75
Azadi Ka Amrit Mahotsav

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E - Bulletin

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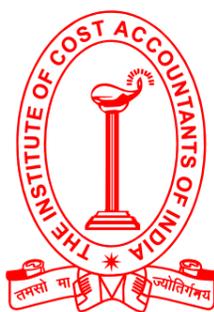
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Behind every successful business decision, there is always a CMA

CONTENTS

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Azadi Ka
Amrit Mahotsav

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.

Azadi Ka Amrit Mahotsav

PAPER: 1, PART: I

FUNDAMENTALS

OF ECONOMICS & MANAGEMENT

(FEM) – ECONOMICS

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Your Preparation Quick Takes

A 50%

B 50%
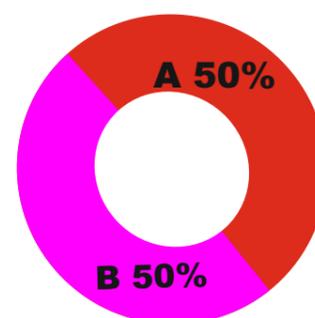
Syllabus Structure

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 you are all enjoying the monsoon and keeping a good health. As I told you earlier that the Corona virus will strike back again and it has come as the fourth wave. If you don't want to be a victim of Covid-19, you must follow the protocol specified by the Government. Always use mask whenever you go out. Sanitize your hand whenever you touch anything outside. Wash your hands with soap thoroughly when you return home. Wash your clothes also on your return. Avoid crowd. Avoid outside food. Remember health comes first, then education. Let us start our usual exercise of mock test.

I. Choose the correct answer:

1. When the increase in total output is proportional to the increase in factors, the firm has
  A. Increasing returns to scale
  B. Constant returns to scale
  C. Decreasing returns to scale
  D. None of the above

2. The marginal rate of technical substitution diminishes
  A. If the two factors are perfect substitutes
  B. If the two factors are complements
  C. As more and more capital is substituted by additional units of labour
  D. None of the above

3. Production function refers to the relationship between
  A. Physical inputs and physical output of the firm
  B. Stock of inputs and stock of output
  C. Productivity of two inputs
  D. None of the above

4. Producer's equilibrium will be achieved at a point where
  A. MRTS > input price ratio
  B. MRTS < input price ratio
  C. MRTS = input price ratio
  D. None of the above

5. If the short run production function is a straight line, then
  A. AP > MP
  B. AP = MP
  C. AP < MP
  D. None of the above

6. If the total cost curve is a straight line parallel to the x-axis
  A. MC will be zero
  B. MC will be positive
  C. MC will be negative
  D. None of the above

7. Which one of the following is incorrect?
  A. When AP rises, MP is more than AP
  B. When AP is maximum, MP is equal to AP
  C. MP cuts the AP curve at its minimum

D.   When AP falls, MP is less than AP

8. **Rational producer will seek to produce in which stage of the law of variable proportion?**
    A.   Stage 1
    B.   Stage 2
    C.   Stage 3
    D.   All the stages

9. **Normally, production indifference curves are**
    A.   Convex to the origin
    B.   Concave to the origin
    C.   Straight line falling to the right
    D.   None of the above

10.   **Monopolist operates in a market where**
    A.   The product has an elastic demand
    B.   The product has an inelastic demand
    C.   The product has unit elastic demand
    D.   None of the above

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

II. **Fill in the blanks:**

1. ………………… cost must be paid in the short run even if the firms output is zero
2. TPn – TPn-1 is ……………
3. AFC curve has a shape similar to ……………   ……………
4. The vertical difference between TC and TVC is …………

Key: 1. Fixed, 2. MP , 3. Rectangular hyperbola, 4. TFC

III.   **True or False:**

1. Free entry and free exit is a feature of perfect competition
2. MC=MR is the equilibrium condition of Monopoly
3. Monopolist is a price taker
4. Equilibrium price under oligopoly is sticky
5. Firm under perfect competition will always earn super normal profit

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

IV.   **Matching:**

1.	Price discrimination	A. Duopoly
2.	Interdependence	B. monopoly
3.	Selling cost	C. AR=AC
4.	SDR	D. Monopolistic competition
5.	Perfect competition	E. IMF

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

So, how do you find the mock test? It will be easy to answer if you have gone through the study material thoroughly. No question will be given from outside the study material. So it is wise to study seriously the Study material. Preserve the scores of the mock test with date for determining the improvement in your performance. All the best!!!

Azadi Ka Amrit Mahotsav

PAPER: 1, PART: II

FUNDAMENTALS

OF ECONOMICS & MANAGEMENT
(FEM) – MANAGEMENT

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Your Preparation Quick Takes
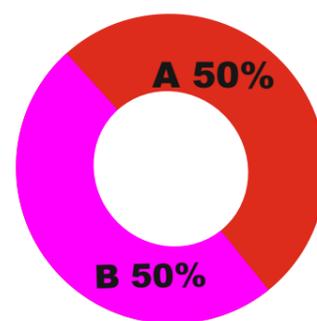
A 50%

B 50%

Syllabus Structure

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

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 a crucial aspect of strategic planning?**
   A. It is a broad concept that consists of business and corporate strategy
   B. It is an overall concept that consists of strategy formulation and implementation
   C. It is a broad concept that consists of environmental and internal analysis
   D. It is a general concept that consists of business inputs and outputs
   Answer: B

3. **Which of the following is the main objective of the Principle of Order?**
   A. It focuses on providing orderly arrangements for the resources within an organization
   B. It concentrates on building a framework for giving orders to the employees within an organization
   C. It focuses on creating a framework for receiving orders from the top management within an organization
   D. None of the above
   Answer: A

4. **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

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. **Henri Fayol is known as _____**
   A. The father of general management
   B. The father of shop floor management
   C. The father of scientific management
   D. All of the above
   Answer: A

7. **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

8. **Management functions include _____**

A. Planning & organizing
B. Directing
C. Controlling
D. All of the above
Answer: D

9. _____ is about grouping of jobs
   A. Organizing
   B. Directing
   C. Planning
   D. Controlling
   Answer: A

10. Managerial skills involve _____
    A. Technical skills
    B. Human skills
    C. Conceptual skills
    D. All of the above
    Answer: D

