



FOREST SCHOOL

16+

SIXTH FORM ENTRANCE AND
SCHOLARSHIP

Critical Thinking Sample Paper

Sixth Form Entrance and Scholarship Critical Thinking - SAMPLE

PAPER Time: 45 minutes

**Answer all the questions on the answer sheet provided. The questions are multiple choice.
You do not lose any marks for wrong answers.**

1. In the case of plastic drink bottles, recycling is not the best answer to the problem of garbage disposal. Ninety-five per cent of soft-drink bottles sold in the United States are made of a compound of polyethylene (PET) which poses recycling problems. They are potentially carcinogenic if recycled into new food or drink containers. Recycled PET tends to absorb other chemicals before re-melting and these chemicals could leach into food or drink that is stored in a recycled container. However, if disposed of in landfill sites, plastic is not harmful to the environment. It can be squashed flat, so that it occupies little space and it is inert. Unlike other waste, it does not leach into soil or water, nor does it produce a dangerous build-up of methane.

Which one of the following best expresses the main conclusion of the argument above?

- A Plastic waste cannot be recycled safely.
 - B Plastic waste is not a danger to the environment.
 - C Food containers made from recycled plastic are potentially carcinogenic.
 - D There is sufficient space in landfill sites to accommodate plastic waste.
 - E Recycling is not the best method of disposing of plastic drink bottles.
2. Every year in this country there are over 8000 personal accidents on golf courses, yet it is estimated that as few as five per cent of all golfers take out adequate insurance against claims for injury. If more golfers could be encouraged to take out appropriate insurance policies the number of accidents could be dramatically reduced.

Which one of the following identifies the flaw in the argument above?

- A It ignores the fact that millions of golfers never have an accident.
- B It assumes that all insurance policies provide adequate insurance against claims.
- C It implies that the occurrence of golfing accidents is causally related to the lack of insurance.
- D It overlooks the possibility that some accidents would not be covered by insurance.
- E It ignores the fact that there are different kinds of insurance for different kinds of activity.

3. A two-month study of major producers of ivory products showed that worldwide demand for elephant tusks for ivory had fallen sharply. Consequently, it is safe to assume that there will be a general decline in elephant poaching.

Which one of the following, if true, would most weaken the above argument?

- A There are far fewer elephants than there were ten years ago, so poachers are finding it increasingly difficult to make a living from the ivory trade.
 - B Poachers now use high-powered rifles which make it far easier for them to kill larger numbers of elephants than was possible in the past.
 - C The worldwide demand for ivory fluctuates considerably at certain times of the year, so poachers stockpile ivory to sell when the market improves.
 - D More and more synthetic materials are being used as substitutes for ivory in the construction of such things as piano keys and billiard balls.
 - E The worldwide demand for ivory has been falling consistently for the last twenty years and many ivory poachers have found alternative sources of income.
4. Many people imagine that large country houses in the eighteenth century had smooth lawns. But in those days there was no way of killing wild plants and weeds and, with the lawnmower not invented, the only method of cutting a lawn was by teams of gardeners with hand scythes; today's weed-free close cuts were unthinkable. Given this, lawns must have been like flowery meadows.

Which one of the following best expresses the main conclusion of the argument above?

- A Modern lawns are kept smooth only with the use of weedkillers and lawnmowers.
 - B The upkeep of eighteenth century lawns required the employment of large numbers of gardeners.
 - C In the eighteenth century, lawns were not smooth but more like flowery meadows.
 - D It is more natural to have a lawn like a flowery meadow than one kept in smooth condition.
 - E Modern lawns would seem boring to a person from the eighteenth century.
5. The demand for blood donors is increasing all over the world. In Western countries, in particular, demand has been rising so rapidly that shortages have begun to appear. In all such countries, demand is growing much faster than rates of growth in populations aged 18-65 from whom donors are drawn. And, despite a massive research effort to find alternatives, it remains true that in medicine there is no substitute for human blood.

Which one of the following conclusions can be drawn from the passage?

