

Statement & Arguments

INTRODUCTION

In this chapter, we are going to study arguments. In fact, this is the study what we call the basics of all logic. Do you know what do we do in logic? In logic, we advocate certain point of view with the help of some evidences and certain assumptions and that is called argumentation. This is a fact that almost all segments of analytical reasoning are somehow associated with argumentation and this is the reason why study of argumentation is so important for the examinees preparing for various competitive examinations.

Concept of Argument

A sequence of two or more sentences (or statements)/ phrases/clauses that includes a conclusion (or claims), is called an argument. This conclusion of the argument is based on one or more than one statement and these statements may be called premises (propositions). Apart from this, arguments may also have some hidden premises. which may be called assumptions. Let us see the following example:

Example:

Mr. Sharma bought a large quantity of sweets, he must have celebrated some occasion.

Explanation: The foregoing example has two parts:

Part I: “Mr. Sharma bought a large quantity of sweets.”

Part II: “He must have celebrated some occasion.

Here, ‘Part II’ is the conclusion part of the given argument. How has this conclusion (part II) been arrived at? In fact, this conclusion has come out with the help of supporting evidence or premise that is part I of the argument. Did you notice that in this argument part I and part II (Premise and conclusion) are connected by a hidden premise which is not explicitly stated. That hidden premise is “a large quantity of sweets is bought only on occasions” and this premise may be called an assumption. Hence, in reality the given argument has three parts.

Part I: (Premise) Mr. Sharma bought a large quantity of sweets.

Part II: (Assumption or hidden premise) a large quantity of sweets is bought only on occasions.

Part III: (Conclusion) He must have celebrated some occasion.

Point to be noted is that part II is an assumption (a hidden premise) that connects part I (premise) and part III (conclusion) and hence, it is a missing link between part I and part III of the given argument.

No doubt that above mentioned example brings to us the basic characteristics of argumentation but it also leaves some questions before us like:

- (i) Is the assumption or hidden premise always present in an argument?
- (ii) Is the number of premise only one in an argument?

Our answer for both the questions will be a big 'No'. Why so? Let us see the explanations for both the questions given below:

- (i) **Explanation for question:** Just consider an argument given as "Mr. Sharma bought a large quantity of sweets. A large quantity of sweets is bought on occasions only. Hence, he must have celebrated an occasion".

Here, we see that this argument has no assumption (hidden premise) because the premise or supporting evidence (Mr. Sharma bought a large quantity of sweets) and conclusion (Hence, he must have celebrated an occasion) are connected by an explicit statement (A large quantity of sweets is bought on occasions only). Remember, an assumption is a hidden premise. It does mean assumption is a missing link in the chain of logic. Therefore, if an argument is complete in itself and does not have any missing link, then it will not have any assumption. In the given argument, the explicit statement (A large quantity of sweets is bought on occasions only) connects premise or supporting evidence and conclusion to make the argument assumptionless.

- (ii) **Explanation for question:** Just consider the argument given as "Vandana is tall. She is slim and has beautiful eyes. She has long hair and charming face as well. So, Vandana is a beautiful girl."

Here,

1st premise: Vandana is tall.

2nd premise: She is slim and has beautiful eyes.

3rd premise: She has long hair and charming face as well.

Conclusion: So, Vandana is a beautiful girl.

This proves that an argument can have more than one premises. Further this explanation is also a reply for question (i) as the given argument has no missing link. This argument is complete in itself and hence, it is free of hidden premise or assumption.

Ways of Argumentation: So far, you must have understood the basic concept of argumentation and come to the conclusion that an argument is usually made to make strong a particular point of view in order to convince someone about something.

- (i) **Argument based on Analogy:** Analogy based arguments are often used to make strong a particular point of view. In fact analogy is an inference drawn out of a resemblance between particular things, occasion or events (that are known) to a further (unknown) resemblance. For example, if we find a fat-woman eating very much and meet in another woman who is also fat then, by analogy, we expect that the other fat woman would also be eating very much. We can say it in another way that if x, y, z, q are any entities and u, v, w are any attributes

then the analogical argument may be represented in the following form :
 x, y, z, q all have the attributes 'u and v'
 x, y, z have the attribute 'w'
 $\therefore q$ probably has the attribute 'w'

► **EXAMPLE 1.** Sachin scored a century in the 1st test against Australia and so did Dhoni; Sachin scored more than 150 runs in the 2nd test against Australia and so did Dhoni; Sachin has scored a double century in the 3rd test against Australia. So, Dhoni will also hit a double century in this 3rd test match against Australia.