11. Management satisfies _____ characteristics of a profession
    A. Few
    B. Many
    C. All
    D. Zero
    Answer: All

12. _____ is the important interpersonal role of manager
    A. Leader role
    B. Liaison role
    C. Figurehead role
    D. All of the above
    Answer: D

13. _____ basically formulate the MOST
    A. Government
    B. Managers
    C. Workers
    D. Trademark registrar
    Answer: B

14. Policies are sometimes defined as a(n)
    A. Shortcut for thinking
    B. Action plan
    C. Substitute for strategy
    D. Substitute for management authority
    Answer: D

15. The most significant management skills are _____
    A. Technical, Human and Conceptual
    B. Technical, Behavioral and Conceptual
    C. Systematic, Human and Conceptual
   D. Technical, Human and Cognitive
    Answer: A

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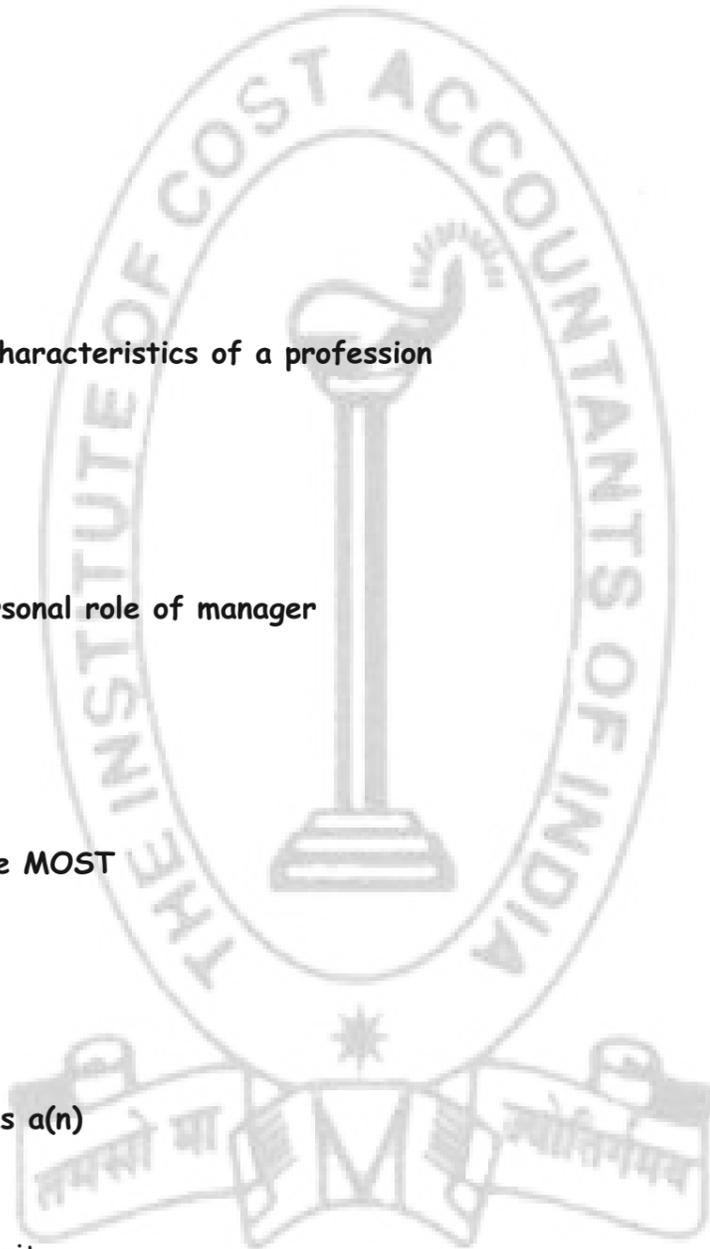
PAPER: 2

FUNDAMENTALS

OF ACCOUNTING (FOA)

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Your Preparation Quick Takes

A 80%

B 20%
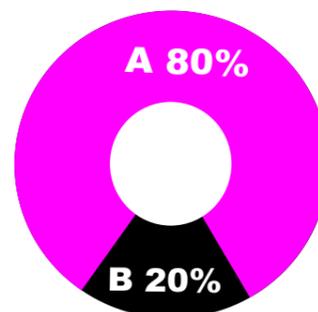
Syllabus Structure

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

Welcome once again to another new issue in your e bulletin.

A psychology professor entered the classroom with half a glass of water in his hand. The students expected the old common question "was it half empty or half full?" But to the surprise, he asked them "How heavy is this glass of water?"

The answers given by the students ranged from 25 mlts to 50 mlts but the professor replied that the actual weight of the glass with water doesn't always matter but how long you hold the glass is what matters.

If you hold the glass for a minute, you won't feel much weight. But if you hold for 10 minutes, you will feel a little more weight and it gets heavier for you with hours.

If you hold it for the entire day, then your hands would go numb and pain. Similar is the case when you carry stress with you. If you think about it for a while and leave it, then there is no problem but if you think about it for hours, it starts becoming a problem and it becomes worse if you sleep with it.

Definitely some of you have appeared for Plus two examination held last month. Those who have done well or even if you have not done well- go ahead. Life is big journey. Don't carry stresses. Enjoy your learning. Accept – come whatever may.

In this issue we will practice the rectification of errors.

Best wishes to all you.

1: Sales of Rs.10,000 recorded as Rs. 1,000 is an example of:
a) Compensating Error
b) Errors of principle
c) Errors of omission
d) Errors of commission
Answer : Error of commission.

