \alpha^2$ . Hence the result
Q26	b	$b^2 = 4ac$ . Hence the result
Q27	b	$\alpha + \beta = \frac{4}{2} = 2 \text{ and } \alpha\beta = 1/2$ Now $s_1 = \alpha^2 + \beta + \beta^2 + \alpha$ $= \alpha^2 + \beta^2 + \alpha + \beta = (\alpha + \beta)^2 - 2\alpha\beta + \alpha + \beta$ $= 4 - 1 + 2 = 5$ $s_2 = (\alpha^2 + \beta)(\beta^2 + \alpha) = \alpha^2\beta^2 + \alpha^3 + \beta^3 + \alpha\beta$ $= \frac{1}{4} + \frac{1}{2} + (\alpha + \beta)^3 - 3\alpha\beta(\alpha + \beta)$ $= \frac{3}{4} + 8 - \frac{3}{2}(2) = 5 + \frac{3}{4} = \frac{23}{4}$ Hence the required equation
Q28	۵	$\alpha + \beta = -\frac{3}{2}\& \alpha\beta = 7/2 \qquad \alpha^4 + \beta^4 = [(\alpha + \beta)^2 - 2\alpha\beta]^2 - 2(\alpha\beta)^2 \& \text{ hence the result}$
Q29	b	$(x-a)(x-b) = h^2$ Or $x^2 - (a+b)x + ab - h^2 = 0$ & its D >0
Q30	с	2 TT Shame The
10 1520		A STATISTICS

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#### Suggestions:

The study guide needs to be read thoroughly. Supplementary readings could be made from other resources. This issue is based totally on teachings imparted in study guide issued by the institute. Standard books could be referred for additional expertise. Detail discussions on different formulae are not done here for which Guide book could be referred. This lesson is purely an aid to study guide on paper 4- Fundamental of Business mathematics and Statistics written and issued by Institute on Syllabus -16. Practice of questions of these sorts may give expertise in solving MCQs









## **ABOUT YOUR STUDIES - FOUNDATION COURSE**

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











### Dear Students,



### 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/SM5 nowadays. Student may update their E-Mail id/ Mobile Number instantly after logging into their account at www.icmai.in at request option. 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 ebulletin everything that you want it to be.

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## Message from Directorate of Studies

Dear Students,

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

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

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

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

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

Let us observe his memory, following the above message.

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

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

Please refer the link mentioned below :

https://icmai.in/studentswebsite/

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

You can win!

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





#### Be Prepared and Get Success;

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23



# **Few Snapshots**



### Group Photo- MDP Kolkata during valedictory session on 27-Aug 21



As part of CAT & AAT Board ICAI initiative, team of delegates from Institute CMA P Raju Iyer, Vice President, CMA Rakesh Singh, Former President, CMA Vijender Sharma, Chairman PD, CMA Dr K Ch A V S N Murthy, Chairman RC & CC, Journal, CMA Chittaranjan Chattopadhyay, Chairman BFSI Board and CMA H Padmanabhan, Chairman CAT and AAT Board met Shri. A Namassivayam, Minister Puducherry-Home, Education, Industries & Commerce, Electricity, Sports, Sainik Welfare





As part of initiative of CAT and AAT Board ICAI our Institute CMA P Raju Iyer Vice President, CMA Rakesh Singh Former President, CMA Vijender Sharma, Chairman PD, CMA Chittaranjan Chattopadhyay, Chairman BFSI Board, CMA Dr K Ch A V S N Murthy, Chairman RC & CCC and CMA H Padmanabhan, Chairman CAT and AAT Board met Shri N. Rangaswamy, Honorable Chief Minister of Puducherry UT



CMA Chittaranjan Chattopadhyay Chairman BFSI Board, CMA Vijender Sharma and CMA H Padmanabhan met BANK top management Shri. P Suresh, Puducherry Head and handed over BFSI Publication after discussing scope for PCMAs and IPAs in Banking Industry CMA Neeraj D. Joshi, Chairman, Management Accounting Committee and CMA (Dr.) Ashish P. Thatte, Chairman, Corporate Laws Committee had an opportunity to greet Dr. Bhagwat Kishanrao Karad, Hon'ble Union Minister of State for Finance on 29th July, 2021

24





## THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

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