

# 16

## Statement: Assumptions



Contrary to popular belief, critical reasoning is one of the most uncomplicated subjects in the GATE syllabus. It does not require maximum effort of the part of a candidate as compared to subjects like mathematics, etc. One can very easily solve critical reasoning questions with the help of common sense, lack of bias, and a little bit of practice.

The following steps are required to answer Critical Reasoning questions:

- Accuracy, precision, and discernment in language comprehension and use.
- Recognising implicit assumptions and values and using relevant information from the facts of the case.
- Interpreting data, assessing evidence, and weighing arguments.
- Determining whether logical relationships exist (or do not exist) between propositions.
- Making inferences and judgements based on your findings.

The process of judging a given statement and assuming the most feasible sentence among a set of assumptions is referred to as 'statement and assumptions'. In most cases, two assumptions are given. Depending on the provided statement, one or more assumptions may become reasonable. Here, an assumption can be described as a thought or an idea that is assumed to be true to arrive at a stated conclusion, but does not have any supporting evidence in the premises. To put it another way, it's an inferred premise from which the conclusion is derived. When we examine assumptions, we discover that when someone says or writes something, he doesn't quite put everything into words and leaves some bits unsaid or unwritten. Why does he do this? He does so because he assumes that the unsaid part will be understood without saying anything and there is no need to put it into words. Hence,

close reading and rational evaluation of a given sentence are necessary.

### Tips and Tricks

- Don't look for absolute or flawless solutions. There will often be exceptions to the correct answer. Accept it as it is. Mark a certain choice as the correct answer if you believe it would be agreeable to a majority of individuals with reasonable standards.
- Consider things from the perspective of the examiner. Try guessing the correct answer without even reading the question. This will be possible after attempting a good number of practice questions. So keep practising!
- Common sense varies from person to person. So, avoid marking your response solely on the basis of your own common sense as it might differ from the examiner's point of view.
- While marking the correct answer, keep your biases hidden.
- Do not make the assertions too logical. Analyse the facts provided, and make only assumptions based on the data provided given in the statement. Don't make things too complex for yourself.
- An assumption does not follow if it directly opposes the given statement.
- If you can't figure out the answer, use the elimination approach. When you read the statement in the question and then the given assumptions in the alternatives, you'll find that some of them are definitely not going to occur. Eliminating them and then selecting from a smaller pool of possibilities may be more efficient for a candidate.



Let's look at the following *example* and see how to approach such questions in the right manner:

Statement: A vital role is played by the philosophers in shaping society's intellect.

Assumption (i): Philosophers are essential for people's intellectual growth.

(Incorrect—rephrasing a statement doesn't quite make it an assumption)

Assumption (ii): Society requires intellectual growth.

(Incorrect—An irrelevant remark that contradicts the conclusion is not an assumption.)

Assumption (iii): Society's intellectual progress may not occur at all.

(Incorrect—An argument that contradicts the statement cannot be an assumption.)

Assumption (iv): Society trusts what philosophers say.

(Correct—The Conclusion is acknowledged and verified by the assumption)

In the following 'examples', each of the given questions consists of one statement followed by two assumptions. You need to choose which of the two (if any) is implicit and can be followed.

**Example 1. Statement:** From January 1, 2016, telecom carriers must use TRAI mode to compensate for missed calls.

**Assumptions:**

- (i) The faith and confidence of TRAI's telecom subscribers will grow.
- (ii) In the future, there will be no frauds.
  - A. Only (i) is implicit.
  - B. Only (ii) is implicit.
  - C. Neither (i) nor (ii) is implicit.
  - D. Both (i) and (ii) are implicit.

**Answer: A**

**Explanation:** There can be no assurance that a scam will not occur in the future. As a result, assumption (ii) is not implicit.

**Example 2. Statement:** "Unfortunately, the court is unable to answer all questions.

However, it appears that the public is resorting to the Supreme Court as a last choice, fed up with an inert Executive.

