

Free Critical Thinking Test

Solutions Booklet

Instructions

This practice critical thinking test will assess your ability to make inferences and logical assumptions and to reason with supported arguments. The test is comprised of the following five sections:

1. Arguments
2. Assumptions
3. Deductions
4. Interpreting Information
5. Inferences

You should attempt the questions before reading this solutions document.

You may use this document to check your answers and to read the reasoning behind each question. It is up to you how you practice most effectively, but we suggest you work through the critical thinking test in its entirety before looking at these solutions.

If you believe there are any mistakes in these solutions we would love to be notified so that we can correct them. Please let us know at info@assessmentday.co.uk

Section 1: Arguments

Instructions:

When making important decisions, it is useful to be able to distinguish between a strong argument and a weak argument. A strong argument is both important and directly related to the question. A weak argument is not directly related to the question, or is of minor importance or may be related to a trivial aspect of the question, or confuses correlation with causation (incorrectly assuming that because two things are related, they cause each other to happen).

In this section, a statement is presented to you with an agreeing or disagreeing argument below. You must regard each argument as true, regardless whether it is weak or strong, agrees or disagrees with the statement. The first and second statements will have three arguments each and the third statement will have only two arguments.

If you consider an argument to be strong, select **Strong argument**, or if you consider an argument to be weak, select **Weak argument**. Judge each question and argument individually. Try not to take into account individual opinion or general knowledge since each argument is considered to be true.

See the example questions below with the correct answers given.

Statement One:

Should companies downsize their workforces to decrease expenses and maximise profits?

Q1

Argument One: Yes, downsizing will protect the company from bankruptcy in hard economic times.

Strong Argument

Weak Argument

Correct answer: Weak Argument

Explanation: Accepting the argument as true, avoiding bankruptcy is an essential motive for an organisation, however, the statement does not discuss bankruptcy, rather it is discussing profits and expenses. Protection against bankruptcy is not the topic, and is straying from the point, and is, therefore a weak argument.

Q2

Argument Two: Yes, companies have no obligation to employ more people than it can handle.

Strong Argument

Weak Argument

Correct answer: Weak Argument

Explanation: Although the point is taken to be true, it does not provide evidence for the benefits of its position, it merely states an irrelevant fact, making this a weak argument.

Q3

Argument Three: No, downsizing leads to demoralisation of the workforce and causes a drop in employee productivity.

Strong Argument

Weak Argument

Correct answer: Strong Argument

Explanation: The argument addresses the initial statement directly, providing a clear disadvantage of the statement, making this a strong argument.

Q4

Argument Four: Yes, companies which have no control over the size of their workforce will be highly vulnerable to economic climates and market changes.

Strong Argument

Weak Argument

Correct answer: Weak Argument

Explanation: The initial question does not discuss taking away the company's right to control its own size, only one aspect of it. Therefore, the point is arguing a separate question, rather than the initial one, presenting a weak argument.

Statement Two:

Should university-level education be free to all students?

Q5

Argument One: No, too much education can lead to over-qualification, and therefore unemployment.

Strong Argument

Weak Argument

Correct answer: Weak Argument

Explanation: The argument only addresses too much education over qualification, and the statement does not discuss these issues, as a result the argument does not fully address the statement, therefore it is a weak argument.

Q6

Argument Two: Yes, having a highly qualified workforce ensures high levels of employee productivity in organisations.

Strong Argument

Weak Argument

Correct answer: Strong Argument

Explanation: If the argument is to be taken as true, then this provides a very clear and relevant benefit to free university education, presenting a strong argument.

Q7

Argument Three: No, research has shown that students that are not required to pay tuition fees tend to slack off more and learn less during their degree.

Strong Argument

Weak Argument

Correct answer: Strong Argument

Explanation: The argument presents direct evidence for the point put forward, and addresses a serious disadvantage of the initial statement. The statement addresses the initial point directly, and is therefore a strong argument.

Statement Three:

Should employers allow all staff the option of flexi-time working hours?

Q8

Argument One: Yes, giving greater flexibility will improve their work-life balance, and therefore their productivity.

Strong Argument
Weak Argument

Correct answer: Strong Argument

Explanation: The argument provides a clear and direct benefit of the initial statement, and directly addresses the statement, making this a strong argument.

Q9

Argument Two: Yes, organisations that value their staff are on average more productive and show lower staff turnover.

Strong Argument
Weak Argument

Correct answer: Weak Argument

Explanation: The argument does not specifically address flexi-time; it argues a separate point regarding valuing staff, which is not directly related to the statement, and is therefore a weak argument.

Q10

Argument Three: No, flexi-time leads to employees working fewer hours. Working fewer hours will decrease an employee's exposure to the workplace, making career progression harder and leading to a less experienced workforce.

Strong Argument
Weak Argument

Correct answer: Strong Argument

Explanation: The argument provides two relevant arguments for its position, and both offer clear disadvantages which directly relate to the initial statement, making this a strong argument.