► **EXAMPLE 2.** Australia and England have both lost to India in football and hockey. So, India should defeat both the countries in cricket.

Findings:

In Example 1, Sachin and Dhoni performed very well in the 1st two matches against Australia. In fact, it seems that Dhoni did the same thing what Sachin did in the 1st and 2nd test. As Sachin has played a great inning scoring a double century in the 3rd test match, hence on the basis of similar situation the conclusion has been made that Dhoni will also make a double century.

We also know that performing good or bad is a matter of chance. It is also a matter of chance that two players (Sachin and Dhoni) performed equally good in the last two test matches. Therefore, we cannot say definitely that Dhoni will make a double century because Sachin has done so. In fact, we can say that he may or may not hit a double century. It can also be said that future performances can not be predicted on the basis of past performances. Thus, it

is clear that this analogical argument does not seem strong. Similarly, in case of example (2) we can say that India may or may not defeat Australia and England in the game of cricket only because India has defeated both the countries in two different games (Football and Hockey). Hence, the argument given in example (2) also seems to be a weak argument.

Final comment: Analogy based arguments are weak arguments.

(ii) **Argument based on cause:** Such arguments relate a cause with a result. Let us see the examples given below:

► **EXAMPLE 1.** India will win the world cup 2011 because it is the most balanced one day team in the world in present day cricket.

► **EXAMPLE 2.** He came back home late night. He must have gone to watch a movie.

Findings: We see in the foregoing examples that effects have been related with causes. In example (1), the cause (the most balanced one day team) well supports the effect (India will win the world cup) and hence, it is a good argument. But in Example (2) it is argued that since the effect (coming home late night) has taken place, the cause (watching movie) must have occurred. But the point to be noted that effect may occur (he may come home late night) because of the other reason as well. Hence, the argument given in the Example (2) is not a good argument or it may be called a weak argument.

Final Comment: Arguments based on causes may be strong or weak or fallacious.

(iii) **Argument based on example:**

Sometimes an argument is given by citing some example/ examples as premise/ premises. Let us see the following examples that will illustrate the concept:

» **EXAMPLE 1.** We should use *X* brand of cold cream because *X* brand is used by 'Madhuri Dixit', the famous bollywood actress.

» **EXAMPLE 2.** We must like Roses because Chacha Nehru loved Roses.

Findings: In example (1) we have arrived at the conclusion (we should use *X* brand of cold cream) by using the premise as example (*X* brand is used by Madhuri Dixit). In example (2) the conclusion (we must like roses) has come out by using the premise as example (because Chacha Nehru loved it). Here, we can say in case of Example-1 that using certain brand by a particular actress, does not mean that *X* brand will be liked by all people as likes and dislikes are the personal choices. In example (2), the case is also the same. Everyone cannot like the roses only because Chacha Nehru loved roses.

Final comment: Example based arguments are either weak or fallacious.

Note: In Example-1 and 2, conclusion part is the start of the arguments. Sometimes you can also see that conclusion is given in the middle. It does mean that conclusion part is not always in the last. But it depends on the style of writing of different writers/authors.

(iv) **Argument based on blind advocacy:**

Such argument is like a salesman's argument who argues only for the purpose of selling a particular

product. He speaks of the advantages and the benefits of his product. Hence, a salesman argument is one where a conclusion comes out because of the positive points and the benefits that it leads to. Such types of arguments are very common in day to day life.

» **EXAMPLE 1.** Exercise is good for health and students need good health to put hard labour in their studies. This is the reason why every educational institution must have a gym.

» **EXAMPLE 2.** There should be a ban on strikes as they disrupt the normal life of the common people.

Findings: In example-1, the conclusion is that every educational institution must have a gym because exercise is good for health and students need good health. No doubt the good health ensures good mind but it is not practically feasible for every educational institution to have a gym. Hence, Example-1 will be a weak argument. In example-2, ban on strikes is being demanded and this demand is being reasonable as argument has negative feature of strike. Hence, example-2 is a strong argument.

Final comment: Such arguments can be both weak or strong.

(v) **Argument based on chronology:**

Very often we see that a conclusion is drawn only on the basis of chronological order of some events. Let us see the examples given below:

» **EXAMPLE 1.** Computer was invented later than television. Therefore, television has a technology inferior to that of a computer.

