

Logical reasoning focuses on the aptitude questions that require logical analysis to reach a correct solution. Most of the questions are based on concepts, and the rest are out of the box thinking.

The Logical reasoning section is intended to test whether you can read the writer's argument and recognise which of its claims strengthens or weakens it. It also checks your ability to make inferences about what is being mentioned in statement. It will require a candidate to be able to use structured and logical thinking in order to identify the different parts of an argument, e.g. its starting points, conclusions, assumptions, inferences etc.

Logical reasoning is classified into two types

Verbal reasoning: It is a way of thinking about concepts and dealing with problems in words. The ability to infer information and its implications in a sentence is tested by verbal reasoning.

Nonverbal reasoning: It is the ability to consider concepts and solutions for problems that are expressed through numbers, letters or figures in combination with words. The ability to deduction and infer the logic of information and consequences in an issue is evaluated by nonverbal reasoning.

How to approach Logical Reasoning section?

The applicant must understand what the author is trying to tell and his reasoning process so that one can respond to questions in this section. That is to say, you must understand what the author is trying to convey and wants you to believe. The reasons why he argues a certain position must also be understood. The main point of the passage is what the author wishes you to believe. Two of the most important concepts in logical reasoning are the main point and the reasons that support it. Questions are often asked about the main point. In addition, the applicant can be asked to make his or her predictions of what may happen if the statements made in this passage are true. Arguments may be based on situations which are similar in logic as those described in the passage. To put it simply, questions are based on the knowledge or information gathered from a passage but are applied to another context. These are known as analogies.

How to Proceed

- While you're reading the first sentence of the passage, think about what the subject of the piece is. What this passage means? In fact, the topic of this passage will usually be specified in the initial sentence.
- You'll have to figure out the author's point of view about the topic. For example, if the opening

sentence is about pollution, you must mentally make a note of whether he is talking about ways to solve the problem or is he simply trying to prove that the problem is not as serious as it is made out to be. It's important to try and understand why the author wrote this passage. What's the most important thing he's trying to say? What's his conclusion from that?

- Even if the questions based on the passage do not ask you what the main point of the passage is, you must make up your mind about the main point of the passage. If you don't do that, it's going to be very difficult to answer any of the other questions, because logical reasoning questions are all about the main point and the reasons the author gives for the truth of the main point.

Read the passage then read the questions one by one.

- o Remember, you've to answer the questions on the basis of the information provided in the passage and nothing else. Even if you have prior information on the subject, even if it is from another passage in the paper, do not use it to answer the questions.

This is a matter of confusion, but once you have an adequate understanding of the concepts, these questions can be answered with ease.

Importance of Logical Reasoning in CLAT

Candidates need to know the key sections in order to make good marks as they prepare for CLAT. CLAT Logical reasoning carries 20% weightage for the UG question paper, which is intended to test candidates' ability to understand and think in logical terms. Candidates need to learn the logical part of this exam in order to have a good preparation for CLAT.

In the exam, you might be faced with short passages with one question based on it as well as passages with four questions based on each passage. An aspirant's ability to interpret patterns and sequences of numbers or to identify relationships between shapes, codes, etc. will also be tested in the CLAT exam along with this new pattern of questions.

Few questions are based on the type of logic present in logic puzzles, and may be based on blood relations, family trees, number and alphabet series, etc.

Important Topics of Logical Reasoning for CLAT

Critical Reasoning

Paragraph-Based Reasoning Questions

Syllogisms

Statement and Assumptions

Statement and Arguments

Statement and Course of Action

Fact, Inference and Judgement

Passage and Inference

Analytical Reasoning

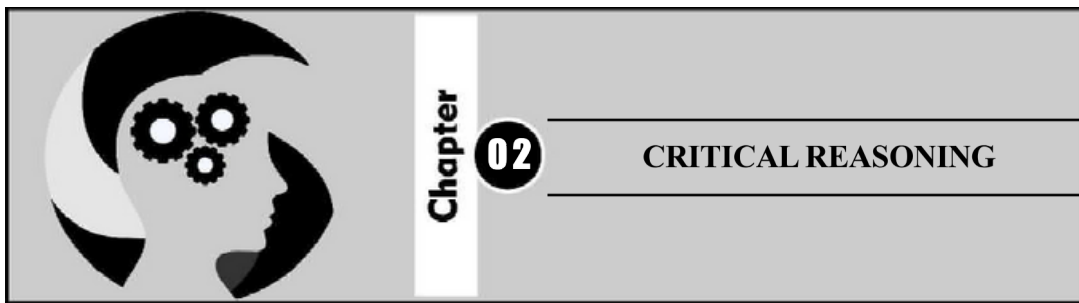
Blood Relations

Number Series

Coding-Decoding

Seating Arrangement

Data Arrangement



The importance of Critical Reasoning in the examination paper has been kept varying through the years in CLAT. For example, in CLAT 2011 almost the complete Logical Reasoning section has only comprised of questions related to Critical Reasoning. In AILET, almost every year, around 5-10 questions on Critical Reasoning have been asked. This portion is also frequently asked in other entrance exams like SLAT, MH-CET etc.

However, Critical Reasoning has now become a pre-dominant section of Logical Reasoning. Most of the questions of the Logical Reasoning section would now comprise of Passage Based Critical Reasoning. These questions test the reasoning, comprehending skills and the ability to make and evaluate arguments, and the ability to draw conclusions in particular. Hence each and every topic under Logical Reasoning plays very important and prominent role in securing good marks in the entrance exam.

I. PARAGRAPH-BASED QUESTIONS

Let's take an example of a question to elaborately discuss the question format as well as its elements.

Que: Soft drinks have been shown by scientists to be bad for the teeth.

Therefore, the government would be justified in banning all soft drinks from the Indian market.

Let's assume that the factual claim in the above given argument is true, now the question comes what else needs to be assumed for the conclusion?