2: Trial Balance might match in spite of presence of:
a) Errors of complete omission, Errors of principle
b) Errors of complete omission
c) Errors of commission
d) Errors of principle
Answer: Errors of complete omission, Errors of principle

3: Compensating errors are of a
a) Neutralizing
b) Consistent
c) Concealing
d) Accommodating
Answer : Neutralizing

4: Rectification entries are passed in
a) Journal Proper
b) Purchase Book
c) Sales Book
d) None of the options
Answer : Journal Proper

5: A Suspense Account will give the
a) Debit or Credit balance
b) Debit balance
c) Credit balance
d) None of the options
Answer : Debit or Credit balance

6: Goods worth Rs.100 given as charity should be credited to
a) Purchase Account
b) Sales Account
c) Charity Account
d) None of the options
Answer: Purchase Account
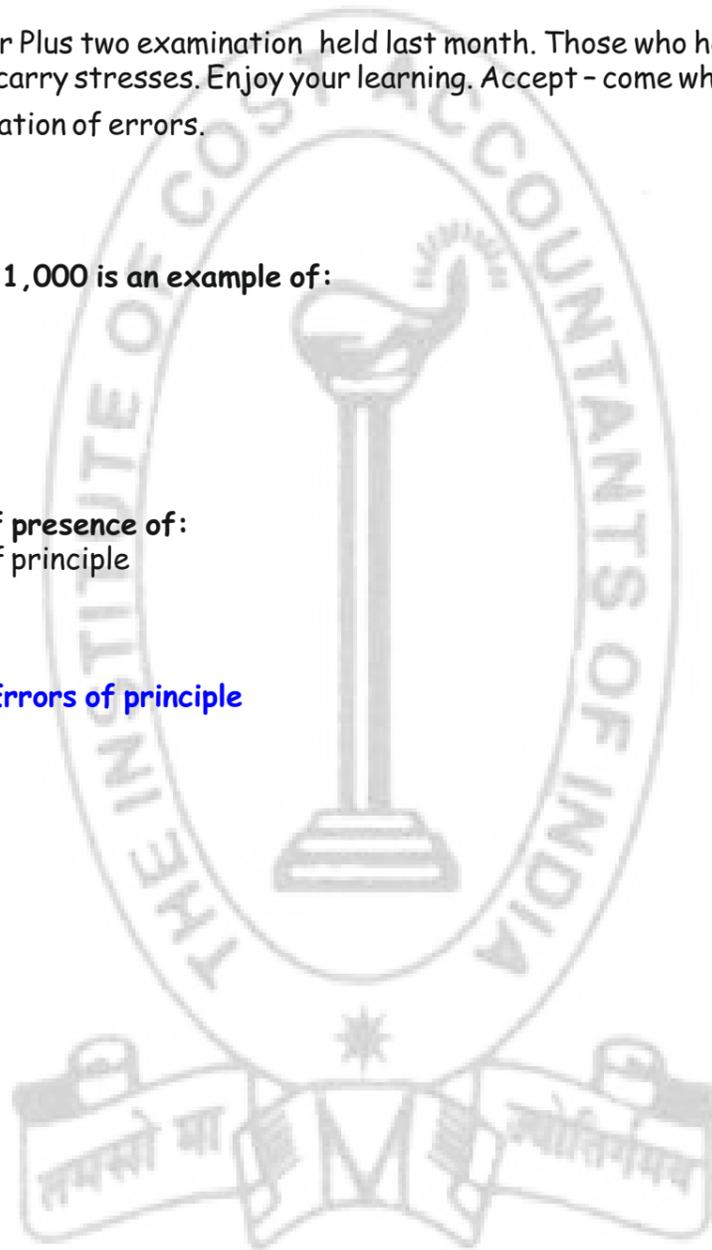
7: Rs. 2,000 paid as wages for erecting a machine should be debited to
a Machinery Account
b) Wages Account
c) Capital Account
d) None of the options
Answer: Machinery Account

8: A brief-case purchased for Rs.800 for the son of a partner was debited to General Exp. A/c with Rs.80. In the rectifying entry, Drawings A/c should be debited with:
a) 880
b) 720
c) 800
d) 80
Answer : C

9: Goods of Rs. 1,000 taken by the proprietor for personal use should be credited to
a) Sales Account.
b) Proprietor's Personal Expenses Account.
c) Purchases Account.
d) None of these.
Answer : Purchase account.

10: Error not shown by Trial Balance are:
a) Errors of Principle.
b) Compensating Errors.
c) Errors of Complete Omission.
d) All of the above.
Answer: D

11: Rs. 1,500 received from Bahadur whose account was previously written off as bad-debt should be credited to
a) Bahadur's A/c
b) Bad-debts Recovered A/c
c) Suspense A/c
d) Cash A/c
Answer: B

12: Trial Balance is prepared to locate
a) Errors of Principle.
b) Errors of omission.
c) Compensating Errors.
d) None of these.
Answer: D

Just don't memorise. Try to set logic and write in your own why the above things are happening. For reference and explanation follow earlier e bulletins.