- A As the demand for blood has increased, so has the supply fallen.
- B The rate of growth of the blood-donor population has been slowing recently.
- C The increase in the rate of demand for blood is mainly due to population growth.
- D If more blood donors could be found, there would be no need to find a substitute for human blood.
- E The problem of the increase in demand for blood shows no sign of disappearing.

6. The Eurovision Song Contest is coming in for increasing criticism. No matter how awful the song, Greece can always be relied on to give a maximum 12 points to Cyprus and Russia will vote for the Ukraine. In one year the political voting was so blatant that the commentator for the UK described it as 'ridiculous'. With more Eastern European countries competing, their power blocs are so strong that Western European countries have little hope of winning. The result of the Eurovision Song Contest is now determined by geo-politics and not by music.

Which one of the following, if true, would most weaken the above argument?

- A Britain nearly always gives high marks to the Irish song.
- B The Eastern European songs are usually sung in English.
- C Eastern European countries have shared tastes in music.
- D Western European countries have won 75% of contests in the past.
- E Poland has never won the Eurovision Song Contest.

Questions 7-10 are about the following passage

All along the burnished footpaths of Greek Street, the shopkeepers are out already, the second wave of early risers. Of course, they regard themselves as the first wave. The grim procession of factory workers less than an hour ago might as well have happened in another country in another age. Welcome to the real world.	Line 1 5
Getting up as early as the shopkeepers do is, in their view, stoic heroism beyond the understanding of lazier mortals. Not that they are cruel, these industrious men. It's just that the shopkeepers of Greek Street care nothing about the shadowing creatures who actually manufacture the goods that they sell. The world has outgrown its quaint rural intimacies, and now it's the modern age: an order is put in for fifty cakes of Coal Tar Soap, and a few days later, a cart arrives and the order is delivered. How that soap came to exist is no question for a modern man. Everything in this world issues fully formed from a benign monster called manufacture; a never-ending stream of objects – of graded quality, of perfect uniformity – from behind veils of smoke.	10 15
You may point out that the clouds of smut from the factory chimneys of Hammersmith and Lambeth blacked all the city alike, a humbling reminder of where the cornucopia really comes from. But humility is not a trait for the modern man, and filthy air is quite good enough for breathing; its only disadvantage is the film of muck that accumulates on shop windows.	20
But what use is there, the shopkeepers sigh, in nostalgia for past times? The machine age has come, the world will never be clean again, but oh: what compensation!	25
Already they're working up a sweat, their only sweat for the day, as they labour to open their shops. They ease the tainted frost from the windows with sponges of lukewarm water and sweep the slush into the gutter with stiff brooms. Standing on their toes, stretching their arms, they strip off the shutters, panels, iron bars, and stanchions that have kept their goods safe another night. All along the street, keys rattle in keyholes as each shop's ornate metal clothing is stripped away.	30
The men are in a hurry now, in case someone with money should come along and choose a wide-open shop over a half-open one. Passers-by are few and often strange at this hour of the morning, but all types may stray into Greek Street and there's no telling who'll spend.	35

7. The shopkeepers' attitude towards the workers who are described in lines 3-5 is best characterised as;
- A ambivalent
 - B dismissive
 - C combative
 - D fearful
 - E suspicious
8. The author uses the phrase 'benign monster' (line 15) in order to
- A criticise the greed of the merchants on Greek Street
 - B evoke sympathy for the fate of the factory workers
 - C characterise the process by which modern goods are created
 - D suggest that consistency is not always an outcome of mass production
 - E emphasise the many hardship of life on Greek Street
9. The 'compensation' described in line 26 is best understood as
- A economic costs of a polluted environment
 - B ability of merchants to market goods effectively
 - C lucrative profits that manufacturers clean from shopkeepers
 - D awareness that present success will not make up for past failure
 - E financial benefits that come with industrialisation
10. In the final paragraph, the shopkeepers can best be characterised as
- A frantic about the delivery of their goods
 - B elated about the abundant profits
 - C eager for the arrival of customers
 - D nonchalant about their success as merchants
 - E suspicious of the neighbouring shopkeepers
11. Lenton Cars hire out cars at a cost of £50 per day if the number of miles travelled is less than 80. There is an extra charge of £1 for every mile travelled over 80 miles. Duxford Hire charge £60 per day for taking the car out and then 50p for every mile travelled.