- Ⓐ That the government justified in banning anything which is bad for dental health
- Ⓑ Soft drinks are bad for dental health
- Ⓒ Dental hygiene is a matter of great concern in the eyes of government
- Ⓓ Indian market is flooded with soft drinks

The paragraph based logical reasoning contains a paragraph followed by a question on the paragraph which is further followed by four choices. After reading and analyzing the question, you have to select one of the answer from the given choices as the correct answer to the question.

The questions of Logical reasoning are divided into three parts:

1. Stimulus
2. Question Stem
3. Answer Choices

Stimulus

Stimulus is one of the most important and fundamental part of a question. A stimulus is a part of the question which can either be a paragraph or a simple sentence. Furthermore, a stimulus might put forward an argument or it might plainly state the simple facts. Though the former appear more often, we should be well versed and prepared to solve questions of both types.

We make plethora of arguments everyday regarding why the cricket team lost, how the current government is performing, what were the roles done by previous government, why something should be done or should not be done, why you should watch a particular movie etc. In each and every argument there is a reason to support such an argument, which is called 'pre-mises' for this purpose. Reasons or premises are nothing but the basis on which the person relies to convince the truth imputed in the argument. Thus, the bowlers bowled badly (to why the cricket team lost), the script as well as the actors are really good (to why should you watch a particular movie), etc., are some of the premises of our arguments.

The purpose of making any argument is to come to a 'conclusion', based on our premises. It is something that the person wants the other to believe and supports it with premises to make him believe that. In fact, the assumptions are the most crucial link in any argument. We knowingly or unknowingly make dozens of assumptions everyday in all our arguments. For example while ordering a pizza we assume that the pizza would be delivered as per the description given, the description given in the menu is correct, the waiter will understand what we ordered, the pizza would not make us sick and so on. Assumptions play an important role as building blocks or the foundation of any statement.

Arguments = Premises + Assumptions + Conclusion

Understanding it in context of the above-mentioned question.

Premises: Soft drinks have been shown by the scientists to be bad for the teeth (evidence).

Conclusion: Therefore, the government would be justified in banning all soft drinks from the Indian market (this is what the author wants us to believe).

Assumption: The government is justified in banning any-thing which is bad for dental health.

Student is required to read the question closely without ignoring any fact as each and every fact which may appear irrelevant is relevant for drawing conclusions or inferences.

The Question Stem

The question stem is another part of the question which plays an important role primarily because after reading the stimulus, you are equipped with conclusion and evidence, but you are direction less. The question stem gives you the direction and it shows the way that how to proceed.

From CLAT perspective, the various types of important question stems are as follows:

- 'The above given argument assumes that'
- 'The conclusion drawn above cannot be true unless which of the following is true?'
- 'What must be assumed in order for the conclusion to follow?'

II. SYLLOGISMS

The word ‘Syllogism’ is derived from a Greek word *Syllogismos* which literally means conclusion or inference. According to Oxford Dictionary it as ‘an instance of a form of reasoning in which a conclusion is drawn from two given or assumed prepositions (premises); a common or middle term in pres-ent in the two premises but not in the conclusion, which may be invalid’.

Generally syllogism questions in CLAT and other major law entrance examinations, usually consist of two or three statements or prepositions and further are provided with 2-4 conclusions of these prepositions, of which the student has to check the validity.

Preposition is a statement which shows the relationship between two term and it consists of the following elements:

Quantifier is a term which assigns a quantity to a particular object. So terms like ‘all’, ‘some’, ‘none’, ‘no’, ‘most’ are all called quantifiers.

All Oranges are Tomatoes’



Quantifier

Subject is that part about which something is being said in the preposition.

‘All Oranges are Tomatoes’



Subject

Copula is that part which shows the relation between the subject and predicate for example, ‘thus’, ‘are’, ‘are not’, ‘is’ are all copulas.

‘All Oranges are Tomatoes’



Copula

Predicate is the last part which states what is stated about the subject in the preposition

‘All Oranges are Tomatoes’

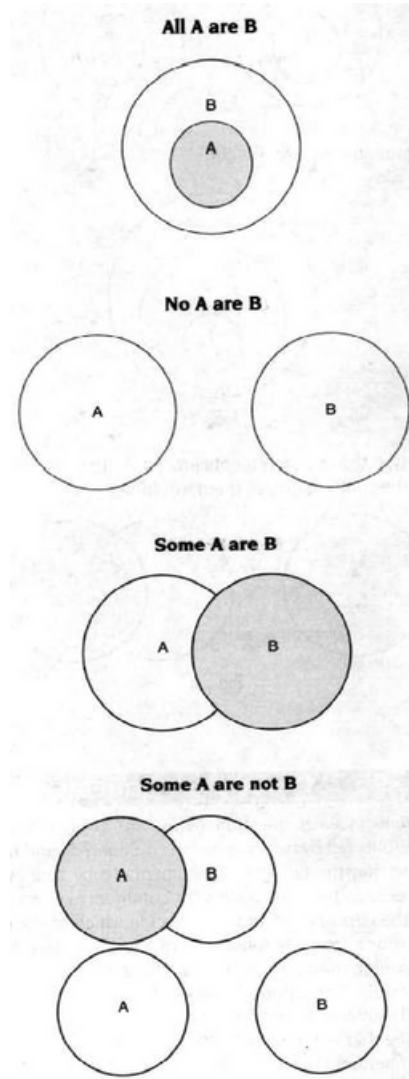


Predicate

8/DHYEYALAW

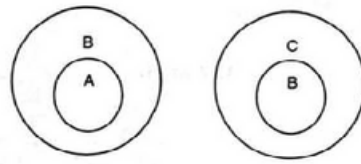
Let's now discuss the primary method of solving questions on Syllogism through the Venn diagram method.

1. **Draw the Venn diagram of each of the statements given in the question.:** Following are the standard Venn diagrams of each of the four types of statements that are usually asked in the questions on Syllogisms.