Statement Four:

Should governments implement a minimum wage, outlining a minimum amount an employee is to be paid per hour?

Q11

Argument One: Yes, the existence of minimum wages is a key part of a civilised society.

Strong Argument

Weak Argument

Correct answer: Weak Argument

Explanation: The argument does not present and advantages of a minimum wage; it only presents a statement about minimum wage, not defending its position, thus making this a weak argument.

Q12

Argument Two: Yes, countries that do not have a minimum wage are often impoverished and dysfunctional.

Strong Argument

Weak Argument

Correct answer: Weak Argument

Explanation: The argument does not state that the absence of a minimum wage is the cause of poverty and dysfunction, it just states that these two things coincide, not addressing the point of the argument, and therefore presenting a weak argument.

Q13

Argument Three: No, minimum wage leads to under-employment by forcing companies to take on staff part-time, as they cannot afford to hire them on a full-time basis.

Strong Argument

Weak Argument

Correct answer: Strong Argument

Explanation: The argument presents a clear disadvantage of the initial statement, outlining the result and how the result would occur, presenting a strong argument.

Statement Five:

Should banks and financial institutions be obligated to engage in socially-responsible investing?

Q14

Argument One: Yes, engaging in socially responsible investing leads to a happier and more fulfilled workforce compared to banks which do not engage in socially-responsible investing.

Strong Argument
Weak Argument

Correct answer: Strong Argument

Explanation: The argument addresses the question directly, and offers two clear advantages of the premise described in the statement, directly addressing the question and presenting a strong argument.

Q15

Argument Two: No, banks are for-profit institutions and have no obligation to social issues.

Strong Argument
Weak Argument

Correct answer: Weak Argument

Explanation: The argument does not provide any benefits of its position or advantageous outcomes; it merely describes its position. This is a weak argument as it does not provide a strong basis for its point, only providing an explanation of its point.

Q16

Argument Three: No, focusing on social responsibility detracts from the aim of making money, which is the most important endeavour for banks, and leads to a decrease in revenue and profit.

Strong Argument
Weak Argument

Correct answer: Strong Argument

Explanation: The argument presents a clear disadvantage of the premise in the statement, directly addressing the question and providing evidence for its claim. This is therefore a strong argument.

Q17

Argument Four: No, over-regulation in the financial sector leads to decreased opportunities and therefore lower profits.

Strong Argument

Weak Argument

Correct answer: Weak Argument

Explanation: The initial question does not discuss regulation of the financial services sector, so the argument is not addressing the initial point, making it a weak argument.

Statement Six:

Should all members of the European Union join the Eurozone and adopt the euro?

Q18

Argument One: No, countries may find it difficult to adapt to a new currency.

Strong Argument

Weak Argument

Correct answer: Weak Argument

Explanation: The passage does not provide any evidence for its claim by describing the outcome of its position, and it only states that countries “may” find it difficult, suggesting there is no guarantee, making this a weak argument.

Q19

Argument Two: Yes, the function of the European Union is to form a single currency union.

Strong Argument

Weak Argument

Correct answer: Weak Argument

Explanation: The argument does not provide evidence for an advantage of a currency union; it merely states the function of the European Union, which does not support its claim. This is therefore a weak argument.

Q20

Argument Three: Yes, greater economic unity between countries improves foreign relations between those member countries, which in turn make each country stronger.

Strong Argument

Weak Argument

Correct answer: Strong Argument

Explanation: The argument directly answers the question in the initial statement, provides an explanation for its opinion and describes a positive outcome of its premise. This is therefore a strong argument.

Q21

Argument Four: No, instability of one Eurozone country could cause the whole Eurozone to become unstable, disrupting the economies of all countries that use the euro.

Strong Argument

Weak Argument

Correct answer: Strong Argument

Explanation: The argument presents a serious problem with the Eurozone concept, and is directly related to the initial question. The argument explains its point and states the outcome, presenting a strong argument.

Statement Seven:

Should governments be engaging in space exploration research?

Q22

Argument One: No, the money spend on these programmes could be used to increase funding for education and healthcare, which would lead to increasing the quality of life for a country's people.

Strong Argument
Weak Argument

Correct answer: Strong Argument

Explanation: The argument addresses the initial question, provides an explanation of its point and provides the outcome of its stated point. This suggests that this is a strong argument.

Q23

Argument Two: No, countries have collectively spent trillions of dollars on space exploration research already.

Strong Argument
Weak Argument

Correct answer: Weak Argument

Explanation: This argument does not provide an explanation for why space exploration should not be funded, it simply states that trillions of dollars have already been spent, not explaining its position, making it a weak argument.

Q24

Argument Three: Yes, space exploration has led to numerous discoveries and ushered in the space age.

Strong Argument
Weak Argument

Correct answer: Weak Argument

Explanation: Although the agreement states that discoveries have been made, it does not go into detail about the benefits of those discoveries, and the reference to the space age does not imply a benefit. Therefore, this is a weak argument.

