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## FOLIOW US ON



## THE INSTITIUTE OF COST' ACCOUNTANIS OF INDIA

## (Statutory Body under an Act of Parliament) <br> www.icmai.in

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Knowledge Update -

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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.

PAPER: 1, PART: I
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OF ECONOMICS \& MANAGEMENT (FEM) - ECONOMICS


## Syllabus Structure

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

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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.
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## Economics

Hi friends!! hope this finds you in fine spirits. Almost we have been able to drive away the giant elephant-like corona virus out of our territory, only the tail is left. Our days of joy and celebration will soon reappear. But for that we have to maintain utmost restraint. We should wear mask compulsorily whenever we go out. We should avoid crowd and maintain 2 meters social distancing. We should wash our hands frequently with soap. And when soap is not available, we should keep sanitizer bottle handy. Whenever our turn comes, we should take both doses of vaccine without hesitation.

Let us start our routine mock test.
I. Choose the correct answer:

1. If the proportionate change in supply is equal to the proportionate change in price, the supply is said to be
A. Elastic
B. Inelastic
C. Perfectly elastic
D. None of the above
2. If the cost of production is more the elasticity of supply will be
A. Less
B. More
C. Unity
D. None of the above
3. When there is excess supply in the market,
A. The market price is < equilibrium price
B. The market price is > equilibrium price
C. The market price is = equilibrium price
D. None of the above
4. In a monopolistic market, if AC curve is tangential to the AR curve at a particular level of output, then, for that level of output
A. MR will be >MC
B. $M R$ will be $<M C$
C. $M R$ will be $=M C$
D. None of the above
5. For a firm under perfect competition, the $A C$ and MC are Rs. 50 and Rs. 60 respectively, corresponding to the equilibrium level of output 150 units. Find out the level of profit.
A. 7500
B. 9000
C. 1500
D. None of the above
6. In the short run, a firm under perfect competition is having both $A V C$ and $M C$ equal to Rs. 80 , corresponding to the equilibrium level of output 1000 units. What decision the firm should take in this situation?
A. Stop production
B. Continue production
C. Leave the industry
D. Indifferent between stopping and continuing production
7. A monopolist can exert his monopoly power only when the demand for the product is
A. Elastic
B. Inelastic
C. Unit elastic
D. None of the above
8. The other name of monopolistic competition is
A. Product differentiation
B. Product discrimination
C. Product distortion
D. None of the above
9. Which of the following is the Keynesian invention?
A. Transactions demand for money
B. Precautionary demand for money
C. Speculative demand for money
D. None of the above
10. Cost-push inflation occurs when
A. The demand for goods is more than the supply
B. The increased labour-cost of production pushes up the prices of goods
C. Rise in mark-up pushes up the prices of goods
D. None of the above

KEY:

1. $D$, 2. $A$, 3. B, 4. $C, 5, C, 6 . D, 7 . B, 8, a, 9 . C, 10 . B$
II. Fill In the blanks:
2. In inductive method the logic proceed from $\qquad$ to
3. For a Giffen good, if the income of the consumer rises, the demand for it should
4. Central bank enjoys the executive power of $\qquad$ issue
5. Longer maturity Treasury Bills with varying maturities up to ............... Days are introduced in April 1992 5. ............ ................ links lenders and borrowers of short term funds

KEY: 1. Particular general, 2. Fall, 3. Note, 4. 364, 5. Money market
III. True or False:

1. Internal economies of scale will result in a shift of the LAC curve
2. The short run production function is represented by the isoquant map
3. OPEC is the example of a cartel formed by the oil producing countries
4. Money acts as a store of value
5. ICICI is a govt. owned bank

KEY:

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

IV Matching:

| 1. | Scarcity definition | A. many sellers |
| :---: | :--- | :--- |
| 2. | SDR | B. Central bank |
| 3. | Lender of last resort | C. Robbins |
| 4. | Perfect competition | D. SFC |
| 5. | Industrial credit | E. IMF |

KEY:

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

Hope you have enjoyed the mock test. There are a couple of mathematical problems in this test. But I feel it won't be a problem for you if you have learnt the theory thoroughly. Please do not consult the keys before you have solved all the problems yourself. Chech up with your past performance and find out whether you have progressed appreciably. All the best!!!


