

UNIT-I

What is Communication?

*it is the process of sharing information through informal conversations, discussions, presentation, phone calls, teleconferencing,

Netsurfing ,chatting etc.

*it is an exchange of meaning and understanding

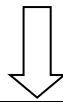
*it is not complete unless the message is decoded and understood by the receiver.

STAGES OF COMMUNICATION:

There are 5 stages:

1. Ideation

Sender has idea

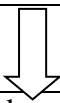


2.Encoding

Sender convert the idea into words/gestures

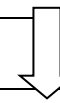
3. Transmission

Message travels over channel



4. Decoding

Receiver decodes message



5.Feedback

Receiver response

QUESTION TAG

In grammar, a **question tag** is a very short clause at the end of a statement which changes the statement into a question.

For example, in 'She said half price, didn't she?', the words 'didn't she' are a question tag.

What are Question Tags?

- Negative **question tag**. If the main sentence is positive, the **question tag** should be negative. ...
- Positive **question tag**. If the main sentence is negative, the **question tag** should be positive. ...
- **Question tags** with auxiliary verb. ...
- **Question tags** without auxiliary verb.

Examples of how question tags are used.

- You haven't seen this film, have you? ...
- She's a doctor, isn't she? ...
- He isn't here, is he? ...
- I don't need to finish this today, do I? ...
- Jenni eats cheese, doesn't she? ...
- The bus stop's over there, isn't it? ...
- They could hear me, couldn't they? ...
- I'm never on time, am I?

The two basic rules about tag questions are:

- If the statement is **negative**, the tag must be **positive**. If the statement is **positive** the tag must be **negative**. ...
- The tense of the tag is determined by the tense of the auxiliary/modal verb of the statement that precedes it.

GERUND AND INFINITIVES

- **Gerunds** and **infinitives** can replace a noun in a sentence.
- **Gerund** = the present participle (-ing) form of the verb, e.g., singing, dancing, running.
- **Infinitive** = to + the base form of the verb, e.g., to sing, to dance, to run.
- Whether you use a **gerund** or an **infinitive** depends on the **main verb** in the sentence.
- I expect to have the results of the operation soon. (Infinitive)
- I anticipate having the research completed eventually. (Gerund)
- **Gerunds** can be used after certain verbs including enjoy, fancy, discuss, dislike, finish, mind, suggest, recommend, keep, and avoid.

1) After prepositions of place and time.

I made dinner before getting home.

He looked unhappy after seeing his work schedule.

2) To replace the subject or object of a sentence

Lachlan likes **eating** coconut oil.

Jumping off a cliff is dangerous, but a real thrill.

- **Infinitives** can be used after certain verbs including agree, ask, decide, help, plan, hope, learn, want, would like, and promise.

1) After many adjectives:

It is hard to make dinner this late.

I find it difficult to describe my feelings about writing research essays.

2) To show purpose:

I left for Russia to study Russian.

I came to the office to solve the mystery of the missing keys.

Difference between Infinitives and Gerunds

Gerund – a verb in its present participle form (-ing) which acts as a noun in a sentence.

example – "Stop smoking."

Infinitive – a verb in its base form precede by the word "to".

example – "Stop to smoke."

SPOTTING THE ERRORS

Spotting errors are asked in verbal reasoning. You need to **spot** sentences and **error** which are grammatically incorrect. This **error** can be anything. From noun to pronoun to singular/plural to word usage they can be anything.

How do use spotting the errors in sentence?

1. Always read the entire **sentence**.
2. When looking for the **error**, examine each choice individually.
3. **Check** verbs and pronouns first, since they're the most likely to include **errors**.
4. When an answer choice contains more than one type of word, **check** both.

Preparation Tips to Solve Spotting Errors Questions

1. Practice with previous year's papers and mock tests. ...
2. Improve your grammar with the help of reference books. ...
3. **Check** for spelling **mistakes** while attempting the questions. ...
4. During the exam, you should read the complete sentence carefully. ...
5. Do not panic during the exam.

Tips for learning English: an error correction diary

1. What you said or wrote originally.
2. The correct way to say or write it instead. (For higher level students, what you say might be correct but not very natural or efficient so you can still improve your **English** by finding a better way to say it.)
3. Why it's a mistake.

English Grammar Editing Error Correction

1. 'The' will come before superlative degree. ...
2. 'ing form of verb' after 'for/before/of'
3. 'Main verb' will come after 'to'
4. '3rd form of verb(participle)' will come after had,have,has. ...
5. Much is used for uncountable noun.

Vocabulary

noun, plural **vo·cab·u·lar·ies**.

the stock of words used by or known to a particular people or group of persons:His French vocabulary is rather limited. The scientific vocabulary is constantly growing.

a list or collection of the words or phrases of a language, technical field, etc., usually arranged in alphabetical order and defined:Study the vocabulary in the fourth chapter.

the words of a language.

any collection of signs or symbols constituting a means or system of nonverbal communication:vocabulary of a computer.

any more or less specific group of forms characteristic of an artist, a style of art, architecture, or the like.

Preposition

A preposition is an important part of the English language. It is used to show a relationship between a noun or pronoun in a sentence and another word in the sentence. A preposition must always be followed by a noun or pronoun in a sentence. It can never be followed by a verb.

There are many preposition examples that will make it easy to understand how the parts of a sentence fit together and how the rules apply when it comes to using a preposition in a sentence.



Examples of Prepositions

There are five different types of prepositions:

- Simple prepositions
- Double prepositions
- Compound prepositions
- Participle prepositions
- Phrase prepositions

Simple Prepositions

Simple prepositions are words like **at**, **for**, **in**, **off**, **on**, **over**, and **under**. These common prepositions can be used to describe a location, time or place.

Some examples of simple

preposition used in sentences are:

- He sat on the chair.
- There is some milk in the fridge.
- She was hiding under the table.
- The cat jumped off the counter.
- He drove over the bridge.
- She lost her ring at the beach.
- The book belongs to Anthony.
- They were sitting by the tree.
- We are running in the gym today.
- The sun is above the clouds.
- She lives near her workplace.
- She drew the picture with a crayon.
- He swam at the lake.
- I walked down the street.
- We located the key for the lock.
- The car went through the tunnel.
- I got a package from a friend.
- I have liked that song since 1999.
- She put the flowers by the window.
- The food was placed on the table.

Double Prepositions

Double prepositions are two simple prepositions used together, often indicating direction. Some examples are **into, upon, onto, out of, from within**.

- Once upon a time, there was a beautiful princess.
- The baby climbed onto the table.
- It is up to us to find the answer.
- The loud noise came from within the stadium.
- She never leaves without her phone.
- The bird sat atop the oak tree.
- The caterpillar turned into a butterfly.
- I was unable to get out of the appointment.

Compound Prepositions

Compound prepositions (or complex prepositions) consist of two or more words, usually a simple preposition and another word, to convey location. Some examples are **in addition to, on**

behalf of, and in the middle of.

- She sat across from Marie.
- I attended the meeting on behalf of my company.
- We were in the middle of the storm.
- He has gym class in addition to his regular classes today.
- He picked up the penny from beneath the couch.
- Aside from singing, she also plays the piano at the bar.
- My car is parked in front of the mailbox.
- The weather will be good this weekend according to Tom.

Participle Prepositions

Participle prepositions have endings such as -ed and -ing. Examples are words such as **considering, during, concerning, provided**

- She is interested in anything concerning horses.
- He works one job during the day and another at night.
- The dog kept following him home.
- All the neighbors were there including the new one.
- The principal was asking questions regarding her behavior.
- Considering his age, he did a great job.
- He was frustrated at the situation.
- The teacher said no talking during class.

Phrase Prepositions

Phrase prepositions include a preposition, an object, and the object's modifier. Examples include phrases like **on time, at home, before class, and on the floor.**

- I will get to the conference on time.
- The baseball game was canceled after the heavy rain.
- John found his homework under the bed.
- The children loved the gifts from their grandparents.
- He succeeded with a little help.
- We met to discuss the project before class.
- She left muddy footprints on the clean floor.
- According to his wishes, his funeral will be private.

Using Prepositions

Prepositions are words that show relationships. A sentence would not make sense without the use of a preposition. There are different types of prepositions used in the English language that not only add detail but make a sentence complete. Prepositions are used to show location, time, direction, cause and possession.

Articles

What Are Articles?

Articles are words that define a noun as specific or unspecific. Consider the following examples:

Eg: After the long day, the cup of tea tasted particularly good.

By using the article the, we've shown that it was one specific day that was long and one specific cup of tea that tasted good.

Eg: After a long day, a cup of tea tastes particularly good.

By using the article a, we've created a general statement, implying that any cup of tea would taste good after any long day.

English has two types of articles: definite and indefinite .

The Definite Article

The definite article is the word **the**. It limits the meaning of a noun to one particular thing. For example, your friend might ask, "Are you going to **the** party this weekend?" The definite article tells you that your friend is referring to a specific party that both of you know about. The definite article can be used with singular, plural, or uncountable nouns. Below are sample example of the definite article the used in context:

Eg: Please give me the hammer.

Eg: Please give me the red hammer; the blue one is too small.

Eg: Please give me the nail.

Eg: Please give me the large nail; it's the only one strong enough to hold this painting.

Eg: Please give me the hammer and the nail.

The Indefinite Article

The indefinite article takes two forms. It's the word *a* when it precedes a word that begins with a consonant. It's the word *an* when it precedes a word that begins with a vowel. The indefinite article indicates that a noun refers to a general idea rather than a particular thing. For example, you might ask your friend, "Should I bring a gift to the party?" Your friend will understand that you are not asking about a specific type of gift or a specific item. "I am going to bring an apple pie," your friend tells you. Again, the indefinite article indicates that she is not talking about a specific apple pie. Your friend probably doesn't even have any pie yet. The indefinite article only appears with singular nouns. Consider the following examples of indefinite articles used in context:

Eg: Please hand me a book; any book will do.

Eg: Please hand me an autobiography; any autobiography will do.

Exceptions: Choosing A or An

There are a few exceptions to the general rule of using *a* before words that start with consonants and *an* before words that begin with vowels. The first letter of the word *honor*, for example, is a consonant, but it's unpronounced. In spite of its spelling, the word *honor* begins with a vowel sound. Therefore, we use *an*. Consider the example sentence below for an illustration of this concept.

Incorrect: My mother is a honest woman.

Correct: My mother is an honest woman.

Similarly, when the first letter of a word is a vowel but is pronounced with a consonant sound, use *a*, as in the sample sentence below:

Incorrect: She is an United States senator.

Correct: She is a United States senator.

This holds true with acronyms and initialisms, too: **an** LCD display, **a** UK-based company, **an** HR department, **a** URL.

Article Before an Adjective

Sometimes an article modifies a noun that is also modified by an adjective. The usual word order is article + adjective + noun. If the article is indefinite, choose a or an based on the word that immediately follows it. Consider the following examples for reference:

Correct: Eliza will bring a small gift to Sophie's party.

Correct: I heard an interesting story yesterday.

Indefinite Articles with Uncountable Nouns

Uncountable nouns are nouns that are either difficult or impossible to count. Uncountable nouns include intangible things (e.g., information, air), liquids (e.g., milk, wine), and things that are too large or numerous to count (e.g., equipment, sand, wood). Because these things can't be counted, you should never use **a** or **an** with them—remember, the indefinite article is only for singular nouns. Uncountable nouns can be modified by words like some, however. Consider the examples below for reference:

Incorrect: Please give me a water.

Water is an uncountable noun and should not be used with the indefinite article.

Correct: Please give me some water.

However, if you describe the water in terms of countable units (like bottles), you can use the indefinite article.

Correct: Please give me a bottle of water.

Incorrect: Please give me an ice.

Correct: Please give me an ice cube.

Correct: Please give me some ice .

Note that depending on the context, some nouns can be countable or uncountable (e.g., hair, noise, time):

Correct: We need a light in this room.

Correct: We need some light in this room.

Using Articles with Pronouns

Possessive pronouns can help identify whether you're talking about specific or nonspecific items. As we've seen, articles also indicate specificity. But if you use both a possessive pronoun and an article at the same time, readers will become confused. Possessive pronouns are words like his, my, our, its, her, and their. Articles should not be used with pronouns. Consider the examples below.

Incorrect: Why are you reading the my book?

The and my should not be used together since they are both meant to modify the same noun. Instead, you should use one or the other, depending on the intended meaning:

Correct: Why are you reading the book?

Correct: Why are you reading my book?

Omission of Articles

Occasionally, articles are omitted altogether before certain nouns. In these cases, the article is implied but not actually present. This implied article is sometimes called a "zero article." Often, the article is omitted before nouns that refer to abstract ideas. Look at the following examples:

Incorrect: Let's go out for a dinner tonight.

Correct: Let's go out for dinner tonight.

Incorrect: The creativity is a valuable quality in children.

Correct: Creativity is a valuable quality in children.

Many languages and nationalities are not preceded by an article. Consider the example below:

Incorrect: I studied the French in high school for four years.

Correct: I studied French in high school for four years.