**Assumptions:**

- (i) The Supreme Court is superior to the Executive Branch.
- (ii) The Supreme Court is more committed than the Executive Branch.
- (iii) The Executive branch lacks sufficient authority.
  - A. (i) and (ii) are implicit.
  - B. (ii) and (iii) are implicit.
  - C. (i) and (iii) are implicit.
  - D. Only (ii) is implicit.

**Answer: C**

**Explanation:** Just because the public is resorting to the Supreme Court as their last choice does not imply that it is more active than the Executive. So, (ii) is not implied. (i) and (iii) can be drawn from the statement given. Hence, (i) and (iii) are implicit.

**Example 3. Statement:** People's entertainment has grown inextricably linked to films.

**Assumptions:**

- (i) Film is the only form of entertainment available.
- (ii) Films are popular.
  - A. Only (i) follows.
  - B. Only (ii) follows.
  - C. Neither (i) nor (ii) follows.
  - D. Both (i) and (ii) follow.

**Answer: B**

**Explanation:** The fact that movies are necessary does not imply that they are the only source of entertainment. As a result, (i) is not implied. (ii) is unmistakably implied by the statement. As a result, it is assumed.

**Example 4. Statement:** One should put his child in school by the age of 3.

**Assumptions:**

- (i) A three-year-old toddler is still not prepared to learn.

- (ii) If a person does so, his child's academic performance will improve.
- A. Only (i) follows.
  - B. Only (ii) follows.
  - C. Neither (i) nor (ii) follows.
  - D. Both (i) and (ii) follow.

Answer: C

**Explanation:** As per the given statement, one should enrol his child in school by the age of 3, but no information is provided as to whether the child is prepared to learn or whether doing so will help the child succeed in school. Therefore, neither (i) nor (ii) is implicit.

**Example 5. Statement:** "Smoking is injurious to health and can cause lung cancer. Hence, it should be avoided at all costs."—Head of Oncology Department.

**Assumptions:**

- (i) There are many other reasons responsible for cancer other than smoking.
  - (ii) Only oncologists recognise that lung cancer is caused solely by smoking.
- A. Only (i) follows.
  - B. Only (ii) follows.
  - C. Neither (i) nor (ii) follows.
  - D. Both (i) and (ii) follow.

Answer: C

**Explanation:** The speaker shows no interest in other causes of lung cancer, so assumption (i) is not implicit. Because it is a doctor's recommendation, we can assume that doctors were aware that smoking is harmful to one's health. However, it is not intended that only oncologists are aware that smoking causes lung cancer. Therefore, (ii) is also not implicit.

### Practice Questions

**Directions:** A statement is presented in each of the questions below, followed by two or more assumptions. You must assume that everything in the statement is accurate based on the information provided and then determine which of the offered assumptions are implicit and can be followed.

1. **Statement:** Why don't you invite George to your son's birthday party this year?

**Assumptions:**

- (i) George does not live in the same city.
  - (ii) George will only attend the birthday party if he is invited.
- A. Only (i) follows.
  - B. Only (ii) follows.
  - C. Neither (i) nor (ii) follows.
  - D. Both (i) and (ii) follow.

Answer: B

**Explanation:** The statement makes no mention of George's residence. As a result, (i) is not implied. Assumption (ii) is implicit because it follows quite directly from the statement given in the question.

2. **Statement:** "We must provide transportation allowance to our staff in order to improve tardiness in our office" — the personnel manager of a company suggests to the CEO.

**Assumptions:**

- (i) Tardiness will not be improved by a transportation allowance.
  - (ii) Discipline should always be rewarded.
- A. Only (i) follows.
  - B. Only (ii) follows.
  - C. Neither (i) nor (ii) follows.
  - D. Both (i) and (ii) follow.

Answer: B

**Explanation:** Assumption (i) contradicts the statement. As a result, it is not implied. The allowance will serve as a motivator for employees to arrive on time. Hence, (ii) is implicit.

3. **Statement:** "You may refer to the book by Mary J. in case you face any difficulty in the subject."—the teacher says to the students.

**Assumptions:**

- (i) Mary J.'s book is accessible to the students.

- (ii) No other book is available on the subject.
- A. Only (i) follows.
  - B. Only (ii) follows.
  - C. Neither (i) nor (ii) follows.
  - D. Both (i) and (ii) follow.