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## Syllabus Structure

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

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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. Management is an organ, organs can be described and defined only through their functions. This definition was given by $\qquad$
A. Peter F. Drucker
B. Terry
C. Louis Allan
D. Henry Fayol

ANSWER: A
2. Management is the art and science of decision making and leadership $\qquad$
A. Harold Koontz
B. Donald J. Clough
C. Louis Allan
D. Terry

ANSWER: B
3. Espirit de corps means
A. Union is strength
B. Service is our motto
C. Buyer beware
D. product is our strength

ANSWER: A
4. Every subordinate should receive orders from and be accountable to only one superior is $\qquad$
A. Unity of direction
B. Unity of command
C. Centralization
D. Scalar chain

## ANSWER: B

5. Allotment of work to each worker on the basis of the capacity of an average worker functioning in the normal working condition is
A. Social task planning
B. Scientific task planning
C. Not a planning
D. Scientific organizing

ANSWER: B

6. Study of the movements of both the workers and the machine to eliminate wasteful movement is $\qquad$
A. Fatigue study
B. Time study
C. Motion study
D. Work-study

ANSWER: $C$
7. The assumptions about future derived from forecasting and used in planning are known as $\qquad$
A. Planning premises
B. Freehold premises
C. Business premises
D. Corporate premises

## ANSWER: A

8. Goals, aims, purposes, missions and target is also known as $\qquad$
A. Objective
B. Strategies
C. Policies
D. Rules

ANSWER: A
9. A statement of expected results expressed in numerical terms for a definite period of time in the future is known as $\qquad$
A. Objective
B. Strategies
C. Procedure.
D. Budgets

ANSWER: D
10. The process of establishing a time sequence for the work is known as $\qquad$ -.
A. Objective
B. Schedules
C. Procedures
D. Budgets

ANSWER: B
11. Specifying the manner of executing policy is known as

A. Objectives
B. Schedules
C. Procedures
D. Budgets

ANSWER: $C$
12.
A. Responsibility
B. Decentralization
C. Centralization
D. Delegation

ANSWER: A
13. Employees will be promoted on the basis of seniority is an example of $\qquad$
A. Rules
B. Procedures
C. Policy
D. Methods

ANSWER: C
14. An identified group of people contributing their efforts towards the attainment of goals is called an
A. Organization
B. Business
C. Management
D. Department

ANSWER: A
15. Rules, duties and responsibilities or workers are given in writing in $\qquad$
A. Formal organization
B. Informal organization
C. Business or organization
D. Strategic organization

ANSWER: A

PAPER: 2


Syllabus Structure
A Fundamentals of Financial Accounting 80\%
B Fundamental of Cost Accounting 20\%


#### Abstract

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

Life sometimes opportune for a better alternative only when you are in trouble.
A teenage boy from a village moved to the city in pursuit of a job to support his family. He then applied for a job in a big firm. After some days, he was called for an Interview. He successfully cleared all the tests and cleared the interview. Hiring manager, "You are hired, give me all your details for further processing. Also make sure that your bike is in good condition, as you have to do a lot of traveling to meet the Customers". The boy replied, "Sir, but I don't have a bike with me!". Hiring Manager, "Without a bike, you will not get this job. You can leave now!. The boy left the place thinking about what to do next. He was left with little money that can feed him only for the next few days. But he doesn't want to return to his village without a job and he was confident and hoping that he will definitely find a better job. While he was thinking, he came across a big vegetable market. Then an Idea sparked and he decided to buy vegetables from the market with the available money and went on to sell those vegetable door to door by walk. By the end of the evening, he was able to sell all those vegetables and had a good profit. This gave him confidence that he can earn from this. Then everyday morning he will go to the vegetable market to buy fresh vegetables and sell them door to door till he finishes his stock. He continued his hard work every day and within years he developed his business. Soon he becomes one of the biggest food chain retailers. After some years, one of his new friends visited his big house, where multiple cars were parked in a garage. Seeing this, his friend asked, "You have a good collection of cars, and do you have any bike collections". The man replied, "I never bought any bike for myself". The friend in surprise, asked him "Why you didn't buy a bike?"
The man replied, "If I had a bike with me, I wouldn't have had these cars".