Sports and academic subjects do not require articles. See the sentences below for reference:

Incorrect: I like to play the baseball.

Correct: I like to play baseball .

Incorrect: My sister was always good at the math .

Correct: My sister was always good at math .

One Word Substitution

One word substitution means to find a single word that describes the given definition or property. In one-word substitution questions, a definition will be given and you will be asked to choose a word for this definition from the options that are provided.

Example of One Word Substitution for A and B are as follows

- Amoral: One not concerned with right or wrong.
- Ambiguous: Capable of being understood in either of two or more possible senses and therefore not definite.
- Anarchist: One who believes in no government and therefore incites disorder in a state
- Autopsy: Dissection of a dead body to find the cause of the death.
- Archive: A place where government / public records are kept.
- Apathy: Lack of feeling.
- Burglar: A person who breaks into houses in order to steal.
- Boulevard: A broad road bordered with trees.
- Bohemian: One who does not follow the usual way of life.
- Bibliophile: One who loves books.
- Ballad: Poem in short stanza narrating a popular story.
- Bevvvy: A group of girls.

Sentence Completion

Sentence completion questions under the English language, are an important part of Competitive exams for various categories like Bank PO, MBA, CA, RRB, TOFEL, etc. These questions test the candidate's vocabulary and knowledge of the finer distinctions among words. There are some strategies that will greatly help to score on these questions. Commonly these sentences are long and difficult to follow, but with a little bit practice, one can learn to master them. Let us discuss it in detail.

Sentence Completion

Sentence completions test the skill to use the information observed in complex and incomplete sentences in order to correctly complete them. It tests a candidate's vocabulary power and skill to follow the logic of sentences. These sentences are often quite complex.

Types:

There are possibly four types of sentence completions:

Restatement: Containing words such as namely, in other words, in fact, that is, etc.

Example: The pickpocket was a trickster, in other words, a _____. Here answer will be knave or scoundrel, which restates "trickster,"

Comparison: Containing the words such as likewise, similarly, and, just as, as like as, etc.

Example: Jack was cleared of all charges; similarly, Jill was _____.

Here we have to compare 'cleared of all charges' with the suitable word, and hence vindicated is the answer.

Contrast: Containing the words such as though, although, however, despite, but, yet, on the other hand, but, however, despite, or, on the contrary, etc.

Example: Although the tiger is a solitary beast, its cousin the lion is a _____ wild animal.

Here answer should be in contrast with "solitary". Therefore, gregarious or sociable are possible answers.

Cause and effect: Containing words such as this, therefore, consequently, because of, etc. Also contains phrases such as due to, as a result, leads to, etc.

Example: A truck stole her parking spot; consequently, Rocky's _____ look showed her displeasure.

Here answer should be to find the cause for someone to steal. Therefore answer may be scowling or sullen.

Suitable Approaches for Sentence Completion:

A good vocabulary can be a great help for such sentence completion. Although we can use many approaches for such type of questions, even without knowing all the choices. Some of them are as follows.

1. Read the Sentence:

Use the sentence clues by reading thoroughly. The question may be difficult due to difficult words and the structure of the sentence. One has to dissect the sentence to figure out what fits best, otherwise one cannot crack the question though knowing the word meanings.

2. Hints:

The hints given may indicate what should go into the blank for the meaningful sentence. Here's a test to locate the right hint. If we change the hint, then the choice in the blank must change. We can check the hint by putting that word or phrase into the blank itself.

3. Pluses and Minuses:

Once we find the word clues, indicate the kind of word we are now looking for with positive meaning or negative meaning. Also, to indicate synonyms or antonyms, we can use these symbols.

4. Structure Words:

See and try for words like but, rather, although, however, and, while, but, therefore, etc.

These may reveal the sentence organization and the relationship between hint and blank. They tell about kinds of words to look for as they change the thought process in the sentence.

5. Visualize:

Before going for the choices, think of the possible words for the blanks. It will save us from wrong choices. If we know roughly the type of words required, the process of elimination becomes much easier. The word we see doesn't have to be fancy and a general idea is fine.

6. Elimination:

Ruling out the wrong choices is now easy. But remember that words have to fit in the given order for the correct answer. If one word is a perfect choice without making sense, then the answer is incorrect. Don't rule out choices if don't know their meanings. If doubts are there, leave it and return to other choices.

7. Working Backwards:

The two-blank questions can be easier as we have more opportunities to eliminate wrong choices. If we can eliminate a choice based on one word, we don't need to know the other word. Often, working I backtracking way works better.

Solved Example on Sentence Completion

Q.1: Suresh's skin was _____ to burn if he spent too much time in the sun.

- (i) Prone
- (ii) Eminent
- (iii) Erect
- (iv) Daunted

Answer: Prone is the correct answer which is an adjective. Its meaning is – a tendency or inclination to something.

Q.2: The Security officer _____ the crowd to step back from the fire to avoid any mishappening.

- (i) Undulated
- (ii) Enjoined
- (iii) Stagnated
- (iv) Delineated

Answer: Enjoined is the correct answer which is a verb. Its meaning is to issue an order or command with authority.

UNIT - II

Numerical Aptitude :

Numerical Ability Tests. The first type of numerical ability test covers basic arithmetic (addition, subtraction multiplication and division), number sequences and simple mathematics (percentages, powers, fractions, etc). This type of test can be categorized as a speed test and is used to determine your basic numeracy.

Problems on numbers:

A word problem is a mathematical exercise where significant background information on the problem is presented as text rather than in mathematical notation.

1. A number is much greater than 36 as is less than 86 . Find the greater number.

Let number be x

$$x-36= 86-x$$

$$x+x=86+36$$

$$2x=122$$

$$X=122/2$$

$$X=61$$

2. Find a number such that when 15 is subtracted from 7 times the number , the result is 10 more than twice the number .

Let number be x

$$7x-15 = 10+ 2x$$

$$7x-2x= 10+15$$

$$5x = 25$$

$$X=25/ 5$$

$$X=5$$

3. The Sum of rational number and its reciprocal is $\frac{13}{6}$ find the number.

Let number be x

$$X + \frac{1}{x} = \frac{13}{6}$$

$$\frac{x * x}{1 * xx} + \frac{1}{6} = \frac{13}{6}$$

$$\frac{x^2 + 1}{x} = \frac{13}{6}$$

$$6(x^2 + 1) = 13x$$

$$6x^2 + 6 = 13x$$

$$6x^2 - 13x + 6 = 0$$

$$6x^2 - 9x - 4x + 6 = 0$$

$$3x(2x - 3) - 2(2x - 3) = 0$$

$$(3x - 2)(2x - 3) = 0$$

$$(3x - 2) = 0 \quad (2x - 3) = 0$$

$$3x = 2 \quad 2x = 3$$

$$X = \frac{2}{3} \quad x = \frac{3}{2}$$

So required number is $\frac{2}{3}$ or $\frac{3}{2}$

4. If the sum two numbers is 31 and their product is 240, then find the absolute difference between the numbers

Let two numbers be x and y

We are given that,

sum of two numbers $x + y = 31$ and product $= xy = 240$

Therefore, $x - y = (x + y)^2 - 4xy$

Substituting the values, $x - y = (31)^2 - 4 \times y$

$$= 961 - 960$$

= 1 The required difference between the numbers is 1.

PROBLEMS ON AGES:

Problem on ages can be categorized into three types, Questions based on calculating the present age, Questions to determine the age of person after X years and questions that calculate age of a person before X years. These three types may cover cases of various types with different combination of ratios, fractions etc

If the current age of a person be X,

then - age after n years = $X + n$

Age n years ago = $X - n$

1. Ravi's age after 15 years will be 5 times his age 5 years back. What is the present age of Rajeev?

Let Ravi's age be X

Ravi age after 15 years = $(x+15)$

Ravi age 5 years back = $(x-5)$

$$X + 15 = 5[x-5]$$

$$X + 15 = 5x - 25$$

$$5x - x = 15 + 25$$

$$4x = 40$$

$$X = 40/4$$

$$X = 10 \rightarrow \text{Present age of Ravi}$$

2. The age of two persons differ by 16 years if 6 years ago, the elder one be 3 times as old as the younger one find their present age?

Let younger age be x Years

Elder person = $X + 16$

So 6 years ago, elder person be 3 times as old as younger one .

$$X+16-6 = 3[X-6]$$

$$X+16-6 = 3x-18$$

$$X+10 = 3X-18$$

$$10+18 = 3X-X$$

$$28 = 2X$$

$$X=28/2$$

$$X=14$$

Present age be 14 \rightarrow younger

$$\text{Elder be } [x+16] = 14+16$$

Elder = 30 years.

3. Rahul is 15 years elder than Rohan. If 5 years ago, Rahul was 3 times as old as Rohan, then find Rahul's present age.

Let age of Rohan be Y

Rahul is 15 years elder than Rohan = $(y + 15)$.

So Rahul's age 5 years ago = $(y + 15 - 5) 3$

Rohan's age before 5 years = $(y - 5)$ 5 years ago,

Rahul is 3 times as old as Rohan

$$(y + 15 - 5) = 3 (y - 5)$$

$$(y + 10) = (3y - 15)$$

$$2y = 25$$

$$y = 12.5$$

Rohan's age = 12.5 years

$$\text{Rahul's age} = (y + 15) = (12.5 + 15) = 27.5 \text{ years}$$

PERCENTAGE:

In mathematics, a percentage is a number or ratio expressed as a fraction of 100. It is often denoted using the percent sign, "%".

- 1) Y % is expressed as $\frac{Y}{100}$
- 2) To find percent of $\frac{A}{B} = \left(\frac{A}{B} * 100\right) \%$
- 3) If the price of goods increases by R %, then the **reduction** in consumption so as not to **increase the expenditure** can be calculated using the formula:

$$\left[\frac{R}{100 + R} * 100\right] \%$$

4. If the price of goods decreases by R %, then the increase in consumption so as not to decrease the expenditure can be calculated using the formula:

$$\left[\frac{R}{100 - R} * 100 \right] \%$$

5. Numerical on Population: Population of a city at present is P and it increases at the rate of R% per annum.

$$\text{To find population after } n \text{ years} = P \left[1 + \frac{R}{100} \right] n$$

$$\text{To find population } n \text{ years ago} = \frac{P}{\left(1 + \frac{R}{100} \right)^n}$$

6. Numerical on Depreciation: Present value of machine is M, If it depreciates at the rate of R% per annum

$$\text{To find value of machine after } n \text{ years} = P \left[1 - \frac{R}{100} \right] n$$

$$\text{To find the value of machine } n \text{ years ago} = P / \left[1 - \frac{R}{100} \right] n$$

1. Express in fraction

$$\text{a. } 56 \% = \frac{56}{100} = \frac{14}{25}$$

$$\text{b. } 06. \% = \frac{0.6}{100} = \frac{3}{500}$$

2. Express is decimal

$$6\% = \frac{6}{100} = 0.06$$

3. Evaluate 28 % of 450 + 45 % of 280

$$\begin{aligned} &= \left(\frac{28}{100} * 450 \right) + \left(\frac{45}{100} * 280 \right) \\ &= 126 + 126 \\ &= 252 \end{aligned}$$

4. If the sales tax be reduced from $3\left(\frac{1}{2}\right) \%$ to $3\left(\frac{1}{3}\right) \%$, then what difference does it make to a person who purchases an article with marked price of Rs. 8400 ?

$$\begin{aligned} \text{Required difference} &= \left(3\left(\frac{1}{2}\right) \% \text{ of } 8400 \right) - \left(3\left(\frac{1}{3}\right) \% \text{ of } 8400 \right) \\ &= \left[\frac{7}{2} \% \text{ of } 8400 \right] - \left[\frac{10}{3} \% \text{ of } 8400 \right] \\ &= \left(\frac{7}{2} - \frac{10}{3} \right) \% \text{ of } 8400 \\ &= \left(21 - \frac{20}{6} \right) \% \text{ of } 8400 \\ &= \frac{1}{6} * \frac{1}{100} * 8400 \end{aligned}$$

=Rs. 14

Profit and Loss

Cost Price (C.P.): Price at which an article is purchased.

Selling Price (S.P.): Price at which an article is sold

Profit/Gain: The seller is said to be in profit, if selling price (S.P.) is greater than cost price (C.P.)

