

ANALYTICAL ABILITY: CRITICAL REASONING

Lecture-3

OVERVIEW

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Name:

Batch:

CAPSTONE EDUCATION

**152/2/A-2 GREEN ROAD, PANTHAPATH SIGNAL,
ROWSHAN TOWER, 4TH FLOOR, DHAKA-1205
01972-277866, 016-30313031**

Critical Reasoning:

Critical Reasoning problems are among the trickiest question types you'll come across in the IBA.

That's because CR problems are *logic-based*.

While an understanding of English grammar rules is essential, your major challenge will be simply to learn how IBA expects you to approach the information within the sentences.

For Critical Reasoning questions, you must be purely and consistently logical.

With each CR question, you'll be presented with an **argument**. Don't try to break down the argument into its essential parts.

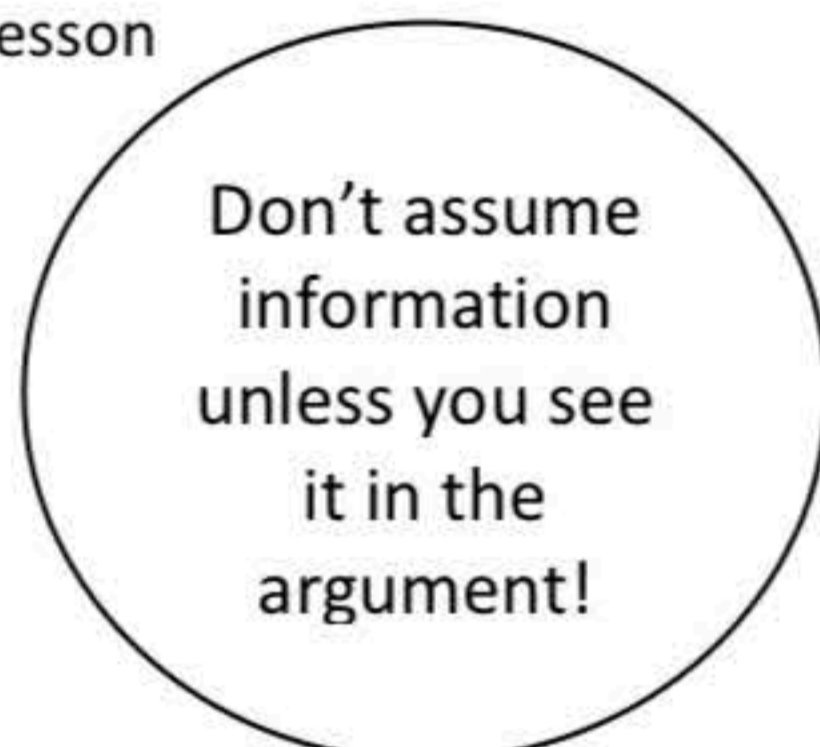
Instead, **reorder the information**.

Reorder the information; identifying the **premises** and **conclusion** inherent within each argument.

By deconstructing a Critical Reasoning argument, you can more clearly see what it is that's missing.

Deconstructing an argument helps you notice illogical connections. **The tendency to make sense of what we read is natural and, for the IBA, fatal.**

Fight your normal reading habits as you go through the questions in this lesson



Often there is no logical connection between the information we present (our **premises**) and our **conclusions**. For example...

You: Let's go see a movie.

Me: I have only two dollars.

What is your conclusion?

We can't go to a movie.

But why?

Because a movie costs more than two dollars

But how do we know this?

We don't!

Make sure you're not bringing outside information into your reading of a Critical Reasoning problem.

Here's another example...

Me: I can't believe I saw Joe drinking a Coke.

You: Why?

Me: Because Joe works for Pepsi.

What's your conclusion?

Joe prefers Coca Cola.

Joe hates his job.

Joe is a spy for Pepsi.

Be careful! What kinds of **assumptions** are you making to reach these conclusions?

What do you make of this one?

On Thursday I wore a blue shirt.

On Friday I had a headache.

Therefore, my blue shirt gives me a headache.

This is a dumbed-down version of a Critical Reasoning problem. It's easy to argue with my logic when I present my argument so simply.

Be always suspicious of CR arguments. Fight with them. What could *you* say that would undermine *my* argument?

Perhaps I was out all night last Thursday.

Maybe I live next door to an airport.

Any of these statements could severely undermine, or **weaken**, my argument. And what could you add that would completely **destroy** it?

There's no connection between the headache and the shirt

This piece of information would completely **destroy** my argument.

And the reverse, that there *is* a direct connection between the headache and the shirt, would completely **fix** it.

Now take a look at my revised argument...

On Thursday I wore a blue shirt.

On Friday I had a headache.

My health is affected by the clothes I wear.

Therefore, my blue shirt gives me a headache.

You'll never find an argument like this in a Critical Reasoning problem. It's too logical!

Critical Reasoning questions ask you to do several things, but central to them all is having an understanding of the basic structure of an argument.

Your task as you approach CR questions will be to break down an *illogical argument* into its stated *premises* and *conclusion*.