Q25

Argument Four: Yes, the findings of these space exploration research and development programmes have been successfully applied to industry, boosting the economies of the host country.

Strong Argument

Weak Argument

Correct answer: Strong Argument

Explanation: The argument directly addresses the initial question, and provides a detailed practical benefit of the initial premise, making this a strong argument.

Section 2: Assumptions

Instructions:

An assumption is something which is presumed or taken for granted. When a person says, “I will see you tomorrow”, it is taken for granted that they will be around tomorrow, and that they will not have last-minute plans which prevent them from seeing you tomorrow.

In this section, you will be provided with a number of statements. Each statement will be followed by a series of proposed assumptions. You must decide which assumptions are logically justified based on the evidence in the statement. If you think that the assumption is taken for granted in the statement, and is therefore logically justified, select **Assumption made**. If you think that the assumption is not taken for granted in the statement, and is not therefore logically justified, select **Assumption not made**. Remember to judge each question individually and base your responses on the statements provided.

See the example questions below with the correct answers given.

Statement One:

Monarchic nations, i.e. those with royal families, differ from republic nations in several ways. An example of this difference is that citizens of monarchic nations pay more tax than citizens of republican nations.

Q26

Assumption 1: The government of monarchic nations are responsible for setting tax rates on their citizens

Assumption Made
Assumption Not Made

Correct answer: Assumption Not Made

Explanation: The statement does not rely on the fact (or assumption) that governments set tax rates for their citizens. The statement doesn't attempt to explain what causes the difference in tax payments, merely that there is a difference.

Q27

Assumption 2: Republican nations do not have a royal family.

Assumption Made
Assumption Not Made

Correct answer: Assumption Made

Explanation: The statement says that monarchic nations are those with a royal family. The statement is assuming that this is one aspect which differentiates monarchic nations from republican nations.

Q28

Assumption 3: The only types of nation are monarchic and republican.

Assumption Made
Assumption Not Made

Correct answer: Assumption Not Made

Explanation: The statement is just talking about the differences between two types of nation; it does not imply that these are the only two nor does the statement rely on there being just two types.

Q29

Assumption 4: A monarchic nation cannot be a republican nation.

Assumption Made
Assumption Not Made

Correct answer: Assumption Made

Explanation: The statement relies on the two types of nation being different in order to describe their differences. The statement also talks about the tax rate paid by citizens of a monarchic nation with the implication that citizens of republican nations pay different tax.

Statement Two:

In 2008, the President of the USA promised to prevent the country entering economic depression, but he failed because at the beginning of 2012, over 12 million USA citizens were unemployed.

Q30

Assumption 1: Unemployment is an indicator of economic depression.

Assumption Made
Assumption Not Made

Correct answer: Assumption Made

Explanation: The statement says that the promise of not entering economic depression was not met due to unemployment figures. So, the statement has made an assumption that unemployment is indicative of economic depression.

Q31

Assumption 2: The number of USA citizens out of work ought to be less than 12 million.

Assumption Made
Assumption Not Made

Correct answer: Assumption Made

Explanation: The statement uses the level of unemployment as a justification for declaring that the promise of avoiding economic depression had not been met. Regardless of whether unemployment is or isn't a fair measure of economic depression, the statement is assuming that this level of unemployment is worse than what would be considered acceptable.

Q32

Assumption 3: Presidents should stick to their promises.

Assumption Made
Assumption Not Made

Correct answer: Assumption Not Made

Explanation: The statement does not assume that the President of the USA should or should not stick to his promises; it merely claims that the promise was not met on this occasion. The statement doesn't imply that breaking of promises is right or wrong, and so does not make the assumption that presidents should stick to their promises.

Statement Three:

Chilean students were right in 2012 to stage protests demanding that university education in Chile should be made free.

Q33

Assumption 1: Some universities outside of Chile are free.

Assumption Made
Assumption Not Made

Correct answer: Assumption Not Made

Explanation: The statement does not make reference to what universities in other countries are charging, or that Chile should adopt practices of other countries. The assumption that there are free universities in other countries is not a prerequisite for this statement to be made.

Q34

Assumption 2: Staging protests will influence the costs of Chilean university education.

Assumption Made
Assumption Not Made

Correct answer: Assumption Not Made

Explanation: This is a subtle one. The statement says that students were right to stage protests, but it does not assume that the outcome will be influenced by the protests. The statement might be supporting protests despite the possible effect it will have, for example the statement could simply be sympathetic towards the protests and be saying that it is understandable the students staged protests.

Q35

Assumption 3: Chilean students cannot afford to pay fees for university education.

Assumption Made
Assumption Not Made

Correct answer: Assumption Not Made

Explanation: The statement makes no reference to what the students can or cannot afford. The statement is not using the affordability of university education as the justification for protests.

Q36

Assumption 4: Chilean students want to attend university.