Loss: The seller is said to be in loss, if selling price (S.P.) is lesser than cost price (C.P.)

$$1. \text{Gain} = \text{SP} - \text{CP}$$

$$2. \text{LOSS} = \text{CP} - \text{SP}$$

$$3. \text{GAIN \%} = \left[\text{GAIN} * \frac{100}{\text{CP}} \right] \%$$

$$4. \text{Loss \%} = \left[\text{loss} * \frac{100}{\text{cp}} \right] \%$$

$$\text{SP} = \frac{100 + \text{GAIN \%}}{100} * \text{CP}$$

$$1) \text{Profit} = (\text{S.P.}) > (\text{C.P.})$$

$$2) \text{Loss} = (\text{S.P.}) < (\text{C.P.})$$

1. A man buys an article for Rs.27.50 and sells it for rs.28.60 .Find the gain percent

$$\text{CP} = \text{Rs.}27.50$$

$$\text{SP} = \text{Rs.}28.60$$

$$\text{GAIN} = \text{SP} - \text{CP}$$

$$= 28.60 - 27.50$$

$$= 1.10$$

$$\text{.GAIN \%} = \left[\text{GAIN} * \frac{100}{\text{CP}} \right] \%$$

$$\begin{aligned} &= 1.1 * \frac{100}{27.5} \\ &= \frac{110.0}{27.5} * \frac{10}{10} \\ &= \frac{1100}{275} \\ &= 4 \% \end{aligned}$$

2. If a radio is purchased for Rs. 490 and sold for Rs. 465.50, Find the loss percentage

$$CP = \text{RS. } 490$$

$$SP = \text{RS. } 465.50$$

$$\begin{aligned} \text{LOSS} &= CP - SP \\ &= 490 - 465.50 \\ &= 24.50 \end{aligned}$$

$$\text{Loss \%} = \left(\frac{\text{loss} \times 100}{CP} \right) \%$$

$$= \left(24.50 \times \frac{100}{490} \right) \%$$

$$= \frac{245}{49} \%$$

$$= 5 \%$$

3. Find SP, when CP = Rs. 56.25, Gain = 20%

$$SP = \left(100 + \frac{\text{gain \%}}{100} \right) * CP$$

$$= \left(100 + \frac{20}{100} \right) * 56.25$$

$$= \left(\frac{120}{100} * 56.25 \right)$$

$$SP = \text{Rs. } 67.50$$

Ratio and Proportion

Ratio: - The ratio of two quantities a and b of same units is the fraction x/y

The fraction x/y can be represented as $x:y$

1. Ratio : \rightarrow 2 quantities a and b

We write it as (a/b) and $a : b$

2. Proportion : equality of two ratios if $a:b=c:d$

$A:b:c:d$

3. Fourth proportional :

a. if $a:b=c:d \rightarrow d$ is the fourth proportional to a,b,c

4. Comparison of ratios

$$(a:b) > (c:d) \rightarrow \frac{a}{b} > \frac{c}{d}$$

Compound ratio of the ratios $(a:b), (c:d), (e:f)$ is $(ace:bdf)$

5. Duplicate ratio of (a:b) = (a² : b²)

Triplicate ratio of (a:b)

$$\text{If } \frac{a}{b} = \frac{c}{d}, \text{ then } \frac{a+b}{a-b} = \frac{c+d}{c-d}$$

1. if a:b=5:9, b:c = 4:7, Find a:b:c ?

$$\begin{array}{r} a : b : c \\ 5 \quad 9 \quad 9 \\ 4 \quad 4 \quad 7 \end{array}$$

Answer 20 36 63

2. If a:b=2:3, c:d = 6:7, b:c=4:5 find a:b::c:d ?

$$\begin{array}{r} a \quad b \quad c \quad d \\ 2 \quad 3 \quad 3 \quad 3 \\ 4 \quad 4 \quad 5 \quad 5 \\ 6 \quad 6 \quad 6 \quad 7 \end{array}$$

48	72	90	105
----	----	----	-----

3. Find 4th proportional to 4,9,12

Let 4th proportional be x

$$4:9 :: 12 : x$$

$$\frac{4}{9} = \frac{12}{x}$$

$$4x = 9 \times 12$$

$$X = (9 \times 12) / 4$$

$$X = 27$$

So the 4th proportional to 4,9,12 is 27

4. Third proportional to 16 and 36

Let 3rd proportional be "x"

Then 16:36::36:x

$$\frac{16}{36} = \frac{36}{x}$$

$$16x = 36 \times 36$$

$$X = (36 \times 36) / 16$$

$$X = 81$$

The Third proportional to 16 and 36 is 81

5. A mixture contains chemical and water in the ratio 4:3 .If 5 liters of water is added to the mixture , the ratio becomes 4:5 .Find the quantity of chemical is the given mixture

Let quantity of chemical = 4X

Water = 3X

5 liter water added to the mixture

$$\left(\frac{4}{3x+5} = \frac{4}{5}\right)$$

$$4X * 5 = 4(3x+5)$$

$$20x = 12x + 20$$

$$20x - 12x = 20$$

$$8x = 20$$

$$8x = 20$$

$$X = \left(\frac{20}{8}\right)$$

$$X = 2.5$$

$$\begin{aligned} \text{So the quantity of Chemical} &= 4x = 4 * 2.5 \\ &= 10 \text{ liters} \end{aligned}$$

TIME AND WORK :

Work is always considered as an entire value or one. There exists an analogy between the time-speed-distance problems and work. Work based problems are more or less related to time speed and distance.

- Work from days: If a person can do a work in 'n' days, then person's 1 day work = 1 / n
- Days from work: If a person's 1 day work is equal to 1/n , then the person can finish the work in 'n' days.
- Number of days = $\frac{\text{Total work}}{\text{Work one in 1 day}}$

1. Worker A takes 8 hours to do a job. Worker B takes 10 hours to do the same job .How long should it take both A and B , working together but independently , to the same job?

$$\text{A's 1 hour work} = \frac{1}{8}$$

$$\text{B's 1 hour work} = \frac{1}{10}$$

$$(\text{A+B}) = \frac{1}{8} + \frac{1}{10} = \frac{8+10}{80}$$

$$= \frac{18}{80}$$

$$= \frac{9}{40}$$

So both A and B will finish the work in $\frac{40}{9} \text{ days} = 4\frac{4}{9}$

2. A and B together can complete a piece of work in 4 days .If A alone can complete the same work in 12 days , in how many days B alone complete that work?

$$A + B = \frac{1}{4}$$

$$A = \frac{1}{12}$$

$$B = \text{Total} - A$$

$$= \frac{1}{4} - \frac{1}{12}$$

$$= \frac{3-1}{12}$$

$$= \frac{2}{12}$$

$$= \frac{1}{6}$$

B alone can complete the work in 6 days.

3.A alone can do a piece of work in 6 days & B alone in 8 Days . A and B undertook to do it for Rs.3200 with the help of C, they completed the work in 3 days .How much is to be paid to C?

$$A \Rightarrow \frac{1}{6} \text{ days}$$

$$B \Rightarrow \frac{1}{8} \text{ days}$$

$$A+B+C = \frac{1}{3} \text{ Days}$$

$$\frac{1}{6} + \frac{1}{8} + C = \frac{1}{3}$$

$$\frac{(8+6)}{48} + c = \frac{1}{3}$$

$$\frac{14}{48} + c = \frac{1}{3}$$

$$C = \frac{1}{3} - \frac{7}{24}$$

$$C = \frac{8-7}{24} = \frac{1}{24}$$

$$3 \text{ Days work of C is } 3 * \frac{1}{24} = \frac{1}{8}$$

$$C = \frac{1}{8} * 3200$$

$$C = \text{Rs.}400$$

Time and Distance

$$1. \text{Speed} = \frac{\text{Distance}}{\text{Time}}$$

$$2. \text{Time} = \frac{\text{Distance}}{\text{speed}}$$

$$3. \text{Distance} = \text{Speed} * \text{Time}$$

$$4. \text{Conversion } X * \frac{km}{hr} \Rightarrow \left(X * \frac{5}{18} \right) \frac{m}{sec}$$

1. An athlete runs 200 meters race in 24 sec his speed is ?

$$\text{Distance} = 200 \text{ m}$$

$$\text{Time} = 24 \text{ sec}$$

$$\text{Speed} = \frac{\text{Distance}}{\text{Time}}$$

$$= \frac{200 \text{ m}}{24 \text{ sec}}$$

$$\text{Speed} = \frac{25 \text{ m}}{3 \text{ sec}}$$

To convert m/sec into km/hr

$$\frac{25 \text{ m}}{3 \text{ sec}} = \frac{25}{3} * \frac{18}{5}$$

$$\text{Speed} = 30 \text{ km/hr}$$

2. A cyclist covers a distance of 750m in 2 min 30 sec .What is the speed in km/hr of the cyclist

$$\text{Distance} = 750 \text{ m}$$

$$\text{Time} = 2 \text{ min } 30 \text{ sec} = 150 \text{ sec}$$

$$\text{Speed} = \frac{\text{Distance}}{\text{Time}}$$

$$= \frac{750}{150} \text{ m/sec}$$

$$= 5 \text{ m/sec}$$

$$\text{Speed} = 5 * \frac{18}{5} = 18 \text{ km/hr}$$

3. A dog takes 4 leaps for every 5 leaps of a hare but 3 leaps of a dog are equal to 4 leaps of a hare. Compare their speeds?

$$\text{Dog} = X = 4X$$

$$\text{Hare} = Y = 5Y$$

$$3X = 4Y$$

$$X = \left(\frac{4}{3} \right) Y$$

$$4X = 4 * \frac{4}{3} Y$$

$$4X = \frac{16}{3} Y$$

$$\begin{aligned} \text{Ratio of speed} &= \text{Ratio of Distance} \\ &= 4X : 5Y \\ &= \frac{16}{3}y : 5Y \\ &= \frac{16}{3} : 5 \\ 4X : 5Y &= 16 : 15 \end{aligned}$$

Simple Interest:

Simple interest is calculated on the principal, or original, amount of a loan

$$\text{Simple interest} = \frac{PNR}{100} \text{ (or) } \frac{PRT}{100}$$

$$P = \frac{SI * 100}{NR}$$

$$R\% = \frac{SI * 100}{PN}$$

$$N = \frac{SI * 100}{PR}$$

where:

P=Principle

i=interest rate

n=term of the loan

1. Find the simple Interest on Rs. 68000 at $16\frac{2}{3}$ per annum for 9 months

$$P = 68000$$

$$R = 16\frac{2}{3} = \frac{50}{3}\%$$

$$T = \frac{9}{12} \text{ Years}$$

$$T = \frac{3}{4} \text{ years}$$

$$\begin{aligned} \text{Simple interest} &= \frac{PRT}{100} \\ &= 68000 * \frac{50}{3} * \frac{3}{4} * \frac{1}{100} \end{aligned}$$

$$\mathbf{SI = Rs. 8500}$$

2. A man earns Rs. 450 as an interest in 2 years on certain sum of investment at the rate of 12% p.a. Find the sum invested?

$$I = 450$$

$$T = 2 \text{ Years}$$

$$R = 12\%$$

$$P = \frac{(I * 100)}{\frac{NR}{2}}$$

$$= \frac{450}{2} * \frac{100}{12}$$

$$P = 1875.$$

3. A man borrowed Rs. 3000 from his friend at 15% p.a for 3 years .Find the total amount refunded by the man to his friend?

$$P = \text{Rs.} 3000$$

$$R = 15\%$$

$$T = 3 \text{ Years}$$

$$SI = \frac{PRT}{100}$$

$$= \frac{3000 * 3 * 15}{100}$$

$$= 1350$$

$$\text{Amount } A = P + I$$

$$A = 3000 + 1350 = 4350$$

Compound Interest:

1. When interest is compound Annually

$$A = P \left[1 + \frac{R}{100} \right]^n$$

2. When interest is compounded half yearly

$$A = P \left[1 + \frac{\frac{R}{2}}{100} \right]^{2n}$$

3. When interest is compounded quarterly

$$A = P \left[1 + \frac{\frac{R}{4}}{100} \right]^{4n}$$

1. Find the compound interest on Rs.7500 at 4% per anum for 2 years , compounded annually

$$P = 7500$$

$$R = 4 \%$$

$$n = 2 \text{ Years}$$

$$A = P \left[1 + \frac{R}{100} \right]^n$$

$$A = 7500 \left[1 + \frac{4}{100} \right]^2$$

$$A = 7500 \left[\frac{104}{100} \right]^2$$

$$= 7500 * \frac{104}{100} * \frac{104}{100}$$

$$A = \text{Rs. } 8112$$

$$\begin{aligned} \text{C.I} &= \text{A}-\text{P} \\ &= 8112- 7500 \\ &= 612 \end{aligned}$$

2.Find compound interest on Rs. 10,000 in 2 Years at 4% per annum , the interest being compounded half yearly.

$$\text{P}= 10,000 \quad \text{R}= 4\% \quad \text{T}= 2 \text{ Years}$$

$$\begin{aligned} \text{A} &= \text{P} \left[1 + \frac{\frac{\text{R}}{2}}{100} \right]^{2n} \\ &= 10000 \left[1 + \frac{\frac{4}{2}}{100} \right]^{2(2)} \\ &= 10000 \left[1 + \frac{2}{100} \right]^4 \\ &= 10000 \left[\frac{100+2}{100} \right]^4 \\ &= 10000 \left[\frac{102}{100} \right]^4 \\ &= 1000 * \frac{51}{50} * \frac{51}{50} * \frac{51}{50} * \frac{51}{50} \end{aligned}$$

$$= 10,824.32$$

$$\begin{aligned} \text{C.I} &= \text{A}-\text{P} \\ &= 10824.32-10000 \\ &= 824.32 \end{aligned}$$

UNIT - III

Critical Reasoning: Logical Inference Questions and Syllogism. Analytical Reasoning: Arrangement problems - Family / Blood Relation Qualms - Sense of Directions - Age Doubts. Verbal Reasoning: Verbal Analogy: Letter series - number series - Coding and Decoding.