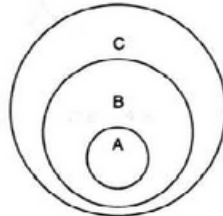


2. **Combine the diagrams of the given statements in as many ways as possible. :** For example, 'All A are B and All B are C'

The venn diagram for both would be



On combining the two, we get:



Similarly, if the two statements are 'No A are B, and Some B are C', the combination of them would be:

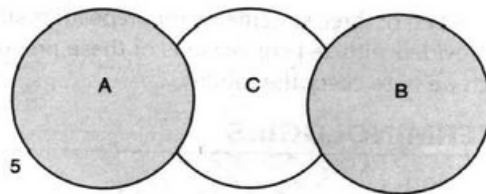
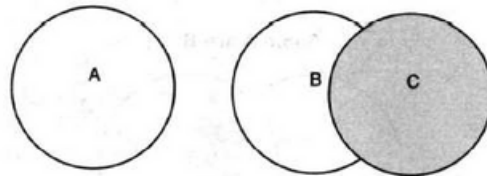


FIG. 3

3. **On the basis of the combinations arrived at, check the validity of the given conclusions.** -The final step is checking the validity of the given conclusions on the basis of all the combinations arrived at. It should be noted that for a conclusion to be valid, it should follow from all the possible combinations and not only one of them.

Thus, from the previous example, the valid conclusions on the basis of Figure 1 are:

- Some C are B
- Some B are A
- Some B are C
- Some A are B
- Some C are A
- Some A are C

On the other hand, some of the invalid conclusions which cannot be inferred would be:

- No A are B
- No B are C
- No A are C

Similarly, in the second example, on the basis of Figure 2 and 3, the valid conclusion would be:

- Some C are not A
- No B are C

On the other hand, some of the invalid conclusions which cannot be inferred would be:

- All A are C
- All B are C
- All A are B
- All B are A, etc.

LET'S CHECK YOUR UNDERSTANDING

In each question given below are two state-ments followed by two conclusions numbered I and II. You have to assume that the two given statements to be true even if they seem to be at variance with commonly known facts. Read the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding the commonly known facts. Give your answer:

- (a) If only conclusion I follows.
- (b) If only conclusion II follows.
- (c) If either I or II follows.
- (d) If neither I nor II follows.
- (e) If both I and II follows.

1. Statements

- I. All Computers are Laptops.
- II. Some Computers are Laptops.

Conclusions

- I. Some Computers are Laptops.
- II. Some Computers are not Laptops.

2. Statements

- I. All Chairs are Tables.
- II. All Tables are Furniture.

Conclusions

- I. All Tables are Chairs.
- II. All Furniture are Tables.

3. Statements

- I. Only students are schools.
- II. Some schools are ICSE.

Conclusions

- I. Some ICSE are students.
- II. Some students are ICSE.

4. Statements

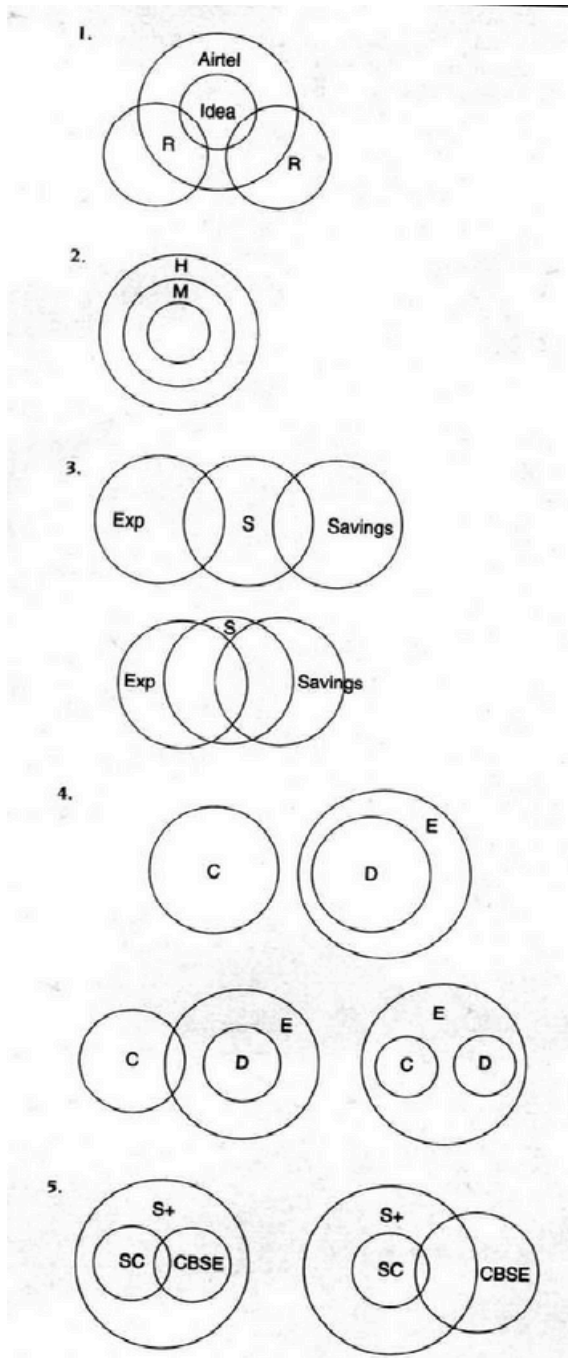
- I. No apples are oranges
- II. All oranges are fruits

Conclusion

- I. Some apples are not fruits
- II. Some fruits are not apples

Correct Answers With Explanation

- 1. (e)
- 2. (d)
- 3. (e)
- 4. (b)



III. STATEMENT AND ASSUMPTION

Assumption is the foundation on which the argument rests. If the assumption is invalidated, or falsified, the whole argument falls like a house of cards. Thus, it is completely necessary to have a good command over assumption questions to master the critical reasoning chapters.