**Answer: A**

**Explanation:** The book's availability is implied by the teacher's suggestion. As a result, (i) is implied. Furthermore, while the book has been praised, this does not rule out the possibility of additional works on the subject. As a result, (ii) isn't true.

- 4. Statement:** Any country's economic prosperity is determined by the quality of its human resources.

**Assumptions:**

- (i) It is every country's dream to achieve economic prosperity.
  - (ii) Measuring the quality of a country's human resources is possible.
- A. Only (i) follows.
  - B. Only (ii) follows.
  - C. Neither (i) nor (ii) follows.
  - D. Both (i) and (ii) follow.

**Answer: B**

**Explanation:** The statement does not address the status of economic prosperity as a national aim. As a result, (i) is not implied. (ii) is implied because it follows directly from the statement.

- 5. Statement:** The current state of education is a disaster, and the country is on the verge of collapse.

**Assumptions:**

- (i) For the country's well-being, a quality education system is necessary.
  - (ii) For the country's well-being, a quality education is sufficient.
- A. Only (i) follows.
  - B. Only (ii) follows.
  - C. Neither (i) nor (ii) follows.
  - D. Both (i) and (ii) follow.

**Answer: A**

**Explanation:** Evidently, the statement refers to the country's decline as a result of the disruption of the educational system. As a result, (i) is implied. However, this does not imply that education alone is adequate and that no other element is responsible for the nation's well-being. As a result, (ii) is not implied.

- 6. Statement:** "Please make sure that you study for the test." — P tells Q.

**Assumptions:**

- (i) Q will give heed to P's advice.
  - (ii) Q will not give heed to P's advice.
- A. Only (i) follows.
  - B. Only (ii) follows.
  - C. Neither (i) nor (ii) follows.
  - D. Both (i) and (ii) follow.

**Answer: A**

**Explanation:** When P tells Q to study for the test, he is just assuming that Q will follow P's advice; otherwise, he would not have advised Q in the first place. As a result, (i) is a reasonable assumption. Similarly, he would not have expected that Q would disregard his advice, as he would not have advised Q in such a case. As a result, (ii) is not implied.

- 7. Statement:** What an idiot I am to put my trust in a liar like Asha!

**Assumptions:**

- (i) Asha is untrustworthy.
  - (ii) I am an idiot.
- A. Only (i) follows.
  - B. Only (ii) follows.
  - C. Neither (i) nor (ii) follows.
  - D. Both (i) and (ii) follow.

**Answer: D**

**Explanation:** Because one is condemned to rely on Asha, (i) is implied. It was a mistake to rely on Asha, according to the statement. Hence, the individual is a fool and as a result, (ii) is implicit.

- 8. Statement:** Global market trends are constantly changing, and as competition grows, consumers' demands for lower

prices and higher quality are constantly rising.

**Assumptions:**

- (i) Previously, consumers were unconcerned with quality and price.
- (ii) Consumers do not benefit from market competitiveness.
  - A. Only (i) follows.
  - B. Only (ii) follows.
  - C. Neither (i) nor (ii) follows.
  - D. Both (i) and (ii) follow.

**Answer: C**

**Explanation:** Consumer demands are referred to in the statement as 'growing.' This isn't to say that customers were previously unconcerned about pricing or quality. As a result, (i) isn't true. Furthermore, the statement states that rising competition has provided customers with a wider range of options, prompting them to compare and select the option that best meets their needs and budget. As a result, they get more 'value for the money.' As a result, (ii) isn't implicit.

**9. Statement:** In light of the institute's new financial priorities, no budgetary provision for the appointment of additional staff will be made.

**Assumptions:**

- (i) Funds are necessary for appointing additional staff.
- (ii) Other than staff appointments, there are certain areas that require extra financial resources.
  - A. Only (i) follows.
  - B. Only (ii) follows.
  - C. Neither (i) nor (ii) follows.
  - D. Both (i) and (ii) follow.

**Answer: D**

**Explanation:** (i) is implied by the phrase 'budgetary provision for the recruitment of additional staff.' In addition, because no budgetary provision was made for staff appointments due to a shift in financial

priorities, several additional concerns will require extra financial attention. As a result, (ii) is also implied.