Statements of syllogisms

The questions of syllogisms of three main parts.

1. Major premise
2. Minor premise
3. Conclusion

The central premise is a statement in general, believed to be true by the author.

Example: All women are smart.

The minor premise is a specific example of the major premise.

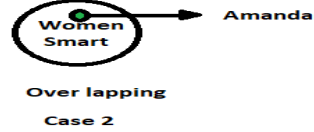
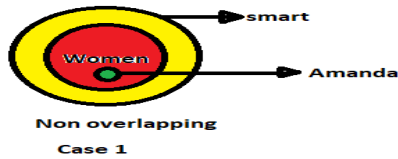
Example: Amanda is a woman.

The conclusion is a specific statement which logically follows both major and minor statement.

Example: Amanda is smart.

Application of Venn diagrams

To identify whether the given conclusion is correct or not draw the Venn diagrams according to major and minor statements.



The above represents the combination of major and minor statements in two different ways. In the first case, the statement “ All women are smart “ the Venn diagram of women is inside the Venn diagram of smart. Hence the major statement is true. And since Amanda is a woman, the Venn diagram representing Amanda should be inside Woman. In the second case, the only difference is, the major statement “ All women are smart “ the Venn diagrams of Women and smart are overlapping with each other. Because that’s another possibility. Since Amanda is women, it is represented inside it. Observing both the cases, we can agree that the conclusion given “ Amanda is a smart “ is true from both the case.

DIRECTIONS for questions 1 – 5: In each of the questions below are given three statements, followed by conclusions: I, II, III, IV. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Q.No.1. Statements:

Some Cats are Rats.

All bats are tables.

All Rats are Bats.

Conclusion:

I. Some Cats are bats

II. All bats are rats

III. All tables are cats

IV. All bats are cats

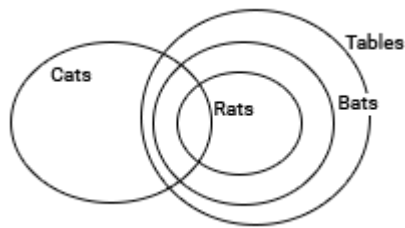
1. Only I & II follow

2. Only II follows

3. Only I & IV follow

4. None of these

Answer Key: 4



Explanation:

So option 4.

Clearly, from the diagram Conclusion I is true.

Q.No 2.Statements:

Some ships are boats.

All boats are submarines.

Some submarines are yatches.

Conclusion:

I. Some yatches are boats.

II. Some submarines are boats.

III. Some submarines are ships.

IV. Some yatches are ships

1. All follow

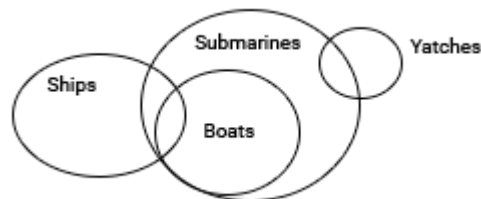
2. Only II and III follow

3. Only III follows

4. Only IV follows

Answer & Explanation

Answer Key: 2



Explanation:

From the diagram we can infer that some submarines are boats and some submarines are ships. So 2nd option.

Q.No 3. Statements:

All Carrots are birds.

Some telephones are Carrots.

All bedsheets are telephone.

Conclusion:

I. All bedsheets are birds

II. Some bedsheets are birds

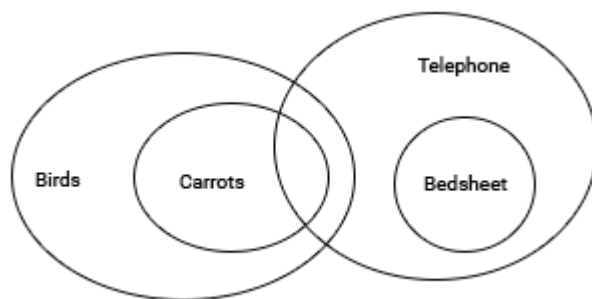
III. Some birds are telephones

IV. All telephones are birds

1. Only I follows
2. Only II follows
3. Only I and III follow
4. Only III follows

Answer & Explanation

Answer Key: 4



Explanation:
possibilities. But only conclusion III is true.

The diagram gives all the

Q.No 4.Statements:

Most CPUs are keyboards.

No keyboard is a Mouse.

All Mouses are CPU.

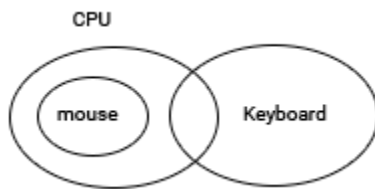
Conclusion:

- I. Some keyboards are CPU
- II. All CPU's are Mouse
- III. No Mouse is a keyboard
- IV. Some Mouse are keyboard

1. Only I follows
2. Only II and III follow
3. Only I and III follow
4. Only II follows

Answer & Explanation

Answer Key: 3



Explanation: Clearly from the diagram, I and III are true.

Q.No 5 Statements:

Samosas are Jalebi.

All Jalebis are Tikki.

All Tikkis are Barfi

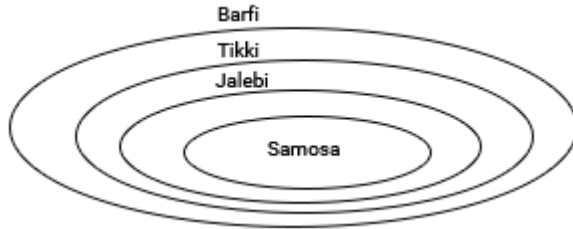
Conclusion:

- I. All Jalebis are Barfi
 - II. All Tikkis are Samosas
 - III. All Samosas are Barfi
 - IV. All Barfi are Jalebi
1. Only I and II follow
 2. Only I and III follow
 3. Only II and III follow

4. All follow

Answer & Explanation

Answer Key: 2



Explanation:
are true.

Clearly from the diagram, I and III

Analytical Reasoning: Arrangement Problems



1. A, P, R, X, S and Z are sitting in a row. S and Z are in the centre. A and P are at the ends. R is sitting to the left of A. Who is to the right of P ?

A. A

B. X

C. S

D. Z

Answer: Option B

Explanation: The seating arrangement is as follows:

• • • • • •
P X S Z R A

Therefore, right of P is X.

2. There are 8 houses in a line and in each house only one boy lives with the conditions as given below:

Jack is not the neighbour Siman.

Harry is just next to the left of Larry.

There is at least one to the left of Larry.

Paul lives in one of the two houses in the middle.

Mike lives in between Paul and Larry.

If at least one lives to the right of Robert and Harry is not between Taud and Larry, then which one of the following statement is not correct ?

- A. Robert is not at the left end.
- B. Robert is in between Simon and Taud.
- C. Taud is in between Paul and Jack.
- D. There are three persons to the right of Paul.

Answer: Option C

3. A, B, C, D and E are sitting on a bench. A is sitting next to B, C is sitting next to D, D is not sitting with E who is on the left end of the bench. C is on the second position from the right. A is to the right of B and E. A and C are sitting together. In which position A is sitting ?

- A. Between B and D

B. Between B and C

C. Between E and D

D. Between C and E

Answer: Option **B**

Explanation:

• • • • •
E B A C D

Therefore, A is sitting in between B and C.

Family / Blood Relation Qualm

Introduction

Blood relation is one of the trickiest topics in logical reasoning. But if studied in the right manner and solved with the help of a family tree, it becomes quite easy to solve.

Relation as we know is the connection between any two things or between any two persons. So when speaking of blood relation, it means the connection between two people by blood or basically by birth.

In addition to this, two people or two families get connected by marriage, hence the relations which are created by marriage are also considered as blood relations.

What is a Family Tree?

A tree as we know has roots firmly grounded and then it has its stem which branches out and gets leaves in it.

Same is the case with a family tree, wherein we can imagine our ancestors as the roots and then their children and grandchildren and so on act as branches and leaves.

Family Tree a pictorial or visual representation of our lineage. With the help of a family tree, it not only gives us a better understanding of our lineage but also helps us understand our relationship with different people who have common ancestors.

Basic Terms used in Blood Relations

- Parents: Mother and father.
- Children: Son or Daughter
- Siblings: Brother or Sister(of the same parents)
- Spouse: Husband or wife.
- Aunt: Aunt means father's sister, mother's sister, father's brother's wife or mother's brother's wife.
- Uncle: Uncle means father's brother, Mother's brother, Father's sister's husband, mother's sister's husband.
- Niece: Brother's and sister's daughter.
- Nephew: Brother's and sister's son.
- Cousin: Children of aunt and uncle.
- Cousin: Children of aunt and uncle.
- Cousin: Children of aunt and uncle.
- Father in-law: Father of spouse.
- Mother in-law: Mother of Spouse.
- Sister in-law: Sister of spouse, wife of brother
- Co-sister: Wife of spouse's brother.
- Brother in-law: Brother of spouse, husband of sister
- Co- brother: husband of spouse's sister.
- Maternal: Relations or family members who are from mother's side.
- Paternal: Relations or family members who are from father's side.

Example Problems

Example 1: A family consists of five members B, C, E, F and G. C is the son of G but G is not the mother of C, E and G are married couple. B is the brother of G. F is the daughter of E. Who

is the brother-in-law of E?

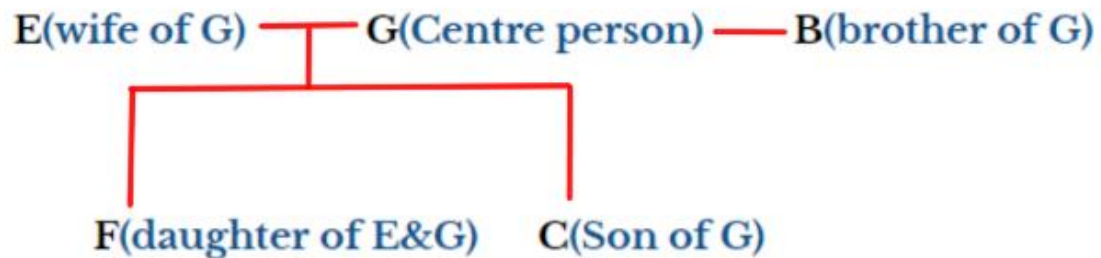
- (A) F (B) G (C) B (D) None of these

Answer:

(C) B

Solution:

With the given information we will draw the family tree.



From the family tree drawn, we get to know that the brother-in-law of E is B.

Equation Based questions

Example 2:

$A + B$ means B is the brother of A.

$A \times B$ means B is the husband of A.

$A - B$ means A is the mother of B.

$A \% B$ means A is the father of B.

How is Q related to T from the expression "Q-P+R%T"?

- (A) Grandmother (B) Mother (C) Aunt (D) Niece

Answer:

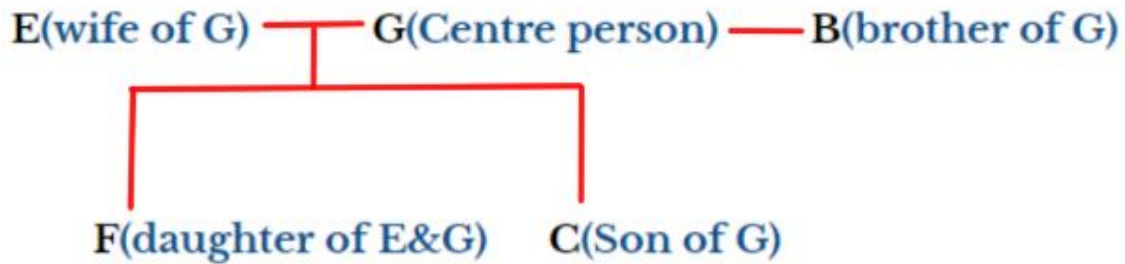
(A) Grand Mother

Solution: From the given information we simplify the expression "Q-P+R%T"

Q is the mother of P

P is the brother of R

R is the father of T



From the family tree drawn we can say that the Q is the grandmother of T.

Pointing to a person type problems

Example 3:

Pointing to a man, a woman said, "His mother is the only daughter of my mother". How is the woman related to the man?

- (A) Aunt (B) Sister (C) Cousin (D) Mother

Answer:

- (D) Mother

Solution:

We trace the given statement backwards; Woman's mother has only one daughter, which means the woman herself. So the man's mother is the woman herself and hence the correct answer is option D.

Practice Problems

Question 1:

Introducing a man, a woman says, "His wife is the only daughter of my father". How is the man related to the woman?

- (A) Brother (B) Father-in-law (C) Maternal uncle (D) Husband

Question 2:

If 'A×B' means that A is the sister of B, 'A÷B' means that A is the daughter of B, 'A-B' means that A is the son of B, then how is P related to S in relationship P – Q × R ÷ S?

- (A) Brother (B) Son (C) Grandson (D) None of these

Question 3:

A visits his brother P who stays with their father Q, mother S and grandfather R, P has two children, B and C. B's husband is X and C's wife is Y. C's son T welcomes A on his visit. How is B related to Q?