Azadi Ka Amrit Mahotsav
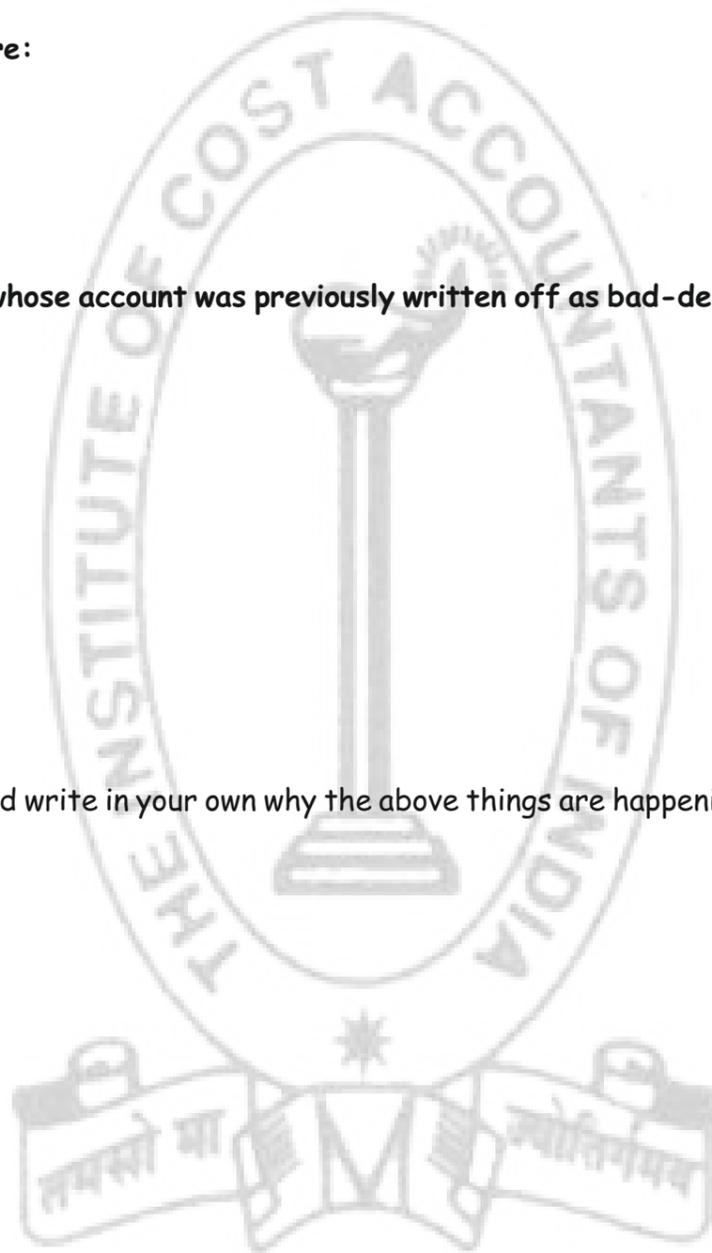
PAPER: 3

FUNDAMENTALS

OF LAWS AND ETHICS (FLE)

CA Partha Ray
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prapray@rediffmail.com

Your Preparation Quick Takes

B 30%

A 70%
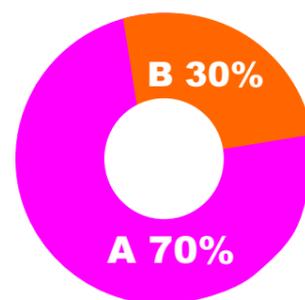
Syllabus Structure

A Fundamentals of Commercial Laws **70%**

B Fundamentals of Ethics **30%**

Learning Objectives:

- Read the Study Material minutely.
- For details or if you don't understand Study Material or the section is important to identify the topic, then refer to Bare Act, otherwise reference to Bare Act is not necessary. For Company Law, book by Avtar Singh is recommended. For other laws Institute Study Material is sufficient.
- The words used in any of the texts as mentioned above should be understood by immediate reference to the Dictionary.
- The main points coming out in any of the provisions should be either underlined or written in separate copy which has to be repeated again and again.
- Theoretical knowledge should be adequate and clear before solving practical problems.
- Don't write wrong English. It changes the meaning and therefore answer may be wrong even when the student's conception is clear. Also don't make spelling mistakes.

LAWS & ETHICS

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

Now, let us understand why this paper is really very important for all of you who are aspiring to be true professionals and are all eager to proudly proclaim aloud that – **Yes, behind every successful decision, there is a CMA**.

The first TIP is that you 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 (Contd.)

Quasi Contracts , Contingent Contracts

Quasi-contract is also an implied contract.A Quasi-contract can be best understood with the help of examples. Mr.X placed an order for home delivery of certain foods on a local Restaurant for dinner at fixed rates, terms and condition, payable on delivery. The delivery person arrives with the dinner packets along with 2 Cups of Ice cream. You accept everything and sign the Proof of Delivery (POD) Slip and pay to the delivery person. In this case you did not ask for the ice creams, you accepted those and did not pay for those. So here, your acceptance is implied and you make a Quasi-contract. The restaurant could have asked for payment but it did not.

Another example : Suppose you have a neighbor who is the only earning member in his family, living with his wife and a minor son. He becomes incapacitated after a road accident and loses his memory completely. You take the responsibility of supplying necessary food and medicines to that family. In such cases you are entitled to be reimbursed only out of the property of the incapacitated person to the extent the price of your supplies are reasonable.

Let us take another example – Your brother borrowed money from a bank but was unable to pay the bank at that time even though he was bound to do so. You paid off the loan on his behalf. In this case , your are entitled to get reimbursement from your brother **under Sec.69.**

In another case, suppose a delivery man came to deliver some goods that you had ordered online. After that man left, you find that he has left a bag full of some other items which you picked up and kept as if those were yours. In such a case, you are bound to compensate for those items in cash or return the same items – **Sec.70.**

In another case, suppose you find a child on the street. You must take reasonable care of that child till you trace the guardian or deposit the child legally to a custodian. In this case the true guardian must reimburse to you the total costs and expenses you incurred while the child was under your care and protection.

In another case, suppose you and your friend both went to a shop and bought a shirt for Rs.500 on credit. The next day your friend went to the shop before you and paid-off Rs.500 to the shopkeeper. In the evening you went to the same shop and again paid Rs.500 to the shopkeeper. In this case , the shopkeeper is bound to repay Rs.500 to you –Sec.72

All the above examples are of Quasi-contracts.

So, let us **understand why they are called Quasi-contracts**. In each case, one person obtains a benefit at the expense of another and even though there is no contract between the parties, the law compels the beneficiary to pay . In such contracts, a relationship between the parties is established as if a contract was created.

Now let us discuss **Contingent Contracts**.
First let us understand **what is Contingency**. It is some future event, which is possible, but cannot be predicted with certainty. For

example, an accident which can always happen but no one can say that it will definitely happen. Now, let us take a practical example. You tell your friend that you will pay Rs.50,000 for his (your friend's) son's admission into college if , he (your friend) dies. This is a contingent contract. So, we realize two things in a Contingent Contract – 1. The performance depends on a contingency ; and 2. The contingency is uncertain.

Now, please read Sections 32 to 36 of the Contract Act, 1872 carefully and remember the **Rules regarding Contingent Contracts** which are as follows -.

1. Contingent contracts cannot be enforced by law unless and until that event has happened.

2. Contracts contingent on the non-happening of an uncertain event can be enforced only when that event becomes impossible. Example : A promises to pay Rs.10,000 to B if B's son gets a 1st Class in the B.Com. examination. The results are declared and the son get a 2nd Class. B cannot enforce the contract as it is Impossible for the son to get a 1st Class any longer in the same examination.

3) A contract which is contingent upon how a person shall act at an unspecified time shall become impossible when that person does something that renders it impossible to perform. For example – A promises to pay B ,Rs.1,00,000 if B's daughter marries A's son. B's daughter marries somebody else's son. Here the contract becomes impossible even though it is possible that B's daughter may marry A's son later, if her present husband dies and A;s son is eligible to marry.