Key Terms

Argument

Central to every CR question is the argument. An argument is an ordered line of reasoning composed of premises, assumptions, and a conclusion. Understanding the elements of an argument is essential to performing well in this section.

Premise

Each CR argument contains at least one premise. Premises are pieces of information that provide evidence used to support the conclusion of the argument. For the purposes of Critical Reasoning arguments, premises are facts not subject to dispute.

Conclusion

The conclusion is the endpoint of the line of reasoning of an argument. Think of it as the result of the argument. The line of reasoning leading to a conclusion is often where errors in logic are made.

Assumption

Assumptions are unstated facts and logical connections in an argument. In order for the conclusion of an argument to be true, the assumptions upon which that argument is based must also be true.

How to Approach

Critical Reasoning questions test your ability to use basic logic to analyze and critique arguments made up of premises and conclusions.

A logical and consistent approach is the best way to avoid formulaic traps.

Follow these steps each time you attack Critical Reasoning questions.

Step 1: Read the question first.

Step 2: Read the argument.

Step 3: Paraphrase the argument using your own words.

Step 4: Predict the answer.

Step 5: Use the process of Error Identification to eliminate the wrong answers.

Step 1: Read the question first

Reading the argument first is confusing. So Read the question and determine what to look for within the answer choices.

In general, you'll be looking for the answer choices that either **strengthen** or **weaken** the argument. Determine which of the **eight kinds of Critical Reasoning questions** you're facing before turning to the argument itself.

Step 2: Read the argument.

1. Identify each **premise** (each piece of information) that is being presented within the argument.
2. Identify the argument's **conclusion**.

3. Determine what **assumptions** are being made.

Step 3: Paraphrase the argument using your own words.

Critical Reasoning arguments are intentionally heavy, wordy and complex. Paraphrasing is a good way of understanding the sense an argument presented. Take the time, *if necessary*, and restate an argument, using words and situations that you can relate to.

Step 4: Predict the answer.

So, you've read the argument. You understand it. You can identify its premises and its conclusion. Now imagine additional premises (additional pieces of information) and what affect each would have on the argument overall.

Brainstorm for a moment. Imagine which additional premise would best strengthen the argument. What one thing could you add that would completely fix it? Now imagine the opposite. How could you weaken the argument? How could you completely destroy it?

This is perhaps the most important step in the process. Answer choices are intentionally misleading, and you can use your predictions as a measuring stick with which to compare the choices given to you by IBA.

Step 5: Use the Process of Error Identification to eliminate the wrong answers.

Think of answer choices as additional premises. As you read each choice, ask yourself, "How would this additional premise affect the strength or weakness of the argument's conclusion?"

Categorize answer choices as one of the following:

1. Strengthen
2. Weaken
3. Neutral
4. Out of scope

Use the Process of Error Identification to get rid of any choices that do not affect the conclusion (*neutral*) or have nothing to do with the argument whatsoever (*out of scope*).

Whether you eliminate *strengthen* or *weaken* answer choices depends on the question related with that argument.

Signal Words

Conclusion

Therefore As a result suggests Indicates
Accordingly So Consequently Thus Hence
It follows that

Conclusions can also be signaled by their strong tone, often marked by "opinion" words such as should ("This law should be enacted ...").

Premises

Since Due to As a result of Because Given

Example 1:

In years past, professional baseball players lifted weights less but were also injured less often during games. Obviously, the more an athlete lifts weights, the higher the likelihood of injury.

The conclusion above presupposes which of the following?

- (A) The increase in baseball injuries is due to a factor other than weightlifting.
- (B) The activities of baseball players represent those of athletes as a group.
- (C) Most baseball injuries today result from too much weightlifting.
- (D) There is no proven correlation between how much athletes lift weights and how likely they are to be affected by injury.
- (E) Weightlifting has always been common practice for professional athletes.

First, read the question.

The conclusion above presupposes which of the following?

This is what's called an **assumption question**. What specific piece of information is presupposed (assumed) in the preceding argument?

Break it down to understand what the writer is really saying.

Can you identify the premises and the conclusion?

Premise #1: In years past, professional baseball players lifted weights less.

Premise #2: But they were also injured less often during games.

Conclusion: Obviously, the more an athlete lifts weights, the higher the likelihood of injury.

Restate or paraphrase the argument, if necessary. Stick as close to the actual text as possible.

If necessary, paraphrase the argument. Put the events in a context you can understand, but stick as close to the actual text as possible. Try changing the subjects without changing what they did.

Keep trying until the argument makes sense to you. *Then return to the actual argument!*

Now, think about some of the big assumptions that are being made.

Ask yourself what you could add to **fix** the argument.

What could you add to the argument to completely **destroy** it!

If it helps, imagine someone you can't stand. Think up a real or fictional know-it-all. Now come up with the one thing you could say to this person that would shut him up.

What if I offered evidence that proved baseball injuries are *definitely not* a result of weightlifting? That might destroy the argument. And the contrary, that baseball injuries *definitely are* a result of weightlifting, might fix it.

What other assumptions can you come up with?

When you're ready, turn your attention to the answer choices.

Use the Process of Error Identification to eliminate any answer choices that are **neutral** or **out of scope**. For this particular question, also eliminate any answer choices that **weaken** the argument.