**10. Statement:** Asin applied for a loan of Rs.3,00,000 from the bank, mortgaging her home, and promising to repay it within seven years.

**Assumptions:**

- (i) A house is accepted as collateral for such loans by the bank.
- (ii) The bank has a policy of approving loans of Rs. 2,00,000 and up.
  - A. Only (i) follows.
  - B. Only (ii) follows.
  - C. Neither (i) nor (ii) follows.
  - D. Both (i) and (ii) follow.

**Answer: D**

**Explanation:** (i) is implicit because it follows straight from the statement. Whereas because Asin has filed for a loan of Rs. 3,00,000, the bank is able to grant a loan of more than Rs. 2,00,000. As a result, (ii) is implied

**11. Statement:** The bus drivers' union has declared an indefinite strike in protest of the recent hike in the road tax.

**Assumptions:**

- (i) The strike will aid the bus drivers' union's case.
- (ii) The administration may change its mind about raising the tax.
  - A. Only (i) follows.
  - B. Only (ii) follows.
  - C. Neither (i) nor (ii) follows.
  - D. Both (i) and (ii) follow.

**Answer: D**

**Explanation:** The sole purpose of the strike mentioned in the statement is to compel the administration to take back the decision of raising road taxes. As a result, both (i) and (ii) are implicit.

**12. Statement:** Whoever emerges from prayer a better man, has had his prayers answered.

**Assumptions:**

- (i) All of our sins are expiated via prayer.
  - (ii) A man's compassion is enhanced by prayer.
- A. Only (i) follows.
  - B. Only (ii) follows.
  - C. Neither (i) nor (ii) follows.
  - D. Both (i) and (ii) follow.

**Answer: C**

**Explanation:** Prayer does not always make man humane, as evidenced by the fact that only those who improve by praying are answered to. As a result, (i) is not implied. There is no discussion of the effectiveness of prayer. As a result, (ii) isn't implied.

**13. Statement:** Increased industrial and vehicular pollution have accompanied India's economic expansion.

**Assumptions:**

- (i) In today's modern society, pollution is inescapable.
  - (ii) India's economic growth is solely driven by industrial expansion.
  - (iii) Economic expansion with controlled adverse effects is what a country desires.
- A. Only (i) follows.
  - B. Only (ii) follows.
  - C. Only (iii) follows.
  - D. Only (i) and (iii) follow.

**Answer: D**

**Explanation:** India had to pay the price of higher pollution levels in order to achieve economic progress, as given in the statement. As a result, (i) and (iii) are both implied. This does not, however, imply that India's economic development is solely due to industrialisation. As a result, (ii) isn't true.

**14. Statement:** "To improve our examinations for admission to engineering schools, we must incorporate subjective type testing." — The Chairperson of the Admission Committee suggests the Committee.

**Assumptions:**

- (i) The Admissions Committee is thinking about improving the admission process.
  - (ii) Currently, admission is conducted only on the basis of an interview.
  - (iii) The Chairperson himself is an engineering graduate.
- A. Only (i) follows.
  - B. Only (ii) and (iii) follow.
  - C. Only (i) and (ii) follow.
  - D. None follows.

**Answer: A**

**Explanation:** Neither (ii) nor (iii) is implied as the statement makes no mention of the current admission system or the Chairman's qualification. (i) follows immediately from the statement and as a result, is implied.

**15. Statement:** The S&S Corporation has just introduced a series of bonuses for timely and conscientious professionals.

**Assumptions:**

- (i) As a result, the company's productivity may rise.
  - (ii) The company's profit may be more than the amount to be spent on bonuses.
  - (iii) Those who are currently not attentive may very well be encouraged by the announcement.
- A. Only (i) and (iii) follow.
  - B. Only (ii) and (iii) follow.
  - C. Only (i) follows.
  - D. All follow.

**Answer: A**

**Explanation:** Announcement of bonuses for timely and conscientious professionals will undoubtedly encourage more colleagues to be punctual, resulting in increased efficiency. As a result, (i) and (iii) are both implied. The statement, on the other hand, contains no information on the company's earnings. As a result, (ii) is not implied.