One of the peculiar traits of assumption is that it is something which the author believes to be true. Otherwise why would he make such an argument? Let's understand the same through an example.

Statement: The Indian hockey team performed well and won the world cup under the old coach. But it has not performed very well under the new coach. Thus, the new coach is the reason why the Indian team is not performing well.

Conclusion: The new coach is the reason why the Indian team is not performing well.

Premises: The Indian hockey team performed well and won the world cup under the old coach.

Premises: But it has not performed very well under the new coach.

Now think, while making the argument what does the author believe to be true? (Ignore the fact that the reasoning of the author is invalid and outright ridiculous). That will be the assumption. Following are some of the assumptions made by the author.

- The composition of the hockey team is pretty much the same or similar under the new coach as it was under the old coach.
- The players are playing equally well under the new coach as they were playing earlier under the old coach.
- The team is losing matches against the teams of the similar level against whom they won under the old coach.

As we discussed earlier, if the assumptions are invalid or false, the whole argument falls like a house of cards. Let us falsify the above-mentioned assumptions and check what happens to our argument.

'The composition of the hockey team is different under the new coach as it was under the old coach'.

Now, if the composition itself is different, blaming the coach for the loss would be inappropriate. There is a possibility that the team had better players earlier, when compared to the current players and in such a situation, putting the blame on the coach is not suitable. Thus, in view of such a negated assumption, the argument falls.

Let us negate another stated assumption. 'The team is not losing matches against the teams of the same level against whom they won under the old coach.'

Again, the team might be losing matches against higher ranked teams now and won matches against lower ranked teams earlier. In this case also, it would be improper to blame the coach for the losses. Again, the argument falls in light of the negated assumption. This brings us to the technique of solving the assumption questions.

The Assumption Negation Technique

The negation technique is one of the better ways of solving the statement and assumption questions. This technique can be divided into the three following steps.

1st STEP: Narrow Down the Answer Choices

First step is to eliminate at the first glance what appears more like a conclusion and not an assumption or when the statement speaks about something totally unrelated to the facts. Though using the negation technique on all the options might be very time consuming but this is the best way to move and analyze the right answer.

2nd STEP: Negate the Remaining Answer Choices

Negating means simply changing the statement so that the meaning of the new statement is logically opposite to that of the old. In fact it means adding a ‘not’ when it is not present and deleting the ‘not’ when it is present in the statement. Thus, ‘the composition of hockey team is pretty much the same’ becomes ‘the composition of hockey team is different’ and ‘the team is losing matches against the teams of the same level’ becomes ‘the team is not losing matches against the teams of the same level.’

3rd STEP: Look for the Negated Assumption that Cannot Coexist with the Argument

Now look for an assumption which attacks the argument or which cannot coexist with the argument. In a very simple words, if the negated assumption is true, the argument cannot possibly be true and if the argument is true then the negated assumption cannot possibly be true. The assumption which fits the above-mentioned criteria will be the correct one.

LET’S CHECK YOUR UNDERSTANDING

Direction: In each question below is given a statement followed by two assumptions numbered I and II. Consider the statement and decide which of the given assumptions is implicit.

Give answer:

- (a) If only assumption I is implicit.
- (b) If only assumption II is implicit.
- (C) If either I or II is implicit.
- (d) If neither I nor II is implicit.
- (e) If both I and II are implicit.

1. Statement: ‘Use our handsets and you will be stunned by its voice clarity and flawless sound’, an advertisement of mobile manufacturer.

Assumptions:

- I. The advertisement will have no effect on the people and they will continue using their existing handsets.
- II. People want voice clarity and good sound in their mobile handsets.

2. Statement: ‘Profitability is a necessary condition for existence and a means to more important ends, but it is not the end in itself for many of the visionary companies. Profit is like oxygen, food, water and blood for the body; they are not the point of life, but without

them, there is no life:- Built to Last

Assumptions:

- I. Profitability is an absolute essential element for existence of even visionary companies.
- II. One cannot be a Visionary company if their main motive is profitability.

3. **Statement:** One should make notes from the news-paper everyday for an efficient preparation of current affairs.

Assumptions:

- I. One cannot prepare for current affairs efficiently without reading newspapers.
- II. Making notes helps in an efficient preparation of current affairs.

4. **Statement:** ‘Use our trial products for once before using any product from MNO’s products’
- An advertisement of XYZ company.

Assumptions:

- I. People will not respond to such advertisements.
- II. People like using trial products before buying them.

Correct Answers With Explanation

- 1. (b) : Assumption as an advertisement only publicizes the characteristic of the product which its potential customers want to see in that product The advertising company cannot possibly move on to the assumption that it will have no effect on people. Thus, I is ruled out. II is a valid.
- 2. (a) : Only It is a valid assumption primarily because of two rea-sons. First, the author tacitly states the same in the first line ‘Profitability is a necessary condition for existence .. .’. Second, since the author has compared profitability to oxygen, food, water and blood, his clear assumption is that it is extremely essential for the existence of visionary companies. Statement II. however, is not an assumption of the statement since it clearly states ‘ ... but not an end in itself for many of the visionary companies’.
- 3. (b) :It is nowhere implied that making notes from the newspaper is the only way for efficiently preparing for current affairs. Thus, I is ruled out. II is a clear assumption of the author.
- 4. (d) :Both the assumptions are valid. Since the company has pub-lished (or telecasted) a particular advertisement, their assump-tion is that people will respond to such advertisements. Otherwise, they would not have gone ahead with that adver-tisement. Similarly, since XYZ company is motivating potential consumers to use their trial products, the clear assumption is that people do like using trial products before making the purchase

IV. STATEMENT AND ARGUMENTS

Arguments means a reason or set of reasons that somebody uses to show that something is accurate or cor-rect. As a litigating lawyer your success in any given case would largely depend on the quality of arguments that you present in the court. It is the quality of sepa-rating and identifying the strong arguments from the weak ones which the examiner seeks to test from the candidates.