Assumption Made
Assumption Not Made

Correct answer: Assumption Not Made

Explanation: The passage does not suggest that the students protested because they want to attend university and their actions of protest might help this outcome. The statement is simply that students were right to protest. In supporting the students' protests the statement is not assuming the students want to attend university.

Statement Four:

Charities don't have to charge VAT to customers, which means charity bookshops can charge lower prices than those charged by second-hand bookshops which are not registered as a charity.

Q37

Assumption 1: Charities pay less tax than non-charities

Assumption Made
Assumption Not Made

Correct answer: Assumption Not Made

Explanation: The statement claims that non-charities have to pay VAT, whereas charities do not. This is one type of tax, but the statement is not saying that charities enjoy an overall more favourable tax regime; it refers to just VAT. The statement is not coming from the angle that overall the level of tax paid by charities is less than that paid by non-charities; it has not made this assumption.

Q38

Assumption 2: Customers prefer to pay lower prices.

Assumption Made
Assumption Not Made

Correct answer: Assumption Not Made

Explanation: The passage says that charities can charge lower prices, but it does not talk about customers preferring one or the other. The statement has not assumed that customers prefer to pay lower prices.

Q39

Assumption 3: VAT increases the price customers pay for things.

Assumption Made
Assumption Not Made

Correct answer: Assumption Made

Explanation: The statement says that because VAT has to be charged by non-charities, the prices they charge customers have to be higher. The statement assumes that the charging of VAT increases the cost to customers.

Section 3: Deductions

Instructions:

In this section, a statement will be provided followed by a series of suggested conclusions. Here, you must take the statement to be true. After reading each conclusion underneath the statement, you must decide whether you think it follows from the statement provided.

If you agree that the conclusion exactly follows the statement, chose **Conclusion follows**.
However, if you do not agree that the conclusion exactly follows then chose **Conclusion does not follow**.

You must select your answer based only on the information presented; not using general knowledge. Similarly, you are advised not to let your own opinions or prejudices influence your decisions; stick to the statements and base your judgements on the facts presented.

See the example questions below with the correct answers given.

Statement One:

In an attempt to cut expenses, an organisation disbanded its IT department and outsourced its IT function to a business process outsourcing company. In doing so, the company has managed to save 20% on its IT function expenditure.

Q40

Conclusion One: Outsourcing functions to business process outsourcing companies will cut expenses.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Does Not Follow

Explanation: Although this company saved money on their IT function, it does not state that other companies will also save money, or that other functions if outsourced would save companies money.

Q41

Conclusion Two: The aim of this company's outsourcing was to make the organisation more profitable.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Does Not Follow

Explanation: The statement does not say that the organisation is a for-profit organisation, and does not mention profitability in the statement, the aim of the outsourcing was to cut expenses. Who is to say what their aim was regarding income.

Q42

Conclusion Three: The outsourced IT function has saved the organisation 1/5th on their IT function expenditure compared to the in-house IT function.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Follows

Explanation: The statement notes that by outsourcing its IT function the company has cut its IT expenses by 20%, suggesting that the previous function was 1/5th (20%) more expensive, and therefore outsourcing has saved 1/5th of the IT expenditure.

Statement Two:

Sarah owns a new company. New companies are more likely to fail than well-established companies. Therefore:

Q43

Conclusion One: Sarah's company will fail.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Does Not Follow

Explanation: The statement notes that new companies are more likely to fail. This does not mean that all new companies will fail. The correct answer is therefore, conclusion does not follow.

Q44

Conclusion Two: Sarah's company is more likely to fail than a well-established company.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Follows

Explanation: The statement notes that new companies are more likely to fail. As a new company, Sarah's company is therefore more likely to fail. The correct answer is therefore conclusion follows.

Q45

Conclusion Three: Well-established companies are more likely to succeed than new companies.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Follows

Explanation: The statement notes that new companies are more likely to fail than well-established companies. Well-established companies are therefore more likely to succeed, by comparison to new companies. The correct answer is therefore conclusion follows.

Statement Three:

Statistics have shown that companies selling baked goods, such as cakes and pastries, are more likely to be successful if they are advertised as French or Belgian.
Therefore:

Q46

Conclusion One: French and Belgian products are more expensive.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Does Not Follow

Explanation: There are other reasons why such companies may be more successful. For example, the goods may be of a better quality, or the type of goods may have a particularly popular taste, or they may be perceived better value. Therefore, we cannot say that these companies are more successful because their goods are more expensive.

Q47

Conclusion Two: French and Belgian baked goods must taste better.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Does Not Follow

Explanation: There are many reasons why such companies may be more successful, taste is only one option. Therefore, we cannot make this deduction without further information.

Q48

Conclusion Three: It is a sound business model to advertise baked goods as “French” or “Belgian” as this is more likely to result in successful sales.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Follows

Explanation: The statement notes that companies selling these types of goods are more successful. Therefore, we can state that it is a good business model to advertise items on this basis.

