

Friday 11 January 2013 – Afternoon

LEVEL 2 AWARD THINKING AND REASONING SKILLS

B901/01 Unit 1 Thinking and Reasoning Skills

Candidates answer on the Question Paper.

OCR supplied materials:

None

Other materials required:

None

Duration: 1 hour



Candidate forename		Candidate surname	
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Centre number						Candidate number				
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INSTRUCTIONS TO CANDIDATES

- Write your name, centre number and candidate number in the boxes above. Please write clearly and in capital letters.
- Use black ink. HB pencil may be used for graphs and diagrams only.
- Answer **all** the questions.
- Read each question carefully. Make sure you know what you have to do before starting your answer.
- Write your answer to each question in the space provided. If additional space is required, you should use the lined pages at the end of this booklet. The question number(s) must be clearly shown.
- Do **not** write in the bar codes.

INFORMATION FOR CANDIDATES

- The number of marks is given in brackets [] at the end of each question or part question.
- The total number of marks for this paper is **60**.
- Quality of Written Communication will be assessed in questions 14 and 17.
- This document consists of **16** pages. Any blank pages are indicated.

SECTION A

You are advised to spend no more than 30 minutes on this Section.

It is worth 30 marks.

Answer all the questions in this Section.

1 A student argued:

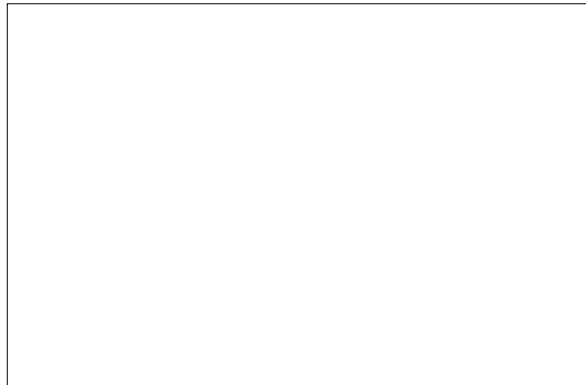
It is the teacher's fault that I failed the history exam. He never set any homework and he could not explain things properly. So he should be sacked.

(a) Mark up the above argument as follows:

- circle any one conclusion indicator word
- put brackets around each of the **two** reasons
- underline the main conclusion.

[4]

(b) For the above argument draw the correct argument map in the box provided.



[2]

2 Read each of the following statements carefully then identify what kind of statement it is by circling the correct answer.

(a)

People steal bicycles because they cannot afford to buy them.

Argument Explanation Information Rant

Circle the correct answer. [1]

(b)

You need to get there quickly so you should buy a bike.

Argument Explanation Information Rant

Circle the correct answer. [1]

(c)

Many bicycles are now made in China. They are environmentally friendly and not too expensive. They are also a good form of exercise.

Argument Explanation Information Rant

Circle the correct answer. [1]

(d)

Cars are dirty smelly weapons of mass destruction. The people who drive them are noisy, arrogant, pompous and foul-mouthed.

Argument Explanation Information Rant

Circle the correct answer. [1]

3 A husband argues as follows, "My wife is an excellent doctor. She is very popular with all her patients." The husband works as a history teacher twenty miles away from his wife's practice.

Identify **one** relevant credibility criterion and explain why this **weakens** his credibility.

Credibility criterion:

Explanation:

.....

.....

.....

[3]

Turn over

- 4 A teacher conducted a survey of five Year 8 students who had volunteered to stay behind after their class to help him tidy up. He asked them whether they enjoyed his lessons. They all said they did. He used this survey to inform the headteacher that students think he is a good teacher.

Identify **four** weaknesses in this survey.

(a) Weakness 1
 [1]

(b) Weakness 2
 [1]

(c) Weakness 3
 [1]

(d) Weakness 4
 [1]

- 5 Which of the following is a **necessary** condition of being a parent?

- Having at least one son
- Having at least one daughter
- Having at least one son or one daughter
- Having at least one son and one daughter

Circle the correct answer. [1]

- 6 Which of the following is **not** a **sufficient** condition of being a parent?

