



Cambridge International AS & A Level

THINKING SKILLS

9694/02

Paper 2 Critical Thinking

For examination from 2020

SPECIMEN PAPER

1 hour 45 minutes



You must answer on the enclosed answer booklet.

You will need: Answer booklet (enclosed)

INSTRUCTIONS

- Answer **all** questions.
- Follow the instructions on the front cover of the answer booklet. If you need additional answer paper, ask the invigilator for a continuation booklet.

INFORMATION

- The total mark for this paper is 50.
- The number of marks for each question or part question is shown in brackets [].

This document has **6** pages. Blank pages are indicated.

Section A

Study the evidence and then answer questions 1 and 2.

Source A

News report

Early morning exercise can be bad for your health, according to researchers. They have discovered that the body's immune system cannot cope with intense exercise first thing in the morning. Their research suggests that evening is the best time to exercise.

The researchers examined the levels of cortisol, a stress hormone that can suppress the immune system, in 14 British competition swimmers with an average age of 18. The swimmers practised at 6am and 6pm on different days. Tests showed cortisol levels were lower (that is, better) in the evenings. In addition, levels of antibodies in the blood that help fight off infection were down sharply in the morning, causing swimmers to be at greater risk of getting an infection.

Source B

News report

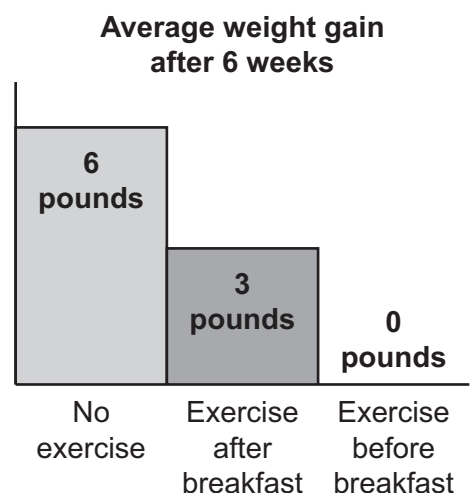
The afternoon is the best time to exercise if you want to avoid injuries. Body temperature is at its highest between 4pm and 5pm, which makes muscles warm and flexible, and therefore less likely to be hurt. Strength output is 5% higher at around mid-day than at other times of day. Anaerobic performance, such as sprinting, improves by 5% in the late afternoon, while endurance is approximately 4% higher in the afternoon.

However, although afternoon exercise is best from a physiological standpoint, research also shows that people who exercise in the morning are more likely to exercise regularly than those who take their exercise later in the day.

Source C

News report

Many trainers advise that you should eat something before engaging in heavy exercise, but researchers in Belgium have now discovered that exercising before eating is better, especially if you are trying to lose weight. For six weeks, 27 healthy young men ate a high-calorie diet, containing lots of sugar and fat. The young men were divided randomly into three groups of nine. One group ate the unhealthy diet and did no exercise. The other two groups used exactly the same exercise routine, but one group exercised before breakfast and the other group exercised after breakfast. In addition, those who exercised before breakfast drank only water during their exercise, but the group which exercised after breakfast consumed energy drinks while exercising.



Source D

News report

More than two thirds of adults in a recent survey said they had made a New Year's resolution to get fitter, and joined a gym. But by the end of January, over a third of them had cancelled their new gym memberships. This finding comes from research conducted by Combat Fitness, a prominent provider of outdoor group fitness classes. Three quarters of the people surveyed said they needed motivating in order to exercise and that they did not have enough motivation on their own. The CEO of Combat Fitness said these statistics did not surprise him. 'The best way to overcome lack of motivation is to exercise in a group, so that fellow members can give encouragement,' he said. 'In addition, our highly trained instructors will help you achieve your goals.'

- 1 (a) Identify and explain **two** reasons why the findings from Source A may not apply to everyone. [3]
- (b) Source A recommends exercising in the evening, whereas Source B says the afternoon is the best time.
Identify and explain **two** reasons why these research results do **not** contradict one another. [3]
- (c) Is Source B an argument? Explain your answer. [2]
- (d) Identify and explain **two** weaknesses in the support given in Source C for its claim that 'exercising before eating is better, especially if you are trying to lose weight'. [4]
- (e) Identify and explain one factor which reduces the credibility of the evidence in Source D. [2]

- 2 *You are advised to spend some time planning your answer before you begin to write it.*

'The best time to exercise is the time most convenient to yourself.'

To what extent do you agree with this claim? Write a short, reasoned argument to support your conclusion, using and evaluating the evidence provided. [8]

Section B

Read the following passage and then answer questions 3, 4 and 5.

- 1 At times of economic hardship, it is understandable if museums are considered very low on a government's list of priorities. In fact, however, the provision of museums is one of the most important functions of government. The survival of nations depends on museums. Human lives – and even generations – can if necessary be replaced; but once the ancient artefacts and records of life in previous generations have been lost or stolen, they are gone for ever.
- 2 Some people may argue that individual cultures matter less in a time of globalisation. But a world in which everyone looked the same, believed the same things and had the same tastes would be unbearably boring. True unity consists in accepting one another's differences, not destroying them. So the preservation of cultures is even more necessary now than it was in previous generations.
- 3 It could be argued that maintaining an interest in our past is a luxury for the benefit of the few who have the leisure to visit museums and the education to appreciate them. But the influence of museums spreads much more widely than this. Most people value knowing that their heritage is being cared for, even if they do not keep going back to inspect it.
- 4 Museums are a vital resource for education, because artefacts make history come alive. Dry facts listed in a textbook or recited by a teacher do not have the power to awaken an interest in the past, compared with handling the actual objects used by heroes of bygone ages or reading for oneself the original documents which shaped the world that we have inherited.
- 5 A wise man once said, 'Whoever controls the present controls the past; whoever controls the past controls the future.' This is, of course, why some governments have air-brushed disgraced politicians from the photographs which showed them in positions of honour and power. By re-writing history, those who have power in the present have been able to influence what happens in the future. If documents and artefacts from the past were not kept safe, powerful people would be free to change history to suit their own purposes, and ordinary members of the public would be unable to challenge them. The existence of museums is therefore a vital support in the defence of democracy.

- 3 (a) Using the exact words from the passage as far as possible, identify the *main conclusion*. [2]
- (b) Using the exact words from the passage as far as possible, identify **three** *intermediate conclusions*. [6]
- (c) Using the exact words from the passage as far as possible, identify a *counter-assertion*. [2]
- (d) Identify an *unstated assumption* required by the argument in paragraph 1. [2]
- 4 (a) Identify and explain a flaw in the reasoning in paragraph 2. [2]
- (b) To what extent is the reasoning in paragraph 4 weakened by the flaw of *restricting the options*? [2]
- (c) Identify an *inconsistency* between paragraphs 1 and 5, and explain to what extent it weakens the reasoning. [2]
- (d) Identify and explain the *conflation* in paragraph 5. [2]
- 5 *You are advised to spend some time planning your answer before you begin to write it.*

‘The study of history has no value.’

Write your own short argument to support **or** challenge this claim. The conclusion of your argument must be stated. Credit will not be given for repeating ideas from the passage. [8]

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Copyright Acknowledgements:

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Question 1 © <http://running.about.com/od/motivation/f/Whats-The-Best-Time-Of-Day-ToRun.htm>

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