Statement Four:

May 2012 had the highest level of rainfall on record for the preceding fifty years.
Predictions of rainfall are rarely accurate. Therefore:

Q49

Conclusion One: It rained more than expected in May 2012.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Does Not Follow

Explanation: The information in the statement does not offer a prediction to the amount of rainfall; it only states that predictions of rainfall are rarely accurate. We cannot deduce what the prediction was based on the statement, therefore the conclusion does not follow.

Q50

Conclusion Two: The rainfall in May 2012 was greater than in May 2011.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Follows

Explanation: The rainfall in May 2012 was the highest on record for the past 50 years; therefore, it must have been higher than the May 2011 levels.

Q51

Conclusion Three: May is usually dry.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Does Not Follow

Explanation: The statement refers to the rainfall in May 2012 being higher than usual. The statement makes no reference to May being usually dry. Based on the information in the statement alone, the correct answer is conclusion does not follow.

Statement Five:

Facebook was launched on the American stock market in May 2012. However, statistics suggest that several previously high-performing companies, such as Pandora, Groupon and LinkedIn fell in value after they were launched on the American stock market.

Therefore:

Q52

Conclusion One: It is possible that Facebook will also drop in value after May 2012.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Follows

Explanation: Based on the information provided about similarly high performing companies, we are able to make the conclusion that it is possible that Facebook may meet a similar fate after May 2012. The key word here is 'possible', as we are unable to say for certain, based on the information provided that this will definitely happen. Based on the information in the statement and the use of the word 'possible' in the conclusion, the correct answer is conclusion follows.

Q53

Conclusion Two: Social networking sites perform badly once they become publicly listed on the stock market.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Does Not Follow

Explanation: The passage does not state that social networking sites perform badly once they become publicly listed. We cannot deduce this from the passage, and therefore the conclusion does not follow.

Q54

Conclusion Three: All companies decrease in value when first launched on the American stock market.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Does Not Follow

Explanation: Based on the information in the above statement we are unable to say that all companies drop in value. The statement notes three companies that have decreased in value, however we cannot apply this to all companies. The correct answer is therefore "Conclusion Does Not Follow".

Statement Six:

There are currently three problems facing the financial sector. Firstly, bankers are no longer seen as reliable or trustworthy. Secondly, executives of financial institutions are seen by the general public as being overpaid. Finally, it is difficult to regulate the financial sector. Therefore:

Q55

Conclusion One: Banks have never been trusted by the general public.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Does Not Follow

Explanation: Based on the information contained in the statement, we are also told that bankers are “no longer” seen as reliable or trustworthy. For this reason, we are unable to say that banks have never been trusted. For this reason, the correct answer is “Conclusion Does Not Follow”.

Q56

Conclusion Two: Reliability is no longer an issue when considering the failings of the financial sector.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Does Not Follow

Explanation: The statement notes that ‘reliability’ is one of the key problems facing the financial sector. For this reason, we are unable to conclude that ‘reliability’ is no longer an issue. The correct answer is therefore “Conclusion Does Not Follow”.

Q57

Conclusion Three: Overpaying financial executives may contribute to problems facing the financial sector.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Follows

Explanation: The passage states that one of the problems facing the financial sector is that executives are seen as overpaid. Overpaying executives will contribute to the public’s perception of them being overpaid, indeed it will vindicate their perception. This conclusion therefore follows.

Statement Seven:

Coley is a company that produces scented candles, using only natural products.
Coley is against testing on animals and does not use pesticides in any of its products.
Therefore:

Q58

Conclusion One: The scent from Coley's candles is made from fruits and berries.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Does Not Follow

Explanation: Although the ingredients are said to be natural, it does not specifically state what those ingredients are, and therefore we cannot deduce that fruits and berries are the ingredients, therefore the conclusion does not follow.

Q59

Conclusion Two: Coley's products are unlikely to contain man-made setting agents.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Follows

Explanation: Based on the description of the products made by Coley's and the ingredients they use, we can conclude that these products are unlikely to include manmade setting agents as this would not be a "natural product". For this reason, the correct answer is "Conclusion Follows".

Q60

Conclusion Three: Coley's products are likely to be expensive.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Does Not Follow

Explanation: The statement fails to make reference to the price of these items. Therefore, we are unable to conclude that they are more expensive. For this reason, the correct answer is "Conclusion Does Not Follow".

Section 4: Inferences

Instructions:

An inference is a conclusion drawn from observed or supposed facts. For example, if someone presses a light switch but the light does not turn on, they might infer that the filament has burnt out. However, inferences may or may not be correct. For example, in this case, the bulb could be missing, or a fuse could be blown.

The questions in this section of the test will begin with a statement of facts that must be regarded as true. After each statement, you will be presented with possible inferences which might be drawn from facts in the statement. Analyse each inference separately and decide on its degree of truth.

For each inference, you will be provided with 5 possible answers: True, Probably True, More Information Required, Probably False, and False.