- (A) Grand-daughter (B) Grandson (C) Son (D) Daughter

Question 4: A's Son B is married to C whose sister D is married to E, who is the brother of B.

How is C related to E?

- (A) Sister-in-law (B) Sister (C) Daughter (D) Cousin

Answers

1. (D) 2. (C) 3. (A) 4. (A)
-

Conclusion

Blood relations is one of the most important topics in logical reasoning.

Two fundamental requisites for this topic are knowledge of terms associated with various types of relationships and the understanding of sketching a family tree and to be able to draw information out of it.

Perfection and confidence will only be observed when a student does rigorous practice of these types of questions extensively!

Sense of Direction

One morning Udai and Vishal were talking to each other face to face at a crossing. If Vishal's shadow was exactly to the left of Udai, which direction was Udai facing?

- A. East
- B. West
- C. North
- D. South

Answer: Option C

Explanation:

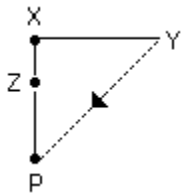


2. Y is in the East of X which is in the North of Z. If P is in the South of Z, then in which direction of Y, is P?

- A. North
- B. South
- C. South-East
- D. None of these

Answer: Option D

Explanation:



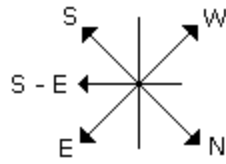
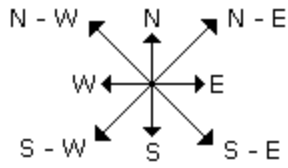
P is in South-West of Y.

3. If South-East becomes North, North-East becomes West and so on. What will West become?

- A. North-East
- B. North-West
- C. South-East
- D. South-West

Answer: Option C

Explanation:

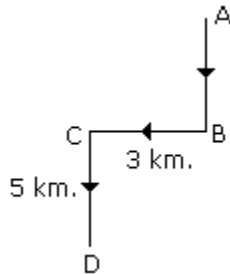


It is clear from the diagrams that new name of West will become South-East.

4. A man walks 5 km toward south and then turns to the right. After walking 3 km he turns to the left and walks 5 km. Now in which direction is he from the starting place?
- A. West
 - B. South
 - C. North-East
 - D. South-West

Answer: Option D

Explanation:

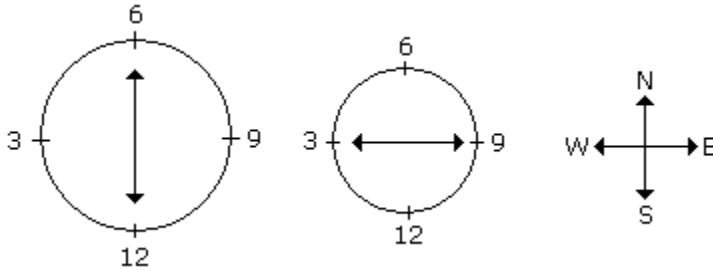


Hence required direction is South-West.

5. Rahul put his timepiece on the table in such a way that at 6 P.M. hour hand points to North. In which direction the minute hand will point at 9.15 P.M. ?
- A. South-East
 - B. South
 - C. North
 - D. West

Answer: Option D

Explanation:



At 9.15 P.M., the minute hand will point towards west.

Age Doubts

1. Father is aged three times more than his son Ronit. After 8 years, he would be two and a half times of Ronit's age. After further 8 years, how many times would he be of Ronit's age?

- A. 2 times
- B. $2\frac{1}{2}$ times
- C. $2\frac{3}{4}$ times
- D. 3 times

Answer: Option A

Explanation:

Let Ronit's present age be x years. Then, father's present age $= (x + 3x)$ years $= 4x$ years.

$$\therefore (4x + 8) = \frac{5}{2}(x + 8)$$

$$\Rightarrow 8x + 16 = 5x + 40$$

$$\Rightarrow 3x = 24$$

$$\Rightarrow x = 8.$$

$$\text{Hence, required ratio} = \frac{(4x + 16)}{(x + 16)} = \frac{48}{24} = 2.$$

2. The sum of ages of 5 children born at the intervals of 3 years each is 50 years. What is the age of the youngest child?
- A. 4 years
 - B. 8 years
 - C. 10 years
 - D. None of these

Answer: Option A

Explanation:

Let the ages of children be x , $(x + 3)$, $(x + 6)$, $(x + 9)$ and $(x + 12)$ years.

Then, $x + (x + 3) + (x + 6) + (x + 9) + (x + 12) = 50$

$$\Rightarrow 5x = 20$$

$$\Rightarrow x = 4.$$

\therefore Age of the youngest child = $x = 4$ years.

3. A father said to his son, "I was as old as you are at the present at the time of your birth". If the father's age is 38 years now, the son's age five years back was:
- A. 14 years
 - B. 19 years
 - C. 33 years
 - D. 38 years

Answer: Option A

Explanation:

Let the son's present age be x years. Then, $(38 - x) = x$

$$\Rightarrow 2x = 38.$$

$$\Rightarrow x = 19.$$

\therefore Son's age 5 years back $(19 - 5) = 14$ years.

4. A is two years older than B who is twice as old as C. If the total of the ages of A, B and C be 27, then how old is B?

A. 7

B. 8

C. 9

D. 10

E. 11

Answer: Option D

Explanation:

Let C's age be x years. Then, B's age = $2x$ years. A's age = $(2x + 2)$ years.

$$\therefore (2x + 2) + 2x + x = 27$$

$$\Rightarrow 5x = 25$$

$$\Rightarrow x = 5.$$

Hence, B's age = $2x = 10$ years.

5. Present ages of Sameer and Anand are in the ratio of 5 : 4 respectively. Three years hence, the ratio of their ages will become 11 : 9 respectively. What is Anand's present age in years?

A. 24

B. 27

C. 40

D. Cannot be determined

E. None of these

Answer: Option A

Explanation:

Let the present ages of Sameer and Anand be $5x$ years and $4x$ years respectively.

$$\text{Then, } \frac{5x + 3}{4x + 3} = \frac{11}{9}$$

$$\Rightarrow 9(5x + 3) = 11(4x + 3)$$

$$\Rightarrow 45x + 27 = 44x + 33$$

$$\Rightarrow 45x - 44x = 33 - 27$$

$$\Rightarrow x = 6.$$

∴ Anand's present age = $4x = 24$ years.

Verbal Reasoning: Verbal Analogy: Letter series

1. SCD, TEF, UGH, _____, WKL

- A. CMN
- B. UJI
- C. VIJ
- D. IJT

Answer: Option C

Explanation:

There are two alphabetical series here. The first series is with the first letters only: STUVW. The second series involves the remaining letters: CD, EF, GH, IJ, KL.

2. B₂CD, _____, BCD₄, B₅CD, BC₆D

- A. B₂C₂D
- B. BC₃D
- C. B₂C₃D
- D. BCD₇

Answer: Option B

Explanation:

Because the letters are the same, concentrate on the number series, which is a simple 2, 3, 4, 5, 6 series, and follows each letter in order.

3. FAG, GAF, HAI, IAH, _____

- A. JAK
- B. HAL
- C. HAK
- D. JAI

Answer: Option A

Explanation:

The middle letters are static, so concentrate on the first and third letters. The series involves an alphabetical order with a reversal of the letters. The first letters are in alphabetical order: F, G, H, I, J. The second and fourth segments are reversals of the first and third segments. The missing segment begins with a new letter.

4. ELFA, GLHA, ILJA, _____, MLNA

- A. OLPA
- B. KLMA
- C. LLMA
- D. KLLA

Answer: Option D

Explanation:

The second and fourth letters in the series, L and A, are static. The first and third letters

consist of an alphabetical order beginning with the letter E.

5. CMM, EOO, GQQ, _____, KUU

A. GRR

B. GSS

C. ISS

D. ITT

Answer: Option C

Explanation:

The first letters are in alphabetical order with a letter skipped in between each segment: C, E, G, I, K. The second and third letters are repeated; they are also in order with a skipped letter: M, O, Q, S, U.

6. ZA₅, Y₄B, XC₆, W₃D, _____

A. E₇V

B. V₂E

C. VE₅

D. VE₇

Answer: Option D

Explanation:

There are three series to look for here. The first letters are alphabetical in reverse: Z, Y, X, W, V. The second letters are in alphabetical order, beginning with A. The number series is as follows: 5, 4, 6, 3, 7.

7. QPO, NML, KJI, _____, EDC

- A. HGF
- B. CAB
- C. JKL
- D. GHI

Answer: Option A

Explanation:

This series consists of letters in a reverse alphabetical order.

8. JAK, KBL, LCM, MDN, _____

- A. OEP
- B. NEO
- C. MEN
- D. PFQ

Answer: Option B

Explanation:

This is an alternating series in alphabetical order. The middle letters follow the order ABCDE. The first and third letters are alphabetical beginning with J. The third letter is repeated as a first letter in each subsequent three-letter segment.

9. BCB, DED, FGF, HIH, _____

- A. JKJ
- B. HJH
- C. IJI

D. JHJ

Answer: Option A

Explanation:

This series consists of a simple alphabetical order with the first two letters of all segments: B, C, D, E, F, G, H, I, J, K. The third letter of each segment is a repetition of the first letter.

10. P₅QR, P₄QS, P₃QT, _____, P₁QV

A. PQW

B. PQV₂

C. P₂QU

D. PQ₃U

Answer: Option C

Explanation:

The first two letters, PQ, are static. The third letter is in alphabetical order, beginning with R.

The number series is in descending order beginning with 5.

Number series

1. Look at this series: 2, 1, (1/2), (1/4), ... What number should come next?

A. (1/3)

B. (1/8)

C. (2/8)

D. (1/16)

Answer: Option B

Explanation:

This is a simple division series; each number is one-half of the previous number.

In other terms to say, the number is divided by 2 successively to get the next result.

$$4/2 = 2$$

$$2/2 = 1$$

$$1/2 = 1/2$$

$$(1/2)/2 = 1/4$$

$$(1/4)/2 = 1/8 \text{ and so on.}$$

2. Look at this series: 7, 10, 8, 11, 9, 12, ... What number should come next?

- A. 7
- B. 10
- C. 12
- D. 13

Answer: Option B

Explanation:

This is a simple alternating addition and subtraction series. In the first pattern, 3 is added; in the second, 2 is subtracted.

3. Look at this series: 36, 34, 30, 28, 24, ... What number should come next?

- A. 20
- B. 22
- C. 23
- D. 26

Answer: Option B

Explanation:

This is an alternating number subtraction series. First, 2 is subtracted, then 4, then 2, and so on.

4. Look at this series: 22, 21, 23, 22, 24, 23, ... What number should come next?

A. 22

B. 24

C. 25

D. 26

Answer: Option C

Explanation:

In this simple alternating subtraction and addition series; 1 is subtracted, then 2 is added, and so on.

5. Look at this series: 53, 53, 40, 40, 27, 27, ... What number should come next?

A. 12

B. 14

C. 27

D. 53

Answer: Option B

Explanation:

In this series, each number is repeated, then 13 is subtracted to arrive at the next number.

Coding and Decoding

1. In a certain code 'MISSIONS' is written as 'MSIISNOS'. How is 'ONLINE' written in that code?

1. OLNNIE
2. ONILEN
3. NOILEN
4. LNOENI
5. ONNLIE

Answer & Explanation

Sol: Option 1

Explanation: First and last letter remain same. The others interchange their positions in pair of two. So, NL become LN IN become NI so code of ONLINE will be OLNNIE

2. In certain code 'TIGER' is written as 'QDFHS'. How is 'FISH' written in that code?

1. GERH
2. GRHE
3. GREH
4. GHRE
5. GEHR

Sol: Option 2

Explanation: Reverse the word and move each letter -1. Reverse of FISH is HSIF subtract 1 from each letter of HSIF. So code of FISH become GRHE.

3. In certain code 'FROZEN' is written as 'OFAPSG'. Then how would 'MOLTEN' be written in that code?

1. OFPOMN
2. OFSMPN
3. OFUMPN
4. OFUNPM
5. OFUMON

Answer & Explanation

Sol: Option 3

Explanation: Reverse the word and move each letter +1. Reverse of MOLTEN is NETLOM add 1 to each letter of NETLOM. So code of MOLTEN become OFUMPN.

4. In a certain code 'ROAR' is written as 'URDU'. How is 'URDU' written in that code?

1. V X D Q
2. XUGX
3. ROAR
4. VSOV
5. V Z C P

Answer & Explanation

Sol: Option 2

Explanation: Each letter moves +3. Add 3 to each letter of URDU, so code of URDU will be XUGX

5. In a certain code 'LIMCA' is written as 'HJLDZ'. Which of the following words is written as 'IFWJBP'?

1. M E X I C O
2. M E R C U R Y

3. JAPAN

4. MIDNIGHT

5. H O N D U S

Answer & Explanation

Sol: Option 1

Explanation: Each letter moves +1, -1,alternately except for L, which is -4. We have to find the word for the code IFWJBP. Add 4 to I then -1, +1 alternately to the remaining letters. The word will be MEXICO.