**16. Statement:** “The easiest and most budget-friendly approach to update your lifestyle — Exchange your old electronic equipment for new electronics and save 30% to 55% on the new items.” — An electronic company’s advertisement.

**Assumptions:**

- (i) Electronic items are no longer in demand unless they come with a compelling promotional scheme.
  - (ii) Most customers are always looking for the greatest quality and are unconcerned about price or accessibility.
  - (iii) Many customers prefer to keep their electronics fully updated to keep up with the latest technology at a minimal cost and with minimal effort.
- A. Only (i) follows.  
B. Only (ii) follows.  
C. Only (iii) follows.  
D. Only (i) and (ii) follow.

**Answer: C**

**Explanation:** The presence of an exchange offer in marketing does not mean that there is no demand for electronic devices without one. As a result, (i) is not implied. Because both ‘easiest’ and ‘most budget-friendly’ are highlighted in the commercial, (ii) is not implied. Customers can also buy new digital products at a discounted price without having to dispose of their old ones, according to the advertising. As a result, only (iii) is implied.

**17. Statement:** The powdered donuts from ‘Le Beignet’ are far superior to those of the other big famous donut chains. Isn’t it obvious that the size of the store makes little difference when it comes to the quality of the donuts served?

**Assumptions:**

- (i) Le Beignet is smaller in size than the other donut chains.
- (ii) Powdered donuts are a true representation of the donuts sold at any given donut franchise.

(iii) The smaller the donut chain, the higher the quality of the donuts supplied in that specific donut chain.

- A. Only (i) follows.  
B. Only (ii) follows.  
C. Only (i) and (ii) follow.  
D. All (i), (ii), and (iii) follow.

**Answer: C**

**Explanation:** (i) is inferred from the first statement (other big famous donut chains). Using the example of powdered donuts, the author has broadened his statement. As a result, he implies that the same is a good representation of the donuts provided in well-known donut chains. Hence, (ii) is implicit. Because the author claims that the size of the donut shop has little bearing on the quality of the donuts, (iii) is not implied.

**18. Statement:** A number of air-conditioned buses have been installed by the public transport corporation on several routes in the city, in an effort to entice people who drive to work and thereby minimise traffic jams on the roads.

**Assumptions:**

- (i) A vast majority of individuals may continue to prefer driving to work.
  - (ii) Several individuals may then choose to take these buses to and from work.
- A. Only (i) follows.  
B. Only (ii) follows.  
C. Neither (i) nor (ii) follows.  
D. Both (i) and (ii) follow.

**Answer: B**

**Explanation:** It is implausible to believe that a ‘vast majority’ of people still want to drive their own cars. Hence, (i) is not a valid assumption. (ii) is correct since it implies that the public transportation corporation has installed air-conditioned buses to entice car users, with the primary goal being to encourage people to take the bus instead of driving. As a result, it is reasonable to suppose that many car owners will now prefer to take the bus.

**19. Statement:** According to a notice posted at the entrance of the Drushti Cooperative Housing Society, no salespeople are allowed to enter the property.

**Assumptions:**

- (i) All salespeople will avoid entering the society.
- (ii) The security staff stationed at the gate might be able to prevent salespeople from accessing the property.
  - A. Only (i) follows.
  - B. Only (ii) follows.
  - C. Neither (i) nor (ii) follows.
  - D. Both (i) and (ii) follow.

**Answer: D**

**Explanation:** Since both assumptions are implied by the provided statement, both (i) and (ii) are implicit

**20. Statement:** “One can easily go to Sri Lanka through air or water.”—Aman tells Swati.

**Assumptions:**

- (i) Swati is planning to travel to Sri Lanka.
- (ii) Aman likes to give people advice about travelling.
  - A. Only (i) follows.
  - B. Only (ii) follows.
  - C. Neither (i) nor (ii) follows.
  - D. Both (i) and (ii) follow.