Select:

True, if you believe the inference is definitely true, i.e. it correctly follows beyond a reasonable doubt.

Probably True, if, based on the facts at hand, you think the inference is probably true; that it is more likely to be true than false, but not true beyond a reasonable doubt.

More Information Required, if you decide that there is not enough data to make a decision based on the provided facts (or lack of facts).

Probably False, if, based on the facts presented, you think the inference is probably false; i.e. it is more likely to be false than true, but there is not enough evidence to suggest that it is definitely false.

False, if you think the inference is definitely false; i.e. it must be incorrect because it misrepresents the facts provided or contradicts the facts provided in the statement.

Have a look at the example questions below with the correct answers given.

Statement One:

Although it is agreed that China is rapidly modernising its army, there is some doubt surrounding the exact amount it is spending. The research institute 'PIPPi', submits that the annual Chinese defence spending has risen from almost \$31 billion in 2000 to over \$120 billion in 2010. This figure is almost double the official figure published by the Chinese government, who fail to include other areas such as research and development in the official figure each year. In 2010, the United States government spent around \$400 billion on military defence. Based on the current level of military growth, statistics suggest that China's defence spending could overtake America's by 2030. In addition to military spending, China's army continues to enjoy the largest number of people within the ranks of its army than any other country.

Q61

Inference 1: The official figures published by the Chinese government in relation to their military spending are thought to be misleading.

- True
- Probably True
- More Information Required
- Probably False
- False

Correct answer: True

Explanation: The passage notes that the Chinese government leave certain areas out of their calculations when creating their official figures for military spending. This suggests that their official figure is misleading. In this way, the inference is true.

Q62

Inference 2: It is known that the Chinese government leave areas such as ‘research’ and ‘development’ from their official figures, however, this would also suggest that other areas of spending are also omitted from their official figure for military spending.

- True
- Probably True
- More Information Required
- Probably False
- False

Correct answer: Probably True

Explanation: The passage notes that “other areas such as research” are omitted from the official figure. This suggests that other areas may also be omitted. However, we cannot be certain of this. We can infer from the passage that it is slightly more likely to be true than false. Therefore, this inference is ‘probably true’ as we cannot know for certain.

Q63

Inference 3: The Chinese government omits several key areas from its official spending figures, in areas such as military spending, agriculture, human rights and law.

- True
- Probably True
- More Information Required
- Probably False
- False

Correct answer: Insufficient Data

Explanation: The passage provides information on the official figures for military spending. We cannot infer, based on this information that official figures for other areas of government spending are also incorrect. This would require more information.

Q64

Inference 4: If there are any anomalies between the published figures on military spending and the actual figure spent, this is merely a clerical error.

- True
- Probably True
- More Information Required
- Probably False
- False

Correct Answer: Probably False

Explanation: The passage notes that the official figure for military spending omits entire areas, such as research and development on a regular basis, rather than on one occasion. This is unlikely to be a clerical error as it happens more than once. However, we cannot be certain that a clerical error has not occurred. Therefore, the correct answer is 'probably false'.

Q65

Inference 5: In 2010, the United States of America spent less on its military defence than the Chinese government.

- True
- Probably True
- More Information Required
- Probably False
- False

Correct answer: False

Explanation: This inference is false. The passage states that the United States government spent \$400 billion in 2010 and (based on PIPPI's research) the Chinese spent over \$120 billion. The official Chinese figures are given as less than half this figure. Whilst the passage envisages that, in the future, China may spend more on defence than the USA, in 2010 this was not the case. For this reason, this inference is false.

Statement Two

Turkey is a surprising addition to the list of rapidly developing economies; with a GDP increase of 8.5% in the year 2011 alone. However, such rapid growth leaves worries regarding possible side-effects. For instance, in 2011 Turkey's rate of inflation was well above that of its peers. Secondly, there is increasing concern regarding Turkey's growing dependency on foreign capital. A large portion of the Turkish banking system is part-owned by banks within the Eurozone. As the single currency falters, such a dependency raises questions about the stability of Turkish growth.

Q66

Inference 1: There are concerns that Turkey's development is at risk of faltering in the years after 2011.

- True
- Probably True
- More Information Required
- Probably False
- False

Correct answer: True

Explanation: This inference is true. The passage states that Turkey is a 'surprising' addition to the list of countries whose economy is rapidly developing. This suggests that it is performing above expectations. The passage then goes on to note that there are worries regarding the possible side effects of such growth. This suggests that there are concerns such growth will be short lived.

Q67

Inference 2: As Turkish banks are part-owned by those in the Eurozone, they may suffer if the European banks face financial difficulty.

- True
- Probably True
- More Information Required
- Probably False
- False

Correct answer: True

Explanation: The inference is true. The passage states that one of the concerns facing the Turkish economy is that they are part owned by banks in the Eurozone. The passage does not speculate over whether the Eurozone banks are likely to face financial instability, but by the fact that they are stated as linked, if Eurozone banks do face difficulty, the part-owned Turkish banks are also likely to suffer.