LET'S CHECK YOUR UNDERSTANDING

Direction: Each question given below is followed by two arguments numbered I and II. You have to decide which of the following argument is a 'strong' argument and which is a 'weak' argument.

Give answer:

- (a) If only argument I is strong
- (b) If only argument II is strong
- (c) If either I or II is strong
- (d) If neither I nor II is strong
- (e) If both I and II are strong

1. **Statement:** Should the persons vehicle be kept in custody when he is driving it without the driving license?

Arguments:

- I. Yes. Driving without a license is in violation of law.
- II. No. As sometimes people due to the fear of misplacing the document hesitate to keep the original license with them.

2. **Statement:** Should football as a sport be included in Olympics?

Arguments:

- I. Yes. It is hugely popular in countries like Europe and England.
- II. No. On a whole, only a handful of countries have prominent football teams, whereas Olympics require participation from most of the countries of the world.

3. **Statement:** Should 'Politics' be taught in schools?

Arguments:

- I. Yes. An informed electorate is the key to a strong democracy.
- II. No. Politics and education should not be mixed as it will affect both adversely.

4. **Statement:** Should Railways levy a small modernization extra-charge on the passengers?

Arguments:

- I. Yes. It will greatly help the railways in generating the required funds for modernizing various facilities provided by them.
- II. No. It will significantly imbalance the funds of an average household.

Correct Answers With Explanation

1. (a) : Impounding the vehicle would act as a sufficient deterrent, and is not an extreme measure. as some might think. Thus, I holds strong. The fear of losing the licence is no excuse for not keep-ing such a vital identification document at all times, especially while driving a vehicle. Thus, II is weak.
2. (b) : A particular sport being hugely popular in a few countries is no reason for its inclusion in Olympics which invites participation from almost all the countries. Thus, I is weak. If football is played seriously by only a handful of countries, it will not generate interest as generated by other games of the Olympics. Thus, II holds strong argument.

3. (a) : Educating the school going children on politics will definitely acquaint them with the intricacies and modalities of the same and will help them in making an informed decision while casting their vote. Thus, I holds strong. II is vague and does not give any argument.
4. (a) : I is strong as the surcharge will definitely help the railways in generating funds for the much needed modernization of the railways. On the other hand, such a minor surcharge is highly unlikely to greatly imbalance the budget of an average house-hold. Thus, II is a weak argument.

V. STATEMENT AND COURSE OF ACTION

In course of one's life, person often come face to face with problems, some of them are more challenging than others. Choosing the correct solution or course of action helps in solving or at least lessen it. On the other hand, choosing the incorrect path might not only enlarge the current problem but might also cre-ate new problems. This underlines the unquestionable need to choose wise solutions to problems and this trait is what the examiner is trying to test through the questions based on statement course of action.

For efficiently solving the statement course of action ques-tions, the proposed course of action should pass through 3 tests which we can name as 'The 3Ps test

Prune

It means cutting short, or lessening the problem which can be effectively be done by choosing correct course of action. If the pro-posed solution to a problem is not lessening the problem then this means that the course of action is not correct for it. Thus, when faced with various course of actions, the person is required to chose the one which is less-ens or eliminates the problem in hand.

Proportional

The proposed solution should always in proportion to the mag-nitude of the problem. Thus, a very simple solution to an explicitly complex problem and vice versa is not desirable. *For example,*

Statement: Financial scams have severely impacted the growth and development of India in the past few years.

Courses of Action: Schools should have more classes on subjects like moral science and politics.

Now, the problem mentioned above is a very big and prominent prob-lem, perhaps one of the biggest problem our country is facing today. To eliminate corruption, what is needed action both on the part of the government as well as on the part of pub-lic. Merely increasing the moral science and politics classes would not have any substantial effects on the corruption of the country. Thus, this is a very far-fetched and simple solution to a very complex and massive problem.

Practical

The last and the final test completes our trilogy of tests. The proposed course of action should in addition to pruning down the problem, and being proportional to the magnitude of the problem, should also be practical. In everyday life, our mind gives us whole lot of solutions for various

problems, but they cannot be implemented due to the practicality element. Consider the following examples.

Statement: The experienced scientists are now claiming that the world might end in 2025.

Course of Action: Big spaceships must be built immediately and all the wealthy residents of earth must be shifted to some other planet for their safety.

Statement: The Union Minister for External Affairs has noted with concern the disturbing trend of terrorist recruiting young boys and girls.

Course of Action: All the young boys and girls of all the areas near which the terrorist operate should be put under constant surveillance.

The course of action proposed in both the above mentioned examples might lessen down the problem and proportional with the solution but none of the course of action is practically possible for the authorities. Thus, such a course of action would not be desirable.

LET'S CHECK YOUR UNDERSTANDING

Direction: In each of the questions below is given a statement followed by two courses of action. On the basis of the information given in the statement, you have to assume everything in the statement to be true then decide which of the suggested courses of actions is worth pursuing.

Give your answer as:

- (a) If only I follows
- (b) If only II follows
- (c) If either I or II follows
- (d) If neither I nor II follows
- (e) If both I and II follows

1. Statement: Hotel Radisson Blu is planning to go overseas with its hotel business and is planning to set up a premium and luxury property in the Mauritius.

Courses of Action

- I. Hotel Radisson Blu should be prohibited from constructing such hotels and should be ordered to invest in social sector programs.
- II. Hotel Radisson Blu should be requested to fully explore the domestic areas first before moving overseas.

2. Statement: The World Bank's recent downward revision of India's growth prospects was by no means unexpected as it merely follows the trend set by international rating agencies.

Courses of Action

- I. The investors should be cautioned and asked not to pay heed to such downward revisions.
- II. Core problems lowering India's growth and thereby the rank should be recognized and addressed extensively.

7.15 per cent and continued to rise, peaking in April 2023 at 12 per cent.