UNIT IV

SELF INTRODUCTION

- Start with a smile on your face & give details about Name, Place after greeting.
- If necessary only add your family details.
- Tell about your educational details.
- Share about why you want to do JOB so.
- About your Project in Brief.
- The person who inspired you a lot.
- Then about your intrests/hobbies.
- Also how you will spend your time when you are free.
- Tell about skills.
- Then conclude by saying THANKS to the Person who is listining to you.

Soft Skills

Soft skills are personality traits and behaviours. Unlike technical or ‘hard’ skills, soft skills are not about the knowledge you possess but the behaviours you display in different situations.

What are soft skills?

Soft skills include any skill that can be classified as a personality trait or habit. Interpersonal skills and communication skills are more specific categories of soft skills that many employers look for in job candidates.

There are many soft skills that you could list on your resume or cover letter. Some of the most sought after soft skills include:

- Effective communication skills
- Teamwork
- Dependability
- Adaptability
- Conflict resolution
- Flexibility
- Leadership
- Problem-solving
- Research
- Creativity
- Work ethic
- Integrity

Broad types of soft skills, which you can read more about below, include:

- Communication
- Problem-solving
- Creativity
- Adaptability
- Work ethic

Why are soft skills important?

Soft skills play an important role in resume writing, interviewing and finding success in communicating with people at work and in other areas of your life. For example, as you look for jobs, you may find that many employers list specific soft skills on their job posts in the ‘required’ or ‘desired’ sections. A job posting for a Human Resources associate may list ‘attention to detail’ as a desired trait, while a job for a Marketing Specialist could list ‘leadership’ and ‘great communication skills’.

Soft skills are often transferable across careers and industries. As a result, you may find that you possess many of the required traits even if you don’t match the exact profile in a job description. As you search for jobs, pay special attention to posts calling for candidates with soft skills or traits you possess. Even if the job title isn’t a great fit, you may find that the description makes sense for you. As you progress through the job search process, keep your resume updated to reflect soft skills most relevant to the jobs you’re applying for.

You may also find it helpful to consider how you might showcase your soft skills in an interview. While you can display some skills like good communication, you may consider weaving others into your answers to interview questions. For example, you might talk about your problem-solving skills when answering a question like, “Tell me about a time you overcame an obstacle.” If the employer prompts you to provide references, think of those that can speak to examples that verify your soft skills and other strengths.

Soft skills list and examples

Because soft skills are often innate personality traits, you already possess several marketable soft skills that will help you get and be successful in a job. Though many are formed with your personality, soft skills can also be learned and developed with practice and experience. Here are few examples of key soft skills and how those skills can enhance your performance during and after the job search process.

Communication

Effective communication skills will be helpful through the interview process and in your career. The ability to communicate involves knowing how you should speak to others in different situations or settings. For example, when working with a team on a project, you may need to communicate when you believe that an idea or process is ineffective. Finding a way to tactfully and skillfully disagree with others on the job without creating conflict is an important skill that employers value.

Related communication skills:

- Active listening

- Confidence
- Conflict resolution
- Organisation

Problem-solving

Employers highly value people who can resolve issues quickly and effectively. That may involve calling on industry knowledge to fix an issue immediately, as it occurs, or taking time to research and consult with colleagues to find a scalable, long-term solution.

Related problem-solving skills:

- Creativity
- Research
- Risk management
- Teamwork

Creativity

Creativity is a broad ability incorporating many different skill sets including other soft skills and technical skills. Employees with creativity can find new ways to perform tasks, improve processes or even develop new and exciting avenues for the business to explore. Creativity can be used in any role at any level.

Related creativity skills:

- Curiosity
- Learning from others
- Open-mindedness
- Taking calculated risks

Adaptability

How easily do you adapt to changes? If you're working in a technology-driven field or start-up, adaptability is especially important. Changes in processes, tools or clients you work with can happen quickly. Employees who are capable of adapting to new situations and ways of working are valuable in many jobs and industries.

Related adaptability skills:

- Consistency
- Organisation
- Optimism
- Flexibility

Work ethic

Work ethic is the ability to follow through on tasks and duties in a timely, quality manner. A strong work ethic will help ensure you develop a positive relationship with your employer and

colleagues even when you are still developing technical skills in a new job. Many employers would rather work with someone who has a strong work ethic and is eager to learn than a skilled worker who seems unmotivated.

Related work ethic skills:

- Attention to detail
- Integrity
- Persistence
- Time management

How to improve your soft skills?

Many employers value strong soft skills over technical skills because they are often personality traits developed over a lifetime and can be difficult to teach. That being said, anyone can improve their soft skills with experience and practice. For example, you may find that an employer is seeking someone skilled in conflict resolution. While you may be naturally skilled at effective communication, it may help to practice working through conflicts with others.

There are several ways you can help improve your soft skills.

1. Pick a soft skill you want to improve and practice it consistently.
You can improve any soft skill if you make it a practice. Most soft skills are a matter of routine. For example, you can practice dependability, both on the job and at home, by improving punctuality (showing up to work or events on time or early) and starting on projects at work earlier so you can complete them ahead of schedule.
2. Observe and mimic the positive soft skills you see in others.
There are likely professionals you know or work with who have strengths in various soft skills. You may be able to develop integral soft skills by observing the practices of others and incorporating them into your own daily routine. You may find, for example, that effective communicators often write down notes when others are talking during meetings. This helps them organise their thoughts so they are prepared to ask and answer important questions. This is also an active listening practice that may be good to utilise as part of your own work.
3. Set milestone goals to improve soft skills.
Set specific, measurable goals by carefully reading your performance reviews at work or asking trusted friends and colleagues for constructive criticism. This can help you to identify key areas of improvement for goal setting and areas of strength to highlight on your resume and in interviews. You can prioritise which soft skills to work on based on those that you need to get a certain job or move up in a career you already have.
4. Find resources to help you learn.
You can find several resources to help you learn tactics for improving the soft skills you want to focus on like books, podcasts or online classes. While some require payment, many are free of cost and can be accessed at any time. You might try out few different types of resources to see which are best for your learning style.

Interpersonal Skills

Interpersonal skills are the qualities and behaviors we exhibit while interacting with other people. They are considered to be one of the most sought after types of Interpersonal skills

We demonstrate them whenever we engage in any kind of verbal or nonverbal communication. In fact, qualities as basic as body language and attitude toward others .

Interpersonal Skills List

1. Emotional Intelligence

Emotional intelligence refers to the ability to keep one's emotions under control and navigate social situations with composure. This is an essential skill in any workplace, as naturally want to be surrounded with emotionally stable and considerate colleagues throughout that time.

Employers are looking for individuals who can keep calm under pressure and avoid pushing their personal frustration onto others. This is invaluable in any position that requires teamwork or communication between colleagues.

For example, project managers must coordinate with coworkers and propose solutions to whatever problems may surface on a daily basis. If the project manager is prone to emotional outbursts in the face of difficulties, he or she may lose the trust of the other project members.

Similarly, a project manager who frequently blames and criticizes others will create a hostile working environment where employees might begin to feel demotivated and seek to avoid responsibility – which is ultimately a detriment to the entire company.

2. Communication

Communication is a quintessential interpersonal skill that must be demonstrated to potential employers. Hiring managers are looking for individuals who can clearly articulate complex ideas to others.

Any job that involves team-based collaboration, or deals directly with customers or clients, requires both verbal and non-verbal communication abilities. Effective body language and eye contact are just as important as the words you use to express your thoughts.

While strong communication is necessary in all industries, sales roles than most. To sell a product to customers, they must be convinced that the product is not only high quality, but also something that they need.

3. Reliability

Reliability encapsulates your work ethic and the integrity to see things through to the end. Simply being on time for work everyday [puts you on the fast track for promotion](#), and always fulfilling promises is a key way to earn social capital in the workplace.

Although reliability is a beneficial interpersonal skill for any job, it has added value for tradespeople in industries such as plumbing or construction. Arriving on time and completing high quality work goes a long way in overcoming common negative stereotypes and earning a solid reputation.

Few other industries benefit as much from recommendations and positive word-of-mouth between friends and neighbors.

4. Leadership

Leadership is an interpersonal skill that sets candidates apart from their peers. Employers are looking for motivated and capable workers who can inspire others and take charge when work needs to be finished.

Leadership involves not only giving orders and making an operational plan for the company, but also getting the most out of every employee and helping everyone feel like they are making valuable contributions to the organization.

Effective leadership requires self-confidence and vision, not to mention a healthy dose of communication abilities.

Executives and top management in industries such as finance and business services have a large say in the direction and range of activities that a company will pursue. It is also essential that top management not merely give orders, but also provide an example for all employees to follow.

5. Positivity

Candidates and employees who demonstrate positivity are much more likely to find success in a position and be well-liked at the company.

Positivity is especially important for administrative assistants such as secretaries, because maintaining a cheerful attitude is valuable in helping others keep stress levels down and in generating a feeling of optimism throughout the office.

It pays for individuals in such a supporting role to be conscious of workplace morale and to approach otherwise stressful situations with a reliably calm and upbeat attitude.

6. Negotiation

Negotiation is not only the act of buying or selling goods, but any interaction in which two or more people engage in a discussion in an attempt to come to a shared agreement.

Interpersonal communication skills naturally play a large role here, but critical thinking and problem solving are also keys to finding the best solution available to satisfy all parties.

The recruitment consultant industry is one where the art of negotiation takes on an extra level of significance. A recruitment consultant must convince both the client firm and the job candidate that the other party is suitable for them.

Add in overseeing salary and benefits discussions on both sides, and it's obvious that the life of a recruitment consultant is filled with opportunities to flex the negotiation muscles.

7. Openness to Feedback

No company wants an arrogant or unteachable employee, so it's great to show a willingness to receive feedback and use it to grow.

A professional mindset calls for suppressing one's ego and focusing on the objective requirements for an assignment or project. As a result, individuals who accept constructive criticism have a better chance of coming out on top in the long run.

Being receptive to feedback is especially useful in entry-level, report-driven positions, such as an analyst role for financial investment firms.

Managers will have a certain image in mind about how investment products should be described and marketed to potential investors. Employees who can swallow their pride and make the changes required to satisfy upper management will earn a much better reputation than those who ardently defend their first drafts and sulk when they are called upon to make revisions.

8. Empathy

People at work gravitate towards those who are capable of showing empathy and taking actions consistent with an understanding of how others feel.

Empathy can be displayed at work in a variety of ways. For example, you could lend an ear to a colleague experiencing problems in the company or, support a project when an unforeseen difficulty strikes.

Teachers who can show understanding and compassion to students serve as the best kind of role models. In addition, creating an environment where all students feel comfortable sharing their thoughts and being treated seriously cultivates both critical thinking and a feeling of self-worth.

9. Teamwork

Teamwork is another great interpersonal skill to have in your repertoire. Modern workplaces often require employees to rely on each other in some capacity and be willing to support others when called upon.

Effective teamwork involves knowing when leadership is required and when it's okay to stand back and be a supportive project member. As such, a good team player will also possess a slew of interpersonal skills already mentioned in this list, including emotional intelligence, communication, and negotiation.

Candidates should put extra focus on their capacity for teamwork if applying for a role in an industry like software development, which requires a large number of people to work together to complete a single project.

While it may seem that only programming or other technical skills are required, any given individual might only work on a small piece of the overall project. As a result, extensive teamwork is required to deliver a high-quality finished product that is visually consistent and feels complete from beginning to end.

10. Active Listening

It's easier to demonstrate being a good listener during a face-to-face interview, but it's still valuable to show your willingness to listen and respect others on your resume.

Being open to the ideas of others will lead to an environment where all employees feel free to share their thoughts. In addition, actively listening enables you to clearly understand all instructions and thus deliver work that satisfies requirements.

For example, a strong listening ability is especially beneficial in the customer service industry. Understanding and delivering what customers want is the most basic demonstration of active listening, but positions in call centers might also require customer service representatives to diagnose a problem that even the customer is not aware of.

Only through deeply focused listening can the customer service representative understand the problem well enough to offer appropriate solutions.

Employability Skills

Many of the most highly sought-after skills today are soft skills pertaining to your ability to communicate and work with a team or hard skills focused on technology. These are the in-demand skills that make you a successful candidate for employment when you're job hunting or seeking a promotion.

What are Employability Skills?

Employability skills are the core skills and traits needed in nearly every job. These are the General Skills that make someone desirable to an organization. Hiring managers almost always look for employees with these skills.

Employability skills include the soft skill that allow you to work well with others, apply knowledge to solve problems, and to fit into any work environment. They also include the professional skills that enable you to be successful in the workplace. These are also considered as Transferable skills because you can apply them to a job in any industry.

Types of Employability Skills

1. Communication
2. Teamwork
3. Reliability
4. Problem-solving
5. Organization and planning
6. Initiative
7. Self-management
8. Leadership
9. Learning
10. Technology

1. Communication

Communication is one of the most important employability skills because it is an essential part of almost any job. The communication process involves five elements: the sender, receiver, message, medium and feedback. When these elements work together, you can deliver and understand messages clearly and efficiently, eliminating unnecessary misunderstandings and errors. Excellent communication skills make you more employable because they can enhance a company's productivity and efficiency and help prevent the waste of valuable time and resources.