For how many miles travelled would the cost of hiring a car be the same for both hire companies?

- A 100
- B 130
- C 140
- D 170
- E 180

- 12.** Gumbey and Sons have decided it is time to modernise their image. To go with their new steel and glass office building they have decided to change the company name. A number of acronyms have been shortlisted and, to help choose between them, the company chairman suggests they should choose a name which, when painted vertically from top to bottom on the new glass front door will read the same from inside and out.

Which of the following names should they choose?

- A** TIME
- B** NONA
- C** DOOD
- D** MITA
- E** WEEM

- 13.** In an effort to monitor my fuel bills last winter I recorded the readings on the gas and electricity meters on the first of each month as follows:

	Gas	Electricity
1 st October	2842	5368
1 st November	3029	5874
1 st December	3281	6355
1 st January	3473	6891
1 st February	3668	7506
1 st March	3914	8052
1 st April	4082	8511

During which month did I use the most gas?

- A** November
- B** December
- C** January
- D** February
- E** March

14. The table shows the numbers of male and female students studying a selection of subjects at a college.

Subject	Female	Male
Biology	24	41
Geography	26	32
German	3	12
Mathematics	104	61
Music	6	10
Sociology	18	67

In which other subject was the balance of female and male students closest to that for Music?

- A Biology
B Geography
C German
D Mathematics
E Sociology
15. It is 4.30pm and Jane, Jean and June have just arrived together at the Vue Cinema. Jane wants to see 'The Rock', but Jean is determined to see 'Mission Impossible' and June would rather see 'Empire Records', so they decide to split up.

KINGPIN (12) Daily 12.00, 3.30, 5.30, 8.10 (120 minutes)
Jim Carrey is THE CABLE GUY (12) Daily 12.50, 3.30, 5.50, 8.10 (120 minutes)
Tom Cruise MISSION IMPOSSIBLE (PG) Daily 12.30, 3, 5.30, 8.10 (110 minutes)
THE ROCK (15) Daily 1.50, 4.50, 7.50 (135 minutes)
EMPIRE RECORDS (12) Daily 2.50, 5.40, 8.20 (90 minutes)

What is the earliest possible time that Jane, Jean and June can arrange to meet together after their films?

- A 6.45
B 7.05
C 7.10
D 7.20
E 8.20

16. The roller coaster at Blue Top Towers Park runs continuously from 10.00am to 6.00pm during the week and from 9.00am to 7.00pm at weekends.

Each ride lasts for 3 minutes.

It can take up to 5 minutes to unload and reload between rides at busy periods, but even when the park is quiet there is a 2 minute gap between the end of one ride and the beginning of the next.

What is the maximum number of rides there can be in one day?

- A 60
- B 75
- C 96
- D 120
- E 200

A cutlery drawer is divided into compartments. The 'knife' compartment contains six black knives and six red knives. The 'fork' compartment contains six black forks and six red forks.

What are the **least** number of knives and forks that must be removed from the drawer in the dark to guarantee having a red knife and matching fork?

- A Three knives and three forks
- B Six knives and six forks
- C Seven knives and one fork
- D Seven knives and six forks
- E Seven knives and seven forks

17.

WHEELERS CYCLES Bicycles for Hire 8am – 8pm Daily Hourly rate 8am – 4pm: £2 per hour 4pm – 8pm: £1 per hour All Day Hire: £15

How much will it cost me to hire a bicycle from Wheelers Cycles from 11am for eight hours?

- A £13
- B £15
- C £16
- D £20
- E £23

Answers

1 mark for each correct answer. Maximum mark: 18

1. E
2. C
3. C
4. C
5. E
6. C
7. B
8. C
9. E
10. C
11. E
12. D
13. A
14. A
15. D
16. D
17. E
18. A