- (A) **The increase in baseball injuries is due to a factor other than weightlifting.**
- (B) **The activities of baseball players represent those of athletes as a group.**
- (C) **Most baseball injuries today result from too much weightlifting.**
- (D) **There is no proven correlation between how much athletes lift weights and how likely they are to be affected by injury.**
- (E) **Weightlifting has always been common practice for professional athletes.**

Only answer choices (B) and (C) strengthen the argument.

Of course, there are many different kinds of athletes. All athletes are not baseball players. **The correct answer is (B).**

Be aware of vague and undefined categories, such as "athletes."

- (A) The increase in baseball injuries is due to a factor other than weightlifting.-----**Weakens**
- (B) **The activities of baseball players represent those of athletes as a group.**
- (C) Most baseball injuries today result from too much weightlifting.
- (D) There is no proven correlation between how much athletes lift weights and how likely they are to be affected by injury. ----
-----**Weakens**
- (E) Weightlifting has always been common practice for professional athletes.....**Neutral**

What's wrong with answer choice (C) ? The trigger word "most" is undefined. "Most" is a relative term, but we don't know what it's relative to.

Example 2:

In 1991, produce growers began using a new, inexpensive pesticide, provoking many objections that they would damage both the environment and the produce they were growing. However, the fears have proven unfounded as, though 1996, produce prices had dropped and no ill effects had been reported.

Which of the following, if true, would be the strongest objection to the argument above?

- (A) Consumption of the produce declined from 1991 to 1993, but rose sharply from 1994 to 1996.

- (B) Several areas in which use of the pesticide was forbidden have also experienced a drop in produce prices.
- (C) The amount of produce grown in 1991 was larger than that of 1996.
- (D) The time since the beginning of the use of the pesticide has been too short to allow some of the predicted effects to occur.
- (E) Since 1992, new pesticides have been developed that scientists agree are relatively risk-free.

Make it personal...

In 1991, I started smoking cigarettes. My friends said it is unhealthy. In 2000, I am still Okay: Therefore; cigarettes are not unhealthy.

There's a fatal flaw to this logic. Look back and compare this rephrasing with the actual argument itself.

(D) is the only answer choice that **weakens** the argument. All the others, in fact, are **out of scope!**

Critical Reasoning Question Types

1. Draw a conclusion
2. Assumption
3. Strengthen
4. Weaken
5. Inference
6. Explain the (apparent) contradiction
7. Complete the passage
8. "Except" questions

WEAKEN THE ARGUMENT

This is probably the easiest and certainly the most common of Critical Reasoning question types the Weaken the Argument question.

Example 3:

Some rental car agencies in the U.S are now looking into installing satellite-guided navigation systems in their automobiles. The driver inputs the address on a keyboard, and the on-board computer calls out directions in American English, such as "You are now approaching Main Street". Rental car agencies hope to target foreign tourists and travelers unfamiliar with the United States.

Which of the following, if true, provides the greatest reason to suggest that the plan will not work?

- A. These new computer navigation systems are expensive to install in many automobiles.
- B. Some foreigners visiting the United States may not understand English.
- C. Some people argue that the computer's voice sounds extremely cold and impersonal.
- D. Many American citizens will also want to take advantage of the satellite-guided navigation systems.
- E. In the average U.S. city, paper maps and city guides are available in almost every hotel and gas station.

Try to answer this Weaken the Argument question yourself before going on to see the explanation.

And here's how to answer the question:

1. Identify the argument. Remember, that's usually in the first or last line.
2. Anticipate what will be the answer, if possible. Imagine
3. what would satisfy the question-what would weaken the argument. Then look for it in the answer choices.
4. Eliminate answer choices that do not weaken the argument.
5. If there are two or three answer choices left after the process of elimination, then choose!

STRENGTHEN THE ARGUMENT

The good news is that **Strengthen the Argument** questions are exactly the same as Weaken, except this time we want to support the main idea or argument.

Example 4:

The city council of Nowheresville has proposed establishing tollbooths on all of the major routes into the city. The council's reasoning is that this fee will force many commuters to switch from private automobiles to the public transportation system.

- A. Most of the citizens of Nowheresville support the new plan.
- B. Several other cities have attempted to implement the scheme in the past, with mixed results.
- C. Currently the average private commuter car spends one hour and forty-five minute in the commute into the city.
- D. A new study suggests that many commuters with cars would switch to public transportation if driving in the city became any more expensive.
- E. The price of gasoline is projected to plummet in the next few months.

Try to answer this Strengthen the Argument question before checking the explanation.

Here's what to do:

1. Identify the argument. Remember, it's usually in the first or last line.
2. Anticipate what will be the answer, if possible. Imagine what would satisfy the question-what would strengthen the argument. Then look for it in the answer choices.
3. Eliminate answer choices that do not strengthen the argument.
4. If there are two or three answer choices left after the process of elimination, then: choose!

SUPPLY THE ASSUMPTION

For most people, these questions are the real difficult ones! Very tough, and unfortunately, the Assumption problem is the type of question most open to interpretation. But we do what we can.