Being an effective communicator involves conveying your thoughts and ideas clearly to achieve certain outcomes, as well as listening to your coworkers' instructions, ideas and intentions. Depending on the job you want, you may have to be competent in several different types of communication, such as verbal, nonverbal, written and visual. For instance, a customer-facing employee needs to have excellent verbal and nonverbal communication skills.

The best way to improve your communication skills is to communicate as frequently as possible. Some of the activities that can help you develop better communication skills include:

- Communicating on social media
- Joining a local club
- Practicing awareness of your facial expressions and body language

2. Teamwork

Good teamwork skills refer to the ability to work harmoniously with your colleagues to achieve a shared goal. Teamwork skills such as collaboration can increase your hiring chances because you may be able to help a company reach its goals more effectively. These skills can also contribute to a more positive work environment. To become a great team player, you need to be comfortable working with people, take responsibility for your share of work and contribute to team goals.

There are many things you can do to boost your teamwork skills, including:

- Volunteering to help coworkers with projects
- Working with others in a local organization
- Joining a sports team

3. Reliability

Reliability makes you more employable because it promotes trust between you and your employer. You are a reliable employee if you can consistently complete your tasks on time, deliver quality work and make minimal mistakes. You must also be able to respond to inquiries and emails promptly and only make promises you can keep.

You can become more reliable by:

- Consistently meeting or exceeding your expected levels of work performance
- Creating schedules for your daily tasks and maintaining them

- Acknowledging your mistakes and making a conscious effort to avoid them in the future

4. Problem-solving

Problem-solving involves identifying key issues and their implications, having a clear understanding of problems and determining the most effective solutions. For more complex problems, you need to know how to divide them into smaller parts that are easier to understand and more manageable.

Problem-solving skills can set you apart from other job candidates because they can help your potential employer maintain an efficient operational process and achieve objectives more effectively. If you are a good problem-solver, you can play an important role in troubleshooting issues, which can enable your team to overcome obstacles and solve complex problems. Depending on the position you are applying for, you may need a certain set of sub-skills to solve problems effectively, including research, analysis and decision-making.

You can become a better problem-solver by:

- Undertaking research assignments and projects
- Participating in brainstorming sessions
- Regularly developing your skills by solving puzzles and playing games

5. Organization and planning

Being able to organize and plan effectively is important because it helps you and your employer save time, effort and money by improving workflow. It ensures that assignments and projects are completed on time and prevents confusion and errors that can be costly to the company.

To be a good organizer and planner, you should be able to identify tasks, prioritize them, create schedules for them and complete them on time. If you are in a leadership position, you need to develop systematic processes for achieving goals and delegating tasks appropriately.

You can develop organizational and planning skills by:

- Developing a timetable for your daily activities
- Organizing an event
- Writing down your tasks and activities in a planner

6. Initiative

Taking initiative means recognizing a problem and solving it, preparing for a potential crisis by taking preemptive action, taking advantage of opportunities and having a positive attitude. It shows that you can think for yourself and take the necessary actions without being instructed to do so. As a person with initiative, you have a strong drive to succeed and a desire to keep improving yourself through continuous learning, which makes you valuable to any organization.

Employers consider initiative one of the key employability skills and value employees who possess self-motivation to complete tasks without being asked. The flexibility and courage of such employees can push organizations to innovate and achieve a competitive edge.

You can improve your ability to take initiative by:

- Approaching companies and other organizations to inquire about job opportunities
- Proposing changes to the policies or activities of a group you belong to
- Setting up a local club or fundraiser

7. Self-management

Self-management refers to the ability to perform job duties satisfactorily with little or no supervision. For higher-level employees, it also means delegating tasks to ensure you complete them on time. Additionally, self-managed employees can motivate themselves to deliver solid work performance consistently.

If you have good self-management skills, you can help your supervisor or manager save time and effort simply because you need minimal guidance and assistance from them. Also, being a self-motivated person means you may be less likely to have productivity issues. These abilities can make you an appealing candidate to most employers.

You can develop self-management skills by:

- Asking for more responsibilities at work
- Creating schedules for certain activities and maintaining them
- Participating in volunteer work that allows you to work independently

8. Leadership

Employers look for good leaders because they can benefit organizations in many ways. As a leader, you play an important role in ensuring that your team shares the same vision as the company and works in unison with other teams and departments to achieve a common goal. Additionally, you can develop strategies for achieving objectives, keep your team constantly motivated and monitor work performance to produce better results for the company.

Leadership skills are important at every level. If you are seeking a managerial position, you need to be a good leader to motivate your team members. You can also benefit from having some leadership ability in entry-level positions because it may help you stand out and climb the ranks faster. You can show leadership by directing and motivating your coworkers, setting objectives and goals for your team, improving work practices and coaching your colleagues.

You can learn to become a better leader by:

- Attending a leadership course
- Starting a local group
- Reading about the habits of successful leaders, particularly those in your industry

9. Learning

Having strong learning skills means understanding new concepts and methods quickly, taking on new tasks, adapting to change and having the tendency to improve your knowledge and skills continually.

Employees who have good learning skills may help employers fill challenging roles more quickly and reduce the cost of staff training. Good learners are especially desirable to companies that are at the forefront of innovation because they can help transition to new methods and technologies more smoothly.

You can increase your ability to learn by:

- Taking a course to improve your learning skills, such as a speed-reading, memory-boosting or an accelerated-learning course
- Researching skills and activities related to your job, such as organizing, teamwork or presentation skills
- Teaching yourself a new skill or hobby

10. Technology

Companies search for candidates with technical skills to help them use the latest technology and stay ahead of their competitors. Depending on your job, the technology skills you need may vary greatly, from word processing and sending email to video editing and using programming languages. If you can grasp technology-related concepts and learn how to use new technologies quickly, you may be more attractive to employers.

Technology skills are acquired through learning and practice. Some of the ways to develop and improve technology skills include:

- Enrolling in a technology course
- Trying out new apps and technology in your daily life
- Staying up-to-date with the latest technology in your industry

More Employability Skills Examples

Here are more skills that employers seek in the candidates they hire:

- Flexibility
- Motivation
- Organization
- Ability to Learn New Skills
- Phone Etiquette
- Client Relations
- Presentation
- Office Equipment
- Bookkeeping Software
- Efficiency
- Multitasking
- Sales
- Goal Setting
- Prioritizing
- Supervision

- Troubleshooting
- Information Management
- Initiative
- Proactive
- Focus
- Enthusiasm
- Negotiation
- Memory

Soft Skills Training

1. Leadership

Ultimately, every organization lives or dies by the quality of its leadership. Take the old saying: “employees don’t leave a bad company, they leave a bad manager”. Employee turnover is just one of the many costly risks of ignoring the role of leadership in the organization.

But what is leadership? Great leaders drive the vision and values of the company while, at the same time, keeping day-to-day activities in check. That’s because great leaders are more than managers. They’re inspirational, encouraging, and empathetic.

2. Time management

There are only so many minutes in the workday, and each one of them costs the organization money. So, it’s no surprise that time management is considered one of the most essential courses to include in your soft skills training for employees.

Employees should be given sufficient information to decide which tasks are most urgent, versus which are most important. Urgent tasks obviously need to be done quickly, but important tasks have a greater impact on the organization. To identify these tasks, employees need a thorough understanding of the short and long-term goals of your business.

When employees prioritize well, they’re less likely to be overwhelmed by pressure and deadlines. This is a great start to achieving a better work-life balance. Employees that can

balance their physical and social needs with work will miss fewer deadlines due to illness or burnout.

3. Teamwork

Look closely at any successful organization and you'll notice one thing: it functions as a team. There's no space for meaningless competition, jealousy, or underhandedness in a team. No, for a team to win, all teammates need to feel safe and bonded.

But creating this ideal team environment is not easy. That's why you need your employees to be skilled team-players.

Teamwork is one of the hottest soft skills training topics for employees, but what does this it look like in action? The knack for teamwork is really a combination of other skills. A team-player is perceptive, intuitive, and sensitive to their teammates' needs. They're also able to negotiate with their peers, while genuinely valuing their ideas.

4. Communication

Business and training visionary Dale Carnegie said that "90% of all management problems are caused by miscommunication", and rapper Lauryn Hill sang in her song 'Lost Ones' that "miscommunication leads to complication." Clearly, the problems of poor communication go far beyond social and industry barriers!

Poor communicators tend to believe that talking is more important than listening. But skilled communicators pay careful attention to all points of view, and listen closely to find the problem at the core of an issue. When they do talk, they adjust their tone and style to the audience. Their colleagues feel understood and respected, no matter the situation.

Without the ability to communicate skillfully, other soft skills, like effective teamwork and leadership, become impossible.

5. Problem-solving

Problems aren't always what they seem. That's why the ability to unpick a situation and find the underlying issue is key to problem-solving. And so is a calm, measured demeanor in the face of challenges.

A skilled problem-solver knows that every problem has a solution, even if it's outside of the proverbial box. They're also a calming influence on their team.

While individuals may have a built-in knack for creativity and analytical ability, these traits can also be fostered in the workplace through employee training. Opportunities to share new ideas, a playful work environment, and leadership that values learning from mistakes are all conducive to developing problem-solving skills.

6. Ownership

Taking ownership of one's responsibilities and mistakes is tough. No one likes to face blame. Even worse, blame often comes with serious consequences in the workplace. Yet, it's almost impossible to learn from mistakes without taking responsibility for them.

One of the most important goals of soft skills training for employees is teaching your staff to take ownership of their decisions (even when they're bad ones) because it prevents problems from festering in the dark. When employees are transparent about mistakes, they can be fixed faster and more effectively.

Finally, employees who take ownership of their work are more self-motivated. This takes a load off leadership to invest their effort where they're most needed.

7. Critical thinking

Do you want employees who just do what they're told? Or do you want employees who are able to interrogate instructions and processes? If your organization is forward-thinking, it's the latter.

Employees who can evaluate the information available and make decisions critically can save significant costs and effort. Without critical thinking skills, employees can't improve processes, innovate in their field, or spot pain points in their team.

You might be wondering how to coach employees on soft skills. In the case of critical thinking, the answer is simple but ambitious. Make transparency, interrogation, and open feedback core values in the organization. These values create an environment where employees are unafraid to question leadership and suggest improvements.

RESUME PREPARATION

- It should consider your extracurricular, and leadership qualities
- A resume should reflect more than just work experience
- Its purpose is to get you an Interview call
- It highlights your objective and accomplishments
- It highlights your skills and experience relevant to the field
- Resume is summary of your educational qualification details

TYPES OF RESUME

- Online Resumes
- Curriculum vitae (CVs)
- Combination resumes
- Functional resume
- Chronological resumes
- Occupational resumes

Occupational resumes

- Business Analyst Resume
- Insurance Manager Resume
- Sales Agricultural Resume
- Bank Manager Resumes
- Sales Retail Resume
- Commodity Specialist Resume
- Tax Accountant Resume
- General Laborer Resumes
- Elementary Teacher Resume

Chronological resumes

- Key components of Chronological Resume Identification
- Job Objective
- Key Accomplishments

- Education
- Professional Experience
- Affiliations/Interests
- References

Functional resume

- Key notes for Functional Resume
- Should include personal details like name address.
- Objective describing position you seek.
- Profile giving summary of your talents and experience.
- Experience listing your position, employer and dates.
- Education details and Training Undergone.
- Lastly Awards and Recognition received.

Combination resumes

The hybrid resume balances the functional and chronological approaches

- It starts with skills, accomplishments, and qualifications of the job applicant.
- Second page is reverse chronological ordering of your work experience.
- This format allows the reader to first match your qualification against job opening.
- It showcases your work experiences in the most marketable fashion.
- It highlights your both job skills and accomplishments.

Curriculum vitae (CVs)

- A curriculum vitae (CV) provides an overview of a person's experience and other qualifications.
- It is typically used to screen applicants, often followed by an interview.
- an outline of a person's educational and professional history.
- A CV is the most flexible and convenient way to make applications.
- It is an application form that is designed to bring out the essential information and personal qualities that the employer requires
- Looking for a highly challenging and dynamic work environment, where I can transform my knowledge to valuable work experience and which can refine my research, managerial, & learning skills.
- To take a challenging position in an esteemed organization with devotion and determination, so that it can enhance my skills and knowledge in the best interests of the organization and for my personal and professional growth.

- To obtain a meaningful and challenging position in a healthy, friendly and competitive atmosphere that enables me to learn and excel. Believing that good team leadership and a hands-on approach to management brings increased standards of services.

Information a CV should include

- Personal details
- Education and qualifications
- Work experience
- Interests and achievements
- Skills
- References

Online Resumes

Benefits of online resume.

- You can submit your resume on any online job portal website which will manage your resume and make it visible to employers.
- You can update your resume online anytime and anywhere.
- Add your "resume page address" into your e-mail's signature.
- Attach files such as Certificates, Word documents, PDF, and databases.
- Add up to 5 different photos.
- Very easy-to-use and it is Free.