» **EXAMPLE 2.** Song 'B' was released two months earlier than song 'C'. So the former could not be the copy of the latter.

Findings: In example-1, it is assumed that a technologically inferior object always comes before the superior objects. This may be true most of the time but this is not true in 100% cases. Hence, the conclusion given in example 1 is questionable making the given argument a weak one. In 2nd case, it is the possibility that song 'C' was recorded earlier although released later than the song 'B'. Hence, in such a situation the possibility of copying can not be denied and this makes argument given in Example-2 a weak argument.

Final comment: This type of arguments are usually weak and unconvincing.

By now, all the standard ways of argumentation have been discussed in detail. We will now take a look at the key words so that you could easily take out the conclusion part from the given argument. The keywords are given below:

So,	Hence,
Therefore,	Consequently
Thus,	

Apart from above given keywords, the conclusion part can also be identified by the certain phrases given below:

As a result
It can be inferred that
Which means that
Which suggests that
Which proves that
Which shows that
It follows that

If you find one of these keywords/phrases before any sentence then take that sentence as your conclusion. If the

keywords/phrases are absent, then apply your common sense and take out the sentences that can follow one of these keywords/ phrases and that sentence will be your conclusion.

After learning concept of argument we can easily move on to the problems of reasoning which are asked in various exams wherein examinee is required to evaluate the forcefulness of the arguments. On the basis of a statement, arguments are given in the questions and the candidate is required to find out:

- (a) Which argument is strong.
- (b) Which argument is weak.

We know that "strong" arguments are those which are both important and directly related to the question. "Weak" arguments are those which are of minor importance and also may not be directly related to the question or may be related to a trivial aspect of the question. To find out if a given argument is strong or not we will move according to the solution steps given below:

Solution steps

- Step I:** Do the preliminary screening of the given arguments.
- Step II:** Find out if the given arguments really follow or not.
- Step III:** Find out if the given arguments are really desirable (in case of positive argument) / harmful (in case of negative arguments)
- Step IV:** Find out if the argument and suggested course of action are properly related.

Now, we will discuss all the steps one by one.

Step I: Preliminary screening of the given arguments

At the very 1st level we test how weak an argument is. If at the very 1st level we find the argument weak, then there is no need to go for further steps. In many cases the weak arguments are very clearly visible and we do not need to think much before arriving at the conclusion that they are weak. Such type of arguments come under the following category:

- (i) **Doubtful/Ambiguous arguments:** These arguments do not make it clear that how they are related to a course of action. They also do not give the clear idea about what exactly the author or writer wants to say.

EXAMPLE 1.

Statement: One should enjoy every second of one's life because everyone has to die one day.

Argument: No, because one must think about fulfilling one's ambition in life and should not think about death as one's goal.

Comment: Here, statement and argument are not properly related. Statement suggests to enjoy every second of life. Enjoying life does not mean that one should not follow the path of fulfilling one's ambition. In fact a person can enjoy his/ her life in the course of fulfilling his/her ambition. In fact, we can say without enjoying work of our own choice, we can not fulfill our ambition. Further the given statement does not give any indication that one should see death as one's goal. Hence, in this case statement and argument leave doubtful

and confusing impression on our mind making the given argument very weak.

- (ii) **Useless/ superfluous arguments:** Such arguments do not do a deep analysis of the given statement. They simply 'glance' at the statement and put them under the category of weak arguments.

EXAMPLE 2.

Statement: Cricket must be banned in India.

Argument: Yes, it has no use.

Comment: Here, the argument does not go deep down into the matter making itself a weak argument.

- (iii) **Arguments in the form of question:** Such arguments are very weak in nature as the arguments given in the question form are without any substance and have no technique of argumentation. In fact, in such arguments arguers throw back the question.

EXAMPLE 3.

Statement: Should import be banned in India?

Argument: Yes, why not?

Comment: Here, statement is given in the form of question and arguer throws back the question without giving any convincing statement in the form of argument. Hence, the given argument is very weak.

- (iv) **Very simple arguments:** Such arguments are very simple in nature. They are given in small sentences but do not get any support by facts or established notions. Further, such arguments are not ambiguous and they are properly related with the

statement but because of their simple nature they come under the category of weak arguments.

EXAMPLE 4.

Statement: Enjoying life should be the principle of our life.