Example 5:

New medical studies indicate that if the average employee improves his physical health, then his productivity also increases markedly. Company XYZ should therefore introduce mandatory exercise programs every morning in order to augment productivity.

- A. The mandatory exercise programs will be successful in improving the physical health of the employees at XYZ.
- B. Employees who take exercise programs at work are not more productive than are employees who take exercise programs outside of work.
- C. Employees who exercise sleep better than employees who do not do so do.
- D. Employees who exercise at work often complain of tiredness throughout the day.
- E. Employees often resist mandatory exercise programs, viewing them as intrusions on their privacy and on their labor rights.

See if you can find the author's assumption before continuing.

- 1. Identify the premises of the argument.
- 2. Identify the conclusion. Remember, that's usually in the first or last sentence of the text.
- 3. Identify the gap in the logic of the argument. What's missing or needed to make this argument convincing?
- 4. What's the new element or factor in the conclusion? The assumption will probably introduce it.
- 5. Go through each answer choices. Does it strengthen the conclusion? If not, then eliminate it.
- 6. Eliminate silly or nonsensical answer choices.
- 7. Choose! Don't waste time!

SUPPLY A CONCLUSION

In this type of question, you have to supply a conclusion from the premises given.

Example 6:

Some studies indicate that alcohol advertisements on television cause people to increase their alcohol consumption. In Arcadia, however, where there has been a ban on alcohol advertising for the last ten years, alcohol consumption per capita is at least as high as in countries that do not have such a ban in place.

Which of the following statements draws the most reliable conclusion from the information above?

- A. People tend to consume more alcohol if they are exposed to alcohol advertisements than if they are not exposed to those advertisements.
- B. Advertising has no effect on whether people consume more or less alcohol.

- C. Advertising cannot be the only factor that determines an individual's consumption of alcohol.
- D. Most people continued to consume alcohol after the ban was implemented.
- E. If advertising for alcohol were allowed in Arcadia, it would be extremely effective.

Try to do the question before you go to the explanation:

- 1. Identify the premises of the argument.
- 2. Assume all the premises are true. Try to combine or link those premises. Is there an obvious conclusion that could be made from these premises?
- 3. Eliminate answer choices that don't deal with or are supported by ALL of the premises or that don't make sense from the information given.
- 4. If there are two or three answer choices left after the process of elimination, then: choose!

PRACTICE:

1. "Life expectancy" is the average age at death of the entire live-born population. In the middle of the nineteenth century, life expectancy in North America was 40 years, whereas now it is nearly 80 years. Thus, in those days, people must have been considered old at an age that we now consider the prime of life. Which of the following, if true, undermines the argument above?

(A) In the middle of the nineteenth century, the population of North America was significantly smaller than it is today.

(B) Most of the gains in life expectancy in the last 150 years have come from reductions in the number of infants who die in their first year of life.

(C) Many of the people who live to an advanced age today do so only because of medical technology that was unknown in the nineteenth century.

(D) The proportion of people who die in their seventies is significantly smaller today than is the proportion of people who die in their eighties.

(E) More people in the middle of the nineteenth century engaged regularly in vigorous physical activity than do so today.

2. Scientists propose placing seismic stations on the floor of the Pacific Ocean to warn threatened coastal communities on the northwestern coast of the United States of approaching tidal waves caused by earthquakes. Since forewarned communities could take steps to evacuate, many of the injuries and deaths that would otherwise occur could be avoided if the government would implement this proposal. The answer to which of the following questions would be most important in determining whether implementing the proposal would be likely to achieve the desired result?

(A) When was the last time that the coastal communities were threatened by an approaching tidal wave?

(B) How far below sea level would the stations be located?

- (C) Would there be enough time after receiving warning of an approaching tidal wave for communities to evacuate safely?
- (D) How soon after a tidal wave hits land is it safe for evacuees to return to their communities?
- (E) Can the stations be equipped to collect and relay information about phenomena other than tidal waves caused by earthquakes?

3. Homeowners aged 40 to 50 are more likely to purchase ice cream and are more likely to purchase it in larger amounts than are members of any other demographic group. The popular belief that teenagers eat more ice cream than adults must, therefore, be false. The argument is flawed primarily because the author

- (A) fails to distinguish between purchasing and consuming
- (B) does not supply information about homeowners in age groups other than 40 to 50
- (C) depends on popular belief rather than on documented research findings
- (D) does not specify the precise amount of ice cream purchased by any demographic group
- (E) discusses ice cream rather than more nutritious and healthful foods

4. According to a prediction of the not-so-distant future published in 1940, electricity would revolutionize agriculture. Electrodes would be inserted into the soil, and the current between them would kill bugs and weeds and make crop plants stronger. Which of the following, if true, most strongly indicates that the logic of the prediction above is flawed?

- (A) In order for farmers to avoid electric shock while working in the fields, the current could be turned off at such times without diminishing the intended effects.
- (B) If the proposed plan for using electricity were put into practice, farmers would save on chemicals now being added to the soil.
- (C) It cannot be taken for granted that the use of electricity is always beneficial.
- (D) Since weeds are plants, electricity would affect weeds in the same way as it would affect crop plants.
- (E) Because a planting machine would need to avoid coming into contact with the electrodes, new parts for planting machines would need to be designed.