1. "GROSS PROFIT IS DETERMINED BY COMPAIRING 'SALES REVENUE' EARNED DURING AN ACCOUNTING PERIOD WITH THE 'COST OF GOODS SOLD' OF THAT ACCOUNTING PERIOD."- WHICH ACCOUNTING CONCEPT FOLLOWS FROM THE ABOVE STATEMENT?
a. MATCHING CONCEPT
b. PERIODICITY CONCEPT
c. ACCRUAL CONEPT
d. NONE OF THESE
2. THE PROFIT WHICH ARISES FROM NON OPERATING ACTIVITIES OF AN ENTITY IS CALLED $\qquad$
a. NET PROFIT
b. REVENUE PROFIT
c. CAPITAL PROFIT
d. NONE OF THESE
3. ADVANCE PAID TO CREDITORS FOR GOODS IS
a. NOT AN EXPENDITURE
b. REVENUE EXPENDITURE
c. CAPITAL EXPENDITURE
d. NONE OF THESE
4. FIXTURES OF THE BOOK VALUE OF RS. 1500 WERE SOLD AT RS. 600 IS A
a. CAPITALLOSS
b. CAPITAL PROFIT
c. NOMINAL PROFIT
d. REVENUE LOSS
5. COMMISSION PAID IN ADVANCE (31.12.2020). THE JOURNAL WILL BE ..........
a. PREPAID COMMISSION ACCOUNT ... DR

TO COMMISSION ACCOUNT
b. COMMISSION ACCOUNT .. DR

TO ACCRUED COMMISSION ACCOUNT
c. COMMISSION ACCOUNT .. DR

TO BANK
d. NONE OF THESE
a. COMMISSION ACCOUNT .. DR TO PREPAID COMMISSION
b. COMMISSION ACCOUNT .. DR TO ACCRUED COMMISSION ACCOUNT
c. COMMISSION ACCOUNT .. DR TO OUTSTANDING COMMISSION ACCOUNT
d. NONE OF THESE
7. REPAIR OF AN ASSET DEBITED TO ASSET ACCOUNT IS A KIND OF ERROR OF.....
a. PRINCIPLE
b. MISPOSTING
c. COMPENSATING
d. ALL OF THESE
8.

HOW WILL YOU TREAT OUTSTANDING RENT WHILE PREPARING FINAL ACCOUNTS ?
a. ADDED TO RENT IN P/L AND AS LIABILITY IN B/S
b. ADDED TO RENT IN P/L AND AS ASSET INB/S
c. DEDUCTED FROM RENT AND AS LIABILITY IN B/S
d. DEDUCTED FORM RENT AND AS ASSET IN B/S
9. UNDER SINGLE ENTRY SYSTEM OF ACCOUNTING IF DRAWING INCREASES THE TRADING PROFIT $\qquad$
a. DECREASES
b. INCREASES
c. REMAINS SAME
10. IN A BILLS RECEIVABLE ACCOUNT IF YOU HAVE OPENING BALANCE , CLOSING BALANCE, BILL DRAWN NORMALLY WHAT WILL BE BALANCING FIGURE IN THE CREDIT SIDE?
a. DISHONOUR OF BILLS
b. DISCOUNT OF BILLS
c. MATURITY PAYEMENT RECEIVED
d. ENDORSEMENT OF BILLS
11. SUBSCRIPTION DUE AT THE END OF THE YEAR WILL BE SHOWN IN THE $\qquad$ .SIDE OF THE BALANC ESHEET .
a. ASSET
b. LIABILITY
c. ADDED WITH CAPITAL FUND
d. NONE OF THESE
12. HOW WILL YOU CLOSE THE GOODS SENT ON CONSIGNMENT ACCOUNT?
a. TRADING ACCOUNT
b. PURCHASE ACCOUNT
c. EITHER A OR B
d. DEBTORS ACCOUNT