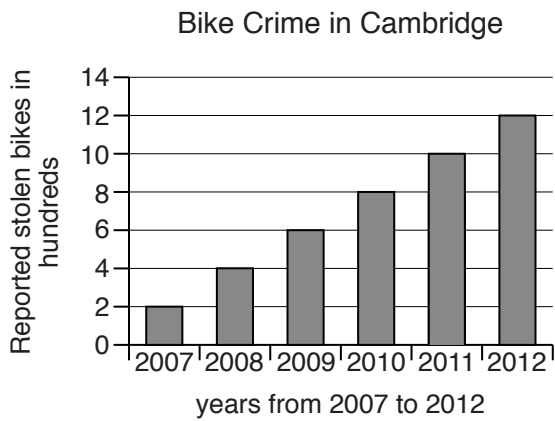
- Being a father
- Being an adult
- Having a daughter
- Having a son

Circle the correct answer. [1]

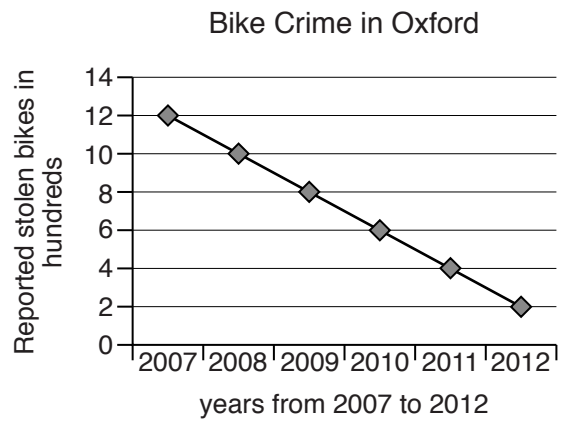
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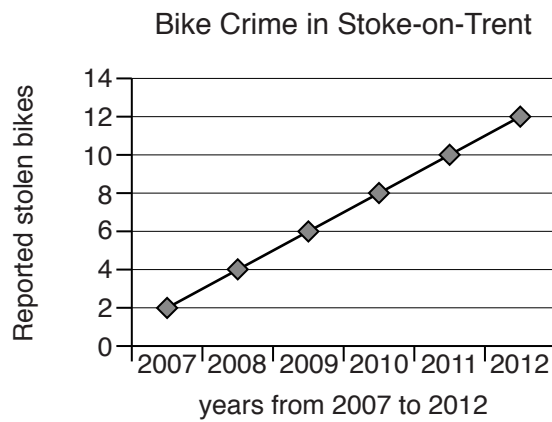
7 Consider carefully the following graphs then answer the questions below:



Graph A



Graph B



Graph C

- (a) Identify the key difference between the information provided about reported stolen bikes in Graph C and the information provided in Graphs A and B.

..... [1]

- (b) Identify the year in which the number of reported stolen bikes in Cambridge first overtakes the number of reported stolen bikes in Oxford.

..... [1]

- (c) A researcher who was shown Graph A concluded that the number of bike thieves must be on the increase in Cambridge.

Suppose this is not the case.

Identify **two** alternative conclusions which could possibly be reached from the data in Graph A.

- (i) First possible alternative conclusion

..... [1]

- (ii) Second possible alternative conclusion

..... [1]

- (d) If the trend in Graph C continues, how many bikes will be reported stolen in Stoke-on-Trent in 2020?

..... [1]

- 8 A detective collects the following information:

The murder took place in the garden.
 The murderer was a close relative of the victim.
 Annabel never went into the garden.
 Gerald is Annabel's father.
 Beth is Annabel's mother.
 Christine is employed as the cook.
 If Gerald is the murderer then either Annabel is the victim or Christine is the victim.
 If Beth is the murderer then either Gerald is the victim or Christine is the victim.

- (a) Who cannot have been the murderer?

Annabel Beth Christine Gerald Circle the correct answer. [1]

- (b) Who is the most likely person to be the murderer?

Annabel Beth Christine Gerald Circle the correct answer. [1]

- (c) Who is the most likely person to be the victim?

Annabel Beth Christine Gerald Circle the correct answer. [1]

- 9 Barbara uses a very simple code in her private diary in which she substitutes numbers for the letters of the alphabet.

Using this code Barbara writes her name as: 2, 1, 18, 2, 1, 18, 1.

- (a) Identify the real name of her friend whose code name is: 1, 14, 14, 5.

..... [1]

- (b) Barbara's mother is called Alex. How does Barbara write this name in code?

..... [1]

- (c) Alex finds Barbara's diary so Barbara changes the code. Alex is now written as 'Bmfy'. How does Barbara write her own name using this new code?

..... [1]

SECTION B

You are advised to spend no more than 30 minutes on this Section.

It is worth 30 marks.

Answer all the questions in this Section.

Read the following text carefully before attempting to answer the questions:

Ashley: I'm looking forward to my holiday in Florida. They have a fantastic circus there. They have cycling bears, tigers jumping through hoops of fire and dancing elephants. It will be amazing.

