

THINKING SKILLS

Paper 2 Critical Thinking

9694/22 May/June 2019 1 hour 45 minutes

No Additional Materials are required.

READ THESE INSTRUCTIONS FIRST

An answer booklet is provided inside this question paper. You should follow the instructions on the front cover of the answer booklet. If you need additional answer paper ask the invigilator for a continuation booklet.

Answer all the questions.

The number of marks is given in brackets [] at the end of each question.

This document consists of 6 printed pages, 2 blank pages and 1 Insert.

1 Study the evidence and answer the questions that follow.

Source A

Newspaper report

Lifestyle guru Dr Benjamin Kitty has now sold a million copies of his book *Gaianomics – How To Tap Into the Earth's Energy and Become Successful.* In the book, he describes how he has been transformed by what he calls 'gaianomics'. As a young man, he was rather clumsy and this led to him being sacked from a number of unskilled jobs. Today he is a successful and prosperous individual. Through reading the book, we can learn the basic principle of gaianomics, which is that we can channel the energy in the core of the earth through our feet. When we learn the techniques, we too can detect and channel this energy, and so go on to experience waves of optimism and an unlimited energy which will allow us to achieve our goals.

Source B

Extract from investigative TV programme

Dr Benjamin Kitty is a con-man. His doctorate is from a dubious university based in Mongolia with the strap-line 'The Cambridge of the Gobi Desert'. Most of the courses offered are on-line, and students can choose the level of qualification for which they wish to study. The fee involved increases with the level of study chosen. In his book he identifies places where the earth's energy is particularly strong, and can even be felt by the trained student of gaianomics. In London, he identifies Leicester Square, which happens to be where the underground train line gets closest to the surface. Gaianomics is a fake science and has no genuine academic basis.

Source C

Letter from Dr Benjamin Kitty to a friend

I have now sold a million copies of my book! Gaianomics has been very good to me and I am so pleased that it has helped many other people as well. My investment of the money my grandmother left me in her will has proved to be a very good one. Studying for my doctorate in psychology took a fair proportion of this money but I don't think I could have written the book without it.

Source D

Letter to magazine *Gaianomics Weekly*

Sir

I am outraged by the attack on Dr Benjamin Kitty in a recent television programme. Reading Dr Kitty's book transformed my life and I am now a successful accountant. Before reading the book I was a young actor with dreams of becoming a star, but was receiving very few offers of parts. Reading the book and practising gaianomics showed me the way forward and also the futility of my previous existence.

Source E

Extract from book The Self-Help Industry

Most 'self-help' books boil down to the message that if you think positively and have high selfesteem then you will succeed in achieving your goals. There is undoubtedly something in this. In the field of sport, successful teams seem to stay successful because of their self-confidence. Equally, a run of losses often seems unstoppable as each defeat saps confidence. Unsurprisingly, the typical 'self-help' book tends to use success in sport as its model. Whether this sports model is applicable to life in general is questionable, because it implies simple definable goals such as winning or breaking a record. However, the life ambitions of the individual might not be simple and definable, nor will achieving them necessarily lead to a sense of fulfilment and happiness.

- (a) How effectively does Source B support its claim that "Gaianomics is a fake science and has no genuine academic basis"?
 [3]
- (b) Source C mentions that Benjamin Kitty inherited money from his grandmother.

What is the significance of this in relation to Kitty's claim that his success was due to gaianomics? [3]

- (c) Explain why Source D is not an effective defence of gaianomics. [3]
- (d) How likely is it that Dr Benjamin Kitty is a "con-man"? Write a short, reasoned argument to support your conclusion, with critical reference to the evidence provided and considering a plausible alternative conclusion. [6]

2 Study the evidence and answer the questions that follow.

Source A

Coastal erosion is increasing in many parts of the world and threatens many buildings on cliffs near the sea. Whilst there have always been some cases of areas suffering gradual erosion and decline, a new pattern is emerging. Very severe storms can erode a coastline by several metres in just one night. This means that buildings which had in the past been built sufficiently far back to be safe are now found to be in a vulnerable position. Whilst it is understandable that owners of such buildings would wish the government to take action to protect their property, many people now believe that such action is not justified. They believe that nature should be left to take its course and that buildings in this situation should be left to their fate.