13. GENERALLY, ADVANCE PAID BY THE CONSIGNEE IS WRITTEN IN
a. CONSIGNEE ACCOUNT
b. COSIGNMENT ACCOUNT
c. BANK ACCOUNT
d. BOTH A AND $C$
14. WHEN CONSIGNMENT DEBTORS ACCOUNT IS OPENED ?
a. WHEN THERE IS CREDIT SALE BY CONSIGNEE
b. WHEN THERE IS NO CREDIT SALE
c. WHEN NO COMMISSSION IS PAID
d. NONE OF THESE
15. WHO WILL BEAR THE LOSS DUE BAD DEBT ?
a. IF DLC IS PAID - BY THE CONSIGNEE
b. IF DLC IS NOT PAID - BY THE CONSIGNOR
c. BOTH A AND B
d. EITHER A OR B

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## PAPER: 3



## Your Preparrection Quick Tches



## Syllabus Structure

A Fundamentals of Commercial Laws 70\%
B Fundamentals of Ethics 30\%

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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.
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## LAWS \& ETHICS

Under the changed environment, where life is becoming unpredictable due to the COVID-19 pandemic, the future is uncertain but still life must go on. The examinations must be conducted while ensuring that the quality and standard of the professional examination is not compromised. Exams have to be switched over to the Multiple Choice Question (MCQ) System and therefore, dear students, you have to initiate a Special Method of Preparation totally different from the essay type examination pattern. MCQ exams contain many more questions than essay exams. You can no longer resort to selective study based on past questions. You are expected to be studying in greater depth and gather more range of knowledge with no more chance to bluff the examiner.

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.

Now, let us start revising part by part, what we have read in the previous issues.
Negotiable Instruments Act, 1932
Now, 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.
Now, let us continue to revise partly, what we read about the Law of Contracts - Indian Contract Act, 1872
A 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 Nextremember
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 arises - 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.

Under essential elements of Contract, we read that there must be a Lawful Consideration. So, what is consideration?

Section 2(d) of the Contracts Act 1872 defines consideration. All past, present and future promise, desire to do or abstain from doing something is a consideration for the promise. For example: A agrees to sell his Motorcycle to $B$ for Rs.15,000. For $A$ the consideration is Rs. 15,000 for the promise and for $B$ the consideration is the Motorcycle.

The question arises - What is past consideration?
This can be explained with an example : X is asked by Z to do certain special extra work which X performs in the month of December,2017. In January,2018 $X$ is paid Rs. 5000 by $Z$ to compensate for the work done in December,2017. In this case, the consideration of $X$ is past consideration.

Almost all contracts require consideration, so the question is - what agreements are valid without consideration ? Please read Sec.25(1), Sec.25(3) and Sec 25(explanation 2)

Section 25(1) specifies those cases where agreement without consideration is valid and those are:

1. The agreement is freely made in writing
2. The written document is registered with the Appropriate Authority
3. The agreement is made on account of natural love and affection:
4. The parties to the agreement stand in near relation to one another.

At this point, an interesting question comes to mind - Can a stranger to a contract sue on a contract?
A stranger to a contract is a person who is not a party to the contract and so he cannot go to court to enforce it. However, if a stranger is a party to the contract, he can sue to enforce it. For example: There is an agreement between Anil, Billu and Chand, where Anil pays money to Billu to deliver to Chand. In this case, Chand can enforce the agreement even though he did not pay any part of the consideration.

Therefore, the next question is - What are the exceptions to the rule that a stranger to the contract cannot sue upon it ? The exceptions are as follows :

1. An agreement to create a trust can be enforced by the beneficiary;
2. A party to a contract can transfer his rights under the contract to third parties. For example : A bearer cheque drawn on an individual can be transferred to any person he wishes.
3. In case of family disputes settled by mutual agreement, where the terms of settlement are written down in a document, such Family Settlements can be enforced by those persons who were not original parties to the settlement.

It may be noted that except for the three exceptions mentioned above, a contract does not give any right upon a person who is not a party to the contract.

Now, let us appreciate that we are all in the Computerized Environment. Therefore, Offers, Acceptances and Contracts can be electronically performed. Such e-contracts are paperless in the electronic form-made, communicated, executed, deployed through software systems. All the essential elements of contract are satisfied but in order to give it the legal validity, The Information Technology Act,2000 has laid regulations for such e-contracts. It requires the parties to the contract to obtain Digital Signatures from the Competent Authority and affix the digital signature instead of the conventional manual signature. Digital Signatures are legally valid and cannot be denied as the signature is in digital form and delivered electronically. In this case, the lawful process of negotiation, acceptance of the terms and the final Contract is through E-mails which are valid in law.