Courses of Action

- I. Inflation is a natural phenomena and the gov-ernment should not try to curb or control it.
- II. The government should regulate the increase in wages of the workers of private and public enter-prises, as the same plays a major role in increas-ing product/service prices and culminates in increasing inflation.

4. **Statement:** Experts estimates that up to 50,000 people may have been left disabled by the Japanese enceph-alitis and viral encephalitis diseases, since they were first detected in 1976 and even government records show that 25,000 have died and another 25,000 left permanently disabled

Courses of Action

- I. Steps should be taken to find out why is there difference between the estimates of the experts and that of the government.
- II. Action should be taken on war footing by the government by increasing awareness. hospital beds in affected areas, deploying specialized doctors and looking for effective vaccinations.

Correct Answers With Explanation

- 1. (b) : I does not follow as a private entity cannot be forced by the government into investing in the social sector programs. However, Raddison Blu can be requested by the government to explore the domestic market fully, before foraying into the foreign mar-kets. However, had the same course of action used ‘ordered’ or ‘strictly asked’ instead of ‘requested’, it wouldn’t have been a desirable course of action.
- 2. (b) : Asking investors not to pay heed to downward revision would not solve the problems and will further lower the investor’s confi-dence in India. II should be followed as it speaks about address-ing the grass root and core problems that are stalling India’s growth.
- 3. (d) : Both do not follow. Firstly, inflation is not completely a natural phenomenon. It is the result of changes in market forces, and thus, can be and should be controlled by the government. However, II talks about an impractical way of curbing inflation. Though regulating the wage of workers might have an effect on inflation, it’ll culminate in tussles between the workers’ unions and the government, which might give rise to more problems.
- 4. (b) : I does not follow as finding reasons for the difference would not have any tangible effects on the fight against the disease. Further, even the experts say that 50,000 people may have been left disa-bled by this disease, and thus, they might be wrong also. II rightly speaks about preventive as well as curative measures, and thus, it is a desired course of action.

VI. FACT, INFERENCE AND JUDGMENT

Questions related to this part are asked here and there in the exam but preparing this part thoroughly is not a bad idea. The student is to recognize and differentiate Facts, Inferences and Judgments.

statistics. Facts mostly depend upon the past or a present happening and hence they cannot be made about future event

Inference on the other hand is the act of deriving logical conclusions from premises known to be true. Thus, inferences are when something unknown is derived from something which is known. You can recognize it by such common indicators, 'would', 'could', 'might', etc

Inference = Fact + Logic of Deduction + Conclusion

Further Judgments are characterized as individual opinions and usually denote the approval or disapproval of something. You can recognize it by such common indicators, 'should', 'must', etc.

LET'S CHECK YOUR UNDERSTANDING

1. (A) Platinum and coins exports jumped 25 % in April to September.
 (B) You have to work harder to crack examinations like the CLAT(UG).
 (C) Usain Bolt is such a fast runner that he may even defeat the fastest land animal on Earth someday.
 (D) Due to the collapse of the bridge, people are facing a big problem of travelling to the town.
 (a) FJFI
 (b) JFIJ
 (c) FJJI
 (d) FFJJ
2. (A) An apple a day keeps the doctor away.
 (B) Be the change you wish to see in the world.
 (C) Without music and movie, life would be a mistake.
 (D) A room without books is like a body without soul.
 (a) IJJJ
 (b) FJJJ
 (c) JJJJ
 (d) FJFJ
3. (A) I believe that 20 per cent of your work generates 80 per cent of your returns
 (B) Justice R. Banumathi recently became the first woman judge from Tamil Nadu to be elevated to the Supreme Court.
 (C) Raj asks a lot of questions in the class. This leads to him understanding the class concepts better than others.
 (D) Taking the CLAT online mayor may not lead to an increase in the number of aspirants taking the CLAT.
 (a) JFJJ
 (b) JFFF
 (c) JFII
 (d) FJFJ

4. (A) ABC Tutorials is the best coaching institute in the city as it gives best study material.
(B) Excessive Cash on Delivery (COD) orders have led to stagnancy in the growth of eCommerce companies.
(C) Overseas investors have pumped in ₹5,200 crores in capital markets in the first week of the month.
(D) The dwindling of Foreign Institutional Investments (FIIs) will have a negative effect on investors' sentiments.
- (a) JFFF
(b) JFJJ
(c) FJFJ
(d) JIFI

Correct Answers With Explanation

1. (b)
J- The statement provides a statistic which can be independently verified.
F- This is an opinion which people may not agree with.
I- This is only an opinion on the running abilities of Usain Bolt. It cannot be verified independently.
J- 'Collapse of the bridge' is the fact on the basis of which inference is drawn on 'villagers facing the problem of travelling to the town'.
2. (b)
F- 'The doctor away' is an inference which follows from 'An apple a day'.
J- This is a quote which is an opinion of someone.
J- This is a quote which is an opinion of someone.
J- This is a quote which is an opinion of someone.
3. (d)
F- Though this might seem like a fact, it is at the best of opinion. Furthermore, the person making the statement has said 'I believe'.
J- This is a verifiable fact.
F- Raj asking a lot of questions (Fact) which leads him to understand the class concepts better than others (Inference).
J- Taking the CLAT online (Fact) may not lead to an increase in the number of aspirants taking the CLAT (Inference).
4. (b)
J- A tutorial being the best cannot be independently verified as best is a subjective term. It may have different meanings for different people.
F- The first half is a fact, whereas the second half is an inference derived from the fact.
J- This is a verifiable fact.
J- The first half is a fact from which the second half of the statement is inferred

VII. PASSAGE AND INFERENCE

The Question Format

A passage and inference question comprises a non-fictional passage usually but not restricted to socio-economic issues which are followed by three to five inferences. Students have to evaluate the inferences in the light of the given passage and state the degree of truth or falsity of the specified inferences.

In very simple words, students have to judge whether a particular inference follows from the given passage and also its extent. Let's understand this concept through an example.