Argument: No this thinking hardly enable us to do anything.

Comment: Here, the given argument is only a simple assertion which contains no substance. Here, it will come under the category of weak arguments.

Step II: Finding out if the given arguments really follow or not.

If the arguments are rejected at the preliminary step then we do not need to test them further. But, if the preliminary step has been cleared, then we move on to step II.

Case I: When the result follows

At the step II, the result will follow in the cases given below:

- (i) **Established fact:** An established fact does mean that it must be universally acknowledged/ scientifically established. A result will follow a course of action if it is an established fact that this particular result follows this particular course of action.

EXAMPLE 1.

Statement: Should drinking be avoided?

Argument: Yes, it contributes to bad health.

EXAMPLE 2.

Statement: Should Tendulkar be selected in the team even after 10 years from now?

Argument: Yes, Tendulkar is one of the greatest cricketers in the world.

EXAMPLE 3.

Statement: Married people should live separate from their parents.

Argument: Yes, living separate will give married people a greater freedom.

EXAMPLE 4.

Statement: Should smoking be promoted?

Argument: No, smoking is injurious to health.

Comment: In the above examples, all the given arguments are expected to follow as they all are established facts. Therefore, all the arguments presented can be said to pass the test of step II.

NOTE : *Point to be noted that arguments given under Example 1, Example 2, Example 3 & Example 4 have passed the step II only so far but it has not yet been determined whether these arguments are forceful or not (strong or not). They will be called strong only when they will pass step III and step IV.*

- (ii) **Prediction on the basis of experience:** Such arguments are very near to established facts type of arguments. But, in reality, they are not established facts as they are not yet so universally acknowledged as to be treated as established fact. In fact, such arguments are given on the basis of experiences. Just see the following example:

EXAMPLE 5.

Statement: Captains should not have given their say in selection of national sports teams.

Argument: Yes, it discourages favouritism towards some particular players.

Comment: The result or consequences given in this example will be a probable result as our experiences suggest this. Hence, this will go for further test.

- (iii) **Logically given arguments:** Such arguments are given on the basis of logic. It does mean that the emphasis here is on the logic and not on the

established fact or experience. If we see such type of arguments we can easily predict that such cases have occurred in practice. But when we think over such situations with proper logic and reasoning then we arrive at the conclusion that such an argument may be true. Let us see the example given below:

» EXAMPLE 6.

Statement: World leaders must try for complete disarmament.

Argument: Yes, complete disarmament will make a war free world.

Comment: The example gives an argument that is logically convincing: The argument is probable as the logic behind it is that if there will be armless world then there will be a war free world. Hence, the argument passes the step II test and will go for further test.

- (iv) **Notions of truth:** Such arguments are unquestionable truth because of the simple reason of universal acceptance. It does mean that they are the ideas or thoughts already acknowledged by society. This is the reason why they are very similar to established facts in many ways. The following example illustrates this point:

» EXAMPLE 7.

Statement: Should marriages between blood relatives be promoted?

Argument: No, it will promote incest which is a sin.

Comment: No, doubt, the given argument seems strong as it is based on prevailing notion of truth that our society does not allow marriages between blood relatives and consider such marriages as

a sin. As, the given argument is likely to be strong it will go for next step test.

Case II (When the result does not follow argument will be rejected).

Following are the cases when results do not follow and arguments are rejected at 2nd level test in step II only.

- (i) **Established fact:** If it is an established fact that a particular result will not follow a particular course of action, then the argument will be rejected at step II. Let us see the example given below:

» EXAMPLE 8.

Statement: Should smoking be discouraged in the country?

Argument: No, it give relaxation when one gets tired and this way contributes to health.

Comment: It is an established fact that smoking is injurious to health and thus, we can say that this argument is incorrect and weak enough to be rejected at step II.

- (ii) **Prediction on the basis of experiences:** If the experiences say that the result will not follow then the given argument will be rejected at the step II. Let us see the example given below:

Statement: Should cricketer A be appointed the next captain of the Indian cricket team?

Argument: Yes, it will end the favouritism in selection of team as cricketer A has made allegations of favouritism against the current captain.

Comment: In this example, the argument suggests that cricketer A should be appointed captain of the Indian cricket team because it will end the favouritism in the team selection. This suggestion has been given on the basis that A has

made allegation of favouritism against the current captain. But the experiences say that there have been so many cases when people did the things what they opposed. Hence, saying one thing and doing other is very common. This is the reason why it can not be made sure that A will not do favouritism in team selection only because he has criticised the current captain for this. It is clear that the given argument is weak enough to be rejected in step II.