## 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.

Sale of Goods Act, 1930
Let us recapitulate - The difference between a Condition and a Warranty .
Sec. 12 of the Sale of Goods Act defines conditions and warranties.
In a Contract of Sale, the terms or the stipulations laid, with reference to purchase and sale of goods, can be conditions or warranties.
We must understand that, a Condition is a stipulation which is Essential to the main objective/purpose of the contract. Any breach/violation of such condition/s may call for repudiation of the contract.

On the other hand, a Warranty is also a stipulation but such stipulation is Collateral to the main objective/purpose of the contract. Any breach/violation of such warranty may call for Claim for damages, but the contract can neither be repudiated nor can the goods be rejected.

So, we understand that both Condition and Warranty are terms/stipulations laid in a Contract of Sale, but whether the terms/stipulations are conditions or stipulations, depends on how the terms are laid, meant and construed to be understood in the contract. In many cases it is seen that a term in a contract is called as warranty but is actually a condition laid and such interpretations are left for the courts to decide.

Sec. 11 of the Sale of Goods Act, lays that a stipulation as to time of payment, must not be deemed as conditions unless the terms of contract throws some indication to such intentions. Both conditions and warranties can be indicated in writing or may be implied on case to case basis, depending on the terms of the contract.

Suppose a contract of sale specifies a condition that goods sold shall be repaired at the premises of the buyer. This condition can be waived by the buyer who decides to carry the goods to the repair shop himself for repairs. In such a case the condition can be treated as a warranty. A buyer may even decide to treat a breach of condition as a breach of warranty and in such cases the buyer cannot repudiate or reject the goods but can accept the goods and sue for damages suffered.



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 are placing some MCQs \& Conventional questions in Permutations \& Combinations of Mathematics part
Q1.
There are 12 points in a plane out of which 5 are collinear. The number of triangles formed by the points as vertices is:
(a) 185
(b) 210
(c) 220
(d) 175

Q2.
The number of combination of $n$ distinct objects taken $r$ at a time be $x$ is given by:
(a) ${ }^{n / 2} C_{r}$
(b) ${ }^{n / 2} C_{r / 2}$
(c) ${ }^{n} C_{r / 2}$
(d) ${ }^{n} C_{r}$

Q3.
Four dice are rolled. The number of possible outcomes in which at least one dice show 2 is:
(a) 1296
(b) 671
(c) 625
(d) 585

Q4.
If repetition of the digits is allowed, then the number of even natural numbers having three digits is:
(a) 250
(b) 350
(c) 450
(d) 550

Q5.
The number of ways in which 8 distinct toys can be distributed among 5 children is:
(a) $5^{8}$
(b) $8^{5}$
(c) ${ }^{8} P_{5}$
(d) ${ }^{5} P_{5}$


Q6.
The value of $P(n, n-1)$ is
(a) $n$
(b) $2 n$
(c) $n!$
(d) $2 n!$

Q7.
In how many ways can 4 different balls be distributed among 5 different boxes when any box can have any number of balls?
(a) $5^{4}-1$
(b) $5^{4}$
(c) $4^{5}-1$
(d) $4^{5}$

Q8.
The number of ways of painting the faces of a cube with six different colors is:
(a) 1
(b) 6
(c) 6 !
(d) None of these

Q9.
6 men and 4 women are to be seated in a row so that no two women sit together. The number of ways they can be seated is
(a) 604800
(b) 17280
(c) 120960
(d) 518400

Q10.
The number of ways can the letters of the word ASSASSINATION be arranged so that all the $S$ are together is:
(a) 152100
(b) 1512
(c) 15120
(d) 151200

Q11.
If repetition of the digits is allowed, then the number of even natural numbers having three digits is:
(a) 250
(b) 350
(c) 450
(d) 550

Q12.
Let $T n$ denote the number of triangles which can be formed using the vertices of a regular polygon on $n$ sides. If $T_{n+1}-T_{n}=$
21, then $n$ equals
(a) 5
(b) 7
(c) 6
(d) 4