Direction: In the question below, a passage is given followed by several inferences. You have to examine each inference separately in the context of the passage and decide upon its degree of truth or falsity.

Mark the answer as

- (a) If the inference is definitely true.
- (b) If the inference is probably true.
- (c) If the data is inadequate.
- (d) If the inference is probably false.
- (e) If the inference is definitely false.

Passage: Reserve Bank of India from the past many years have moved towards a policy of market-determined exchange rate which is in line with Anglo-Saxon beliefs. But for better welfare progress and societal needs to meet the objectives of societies growth, jobs and financial stability, etc. we are required to follow the date back of managing the exchange rate in order to maintain the external value of the rupee around a level which would keep the current account deficit within +/-1 of Gross Domestic Product (GDP). If the cost of intervention and sterilization becomes unaffordable, the solution would be to impose controls on capital movement, rather than giving up management of the exchange rate.

Inferences

1. Growth has suffered ever since RBI has embraced the policy of market-determined exchange rate.
2. Rupee is currently being traded at a much lower level, as compared to the level on which it was traded two years ago.
3. Reserve Bank of India has the right to intervene in the determination of exchange rate of Indian rupee.
4. Imposing control on capital movement might further provoke agitation regarding the condition of rupee.

Stick to the Facts

The students are required to stick to the facts without making any assumption or anticipation regarding the given facts in the question. It is one of the most often repeated guideline and yet the student fails to follow the same and hence thereby fail in answering these questions correctly. Just stick to the facts and don't deviate from it so as to answer the question properly and correctly. Let's take an example of a common mistake made by students.

Consider the sample passage given above and consider its first inference. There is bound to be considerable dis-agreement over whether it should be probably true, or facts insufficient. The former is fuelled by the statement "But if the objective is growth, jobs and financial stability..." This statement in a way might suggest that this objective hasn't been met and that's why the author is now suggesting that RBI should manage the exchange rate. However, on independently analyzing this statement in the light of the passage, the growth of the past two years has found no mention anywhere. Yes, the author is asserting that RBI needs to move away from the minimum intervention policy if its aim is growth, but it is at most a personal opinion and in the absence of concrete facts and statistics regarding the present growth rate a negative growth rate would be a wrong assumption to make.

Making an Assumption

From the perspective of solving the questions, the primary difference between the legal reasoning questions and Passage-Inference questions is that in the latter, you are allowed to make universal assumptions whereas in the former any deviation whatsoever from the principle/facts might put the student in trouble. So, what is making assumption all about? And why is this relevant to solving questions of this chapter. Let's try and understand it with the help of an example.

I. Statement: The Indian prime minister met delegation from Vietnam in July 2010.

Inference: Manmohan Singh met the Vietnamese delegation in July 2010.

The above statement nowhere mentions the name of the Indian prime minister, but the inference, which implies that the Indian prime minister is Manmohan Singh, is definitely true. This is because it's a universal truth that the Indian prime minister at that time was Manmohan Singh, and thus, we are moving on such an assumption.

II. Statement: Corruption at all levels is obstructing India's growth story.

Inference: Politicians are solely responsible for obstructing India's growth.

The above statement says that the corruption at all levels is obstructing India's growth story, whereas the stated inference blames the politicians solely for the obstruction. Now let's try making an assumption. Our assumption here will be that corruption at all levels is synonymous with corruption in politics. However, our common sense will tell us that this is a very weak assumption. Corruption at all levels will include corruption in police, media, executive, judiciary, as well as in private parties which finds no indication in the provided inference. Therefore, the inference is definitely false.

Thus, the above-mentioned discussion can be summarized in the following points.

- ☞ Whenever the inference is not directly given from the passage, you will have to make an assumption to determine the truth or falsity of the inference.
- ☞ The assumption should be based on well known facts or common sense.
- ☞ The assumption should be universally true, which means that it should be considered true everywhere and its truth should not be disputed at large. Considering our first example, it was a universal truth that Mr. Manmohan Singh was the Prime Minister of India in 2010.
- ☞ As a general tip, do not dwell on exceptions. People might challenge even universal truths. But for our purposes universal truth is highly considered as truth by an absolute majority of people. For example: A small percentage of people think that Taj Mahal was not built by Shah Jahan, or that Shakespeare copied most of his plays but universal and proven truth is the opposite. In a nutshell, do not let your disagreements bother your belief of universal truths.
 - (a) The earth is round.
 - (b) A socialist government formulates its policies for the benefit of all its citizens.
 - (c) Adolf Hitler was a dictator.
 - (d) India got freedom due to non-violent methods adopted by our freedom fighters.
 - (e) India is the largest democracy and the 7th Largest country in the world.
 - (f) The Statue of Liberty is 92 meters/ 305 ft high and is made of a iron structure with copper skin.

Keywords

One should always read any given passage like a detective, and look for key words in it. Key words, for our purposes, comprises adverbs, verbs, adjectives and conjunctions. These are the words which can largely change the course of the inference. Some examples of key words are **no, none, all, some, although, though, despite of, in-spite of**, etc. Now let's consider a few examples of how such key words can influence the inferences, and why we should keep look-ing for them in each passage like a detective.

Statement: All the countries have pledged to reduce their greenhouse gas emissions by 2020.

Inference I: Some of the countries will not be success-ful in reducing their greenhouse gas emissions, as promised by them.

In this fast developing world with a plethora of industries as well as development goals which are to be met, it would be risky to assume that all the countries will be successfully able to reduce their emissions as pledged by them. Thus practically speaking, there will always be few countries that won't be able to reduce their emissions. Thus, the above mentioned inference is definitely true.

Inference II: All of the countries will be not be successful in reducing their greenhouse gas emissions as promised by them.

Though it's a risky preposition, we can still safely assume that out of over 200 countries, there will always be few coun-tries which will be able to keep the environment ahead of reckless development, and thus will be able to fulfill their pledge. Thus we can safely say that the above-mentioned inference is definitely false.