Types of online Resume

- Career Change Resume
- Entry Level Experience Resume
- Public Information Director Resume
- Quality Review Auditor Resume
- Writer Resume
- Dispatcher Resume

Interview Tips and Questions

Prepare for the Interview

We don't need to memorize an answer, but do take the time to consider how we will respond. The more we prepare, the more confident we will feel during a job interview.

When we are not sure what to expect during an interview, also take time to review this refresher on how job interviews works, and these tips on how to prepare the job interviews.

Job Interview Questions and Answers

Here's a list of common job interview questions, with examples of the best answers about you, your work history and experience, the job, your goals, the new job, salary, and what you have to offer the employer.

Questions About You

Interviewers will ask questions about you to gain insight into your personality and to determine whether you're a fit for both the job and the company. These are open ended questions which will give you the opportunity to show the employer that you're well-qualified for the position.

For example:

1. Tell-me-about-yourself
2. what-is-your-greatest-strength
3. what-is-your-greatest-weakness
4. how-to-answer-what-makes-you-unique-at-an-interview
5. Tell me about something-not-on-resume.
6. Interview-questions-about-strengths-and-job-performance
7. job-interview-question-how-do-you-handle-failure

Questions About Leaving Your Job

Employers almost always ask about why you left, or are leaving, your job. Be prepared with an explanation for why you're moving on. Do make sure the reasons you give match what past employees will say about you if they are contacted for a reference.

For example: 1) Why are you leaving your job?

2) Why do you want to change job?

3) Why did you resign?

4) Why did you quit your job?

UNIT-V

Group Discussion

Definition

Group discussion (GD) is a comprehensive technique to judge the suitability of an individual and his appropriateness for admission, scholarship, job, etc. GD assesses the overall personality – thoughts, feelings and behaviour - of an individual in a group. A topic is presented to the group members for discussion. While the discussion is going on, a group of panellists observe them. Through this observation they judge intellectual, social, leadership, communicative skills of candidates taking part in the GD.

Importance of GD

For admission to some of the universities, B- Schools, campus placements after graduation or for recruitment to a multinational company, you need to have knowledge of the field and also have the capability to work in a group as a leader or as a member. The group discussion technique is a very effective way to judge the candidate's ability to work in a group.

What are the skills that are judged in a GD?

- How good you are at communicating with other
- How easily you behave and interact with the other group members
- How open minded you are
- How flexible or rigid you are in accepting the view- points of others in the group
- Your leadership skills
- Your analytical abilities
- Problem solving & critical thinking skills
- Time management skills
- Your skills at putting forth your ideas in an unbiased manner
- Social attitude and confidence

A Preview of a Group Discussion session

Let us have a look into a typical group discussion situation.

A group was given a topic for Group Discussion – 'Education is the only way to remove poverty'. One of the candidates in the group, 'Vishal', was very aggressive in his manner of putting up the arguments in favour of the topic. Many times he even cut down other candidates and barely allowed

others to speak. He spoke rudely in case anyone put up a different view and his voice was also loud.

His body language was rude and not pleasant. He was doing this to appear like a leader who knew

the most about the topic of discussion.

Do you think Vishal's behaviour was correct? Do you agree that Vishal's behaviour would help him

get a job?

Do's of participating in a GD

- Think before you speak.
- Pick up clues from the discussion and intelligently add points that come to your mind with regards to the topic, in case you don't know much about the topic.
- Back up your points with facts and figures if needed.
- Be gentle and sure in your presentation of views.
- Speak to-the-point and make sure that you do not repeat the points.
- Be calm and composed while speaking.
- Listening to others is also an important aspect of participation in the group discussion, so listen to others.
- Have respectful attitude towards the viewpoints of others.
- Your body language should convey your ease of behaviour.
- Sometimes the discussion may take a hostile turn. In such a case it is a good idea to intervene to make the situation relaxed. This act of yours will show your leadership and problem solving skills.

Don'ts of participating in a GD

- Do not initiate the discussion if you do not know the topic well.
- Do not go overboard in exhibiting your knowledge even if you know the topic well.
- Do not interrupt other members when they are speaking.
- Do not change your opinion about the topic just because most of the other participants are having an opinion different from yours.
- Do not feel unconfident if a speaker prior to you has presented the points more effectively than you.
- Do not ask irrelevant questions.
- Do not let your personal biases about the topic enter the discussion

Points to be kept in mind before the GD

No one knows what the topic of GD is going to be. Hence, it will be a good idea to keep yourself abreast with topics like:

1. Current Affairs

Current Affairs is something that you have to be thorough with. For this, read newspapers regularly

and watch news on the television. Understand the recent crises that the world is reeling under, the latest developmental initiatives, the ties between various countries and the like.

2. Historical topics

Have a fair knowledge about the country's history and also the history of other countries. The topics may not be specifically from this area, but having historical information will help you cite examples and make references whenever needed.

3. Sports, Arts & Literature

4. Data crunching

Familiarize yourself with important data. Throwing in some data if required in your GD will definitely create an impression among the assessors.

Read as much as possible. Have good and sound knowledge on numerous topics. Watching documentaries on various topics will help here. Improve your vocabulary. This does not mean that

you use heavy and big words, but it means that you will be able to understand the topic better and contribute effectively.

Last but not the least; mentally visualize yourself as succeeding and you will succeed.

TYPES OF GD

1. FACTUAL TOPICS

Factual topics are about practical things, which an ordinary person is aware in his day-to-day life. Typically these are about socio-economic topics.

E.g. The education policy of India, Tourism in India

2. CONTROVERSIAL TOPICS

Controversial topics are the ones that are argumentative in nature. They are meant to generate controversy.

E.g. Reservations should be removed, Women make better managers

3. ABSTRACT TOPICS

Abstract topics are about intangible things. These topics are not given often for discussion, but their possibility cannot be ruled out. These topics test your lateral thinking and creativity.

E.g. A is an alphabet, The number 10

Group discussion skills

Useful sub-skills for students

There are a number of different sub-skills which students will need to be able to successfully and effectively participate in a group discussion. Students need to develop the ability to

Analyse

This skill can be developed by giving students the topic individually and asking them to brainstorm or mind-map all of the possible sub-topics they could speak about. The students can then swap their notes and assess or analyse the relevance of each of the sub-topics their partner has included. Together, the students then draw up a fresh list or mind-map and discuss how the sub-topics might be linked together, along with examples or reasons for any arguments they might have.

Persuade

This skill comes in useful when students need to make decisions on how to do something (e.g. which candidate should get a job). A fun activity to develop this skill is to give groups of students this topic and ask them to decide on the profile of the perfect candidate, creating a list of 7 adjectives. The students are then re-grouped and asked to persuade the other members of the group that their selection is the best while compiling a second, negotiated list. The group members who retain the most from their original lists are the winners. Note down useful phrases that you hear the students using while doing this task and discuss these at the end for future reference.

Control emotions

This can be practised by giving the students a fairly controversial topic, such as 'Friends are more important than family' and asking the students to decide whether they agree, disagree or have no opinion, making notes on their main arguments to support their viewpoint. Divide the students into groups ensuring that there is a mix of views within each group. Explain that for this discussion, the aim is to keep their voices low and try to control their emotions as far as possible. Monitor and give feedback on these areas.

Support

One of the most important things for this skill is for students to learn when it is and isn't appropriate to interrupt and how to do it. Very often students will talk over each other in an effort to get their point across and forget to listen.

To practise this, you can get your students to make a list in small groups of when it is and isn't appropriate to interrupt other speakers. They should include things like 'not appropriate during the middle of a point, if the speaker has not said very much previously, or when you are feeling angry and liable to say something you'll regret'. It is appropriate when the speaker has been dominating the discussion for too long, what the speaker is saying is completely irrelevant to the topic, or you don't understand the point he / she has made'.

You can then give them or elicit a list of phrases which they might use to interrupt politely (e.g. 'Can i just add something here?', 'Sorry I'd just like to clarify something,' etc.) The students then write five of these on slips of paper (one per slip) and have a group discussion on a given topic. The aim is to use all of the language on their slips. When they have used a phrase, they put the slip in the middle of the table. The other students in the group judge whether the interruption was appropriate / polite. If not, they take the slip back and try again.

Use functional language

Depending on the types of group discussions that you plan to do with your class, it is useful to draw up a list of useful functional language for the students to refer to. This could include phrases for functions such as 'Giving reasons', 'Giving your opinion', 'Agreeing and disagreeing', etc. You can either make up the list yourself and distribute it or get the students to do this. For each group discussion, you can then refer them to the appropriate section of the list and give them a few moments to consider the language before beginning the discussion.

Discussion Etiquette

DO'S

- Stay with the topic .
- Make original points & support them by substantial reasoning .
- Listen to the other participants actively & carefully.
- Whatever you say must be with a logical flow and validate it with an example as far as possible.
- Be polite to the group
- Think before you speak
- Regulate you voice through tone modulation
- Try to get your turn
- Be aware of your Kinesics.

DON'T

- Argue
- Being shy /nervous / keeping isolated from G.D
- Interrupt another participant before his arguments are over
- Speak in favor ; example: Establish your position and stand by it stubbornly
 - Change opinions
- Don't make mockery of any participant even if his arguments are funny.
- Use of personal anecdotes and experiences.

Essentials of Group Discussion

Professional arena today demands people with good communication skills. In addition to these skills one must be well acquainted with the facts and figures. Interviews and group discussions play a vital role in the recruitment of any individual to company in the present scenario. Most of the people keep aloof from these group discussions, debates, elocution since childhood due to crowd fear or stage fear. This ultimately makes them weak in communication skills and hampers further. One must fully participate in such activities because they enhance one's communication, vocabulary, fluency in English and keeps one abreast with the current scenario. It also instills confidence in an individual to speak on any topic.

Group discussions makes us to participate in group and put forth our views. There is a lot of difference in a debate and a group discussion. In a debate there are two sides one in favour of the topic and other in opposition. They have to stick to their view. Instead in a group discussion there are no such groups. There is a healthy discussion to get a positive and a constructive conclusion. One can agree or disagree on the views of other fellow participants. Following are the few essentials which have to be kept in mind while participating in a group discussion

1. Clarity of Topic:

When the topic of the group discussion is announced. One must move the vehicles of his/her own memory to gather all the points one can recollect. If one is totally unaware about the topic, one must not step ahead and initiate. He must first listen to the views of other, then understand the topic and then put forth his/her views.

2. Start where Left:

Start the discussion from where the other person has left the topic. Do not just start giving your views. Try to synchronise your views with the views of other. Try to show agreement with others if you are satisfied with the points else you can put forth your views on disagreement.

3. Active Participation:

One must actively participate in the group discussion to have a good impression on the jury as well as the fellow members. but this active participation should be emulsified with relevant views. Unnecessary and irrelevant points can put you in trouble and deduct the points. So be careful with your views.

4. Healthy Tone:

Try to put forward your views in healthy and impressive tone. Do not get aggressive when anybody opposes you or is against your point. It also reduces the points. Remain calm and cool.

Gestures and movements that you should avoid during GD & PI

Body language plays a major role in your group discussion and personal interview rounds. As you have read in the previous article on MBAUniverse.com about the role of body language, your action speaks louder than your words. So be careful before you act as it can destroy the entire game which you had almost won by utilizing your content, multiple entries and leadership skills.

In this article, we talk about the gestures which should be absolutely avoided by you:

1. Pointing fingers: Pointing fingers generally signify talking in anger and accusing someone with your finger. It exhibits your aggression.
2. Playing with pen or paper: Playing with pen, paper or just moving your hands shows careless attitude. Whether you remain silent or talk while playing with such objects, it will show your lack of interest.
3. Stooping/slouching: You should sit straight while in a GD/PI. Don't stoop or slouch or bend forward. That is an informal posture and is not at all welcomed in GD/PI rounds.
4. Sitting with crossed arms/legs: When you sit with crossed arms/legs or both, it refers to a closed mindset and a person who is not ready to accept/listen to others' point of views.
5. Throwing your hand: Don't throw your hands in such a manner that it enters your next group member's space. Every one has their own personal space and entering that disturbs the entire group coherence.
6. Fidget: You should not keep fidgeting or move uncomfortably in your chair.
7. Not to be stiff: When it is advised that you should not keep fidgeting, it is also meant that you should not be absolutely stiff in your position. You should be comfortable in your posture.

8. Scratching, pricking, rubbing: You should not engage your hands in inappropriate activities such as scratching, pricking, rubbing etc. This will again show your lack of interest in the GD/PI and too much obsession with yourself.

9. Control your facial expressions: Control your facial expression and avoid showing your anger/disgust/frustration reflect on your face. Also don't smirk, smile or laugh unnecessarily. Don't make it too stoic.

10. Moving your legs: Moving legs refer to impatience. If you keep moving your legs, you will communicate that you want to get rid of the GD/PI process. Even if you feel that way, you should control your movements and body language to make yourself appear enthusiastic in the B-School admission process.