Q68

Inference 3: The Turkish banks are part-owned by European banks as this provides greater variation to the market and extra finance to the economy.

- True
- Probably True
- More Information Required
- Probably False
- False

Correct answer: Insufficient Data

Explanation: The passage fails to mention why the Turkish banks are part owned by European banks. We therefore require further information on this point before making this inference.

Q69

Inference 4: Turkish banks are part-owned by European banks as this provides greater economic links with the Eurozone, helping their ascension into the European Union.

- True
- Probably True
- More Information Required
- Probably False
- False

Correct Answer: Insufficient Data

Explanation: The passage fails to mention why the Turkish banks are part owned by European banks. We would therefore require more information before making this inference.

Q70

Inference 5: The Turkish economy was surprisingly stagnant in 2011.

- True
- Probably True
- More Information Required
- Probably False
- False

Correct Answer: False

Explanation: This statement is false. The passage notes that the Turkish economy was performing better than expected during 2011. This suggests it is far from stagnant.

Statement Three

Some people think that prospective employees should include a photograph with their application form. Such practice has traditionally been criticised for allowing more attractive individuals to get ahead in their career over 'plain' colleagues. However, one study demonstrates that this is, in fact, untrue. Ruffle, the creator of this study, attributes his findings to the 'dumb-blonde hypothesis'- that beautiful women are thought to be unintelligent. Ruffle submits that companies would be better advised adopting the selection model employed by the Belgian public sector, where CVs are anonymous and candidate names, gender and photographs are not allowed to be included on CVs. Such a model allows the candidate to be selected on factors relevant to the role applied for.

Q71

Inference 1: The 'dumb-blonde hypothesis' says that more attractive women are less capable of being intelligent.

- True
- Probably True
- Insufficient Data
- Probably False
- False

Correct answer: False

Explanation: The passage states that the 'dumb-blonde hypothesis' is that people think beautiful women are 'thought' to be unintelligent. So, based on the passage alone we are told that the theory describes how people perceive beautiful women to be unintelligent, yet does not state that they are actually less intelligent.

Q72

Inference 2: The model of selecting future employees adopted by the Belgian public sector aims to reduce discrimination based on appearance and gender.

- True
- Probably True
- Insufficient Data
- Probably False
- False

Correct answer: Probably True

Explanation: This inference is probably true. The passage fails to state why the Belgian public sector has chosen to implement this method of selection; however, we can infer, based on the nature of the information in the passage and the topic discussed, that this is a likely reason behind

the method chosen. As we cannot be certain of this, the correct answer is 'probably true'.

Q73

Inference 3: The method of selecting future employees adopted by the Belgian public sector has helped to eliminate discrimination in the Belgian public sector.

- True
- Probably True
- Insufficient Data
- Probably False
- False

Correct answer: Insufficient Data

Explanation: The passage fails to provide information on the success rate of this selection method; it simply outlines the method. Therefore, we cannot say whether this model has been successful. For this reason, we require further information before we can make this inference.

Q74

Inference 4: The method of selecting future employees adopted by the Belgian public sector has had the effect of increasing discrimination based on appearance within the Belgian public sector.

- True
- Probably True
- Insufficient Data
- Probably False
- False

Correct Answer: Probably False

Explanation: This inference is probably false. While the passage fails to provide information on the success rate of this model of employee selection, it states that under this model, future employees cannot provide pictures of themselves with their application. This would suggest that discrimination would be reduced, rather than increased. However, based on the information provided, we cannot say this for certain. For example, increased visual discrimination may in fact take place in the interview. For this reason, the correct answer is probably false.

Section 5: Interpreting Information

Instructions:

The following questions will consist of a passage of information, followed by a series of conclusions. You are instructed to assume all information in the passage is true. The task is to judge whether or not each of the proposed conclusions logically flows beyond a reasonable doubt from the information given in the paragraph.

If you think that a conclusion follows beyond a reasonable doubt (but perhaps not exactly, or necessarily, unlike in the Deductions section), select **Conclusion follows**. If you think the conclusion does not follow beyond a reasonable doubt based on the facts given, select **Conclusion does not follow**. Do not use general knowledge when answering, only use the information provided in the passage. Remember to judge each conclusion individually.

See the example questions below with the correct answers given.

Statement One:

The Tapoloa Club is a Hawaiian-themed night club in central London. Its most popular drink is the Volcano, which emits sparks and flames. The Tapoloa Club also offers a range of cocktails in perverse containers such as pineapples and coconuts, such as the 'Coconut Express' and the 'Pineapple Pick-Up' respectively. Therefore:

Q75

Conclusion One: The 'Coconut Express' is the second most popular drink sold by the Tapoloa Club.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Does Not Follow

Explanation: The statement does not state the popularity of the "Coconut Express", it just mentions its name, so we cannot therefore make a conclusion of its popularity, and therefore the conclusion does not follow.