Thus the example demonstrates the importance of key words, and how different key words can make a difference in checking the truth or falsity of a statement/passage.

Passage: Our main goal was to find out how the PDS (Public Distribution System) functioned in rural areas and what the people thought about the idea of replacing it with cash -transfer system. Economic theory might tell us that cash transfers put the consumers on a higher indifference curve than subsidizing the prices. However, the survey found that the reality is quite different from the theory and the same was reported back to the government.

There is a constant gap between economic theories and survey results.

The government is contemplating by replacing the PDS with cash-transfer system.

The survey was conducted by a private survey agency.

Consider the first inference. It says that economic theories and survey results often contradict each other. If you look at the passage, the last line is substantiating this inference to an extent. But just on the basis of one instance, can we make a generalized inference that there is a constant disconnect between economic theories and survey results. This is where the confusion between probably true and data inadequacy creeps in.

Coming to the second inference, we can safely say that the survey was carried out at the behest of the Government. But the question that arises is whether the Government car-ried out the survey because it is contemplating replacing PDS with cash-transfer system? This also creates confusion as to whether the answer to the second inference is prob-ably true or definitely true.

So, how do we go about getting rid of such confusions?

Let's consider the second of these, the confusion between definitely true and probably true, and also the confusion between definitely false and probably false.

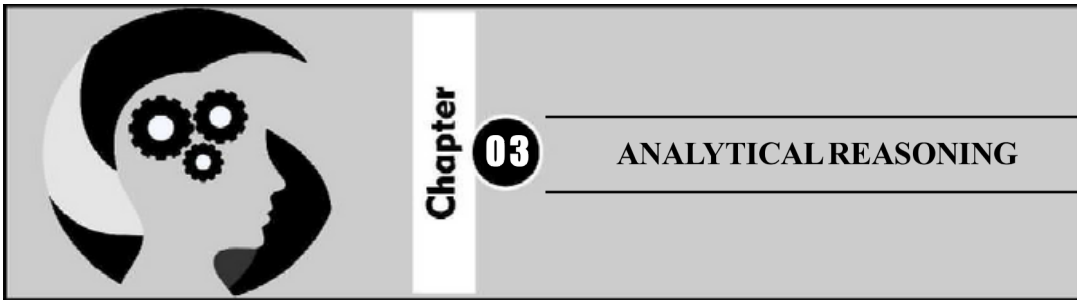
Earlier we read about making assumptions and why they are important in determining the truth and falsity of state-ments. Unless the inference is not a blatant restatement of the statement/passage, you will always make an assumption while coming to an inference. So, when you are armed with an assumption and confused between definitely true and probably true, or definitely false and probably false, then check the universality of your assumption. Ask yourself, how true and strong is this assumption? How many people are bound to disagree with this assumption? If your assumption is very strong and universally applicable, the answer will be definitely true otherwise it will be probably true. Similarly, if your assumptions is very weak and universally inapplicable, your assumptions is definitely false, otherwise it is probably false.

Let's consider the above-mentioned sample problem. While checking the truth or falsity of the second inference, the assumption we are making is that such a survey would not have been carried out, with government trying to find out how PDS functioned in rural areas, and what people thought about replacing it with cash-transfer system. However, what we need to check is that how true is that assumption? Will the government carry out such a survey only when they are considering replacing PDS? Can there be no other reason whatsoever? With a few stray exceptions, we can safely say that the answer to these questions is YES. The government seeks public opinions, and conducts surveys only on its pro-posals and when it is trying to change the status quo. Thus, the second inference is definitely true.

Coming to the second source of confusion, between probably true-data inadequate and data inadequate-probably false, the trick is checking the information as given in the passage again. Check if the facts as given in the passage are adequate to arrive at the given inference. If the inference can be arrived at with the help of limited facts given in the pas-sage, the answer will be probably true/probably false (if such an inference cannot be arrived at but facts are sufficient). If the given facts are too less and insufficient the answer will be data inadequate.

Now let's analyze the first inference. It is inferred that there is a constant disconnect between economic theories and survey results. Now ask yourself the same question, as asked above. Is sufficient information given? And can, on the basis of the information given, you can make such an inference? The information as given is only of one survey. Nothing else is given with regards to any other surveys where there was a breakage between economic theories and survey results. Thus, just on the basis of one such disconnect, we cannot say that there is a constant disconnect between eco-nomic theories and survey results. Thus, the answer is data inadequate.

□□□□□



I. BLOOD RELATIONS

Questions on Blood Relations plays one of the most important part in Logical Reasoning and these are quite repetitive in past few years for CLAT and other law entrance examination.

The questions in section can be divided in two types:

1. Puzzle-based (data arrangement) questions.
2. Statement-based questions.

It is important to know a basic rule to solve these types of questions. A student can visualize the situation and place themselves in the place of one of the characters and can answer the questions rightly if he/she has the right knowledge of questions on blood relations. Further it also depends upon his knowledge about various blood relationships in their real life.

Let's see the hierarchy of blood relationships-

1st Stage	Grandparents	Grandfather, grandmother
2nd Stage	Parents and in-laws	father, mother, father-in-law, mother-in-law, uncle, aunt
3rd Stage	Siblings, Spouse and in-laws	Brother, sister, wife, husband, brother-in-law, sister-in-law
4th Stage	Children and in-laws	Son, daughter, niece, nephew, son-in-law, daughter-in-law
5th Stage	Grandchildren	

Important terms to remember

Maternal - They are relations related to the mother's side. For example, mother's sister, mother's brother, mother's aunt and uncle, etc.

Paternal - They are the relations related to the father's side. For example, father's brother and sister, etc.

Remember the following relationships:

- ☉ Type of Relationship
- ☉ Mother's or Father's son
- ☉ Mother's or Father's daughter

Terminology in Use
 Myself/Brother
 Myself/Sister