Note : This is the exactly opposite to point (ii) in step II (Case I).

(iii) **Argument with faulty logic:** This is exactly opposite to the point (iii) in step II (case I). Let us see the following example:

Statement: Should the culprits behind the fodder scam in Bihar be punished?

Argument: No, a political vaccum will be created if the culprits get punishment.

Comment: As per the logic, punishing culprits behind the fodder scam in Bihar would please the public and improve the image of the Bihar government. How can it create a political vaccum? This argument has been given with a faulty logic and hence will be rejected in step II only.

(iv) **Argument violating prevailing notions of truth:** Argument that violates unquestionable notions (Ideas that are universally accepted and acknowledged by society) will be rejected in step II. Let us see the example given below:

Statement: Should marriage in blood relations be promoted in India?

Argument: Yes, if the two mature blood relatives are willing to do so, then they can not be prohibited from doing it.

Comment: In our society, it is widely accepted truth (or universally accepted truth) that the marriages between blood relatives are considered to be a sin as it promotes incest. The given argument violates this prevailing notion of truth and is weak enough to be rejected in step II.

(v) **Arguments based on examples/analogies:** Very often it is seen that an example or a precedent is made the basis of an argument. But point to be noted that analogy or example based arguments come under the category of bad arguments. It must be cleared that just because someone did something in the past, the same can not be said as pursuable. Let us see the example given below:

Statement: Should everyone be optimistic in Life?

Argument: Yes, Indira Gandhi was optimistic and this is the reason why she became the prime minister of India.

Comment: Here, the example of Indira Gandhi is given that makes the argument very weak. Thus, such type of arguments are rejected in step II.

(vi) **Arguments based on individual perceptions (or assumptions):** In some cases it is seen that an assumption or view of the author is the substance of an argument. Such arguments neither have proper logic nor substance of established fact. These arguments are called bad arguments and they can be rejected in step II.

Statement: Should India be declared a Hindu Rashtra?

Argument: No, it will lead to chaos.

Comment: What message author gives through the argument is view of the

author. In fact, declaring India a Hindu Rashtra may or may not lead to the result given in the argument. It means that assertion made by argument may or may not follow in actual practice and if the author has a rigid stand on this assertion, it is his/ her individual perception or assumption which makes the argument weak enough to be rejected in step II.

Step III: Given arguments are really desirable/ harmful

In step II, we come to the conclusion that Examples 1-7, have passed the 2nd level test and qualified for the step III (3rd level test). Hence, we will take the examples to be qualified for step III one by one:

► **EXAMPLE 1.** Here, the argument is positive and therefore, we have to check the desirability. As, it is a established fact that drinking contributes to bad health and thus it is desirable to avoid it. It is clear row that Example 1 passed the 3rd level test.

► **EXAMPLE 2.** No doubt that at present Tendulkar is one of the greatest cricketers in the world. He will also remain in the list of great ones in the history of the game of cricket. But it is also a truth that he has spent more than 20 years in this game and is a retired cricketer. This is the reason that after 10 years he will definitely not be in team as his selection is impossible. Hence, despite being an established fact the argument is not desirable and is rejected in step III. (Example 2 is a weak argument)

► **EXAMPLE 3.** Here, it is true that living separately from parents gives married people more freedom but at the same time getting freedom at cost of separation

from parents is undesirable. Further, separating from parents does mean avoiding duty of taking care of parents. Hence, argument given in example 3 is not desirable and is weak enough to be rejected in step III.

► **EXAMPLE 4.** As smoking is injurious to health, its promotion is harmful. This reason makes the argument strong enough to pass the step III test.

► **EXAMPLE 5.** It is true that favouritism takes place on the part of captains at times, but that does not mean that they should not be given their say while selecting team. In fact, captains are expected to bring positive and desired result if given their say in team selection. Further, giving their say in team selection makes the captains more responsible for the bad performance of the team and this inspires the captain to draw best out of the players in the team. Hence, the result is not desirable and the given argument proves to be weak enough to be rejected in step III.