Q13.
How many ways are here to arrange the letters in the word GARDEN with the vowels in alphabetical order?
(a) 120
(b) 240
(c) 360
(d) 480

Q14.
How many factors are $2^{5} \times 3^{6} \times 5^{2}$ are perfect squares
(a) 24
(b) 12
(c) 16
(d) 22

Q15.
A student is to answer 10 out of 13 questions in an examination such that he must choose at least 4 from the first five questions. The number of choices available to him is
(a) 40
(b) 196
(c) 280
(d) 346

Q16.
From 7 gentlemen and 4 ladies a committee of 5 is to be formed. In how many ways can this be done to include at least one lady?
Q17.
In how many ways can 5 boys and 7 girls be arranged in a row so that all the 5 boys are together?
Q18.
In how many ways can the letters of the word SIGNAL be arranged so that the vowels occupy only the odd places?

```
Answer: 1. (b) }21
Hint:
Total number of triangles that can be formed with 12 points (if none of them are collinear)
\(={ }^{12} C_{3}\)
(this is because we can select any three points and form the triangle if they are not collinear)
With collinear points, we cannot make any triangle (as they are in straight line).
Here 5 points are collinear. Therefore we need to subtract \({ }^{5} C_{3}\) triangles from the above count.
Hence, required number of triangles \(={ }^{12} C_{3}-{ }^{5} C_{3}=220-10=210\)
Answer: 2.(d) \({ }^{n} C_{r}\)
Hint:
The number of combination of \(n\) distinct objects taken \(r\) at \(a\) time be \(x\) is given by
\({ }^{n} C_{r}=n!/\{(n-r)!\times r!\}\)
Let the number of combination of \(n\) distinct objects taken \(r\) at a time be \(x\).
```

Now consider one of these $n$ ways. There are e objects in this selection which can be arranged in $r$ ! Ways. So, each of the $x$ combinations gives rise to $r!$ Permutations. So, $x$ combinations will give rise to $x \times(r!)$. Consequently, the number of permutations of $n$ things, taken $r$ at a time is $x \times(r!)$ and it is equal to ${ }^{n} P_{r}$ So, $x \times(r!)={ }^{n} P_{r}$
$\Rightarrow x \times(r!)=n!/(n-r)!$
$\Rightarrow x=n!/\{(n-r)!\times r!\}$
$\Rightarrow{ }^{n} C_{r}=n!/\{(n-r)!\times r!\}$
Answer: 3. (b) 671
Hint:
No. of ways in which any number appearing in one dice $=6$
No. of ways in which 2 appear in one dice $=1$
No. of ways in which 2 does not appear in one dice $=5$
There are 4 dice.
Getting 2 in at least one dice $=$ Getting any number in all the 4 dice - Getting not 2 in any of the 4 dice.
$=(6 \times 6 \times 6 \times 6)-(5 \times 5 \times 5 \times 5)$
$=1296-625$
= 671
Answer: 4. (c) 450
Hint:
In a 3 digit number, 1st place can be filled in 5 different ways with ( $0,2,4,6,8$ )
10th place can be filled in 10 different ways.
100th place can be filled in 9 different ways.
So, the total number of ways $=5 \times 10 \times 9=450$
Answer: 5. (a) $5^{8}$
Hint:
Total number of toys $=8$
Total number of children $=5$
Now, each toy can be distributed in 5 ways.
So, total number of ways $=5 \times 5 \times 5 \times 5 \times 5 \times 5 \times 5 \times 5$
$=5^{8}$
Answer: 6. (c) n!
Hint:
Given,
Given, $P(n, n-1)$
$=n!/\{(n-(n-1)\}$
$=n!/(n-n+1)\}$
$=n!$
So, $P(n, n-1)=n!$
Answer: 7. (b) $5^{4}$
Hint:
Here, both balls and boxes are different.
Now, 1st ball can be placed into any of the 5 boxes.
2nd ball can be placed into any of the 5 boxes.
3rd ball can be placed into any of the 5 boxes.
4th ball can be placed into any of the 5 boxes.
So, the required number of ways $=5 \times 5 \times 5 \times 5=5^{4}$