5. A company is considering changing its policy concerning daily working hours. Currently, this company requires all employees to arrive at work at 8 a.m. The proposed policy would permit each employee to decide when to arrive—from as early as 6 a.m. to as late as 11 a.m. The adoption of this policy would be most likely to decrease employees' productivity if the employees' job functions required them to

(A) work without interruption from other employees (B) consult at least once a day with employees from other companies

- (C) submit their work for a supervisor's eventual approval
- (D) interact frequently with each other throughout the entire workday
- (E) undertake projects that take several days to complete

6. The amount of time it takes for most of a worker's occupational knowledge and skills to become obsolete has been declining because of the introduction of advanced manufacturing technology (AMT). Given the rate at which AMT is currently being introduced in manufacturing, the average worker's old skills become obsolete and new skills are required within as little as five years.

Which of the following plans, if feasible, would allow a company to prepare most effectively for the rapid obsolescence of skills described above?

- (A) The company will develop a program to offer selected employees the opportunity to receive training six years after they were originally hired.
- (B) The company will increase its investment in AMT every year for a period of at least five years.
- (C) The company will periodically survey its employees to determine how the introduction of AMT has affected them.
- (D) Before the introduction of AMT, the company will institute an educational program to inform its employees of the probable consequences of the introduction of AMT.
- (E) The company will ensure that it can offer its employees any training necessary for meeting their job requirements.

7. Traverton's city council wants to minimize the city's average yearly expenditures on its traffic signal lights and so is considering replacing the incandescent bulbs currently in use with arrays of light-emitting diodes (LEDs) as the incandescent bulbs burn out. Compared to incandescent bulbs, LED arrays consume significantly less energy and cost no more to purchase. Moreover, the costs associated with the conversion of existing fixtures so as to accept LED arrays would be minimal. Which of the following would it be most useful to know in determining whether switching to LED arrays would be likely to help minimize Traverton's yearly maintenance costs?

- (A) Whether the expected service life of LED arrays is at least as long as that of the currently used incandescent bulbs
- (B) Whether any cities have switched from incandescent lights in their traffic signals to lighting elements other than LED arrays
- (C) Whether the company from which Traverton currently buys incandescent bulbs for traffic signals also sells LED arrays
- (D) Whether Traverton's city council plans to increase the number of traffic signal lights in Traverton
- (E) Whether the crews that currently replace incandescent bulbs in Traverton's traffic signals know how to convert the existing fixtures so as to accept LED arrays

8. A report that many apples contain a cancer-causing preservative called Alar apparently had little effect on consumers. Few consumers planned to change their apple-buying habits as a result of the report. None the less, sales of apples in grocery stores fell sharply in March, a month after the report was issued. Which of the following, if true, best explains the reason for the apparent discrepancy described above?

(A) In March, many grocers removed apples from their shelves in order to demonstrate concern about their customers' health.

(B) Because of a growing number of food-safety warnings, consumers in March were indifferent to such warnings.

(C) The report was delivered on television and also appeared in newspapers.

(D) The report did not mention that any other fruit contains Alar, although the preservative is used on other fruit.

(E) Public health officials did not believe that apples posed a health threat because only minute traces of Alar were present in affected apples.

9. In order to reduce the number of items damaged while in transit to customers, packaging consultants recommended that the True Save mail-order company increase the amount of packing material so as to fill any empty spaces in its cartons. Accordingly, True Save officials instructed the company's packers to use more packing material than before, and the packers zealously acted on these instructions and used as much as they could. Nevertheless, customer reports of damaged items rose somewhat. Which of the following, if true, most helps to explain why acting on the consultants' recommendation failed to achieve its goal?

(A) The change in packing policy led to an increase in expenditure on packing material and labor.

(B) When packing material is compressed too densely, it loses some of its capacity to absorb shock.

(C) The amount of packing material used in a carton does not significantly influence the ease with which a customer can unpack the package.

(D) Most of the goods that TrueSave ships are electronic products that are highly vulnerable to being damaged in transit.

(E) TrueSave has lost some of its regular customers as a result of the high number of damaged items they received.

10. Cable-television spokesperson: Subscriptions to cable television are a bargain in comparison to "free" television. Remember that "free" television is not really free. It is consumers, in the end, who pay for the costly advertising that supports "free" television. Which of the following, if true, is most damaging to the position of the cable-television spokesperson?

(A) Consumers who do not own television sets are less likely to be influenced in their purchasing decisions by television advertising than are consumers who own television sets.

(B) Subscriptions to cable television include access to some public-television channels, which do not accept advertising.

(C) For locations with poor television reception, cable television provides picture quality superior to that provided by free television.

(D) There is as much advertising on many cable television channels as there is on "free" television channels.

(E) Cable-television subscribers can choose which channels they wish to receive.

11. Wood smoke contains dangerous toxins that cause changes in human cells. Because wood smoke presents such a high health risk, legislation is needed to regulate the use of open-air fires and wood-burning stoves. Which of the following, if true, provides the most support for the argument above?