4) A contract which is contingent upon the happening of an event within a fixed time, becomes void if the event does not happen within the fixed time or if it cannot happen within that fixed time. For example – A enters into a contract to buy B's house within 6 months at a certain price. The contract cannot be enforced after 6 months or if the building gets destroyed due to an earthquake within those 6 months.

5) A contingent agreement to do something that is impossible to perform is void, whether such an event was known or not known to the parties to such agreement at the time the agreement was made. For example X agrees to pay Rs.2 lalks to Y if Y marries X's daughter Z. Z was already dead at the time of the agreement. Therefore, this agreement is void.

Capacity of Parties and Free Consent

Capacity - It must be remembered that the parties to an agreement must be legally capable of entering into an agreement. If that capacity is wanting/absent, the agreement in that case cannot be enforced by a Court of Law.

So the question naturally arises - **In what way Want of Capacity arises ?**

The simple answer is that want of capacity arises **from – Minority, Lunacy, Idiocy, Drunkenness etc.** In such cases the of disability, the agreement with such person cannot be enforced by law, *except in special cases.*

Free Consent – Unless an agreement is based on Free Consent of all the parties to an agreement, it is not enforceable.

So, here again the obvious question coming to mind is – **When can we say that there is absence of Free Consent ?**

The answer is – If an agreement is induced by **Coercion, Undue influence, Mistake, Misrepresentation and / or fraud** *in such circumstances it can be said that there is absence of Free Consent.* The party guilty of coercion, undue influence, fraud etc. cannot enforce the agreement as the essence of the agreement is vitiated by such factors. However, the other aggrieved party to the agreement can enforce it, subject to certain rules laid in the Act.

Negotiable Instruments Act, 1932 (Contd.)

let us discuss about – **Crossing – Meaning, Definition and Type of Crossing** .

Crossing – Is done on a cheque, by putting two parallel lines across the face of the cheque leaf . There can be two types of cheques – 1. Open Cheque ; 2. Crossed Cheque.

An **Open cheque** is one which can be presented across the counter for encashment.

A **Crossed Cheque** is one which has to be presented to the bank through another banker. Here, there are two types of Crossing – **General Crossing** and **Special Crossing.**

In case of **General Crossing**, the cheque can be presented to the bank through any banker. However, in case of **Special Crossing**, the name of the bank is written **between the parallel lines** and therefore that cheque has to be presented for encashment only through the bank named between the parallel lines.

A Special Crossing cheque is sometimes crossed – **Account Payee.** In such cases the words "Account Payee" is written in between the parallel lines drawn across the face of the cheque leaf. Here, the Drawer clearly directs the paying bank to pay to a particular person only and credit the amount to the bank account of the payee. In such cases, the cheques become non-transferable.

In a **Special Crossing Cheque**, the banker's name and payee's name is sometimes mentioned on the cheque. Since the bankers have full Know Your Customer (KYC) details of every customer's viz. name, verified address and signature , any forgery can now be detected . Special Crossing helps in preventing fraudulent transactions and makes misappropriation difficult .

Rules applicable in the case of Lost Negotiable Instruments :

1. Where a bill of exchange has been lost before it is overdue, the holder may apply to the drawer to give him another bill of the same tenor. For that the holder has to indemnify the drawer by giving a security if required , against all persons in case it is found again.
2. Before payment of a negotiable instrument, the person liable to pay is entitled to see the instrument and after payment he is entitled to have it delivered to him. If the instrument is lost or or otherwise it cannot be produced to him, he can refuse to pay. If he pays in such a case, he can demand to be indemnified against any further claim thereon against that instrument from him.
3. The finder of a lost instrument gets no title.
4. If a negotiable instrument, payable to bearer is lost and the finder negotiates it to the third party who takes it in good faith and for value , the third party becomes a holder in due course and is entitled to receive the amount due on the instrument from the parties liable to pay.
5. If a lost negotiable instrument is indorsed by the finder with a forged signature, the indorsee gets no title even though he might have taken it on good faith and for consideration.
6. If a lost negotiable instrument is paid to the person having it in his possession, the person liable to pay is discharged from all liabilities under the instrument. The true owner can however recover the money from the person who obtained the payment. In this case, the payment to the person finding the lost instrument, shall be considered as payment in due course.

The Negotiable Instruments Act lays down **certain Rules of Evidence and the Court can presume** the following :

1. That every instrument was made or drawn for a consideration.
2. That every Negotiable Instrument bearing a date was made or drawn on such a date.
3. That every accepted bill of exchange was accepted within a reasonable time after its date and before its maturity.
4. That every transfer of negotiable instrument was made before its maturity.
5. That a lost Promissory Note, Bill of Exchange or Cheque was duly stamped.
6. That a holder of a negotiable instrument is a holder in due course.
7. That the indorsements appearing upon a negotiable instrument were made in the order in which they appear thereon.
8. That if an instrument is dishonoured and a suit is filed in Court, the fact of dishonor shall be presumed by the Court unless and until such a fact is disapproved.
9. That the burden of proof lies on the party alleging and if the defendant alleges that there was no consideration, it is his duty to prove it.

The Negotiable Instruments Act lays down the following **Rules regarding Estoppel** :

Estoppel is the principle which *prevents a person from* denying something that was implied by a previous action or a statement made earlier, *that is, going back on his or word.*

1. Estoppel against denying original validity of instrument.
2. Estoppel against denying capacity of payee to indorse.
3. Estoppel against denying signature or capacity of prior party.

Ethics and Business

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.

Business Ethics is applicable within the periphery of a business circle and environment. It encompasses the behavior of individuals within business organizations, giving top priority to Business Interests.

Business Ethics is the study of business situations, activities and decisions where issues of right and wrong are addressed. This wonderful explation was given by Andrew Crane.