## Answer: 8. (a) 1

Hint:


Since the number of faces is same as the number of colors,
therefore the number of ways of painting them is 1
Answer: 9. (a) 604800
Hint:
6 men can be sit as
$\times M \times M \times M \times M \times M \times M \times$
Now, there are 7 spaces and 4 women can be sit as ${ }^{7} P_{4}={ }^{7} P_{3}=7!/ 3!=(7 \times 6 \times 5 \times 4 \times 3!) / 3!$
$=7 \times 6 \times 5 \times 4=840$
Now, total number of arrangement $=6!\times 840$
$=720 \times 840$
$=604800$
Answer: 10. (d) 151200
Hint:
Given word is : ASSASSINATION
Total number of words $=13$
Number of A:3
Number of $S: 4$
Number of I: 2
Number of $\mathrm{N}: 2$

Number of $\mathrm{T}: 1$
Number of $0: 1$
Now all $S$ are taken together. So it forms a single letter.
Now total number of words $=10$
Now number of ways so that all S are together $=10!/(3!\times 2!\times 2!)$
$=(10 \times 9 \times 8 \times 7 \times 6 \times 5 \times 4 \times 3!) /(3!\times 2 \times 2)$
$=(10 \times 9 \times 8 \times 7 \times 6 \times 5 \times 4) /(2 \times 2)$
$=10 \times 9 \times 8 \times 7 \times 6 \times 5$
$=151200$
So total number of ways $=151200$
Answer: 11. (c) 450
Hint:
In a 3 digit number, 1st place can be filled in 5 different ways with ( $0,2,4,6,8$ )
10th place can be filled in 10 different ways.
100th place can be filled in 9 different ways.
So, the total number of ways $=5 \times 10 \times 9=450$
Answer: 12. (b) 7
Hint:
The number of triangles that can be formed using the vertices of a regular polygon $={ }^{n} C_{3}$
Given, $T_{n+1}-T_{n}=21$
$\Rightarrow{ }^{n+1} C_{3}-{ }^{n+1} C_{3}=21$
$\Rightarrow{ }^{n} C_{2}+{ }^{n} C_{3}-{ }^{n} C_{3}=21\left\{\right.$ since $\left.{ }^{n+1} C_{r}={ }^{n} C_{r-1}+{ }^{n} C_{r}\right\}$
$\Rightarrow{ }^{n} C_{2}=21$
$\Rightarrow n(n-1) / 2=21$
$\Rightarrow n(n-1)=21 \times 2$
$\Rightarrow n^{2}-n=42$
$\Rightarrow n^{2}-n-42=0$
$\Rightarrow(n-7) \times(n+6)=0$
$\Rightarrow n=7,-6$
Since $n$ cannot be negative,
So, $n=7$
Answer: 13. (c) 360
Hint:
Given word is GARDEN.
Total number of ways in which all letters can be arranged in alphabetical order $=6$ !
There are 2 vowels in the word GARDEN A and E.
So, the total number of ways in which these two vowels can be arranged $=2$ !
Hence, required number of ways $=6!/ 2!=720 / 2=360$
Answer: 14. (a) 24
Hint:
Any factors of $2^{5} \times 3^{6} \times 5^{2}$ which is a perfect square will be of the form $2^{a} \times 3^{b} \times 5^{c}$
where a can be 0 or 2 or 4 , So there are 3 ways
$b$ can be 0 or 2 or 4 or 6 , So there are 4 ways
a can be 0 or 2 , So there are 2 ways
So, the required number of factors $=3 \times 4 \times 2=24$
Answer: 15. (b) 196
Hint:
There are two cases

1. When 4 is selected from the first 5 and rest 6 from remaining 8

Total arrangement $={ }^{5} \mathrm{C}_{4} \times{ }^{8} \mathrm{C}_{6}$
$={ }^{5} C_{1} \times{ }^{8} C_{2}$
$=5 \times(8 \times 7) /(2 \times 1)$
$=5 \times 4 \times 7$
$=140$
2. When all 5 is selected from the first 5 and rest 5 from remaining 8