**Answer: C**

**Explanation:** The statement does not mention anything about Swati’s plans to travel anywhere. As a result, (i) is not implicit. Similarly, assumption (ii) may also not be a fact as the given statement tells nothing about Aman’s nature. Hence, neither (i) nor (ii) follows.

**21. Statement:** Even if a novice does not have any access to a tutor, he can study history with this book.

**Assumptions:**

- (i) A novice aspires to learn history without the help of a tutor.
- (ii) A history tutor may not always be accessible.

(iii) It is difficult for a novice to understand history by himself without a tutor.

- A. Only (i) and (ii) follow.
- B. Only (ii) and (iii) follow.
- C. Only (i) and (iii) follow.
- D. All (i), (ii), and (iii) follow.

**Answer: B**

**Explanation:** The statement is obviously intended to emphasise the book’s utility. The aspirations of a novice are not mentioned. As a result, (i) isn’t true. The book is also meant to serve as a guide when a tutor is unavailable. As a result, both (ii) and (iii) are true.

**22. Statement:** If it rains excessively, Udit’s father advised him to take a taxi back home.

**Assumptions:**

- (i) If it rains excessively, Udit may be unable to make a decision.
- (ii) Even when it is raining outdoors, taxis are available.
  - A. Only (i) follows.
  - B. Only (ii) follows.
  - C. Neither (i) nor (ii) follows.
  - D. Both (i) and (ii) follow.

**Answer: B**

**Explanation:** Udit’s father has given him this advice out of concern and love for his child, not because Udit would be unable to make his own decision. As a result, (i) isn’t implied. In addition, Udit’s father advises him to take a cab home if it is raining badly, implying that taxis are available even when it is pouring. Therefore, (ii) is implicit.

**23. Statement:** “On Anuj and Anita’s anniversary, I would like to give them a book about Reiki and meditation practices.”—Shubham tells Gauri.

**Assumptions:**

- (i) Anuj and Anita will invite Shubham to their wedding anniversary celebrations.
- (ii) The couple to whom the book will be given is under a great deal of stress



- in their personal lives and is not experiencing ideal emotional stability.
- (iii) A book can be considered an acceptable present to give someone on their anniversary.
- A. Only (i) and (ii) follow.  
B. Only (ii) and (iii) follow.  
C. Only (i) and (iii) follow.  
D. All (i), (ii), and (iii) follow

**Answer: C**

**Explanation:** Shubham's decision to give Anuj and Anita a book on their anniversary implies that he will be welcomed by the couple and that a book will suffice as a present. As a result, (i) and (iii) are both implied. Nothing can be inferred about the couple's mental health from the statement. As a result, (ii) is not implied.

**24. Statement:** These mangoes are far too inexpensive to be of decent quality.

**Assumptions:**

- (i) Whenever the mango harvest is plentiful, prices drop.  
(ii) If a product has a very low selling price, there is a sure-shot guarantee of its quality not being decent enough.  
(iii) Mangoes that are quite inexpensive are also delicious.
- A. Only (i) and (iii) follow,  
B. Only (ii) follows,  
C. Only (ii) and (iii) follow,  
D. None follows,

**Answer: B**

**Explanation:** The mangoes are said to be so inexpensive that they cannot possibly be of decent quality. This means that good mangoes will never be too cheap, and very cheap mangoes will never be good. As a result, neither (i) nor (iii) is implied. The statement that mangoes are of questionable quality because they are inexpensive leads to assumption (ii). Therefore, it is implicit.

**25. Statement:** Sumedh chose to make a train reservation in November for a trip to Kolkata in February.

**Assumptions:**

- (i) Reservations are taken three months in advance on the railway.  
(ii) There are several trains that run to Kolkata from the city in which Sumedh lives.  
(iii) There will be a vacancy in the class that Sumedh desires to travel in.
- A. Only (i) follow.  
B. Only (ii) and (iii) follow.  
C. Only (i) and (iii) follow.  
D. All (i), (ii), and (iii) follow.

**Answer: A**

**Explanation:** Sumedh makes the reservation in November for a February trip, therefore (i) is clearly implied. The number of trains to Kolkata or the number of vacancies in various classes cannot be calculated from the available information. As a result, neither (ii) nor (iii) can be assumed.