Q76

Conclusion Two: All themed clubs in London sell unusual drinks

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Does Not Follow

Explanation: Based on the information in the statement alone, we are unable to say whether or not all themed clubs in London sell unusual drinks. The statement is based on one club alone and does not mention others. For this reason, we are unable to deduce this conclusion. The correct answer is therefore, "Conclusion Does Not Follow".

Q77

Conclusion Three: The “Coconut Express” is contained in a pineapple, and the “Pineapple Pick-up” is contained in a coconut.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Follows

Explanation: The passage states “cocktails in containers such as Pineapples and coconuts, such as the ‘coconut express’ and the ‘pineapple pick-up’ respectively” informing us that pineapples are the container for the coconut express, and coconuts are the container for the pineapple pick up, so therefore the conclusion follows. It would be an incorrect conclusion to assume because the fruit was mentioned in the drink’s name, that the container would be of the same fruit.

Statement Two:

The British National Library has the largest collection of publicly-owned books in the United Kingdom. Therefore:

Q78

Conclusion One: There might be a larger collection of books in the United Kingdom.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Follows

Explanation: The statement notes that the British National Library is the largest collection of publicly owned books. However, it is possible that there are larger collections of privately owned books. For this reason, the correct answer is "Conclusion Follows".

Q79

Conclusion Two: There might be a larger collection of publicly-owned books in the United Kingdom.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Does Not Follow

Explanation: The statement notes that the British National Library is the largest collection of publicly owned books. For this reason, it is not possible for there to be a larger publicly owned collection in the UK. The correct answer is therefore "Conclusion Does Not Follow".

Q80

Conclusion Three: The British National Library is in the United Kingdom.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Follows

Explanation: The statement notes that the British National Library has the largest collection of publicly owned books in the United Kingdom. For this reason, we can deduce that the British National Library is itself within the United Kingdom. The correct answer therefore is "Conclusion Follows".

Statement Three:

People with a master's degree in business administration (MBA) earn an income on average 70% higher than people with just an undergraduate degree. MBA students from top business schools earn an income on average 50% higher than the average income of people with MBAs.

Q81

Conclusion One: If a person obtains an MBA, their income will increase.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Does Not Follow

Explanation: The statement does not say that obtaining an MBA is the cause for the increase in income, and therefore it is fallacious to conclude that obtaining an MBA will increase your income based purely on the statement above. Just because average incomes for an MBA graduate are higher does not imply that these are the cause of the increase, and therefore it is no guarantee to increase income.

Q82

Conclusion Two: If a person obtains an MBA from a top business school, their income will be higher than that of the average MBA graduate.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Does Not Follow

Explanation: The statement does not say that obtaining a top MBA is the cause of the increase in income between top and average MBA recipient incomes. Because correlation does not imply causation, we cannot conclude that the achievement of a top school MBA is the cause of this income difference, based on the information provided.

Q83

Conclusion Three: The average income of an MBA graduate from a top business school is over double that of the average income of a person holding only an undergraduate degree.

Conclusion Follows

Conclusion Does Not Follow

Correct answer: Conclusion Follows

Explanation: Because the income of an average MBA students is 70% larger than that of an undergraduate, and a top MBA graduate's income is 50% greater than the average MBA income. We can therefore conclude that the average income of a top MBA graduate is more than double the average person holding only an undergraduate degree.

Statement Four:

Hannah has been a solicitor for three years. She works for a law firm in central London and has hopes of being promoted. To be promoted in Hannah's firm, employees must have at least four years' experience practising as a solicitor. Therefore:

Q84

Conclusion One: Hannah cannot be promoted because she doesn't have enough experience.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Follows

Explanation: The statement notes that to be promoted, members of staff must have at least four years' experience practising as a solicitor. We are also aware that Hannah only has three years of experience practising as a solicitor. Therefore, she does not meet the required number of years' experience. For this reason, the correct answer is "Conclusion Follows".

Q85

Conclusion Two: We cannot know whether Hannah can be promoted or not.

Conclusion Follows
Conclusion Does Not Follow

Correct answer: Conclusion Does Not Follow

Explanation: The statement notes that to be promoted, members of staff must have at least four years' experience practising as a solicitor. We are told that Hannah only has three years of experience practising as a solicitor. Therefore, she does not meet the required number of years of experience. With this in mind, we are able to say that she cannot be promoted. For this reason, the correct answer is "Conclusion Does Not Follow".

Q86

Conclusion Three: In 3 years' time, assuming that Hannah has not been promoted, she will be over qualified for her current position.

Conclusion Follows

Conclusion Does Not Follow

Correct answer: Conclusion Does Not Follow

Explanation: The passage does not refer to over qualification; therefore, we cannot conclude that she will be over qualified. The passage states that 4 years is the minimum requirement for promotion, but does not state that she will be guaranteed a promotion, or that her current role will be unsuitable to her after her four years as a solicitor.

-- END OF CRITICAL THINKING TEST --