Source B

Climate change experts believe the increased severity of coastal storms is one of the many side effects of global warming. Whilst the relationship between climate and weather is complicated, there are good grounds to believe that severe weather events are a sign of global warming. Whether global warming can be reversed is a difficult question to answer. Some people deny that climate change is happening. Others suggest that it is a natural phenomenon not caused by human activity. World leaders are increasingly accepting the scientific evidence that human activity is increasing the rate of global warming. However, they are still a long way from agreeing upon an effective international policy to decrease the pace of global warming.

Source C

Whilst coastal erosion is a natural phenomenon, severe coastal erosion is mainly the result of human activity which interferes with the natural movement of sand around the coast. This natural movement would create a protective barrier of sand between the sea and the cliffs. In the absence of this barrier, storm force waves pound directly upon the cliffs, causing them to erode very rapidly. Two examples of such human interference are:

- Using wooden structures called groynes to keep the sand in place on pleasure beaches.
- Dredging in order to maintain deep water channels into ports and harbours.

Source D

Techniques to deal with coastal erosion are usually divided into 'hard' and 'soft' engineering options. An example of a hard engineering option would be to build sea walls. These are very expensive to build and maintain, and can themselves be subject to erosion and damage by severe coastal storms. One soft engineering option could be 'managed retreat', where areas of the coast are allowed to erode and flood naturally. Usually, this would be in places considered to be of low value, such as those not being used for housing or farming. A second could be to manage beaches by replacing the sand which has been removed by storms. Although this is relatively inexpensive compared with the hard options, it does involve an almost constant operation to replace the material which has been removed. This is time-consuming and needs obtrusive building works upon the beach.

- (a) Source A mentions the possibility of governments taking action to protect buildings from coastal erosion. Suggest three reasons why they might not do so.
 [3]
- (b) Explain why the achievement of an international policy on global warming would not be a solution to the problem of coastal erosion. [4]
- (c) A high percentage of the world's population live in coastal areas.

Explain why we cannot infer from this information that coastal erosion is a major threat to the world's population. [2]

(d) 'Houses should not be built on cliff tops.'

To what extent do you agree with this claim? Write a short, reasoned argument to support your conclusion, using and evaluating the information provided in Sources A–D. [6]

- **3** *Read the passage and answer the questions below.*
- 1 One of the great improvements resulting from modern advanced industrial society is the recognition of the importance of forward planning. Some may argue that it is best to 'go with the flow', but such an approach leads to chaos. For example it might seem a good idea to take a flexible approach on a car journey and adjust one's route in the light of traffic reports, but one needs to have some idea of one's destination when setting out on a journey.
- 2 The romantic notion of being spontaneous is attractive, but forward planning is essential to survival in modern society. When constructing a house, a builder has to produce something called a Critical Path Analysis. This is to ensure that things happen in the right order; that, for example, electricians are not brought in until walls and floors are in place. Without this rigorous approach, an individual is likely to find that they keep missing appointments or they arrive on the platform just as the train is leaving the station. Such is the fate of those die-hard old hippies stuck in the 1960s. In the modern world one needs to get real and get planning.
- 3 Some might argue that forward planning is incompatible with creative activity. However, if we take great literature as an example, many authors stress the importance of a systematic approach to creative work. The writer Somerset Maugham advocated that one should always aim to get one thousand words written before breakfast. If people with creative ambitions follow such advice those ambitions will be realised.
- 4 Forward planning will lead to a happier life. One will be well-prepared to deal with the unpredictable events that are an inevitable feature of human existence. For instance, the well-organised person can save money for their eventual retirement and old age and enjoy this last phase of their life.
 - (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. [3]
 - (c) Evaluate the strength of the reasoning in the argument. In your answer you should consider any flaws, unstated assumptions and other weaknesses. [5]
 - (d) 'We would be happier if clocks had never been invented.'

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. [5]

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