In this context, one must remember **the 3 C's of Business Ethics , which are –**

a) **Compensation,**
b) **Competency and**
c) **Character .**

Azadi Ka
Amrit Mahotsav

PAPER: 4

FUNDAMENTALS

OF BUSINESS MATHEMATICS AND STATISTICS (FBMS)

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Your Preparation Quick Takes

A 40%

B 60%
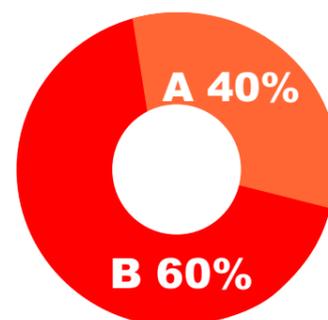
Syllabus Structure
A Fundamentals of Business Mathematics **40%**
B Fundamentals of Business Statistic **60%**

BUSINESS MATHEMATICS AND STATISTICS

In this issue we discuss MCQs on various chapters of Business Mathematics

Q1. 4th term of a GP is 4 and the product of 2nd and 4th term is unity. 6th term of the GP is
(a) 28
(b) 1
(c) 64
(d) 32

Q2. Work done by $(x-3)$ men in $(2x+1)$ days and the work done by $(2x+1)$ men in $(x+4)$ days are in the ratio $3:10$. The value of x is
(a) 4
(b) 2
(c) 5
(d) 6

Q3. Three executives enter in a room where there are five chairs in a line. Executives can take their seats in
(a) 60 ways
(b) 30 ways
(c) 50 ways
(d) 40 ways

Q4. The number which has the same ratio with $\frac{4}{9}$ as $\frac{2}{11}$ has with $\frac{7}{33}$ is
(a) $\frac{9}{22}$
(b) $\frac{7}{21}$
(c) $\frac{8}{21}$
(d) $\frac{3}{11}$

Q5. The sum of all integers from 1 to 100 not divisible by 3 and 5 is
(a) 2654
(b) 2632
(c) 2678
(d) 2689

Q6. If $x^{2/3} + x^{1/3} = 2$, then x is
(a) –1 or 1
(b) –1 or 8
(c) –8 or 1
(d) 0

Q7. The 2nd term of a GP is 3 and 5th term is 81/8. The 8th term is

(a) 26

(b) 2678

(c) 2542/32

(d) 2187/64

Q8. $\sqrt{6 + \sqrt{6 + \sqrt{6 + \sqrt{6 + \ldots\ldots \infty}}}}$ is equal to

(a) 3 or - 2

(b) 1 or - 1

(c) 3 or 2

(d) 1 or 0

Q9. The sum of first n terms of two AP are $3n + 8, 7n + 15$. The ratio of their 15th term is

(a) 95/218

(b) 38/120

(c) 38/95

(d) 120/218

Q10. A sum of R25000 invested at 8% p.a. compounded semiannually for three years amounts to

(a) R26592.30

(b) R24328.40

(c) R27565.80

(d) R28121.60

Q11. 5 boys and 7 girls could be arranged in a row so that all the 5 boys are together in

(a) 5000000 ways

(b) 4838400 ways

(c) 6345780 ways

(d) 4569820 ways

Q12. If $a \neq 0$, value of x in equation $3a^2x^2 + 8abx + 4b^2 = 0$ is

(a) – b/a or – 2b/3a

(b) – b/a or – b/3a

(c) – 2b/a or – 2b/3a

(d) – b/2a or – 3b/2a

Q13. In a fraction $\frac{a}{b}$

(a) The numerator a is called the antecedent of the ratio and denominator b is called the consequent of the ratio

(b) The numerator a is called the consequent of the ratio and denominator b is called the antecedent of the ratio

(c) The antecedent a is called the numerator of the ratio and consequent b is called the denominator of the ratio

(d) The consequent a is called the numerator of the ratio and antecedent b is called the denominator of the ratio

Q14. If $3A = 5B = 6C$ then $A:B:C$ is
(a) 10:6:5
(b) 8:6:3
(c) 11:9:7
(d) 5:6:7

Q15. If $A \propto BC$ and $B \propto CA$, then
(a) A is a constant
(b) B is a constant
(c) C is a constant
(d) $AB \propto C^2$

Q16. . Suppose A.M of and b is $\frac{a^{n+1}+b^{n+1}}{a^n+b^n}$. Then n is
(a) 1
(b) 0
(c) ∞
(d) Indeterminable

Q17. If $\frac{n!}{2!(n-2)!}$ and $\frac{n!}{4!(n-4)!}$ are in the ratio of 2:3 then the value of n is
(a) 7
(b) 2
(c) 4
(d) 5

Q18. A man secures an interest free loan of R14500 from a friend and agrees to repay it in 10 instalments. He pays R1000 as first instalment and then increases each instalment by equal amount over the preceding instalment. His last instalment is
(a) R1000
(b) R1900
(c) R1600
(d) R1800

Q19. A piece of equipment costs a certain factory R600000. If it depreciates in value, 15% the first year, 13.5% the next year, 12% the third year and so on. If all percentages applying to the original cost then its value at the end of 10 years will be
(a) R125000
(b) R103000
(c) R110000
(d) R105000