(A) The amount of dangerous toxins contained in wood smoke is much less than the amount contained in an equal volume of automobile exhaust.

(B) Within the jurisdiction covered by the proposed legislation, most heating and cooking is done with oil or natural gas.

(C) Smoke produced by coal-burning stoves is significantly more toxic than smoke from wood burning stoves.

(D) No significant beneficial effect on air quality would result if open-air fires were banned within the jurisdiction covered by the proposed legislation.

(E) In valleys where wood is used as the primary heating fuel, the concentration of smoke results in poor air quality.

12. A certain automaker aims to increase its market share by deeply discounting its vehicles' prices for the next several months. The discounts will cut into profits, but because they will be heavily advertised the manufacturer hopes that they will attract buyers away from rival manufacturers' cars. In the longer term, the automaker envisions that customers initially attracted by the discounts may become loyal customers. In assessing the plan's chances of achieving its aim, it would be most useful to know which of the following?

(A) Whether the automaker's competitors are likely to respond by offering deep discounts on their own products

(B) Whether the advertisements will be created by the manufacturer's current advertising agency

(C) Whether some of the automaker's models will be more deeply discounted than others

(D) Whether the automaker will be able to cut costs sufficiently to maintain profit margins even when the discounts are in effect

(E) Whether an alternative strategy might enable the automaker to enhance its profitability while holding a constant or diminishing share of the market

13. In Swartkans territory, archaeologists discovered charred bone fragments dating back one million years. Analysis of the fragments, which came from a variety of animals, showed that they had been heated to temperatures no higher than those produced in experimental campfires made from branches of white stinkwood, the most common tree around Swartkans. Which of the following, if true, would, together with the information above, provide the best basis for the claim that the charred bone fragments are evidence of the use of fire by early hominids?

- (A) The white stinkwood tree is used for building material by the present-day inhabitants of Swartkans.
- (B) Forest fires can heat wood to a range of temperatures that occur in campfires.
- (C) The bone fragments were fitted together by the archaeologists to form the complete skeletons of several animals.
- (D) Apart from the Swartkans discovery, there is reliable evidence that early hominids used fire as many as 500,000 years ago.
- (E) The bone fragments were found in several distinct layers of limestone that contained primitive cutting tools known to have been used by early hominids.

14. In Washington County, attendance at the movies is just large enough for the cinema operators to make modest profits. The size of the county's population is stable and is not expected to increase much. Yet there are investors ready to double the number of movie screens in the county within five years, and they are predicting solid profits both for themselves and for the established cinema operators. Which of the following, if true about Washington County, most helps to provide a justification for the investors' prediction?

- (A) Over the next ten years, people in their teenage years, the prime movie going age, will be a rapidly growing proportion of the county's population.
- (B) As distinct from the existing cinemas, most of the cinemas being planned would be located in downtown areas, in hopes of stimulating an economic revitalization of those areas.
- (C) Spending on video purchases, as well as spending on video rentals, has been increasing modestly each year for the past ten years.
- (D) The average number of screens per cinema is lower among existing cinemas than it is among cinemas still in the planning stages.
- (E) The sale of snacks and drinks in cinemas accounts for a steadily growing share of most cinema operators' profits.

15. A conservation group in the United States is trying to change the long-standing image of bats as frightening creatures. The group contends that bats are feared and persecuted solely because they are shy animals that are active only at night. Which of the following, if true, would cast the most serious doubt on the accuracy of the group's contention?

- (A) Bats are steadily losing natural roosting places such as caves and hollow trees and are thus turning to more developed areas for roosting.
- (B) Bats are the chief consumers of nocturnal insects and thus can help make their hunting territory more pleasant for humans.
- (C) Bats are regarded as frightening creatures not only in the United States but also in Europe, Africa, and South America.
- (D) Raccoons and owls are shy and active only at night, yet they are not generally feared and persecuted.
- (E) People know more about the behavior of other greatly feared animal species, such as lions, alligators, and snakes, than they do about the behavior of bats.

16. Which of the following best completes the passage below? People buy prestige when they buy a premium product. They want to be associated with something special. Mass-marketing techniques and price-reduction strategies should not be used because .

- (A) affluent purchasers currently represent a shrinking portion of the population of all purchasers
- (B) continued sales depend directly on the maintenance of an aura of exclusivity
- (C) purchasers of premium products are concerned with the quality as well as with the price of the products
- (D) expansion of the market niche to include a broader spectrum of consumers will increase profits
- (E) manufacturing a premium brand is not necessarily more costly than manufacturing a standard brand of the same product

17. Hunter: Many people blame hunters alone for the decline in Greenrock National Forest's deer population over the past ten years. Yet clearly, black bears have also played an important role in this decline. In the past ten years, the forest's protected black bear population has risen sharply, and examination of black bears found dead in the forest during the deer hunting season showed that a number of them had recently fed on deer. In the hunter's argument, the portion in boldface plays which of the following roles?

- (A) It is the main conclusion of the argument.
- (B) It is a finding that the argument seeks to explain.
- (C) It is an explanation that the argument concludes is correct.
- (D) It provides evidence in support of the main conclusion of the argument.
- (E) It introduces a judgment that the argument opposes.