Total arrangement $={ }^{5} C_{5} \times{ }^{8} C_{5}$
$=1 \times{ }^{8} C_{3}$
$=(8 \times 7 \times 6) /(3 \times 2 \times 1)$
$=8 \times 7$
$=56$
Now, total number of choices available $=140+56=196$

## Answer: 16

Hint:
Possible cases of formation of a committee are:
(i) 1 lady and 4 gentlemen
(ii) 2 ladies and 3 gentlemen
(iii) 3 ladies and 2 gentlemen
(iv) 4 ladies and 1 gentleman

From (i), 1 lady can be selected out of 4 ladies in $4 c_{1}$ ways and 4 gentlemen can be selected from 7 gentlemen in $7 c_{4}$ ways. Now each way of selecting lady can be associated with each way of selecting gentlemen. So 1 lady and 4 gentlemen can be selected in $4 c_{1} \times 7 c_{4}$ ways.

## Similarly,

Case (ii) can be selected in $4 c_{2} \times 7 c_{s}$ ways.
Case (iii) can be selected in $4 c_{s} \times 7 c_{2}$ ways.
Case (iv) can be selected in $4 c_{4} \times 7 c_{1}$ ways.
Hence the total number of selection in each case of which at least one lady is included
$=4 c_{1} \times 7 c_{4}+4 c_{2} \times 7 c_{s}+4 c_{5} \times 7 c_{2}+4 c_{4} \times 7 c_{1}$
$4 \times 35+6 \times 35+4 \times 21+1 \times 7=441$

## Answer: 17

Hint:
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 $8!\times 5!=(8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2) \times(5 \times 4 \times 3 \times 2)=$ 4838400

## Answer: 18

Hint:
Number of letters in SIGNAL is 6 so there are 3 odd places namely first, third and fifth.
Vowels are only 2 . The number of ways in which 2 vowels can occupy 3 places is $3 p_{2}$ For each such way the remaining 4 places are to be occupied by 4 remaining consonants. This can be achieved in 4! Different ways. Theses vowels can also be arranged themselves in two ways.
Hence the required arrangements are $3 p_{2} \times 4!\times 2=288$
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
Best Wishes


## (D) $\stackrel{D}{\square} \sqrt{\Delta} \rightarrow \square \rightarrow \Delta \Delta \square$



## Advice

## ABOUT YOUR STUDIES - FOUNDATION COURSE

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

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


Appear For Examination
FINISHED

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 ebulletin everything that you want it to be.

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## Message from

 Directorate of StudiesDear 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.

## GOOD LUCK



Be Prepared and Get Success:

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## THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

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## Few Snupshots



Glimpses of the Child Literacy Program organised by the Institute to commemorate Azadi Ka Amrit Mahotsav on 24.09.2021 at CMA Bhawan, New Delhi.


Glimpses of Swachhta Abhiyan program organised by the Institute to commemorate Azadi Ka Amrit Mahotsav on 01.10.2021 at CMA Bhawan, New Delhi.


CMA (Dr.) Ashish P. Thatte, Chairman, Corporate Laws Committee along with CMA Neeraj D. Joshi, Chairman, Management Accounting Committee extending greetings to Shri Narayan Tatu Rane, Hon'ble Union Minister for Micro, Small and Medium Enterprises on 2nd August, 2021


CMA P. Raju Iyer, Vice-President along with CMA Neeraj Joshi, Council Member of the Institute and CMA B.B. Goyal, Former Addl. Chief Adviser (Cost), Ministry of Finance, GoI, extending greetings to Shri Arun Goel, IAS, Secretary to the Government of India, Ministry for Heavy Industries during a meeting on 1st October, 2021 to submit a detailed representation relating to Cost Audit in the notified PLI Scheme for Automotives and Auto Components.


CMA P. Raju Iyer, Vice President along with CMA Chittaranjan Chattopadhyay, Chairman BFSI Board \& Indirect Taxation Committee of the Institute and CMA B.B. Goyal, Advisor, ICWAI MARF \& Former Addl. Chief Adviser (Cost), Ministry of Finance, GoI extending greetings to CMA (Dr.) Manoj Anand, Whole Time Member (Finance), Pension Fund Regulatory and Development Authority (PFRDA) on 25.08.2021.

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