Q20. If a,b,c,d are in proportion then $(\frac{a-b}{c} + \frac{a-c}{b})^2 - (\frac{d-b}{c} + \frac{d-c}{b})^2$ is equal to
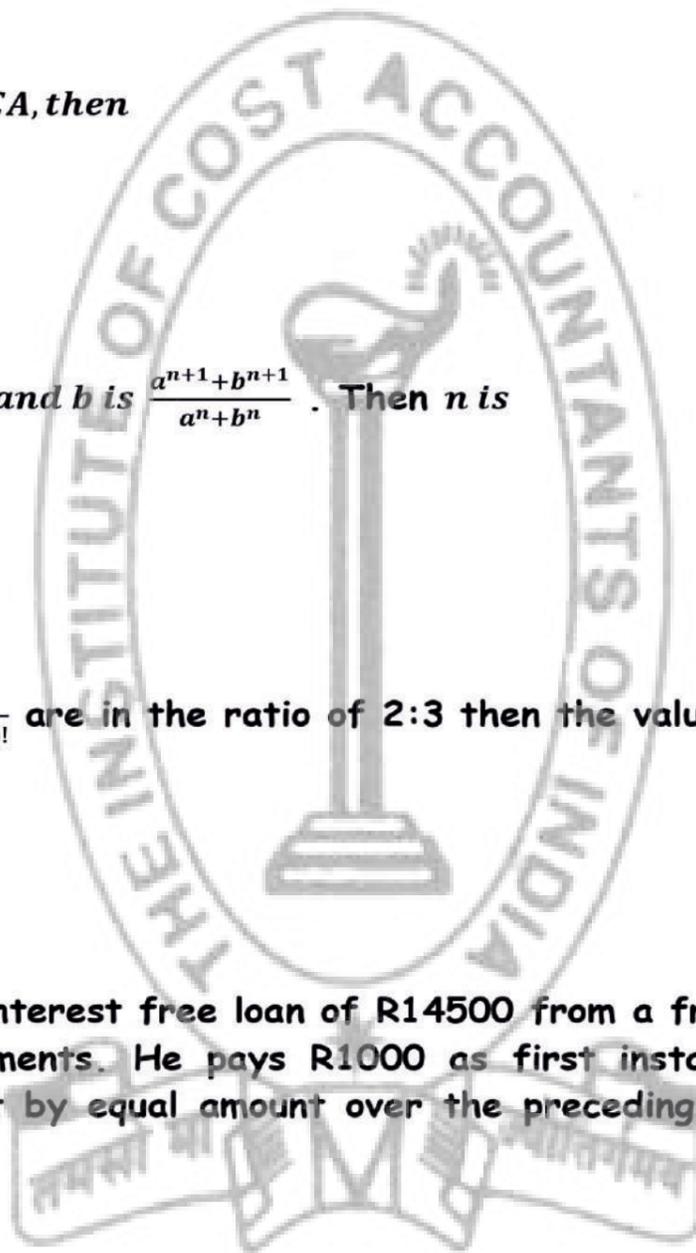
(a) $(a + d)^2 + (\frac{1}{c^2} + \frac{1}{b^2})$

(b) $(a - d)^2 + (\frac{1}{c^2} - \frac{1}{b^2})$

(c) $(a + d)^2(\frac{1}{c^2} + \frac{1}{b^2})$

(d) $(a - d)^2(\frac{1}{c^2} - \frac{1}{b^2})$

Answer:

Q1	c	$t_4 = ar^3 = 4$ & $t_2 * t_4 = ar * ar^3 = 1$ So $ar = \frac{1}{4}$ & $\frac{ar^3}{ar} = 16$. So $r = \pm 4$ Hence the result
Q2	d	$\frac{(x-3)(2x+1)}{(2x+1)(x+4)} = \frac{3}{10}$ & hence the answer.
Q3	a	3 executives will occupy only 3 chairs out of 5 chairs. So 3 chairs can be filled up out of 5 chairs in 5_{P_3} ways
Q4	c	$\frac{x}{4/9} = \frac{2/11}{7/33}$ Hence the result
Q5	b	The required sum is (1+2+3+4+.....100) – (3+6+9+......99) – (5+10+15+.......100) – (15+30+45+.......90)
Q6	c	Put $x^{1/3} = t$ we get $t^2 + t - 2 = 0$ Or, $(t + 2)(t - 1) = 0$ Or, $t = -2$ or 1 Or, $x^{1/3} = -2$ or 1 Or, $x = -8$ or 1
Q7	d	$t_5 = ar^4 = \frac{81}{8}$ & $t_2 = ar = 3$ So $\frac{ar^4}{ar} = \frac{27}{8}$ So $r = \frac{3}{2}$ So $a = 3$ Hence the result
Q8	a	Let $x = \sqrt{6 + \sqrt{6 + \sqrt{6 + \sqrt{6 + \ldots \ldots \infty}}}}$ Or, $x^2 = 6 + \sqrt{6 + \sqrt{6 + \sqrt{6 + \sqrt{6 + \ldots \ldots \infty}}}}$ Or, $x^2 = 6 + x$ Or, $x^2 - x - 6 = 0$ Or, $(x - 3)(x + 2) = 0$ Or, $x = 3$ or -2
Q9	a	By question we can write $\frac{2a+(n-1)*d}{2a'+(n-1)*d'} = \frac{3n+8}{7n+15}$ We have to find $\frac{a+14d}{a'+14d'} = ?$ Or, $\frac{a+14d}{a'+14d'} = \frac{2a+28d}{2a'+28d'}$ Now in $\frac{2a+(n-1)*d}{2a'+(n-1)*d'}$ we put $n = 29$ we get $\frac{2a+28}{2a'+28d'}$ But $\frac{2a+28d}{2a'+28d'} = \frac{3n+8}{7n+15} = \frac{3*29+8}{7*29+15} = \frac{95}{218}$. So the answer
Q10	d	$25000(1 + 0.08/2)^3$
Q11	b	We count the 5 boys as one boy so that number of persons involved is now 8. They can be arranged in 8! Ways. But these 5 boys themselves can be arranged in 5! Ways. Hence required number of arrangements is 8! * 5! = (8*7*6*5*4*3*2) X (5*4*3*2) = 4838400
Q12	c	$3a^2x^2 + 8abx + 4b^2 = 0$ Or $3a^2x^2 + 6abx + 2abx + 4b^2 = 0$ Or, $3ax(ax + 2b) + 2b(ax + 2b) = 0$ Hence the result