18. In Asia, where palm trees are nonnative, the trees' flowers have traditionally been pollinated by hand, which has kept palm fruit productivity unnaturally low. When weevils known to be efficient pollinators of palm flowers were introduced into Asia in 1980, palm fruit productivity increased—by up to 50 percent in some areas—but then decreased sharply in 1984. Which of the following statements, if true, would best explain the 1984 decrease in productivity?

- (A) Prices for palm fruit fell between 1980 and 1984 following the rise in production and a concurrent fall in demand.
- (B) Imported trees are often more productive than native trees because the imported ones have left behind their pests and diseases in their native lands.
- (D) The weevil population in Asia remained at approximately the same level between 1980 and 1984.
- (E) Prior to 1980 another species of insect pollinated the Asian palm trees, but not as efficiently as the species of weevil that was introduced in 1980.

(C) Rapid increases in productivity tend to deplete trees of nutrients needed for the development of the fruit-producing female flowers.

19. Physician: The hormone melatonin has shown promise as a medication for sleep disorders when taken in synthesized form. Because the long-term side effects of synthetic melatonin are unknown, however, I cannot recommend its use at this time.

Patient: Your position is inconsistent with your usual practice. You prescribe many medications that you know have serious side effects, so concern about side effects cannot be the real reason you will not prescribe melatonin.

The patient's argument is flawed because it fails to consider that

- (A) the side effects of synthetic melatonin might be different from those of naturally produced melatonin
- (B) it is possible that the physician does not believe that melatonin has been conclusively shown to be effective
- (C) sleep disorders, if left untreated, might lead to serious medical complications
- (D) the side effects of a medication can take some time to manifest themselves
- (E) known risks can be weighed against known benefits, but unknown risks cannot

20. In recent years, many cabinetmakers have been winning acclaim as artists. But since furniture must be useful, cabinetmakers must exercise their craft with an eye to the practical utility of their product. For this reason, cabinetmaking is not art.

Which of the following is an assumption that supports drawing the conclusion above from the reason given for that conclusion?

- (A) Some furniture is made to be placed in museums, where it will not be used by anyone.
- (B) Some cabinetmakers are more concerned than others with the practical utility of the products they produce.
- (C) Cabinetmakers should be more concerned with the practical utility of their products than they currently are.
- (D) An object is not an art object if its maker pays attention to the object's practical utility.
- (E) Artists are not concerned with the monetary value of their products.

Example	1	2	3	4	5	6
Ans	B	D	B	D	A	C

HOME WORK

1. In Bangladesh it is predicted that food supply can never keep pace with the rate of increase in human population. Which of the following statements, if true would tend to weaken the prediction?

I. Total human population has risen at a rapid rate partly because of the removal of natural checks on population.

II. In many nations, the increase of human population has far outstripped the food — producing capacity.

III. Human population growth may be halted by the use of contraceptives.

IV. For many ethnic and religious groups, artificial control of conception is morally unacceptable.

A. II only B. I only C. I and II

D. III only E. II and IV only

2. "Having good social contacts is a prerequisite for getting a good job." Which of the following contradicts the above statement?

- A. Kaiser has good social contacts but he got a poor job.
- B. Afzal has both good social contacts and a very good job.
- C. Renuka has no social contact but recently got a good job.
- D. Good academic performance helps in getting a good job.
- E. Good social contacts do not always help in getting a good job.

3. Leafletting and speech making on government property should be outlawed. Radicals should not use public property when peddling their unsavory views. The argument above is based on the assumption that:

- A. the general public has a vested interest in the free exchange of varied political views
- B. political activity that interferes with the orderly functioning of government, should not be protected by law.
- C. all those who leaflet and make speeches on government

properties are radicals.

- D. radicals prefer using public property when disseminating their views
- E. legal restrictions that apply to one group need not apply equally to all.

4. Which of the following contradicts the view that only the smart becomes rich?

- A. Both "smart" and "rich" are relative terms.
- B. Some smart people do not desire to become rich.
- C. Shameem was smart, yet he was poor his whole life
- D. Different people are smart in different ways
- E. Sohail is stupid, yet he amassed a large fortune by the age of 30

5. "This year more students passed the S.S.C. examination. The questions must have been easier compared to those in the last year." This argument is most likely based on which of the following assumptions?

- A. Had the questions not been easier, fewer students would have passed?
- B. Quality of student does not vary from year to year.
- C. This year there was less criticism from students about the difficulty level of questions.
- D. One year's results should be compared with another year's
- E. Educationists are critical these days about the quality of S.S.C. questions.

6. The following is a conversation between two friends Hamid and Selim

Hamid: I just heard that Salam failed in the HSC exam.

Selim: That can't be true; he secured first division in the merit list in the SSC exam. What can you conclude from this conversation?

- A. Selim thinks Hamid is lying
- B. Selim assumes that no one who got first division in SSC exam is likely to fail in the HSC exam.
- C. Hamid thinks Salam has failed in the HSC exam
- D. Selim thinks Salam is still in the college and never appeared in the HSC exam.
- E. Hamid knows that Salam failed in the HSC exam.