Briony: Well I think you shouldn't go. Circuses are cruel. Wild animals should be allowed to roam freely. They shouldn't be kept in cages and transported about in lorries and railway carriages too small for them to exercise in.

Carlo: I agree with Briony. How do you think they train those bears of yours to ride bikes? It's not nice, I can tell you! They use electric prods and whips and other instruments of torture – all so you can have a good laugh.

Briony: Circuses are not just cruel they are dangerous. Every year circus animals have accidents performing their tricks. They get burnt, they break limbs and in some cases they die.

Carlo: And it's not just dangerous for the animals, people get hurt too. Circus animals are often a real danger both to their trainers and the general public. In 1994 a circus elephant called Tyke killed its trainer and ran through the streets of Honolulu causing lots of damage to property.

Ashley: You are both being ridiculous. You can't ban something just because it's dangerous. Otherwise you would have to ban swimming in the sea or walking up mountains. And I don't see how the circus is cruel. At least the animals are well-fed and properly sheltered. In the wild they could go for days without food and can be easily maimed and killed by other animals. The truth is, it is kill or be killed. Nature is cruel. We're doing them a favour rescuing them from the wild.

Briony: We're not rescuing them, we're humiliating them! It's unnatural for wild animals to be dressed up in costumes and ride a bicycle round and round while idiots like you look on laughing and clapping.

Carlo: I agree. Whenever we mess with nature, we make things worse. Everything unnatural should be banned.

Ashley: Well gymnastics is unnatural and dangerous; does that mean you want to ban the Olympics? And what about working dogs like police dogs or guide dogs or sheep dogs? What they do is unnatural. They have to be trained and disciplined to do their work. So how is training dogs to help find earthquake victims any different from training bears to entertain us by doing tricks? It's the same thing. So if one is OK so is the other!

10 Ashley claims that training dogs to find earthquake victims is exactly the same as training bears to entertain us by doing tricks.

Identify **two** significant differences between each case and explain what makes training the dogs acceptable and training the bears unacceptable.

(a) First difference and explanation

.....
.....
.....
..... [2]

(b) Second difference and explanation

.....
.....
.....
..... [2]

11 Briony and Carlo would both like to see circuses banned because of their treatment of animals.

Identify **two** other possible options which they could consider instead of banning circuses.

(a) First option
..... [1]

(b) Second option
..... [1]

12 Ashley considers the claim that if something is dangerous it should be banned.

He then gives two counter-examples: swimming in the sea and climbing mountains.

Provide **two** counter-examples of your own.

(a) Counter-example 1: [1]

(b) Counter-example 2: [1]

- 13 Carlo claims that “Circus animals are often a real danger both to their trainers and the general public”.

In support of this claim he offers the following evidence:

In 1994 a circus elephant called Tyke killed its trainer and ran through the streets of Honolulu causing lots of damage to property.

Give **three** reasons why Carlo’s claim is only weakly supported by this evidence.

- (a) Reason 1.....
.....
..... [1]
- (b) Reason 2.....
.....
..... [1]
- (c) Reason 3.....
.....
..... [1]

- 15** Briony claims that “it is unnatural for wild animals to be dressed up in costumes and ride a bicycle round and round”.

Here are some different ways in which the word ‘unnatural’ can be interpreted:

- ‘unnatural’ = amazing
- ‘unnatural’ = very rare
- ‘unnatural’ = wrong
- ‘unnatural’ = better than natural

Circle the interpretation of the word ‘unnatural’ which best fits the way Briony uses the word. [1]

- 16** Ashley claims that what working dogs like police dogs do is ‘unnatural’.

Here are some different ways in which the word ‘unnatural’ can be interpreted:

- ‘unnatural’ = amazing
- ‘unnatural’ = very rare
- ‘unnatural’ = wrong
- ‘unnatural’ = better than natural

Circle the interpretation of the word ‘unnatural’ which best fits the way Ashley uses the word. [1]

ADDITIONAL ANSWER SPACE

If additional answer space is required, you should use the following lined page(s). The question number(s) must be clearly shown in the margins.

A large area of lined paper for writing answers. It features a vertical margin line on the left side and horizontal dotted lines for writing. The lines are evenly spaced and extend across the width of the page.

A vertical solid line is positioned on the left side of the page. From this line, 25 horizontal dotted lines extend across the page, creating a series of rows for writing.

A large area of the page is reserved for writing, featuring a vertical solid line on the left side and horizontal dotted lines extending across the page.



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