Q13	a	
Q14	a	$3A = 5B = 6C = x \ (Say)$ So $A = \frac{x}{3}, B = \frac{x}{5}, C = \frac{x}{6}$ So $A:B:C = \left(\frac{x}{3}\right):\left(\frac{x}{5}\right)\left(\frac{x}{6}\right)$ Hence the result
Q15	c	
Q16	b	$\frac{a+b}{2} = \frac{a^{n+1}+b^{n+1}}{a^n+b^n}$ $Or \frac{(a+b)(a^n+b^n)}{2} = a^{n+1}+b^{n+1}$ $Or, a^{n+1} + a^n b + b^n a + b^{n+1} = 2(a^{n+1}+b^{n+1})$ $Or, a^n b + b^n a = a^{n+1} + b^{n+1}$ $Or, a^{n+1} - a^n b = b^n a - b^{n+1}$ $Or, a^n(a-b) = b^n(a-b)$ $Or, \left(\frac{a}{b}\right)^n = 1^0 \ Or, n = 0$
Q17	d	$\frac{n!}{2!\,(n-2)!} : \frac{n!}{4!\,(n-4)!} = 2:1$ $Or, \frac{n!}{2!(n-2)!} * \frac{4!(n-4)!}{n!} = 2:1$ Hence the result
Q18	b	Let the first instalment is A and equal increased amount is d So payment of instalments will form a series like $A + (A+d) + (A+2d) + \cdots \ldots \ldots 10 \ terms = 14500$ Now by question $A = 1000$ We can write $S_{10} = 14500 = \frac{10}{2}[2*1000 + (10-1)d]$ $Or, 2900 = [2000 + 9d]$ $Or, 2900 - 2000 = 9d$ $So, d = 100$ We have to find out the last instalment. That is we have to find the last term of the series. So we can write $t_{10} = A + 9d = 1000 + 9*100 = 1900$
Q19	d	Depreciation in 1st year : $600000 * 0.15 = 90000$ Depreciation in 2nd year: $600000 * 0.135 = 81000$ Depreciation in 3rd year: $600000 * 0.12 = 72000$ So the value of equipment at end of 10 year: $V = 600000 - (90000 + 81000 + 72000 + \cdots \ldots upto \ 10 terms)$ $Or, V = 600000 - S_{10} = 600000 - \frac{10}{2}[2*90000 + (10-1)d]$ $Or, \qquad V = 600000 - 5[180000 + 9*(-)9000] = 600000 - 495000 = 105000$
Q20	d	$\left(\frac{a-b}{c} + \frac{a-c}{b}\right)^2 - \left(\frac{d-b}{c} + \frac{d-c}{b}\right)^2$ Put $a = dk^3, b = dk^2, c = dk$. We will Get $\left(k^2 - \frac{1}{k}\right)^2 - \left(k - \frac{1}{k^2}\right)^2$ Hence the result after few iteration and put the values of $dk^3 = a, dk^2 = b$ & $dk = c$

Suggestions:
The study guide needs to be read thoroughly. Supplementary readings could be made from other resources. In this issue discussions are held on problems taken from different chapters on assorted basis in MCQ pattern. These could be used as supplement to the study guide. Students should go thoroughly for clear concept on formula from Guide book on the paper 4- Fundamental of Business mathematics and Statistics written and issued by Institute on Syllabus -16.
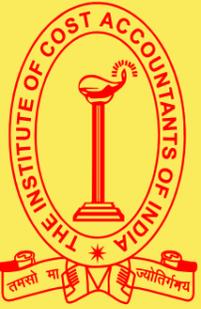
PRACTICAL
Advice

ABOUT YOUR STUDIES - FOUNDATION COURSE

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

START

01 Read Study Notes, MTPs, E-Bulletin, Work Books, Attend Webinar sessions

02 Solve Excercises given in Study Note

03 Assess Yourself

04 Appear For Examination

FINISHED
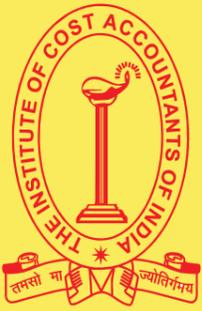
SUBMISSIONS

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.

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.

Message from
Directorate of Studies

Dear Students,

We from the Directorate of Studies understand your expectations from us and accordingly we are trying to deliver some meaningful tips through various publications in soft versions like-E-bulletins, Mock Test Papers (MTPs), and we also have conducted Webinar Sessions for the benefit of the students. Supplementary and Amendments are also uploaded from time to time to keep the students updated about the recent changes made in the papers; wherever applicable.

You must be aware that India is celebrating Azadi Ka Amrit Mahotsav, which is an initiative of the Government of India to celebrate and commemorate 75 years of independence and the glorious history of its people, culture and achievements. Along with pan India, your Institute has also observed and took part in various meaningful activities throughout the year. We also expect that our students should also take part in the development of the nation and make the country proud.

"Freedom has only one motto, may our country be happy and prosperous" …….

let you all observe the message cited above.

❖ Certain general guidelines are listed below and which will help you in preparing for the examinations:

❖ Conceptual understanding and overall understanding of the subjects should be clear,

❖ Students are advised to go through the study material provided by the Institute meticulously,

❖ Students should know and learn the basic understandings of the subjects with focus on core concepts,

❖ Students are expected to give to the point answer which is a pre-requisite for any professional examination,

❖ To strengthen the answers, students are advised to answer precisely and in the structured manner,

❖ Proper time management is also important while answering.

Please refer the link mentioned below:

https://icmai.in/studentswebsite/index.php

GOOD LUCK
Be prepared and be successful

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Few Snapshots

CMA P. Raju Iyer, President along with CMA Vijender Sharma, Vice President of the Institute and CMA B.B. Goyal, Former Addl Chief Advisor (Cost), MoF, GoI extending greetings to Shri Rajnath Singh, Hon'ble Union Minister of Defence on 7th July, 2022.

Glimpses of Observance of GST Day 2022 : GST in India - Poised to deliver Sustainable Growth on 06 July 2022 at Scope Complex, New Delhi

CMA P. Raju Iyer, President along with CMA Vijender Sharma, Vice President of the Institute and CMA B.B. Goyal, Former Addl Chief Advisor (Cost), MoF, GoI extending greetings to Lt. Gen Anil Puri, Additional Secretary, Deptt of Military Affairs, Ministry of Defence on 7th July, 2022.

CMA P. Raju Iyer, President and Prof. Sanghamitra Bandyopadhyay, Director, ISI, Kolkata along with CMA Biswarup Basu, Immediate Past President, CMA Chittaranjan Chattopadhyay, Chairman, BFSI and other dignitaries at a MoU signing ceremony on academic and research collaboration with Indian Statistical Institute (ISI), Kolkata on 13th July, 2022.

CMA P. Raju Iyer, President and Prof. Sanghamitra Bandyopadhyay, Director, ISI, Kolkata along with CMA Biswarup Basu, Immediate Past President, CMA Chittaranjan Chattopadhyay, Chairman, BFSI and other dignitaries at a MoU signing ceremony on academic and research collaboration with Indian Statistical Institute (ISI), Kolkata on 13th July, 2022.