7. I'm afraid Saber will never be an outstanding cricket player again. Last month he injured his wrist, and the doctors had to remove some of the cartilage. The argument above is based upon which of the following assumptions?

- I. One must have healthy wrist to play cricket

II. How well one plays cricket may be influenced by the condition of one's wrist

III. Healthy wrist is necessary for a professional cricket player.

- A. I only
- B. II only
- C. I & II only
- D. II and III only
- E. I, II and III

8. Since it is possible that substances contained in certain tree roots may provide a cure for cancer, the government must provide sufficient funds to allow through testing of this possibility. The argument above assumes that:

- A. substances contained in certain tree roots will probably cure cancer.
- B. the line of research mentioned offers at present the most promising possibility for finding a cure for cancer.
- C. the possibility of finding a cure is a sufficient reason for funding research into possible cancer cures.
- D. a cure for cancer would be extremely valuable to society.
- E. the government is the only possible source of funds for the research described.

9. While trying to computerize its accounts section, a company faced strong resistance from its labor union. They claimed computer would replace a number of employees. Which of the following arguments would reduce employee resistance most?

- (A) computer's will increase efficiency in the accounts section
- (B) Computers will change the nature of jobs for employees.
- (C) Computerization will be quite expensive
- (D) Employees will be given the authority to choose computer brands.
- (E) Accounts sections in most organizations are computerized today.

10. All good athletes want to win, and all athletes who want to win eat a well balanced diet; therefore, all athletes who do not eat a well-balanced diet are bad athletes. Which of the following, if true, would refute the assumptions of the argument above?

- A. Sara wants to win, but she is not a good athlete.
- B. Babu, the accountant, eats a well-balanced diet, but he is not a good athlete.
- C. All the players on the Abahani cricket team eat a well-balanced diet.
- D. No athlete who does not eat a well-balanced diet wants to win.
- E. Karim, the cricket star, does not eat a well-balanced diet, but he is a good -athlete.

11. Team plays, like football, display- Strong socialist tendencies in their requirement of individual

subordination to the authority of coaches and managers. Which of the following may be inferred from the above information?

- A. All team sports are authoritarian
- B. All team players are subordinate to their coaches.
- C. All team sports have socialist tendencies.
- D. Individual subordination to authority is an aspect of socialism.
- E. Without employee subordination to managerial authority, production for profit is possible.

Questions 12-14 are based on the following.

Strict gun control laws cause a decrease in violent crimes; in the six months since the city council passed a gun control law, armed robberies in City X have dropped by 18 percent.

12. Which of the following statements, if true, would weaken the argument above?

- I. In the six months since the law was passed, 40 percent more police have been recruited
- II. In the six months since the law was passed, accidental deaths by firearms have increased by 10%
- III. Only 30% of those indicated under the new law have been convicted

- A. I only
- B. III only
- C. I and II only
- D. I and III only
- E. II and III only

13. All of the following, if true, are valid objections to the arguments above EXCEPT:

- A. A decrease in crime in one city does not mean that such a decrease would occur anywhere a gun control law was enacted.
- B. Other factors may have caused the drop in armed robberies
- C. Armed robbery is only one kind of violent crime that might be affected by a gun control law.
- D. The gun control law has made it more difficult for citizens to purchase guns for legitimate purpose of self-defense
- E. Since the law was passed, murders involving guns in City X have increased by 22 percent.

14. Which of the following statements, if true, would strengthen the argument above?

- I. Before the law was passed, the number of armed robberies had been steadily increasing
- II. The more that laws are used to prevent a crime, the less likely that crime is to occur.

III. Three fourths of all violent crimes involve the use of a gun.

- A. I only
- B. III only
- C. I and II only
- D. II and III only
- E. I, II, & III

15. At a political rally in Paltan Maidan, candidate Mr. Rahmat Ali exclaimed, "— everyone at the rally is behind me. It seems I am going to be elected.

Which of the following statements, if true, best supports Mr. Ali's conclusion?

- A. Ali was supported by the City Mayor
- B. People always vote according to their emotion
- C. Ali has never been defeated in an election
- D. Ali's opponent also appeared at the rally
- E. The rally was attended by nearly all the residents in Ali's constituency.

16. Gani: I wish you wouldn't eat so much beef. It's bad for your health.

Nima: How can you say that? I don't weigh a pound more than I did a year ago.

Which of the following responses would most strengthen Gani's argument?

- A. Putting on weight is not the only harmful effect of eating beef.
- B. Most people who eat a lot of beef do put on weight.
- C. If you keep eating so much beef, you will soon put on weight.
- D. You weigh ten pounds more than you did six years ago.
- E. You can put on weight in other ways than by eating beef.

17. Tipu: I don't want to take Professor Haroon's course. I've heard he's very strict when it comes to giving out grades.

Shoma: That's not true. Seema took his course last year, and he gave her an A grade.

From the conversation above, it can be inferred that Shoma interpreted Tipu's statement to mean that Professor Haroon.

- A. never gives out A grades
- B. Make unfair demands on his students
- C. only gives good grades to few favoured students
- D. has become increasingly strict in his grading over the past year
- E. gives out fewer good grades than most teachers in the department