► **EXAMPLE 6.** If it is possible to make world free of wars through complete disarmament, it is well and good. But, complete disarmament does not assure that there would be no antisocial elements like murderers, looters, terrorists and the likes. To tackle these kind of anti-social elements, police and different security forces are needed. How do police and other security forces function without arms? No, doubt, it is impossible for such security providing bodies to work without arms. Hence, the argument given in Example 6 is weak and will be rejected in step III.

► **EXAMPLE 7.** Marriages in blood relatives promote incest which is a sin and hence harmful for the established norm of society. On the basis of this logic, argument given in Example 7 is strong enough to pass the 3rd level test step III.

Now, we have,

Examples qualified for step IV test: Example-1, 4 and 7. Rejected examples in step III: Example-2, 3, 5 and 6.

Note : *How to decide a positive argument which is really desirable or a negative argument which is really harmful, is only the matter of common sense. Just apply your common sense, think over the argument, try to go by proper logic and general norms of society.*

Step IV: Finding proper relation between argument and suggested course of action.

What does proper relation between statement and argument mean? In fact, it does mean that argument must be pinpointed on the main issue involved and it should not focus on any irrelevant, insignificant or minor issues. Now, we move on to step IV or final test. As Example-1, 4 and 7 have qualified for this test, let us check the three examples one by one:

► **EXAMPLE 1.** Drinking and bad health are properly and directly related. Hence, the given argument “Yes, it contributes to bad health” is a strong argument and this is the final conclusion.

► **EXAMPLE 2.** Smoking and bad health (injurious to health) are directly and properly related. Hence, the given

argument “No smoking is injurious to health” is a strong argument and this is the final conclusion.

► **EXAMPLE 3.** Marriages in blood relatives and promotion of incest is directly and properly related. Hence, the given argument “No, it will promote incest which is a sin” is a strong argument and this is the final conclusion.

Now, we have come to the end of this chapter. For the understanding of students, below is given a question format for the examination. The question format has been made with the Example 4 given in this chapter.

Question format:

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

Statement: Should smoking be promoted?

Argument: I: No, smoking is injurious to health.

II: Yes, why not?

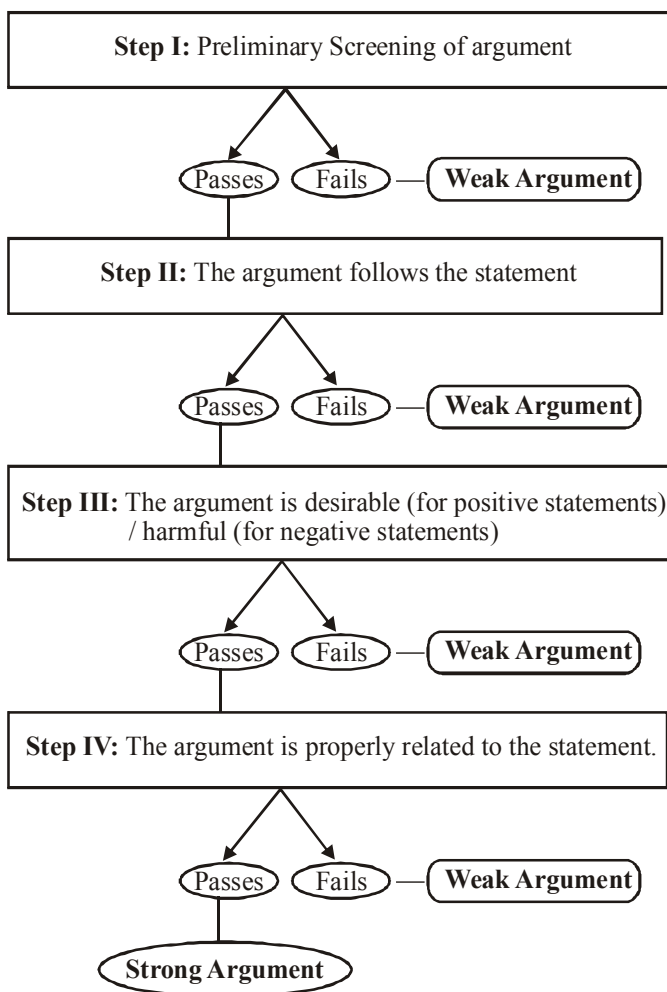
Solution:

I will follow (the reason already given see Example 4)

II will not follow as it is a question back type of argument and such type of arguments are very weak.

Hence, option (A) is the correct answer.

Shortcut Approach



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