

**OXFORD CAMBRIDGE AND RSA EXAMINATIONS**  
**Advanced Subsidiary GCE**

**CRITICAL THINKING**

Unit 2: Assessing & Developing Argument

Friday **13 JANUARY 2006** Afternoon 1 hour 45 minutes

**F492/01**  
**F492/02**

Additional materials:  
Answer sheet for Section A Multiple Choice  
Resource Booklet

Candidate Name	Centre Number	Candidate Number												
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**TIME** 1 hour 45 minutes

**INSTRUCTIONS TO CANDIDATES**

- Write your name, Centre number and candidate number in the spaces above and on the answer sheet.
- Answer **all** questions.
- Answer Section A, questions 1 – 20, on the answer sheet provided. You are advised to spend not more than 40 minutes on Section A.
- Answer Sections B and C in the spaces on the question paper.
- Read the Resource Booklet and each question carefully and make sure you know what you have to do before starting your answer.

**INFORMATION FOR CANDIDATES**

- You will be awarded up to 5 marks in Sections B and C for the quality of your written communication.
- 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 **120**. Section A comprises 33% of the available marks; Sections B and C comprise 67% of the available marks.

<b>FOR EXAMINER'S USE</b>	
<b>Section B/50</b>	
<b>Section C/25</b>	
<b>QWC/5</b>	
<b>Total B + C</b>	

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**This question paper consists of 19 printed pages and 1 blank page.**

**Section A**

Answer **all** questions in this section of the paper.

You are advised to spend no more than 40 minutes on this section of the paper.

- 1 The introduction of professionalism into English rugby union may have had some benefits, but has not been in the long term interest of the game. The national team has drawn large crowds and been able to commit large sums of the resulting money to the development and training of their players, resulting in the World Cup victory. However, too little of this money is passed down to non-professional clubs at the 'grass roots' of the sport, where many of the current stars first pulled on a rugby shirt. Clubs are closing due to financial problems, giving less opportunity for future stars to take up the game. It has also been suggested that in the future there will be fewer people interested in the game and crowds at internationals may eventually fall.

Which of the following is the **best statement** of the **main conclusion** of the above argument?

- A Professionalism in English rugby means that crowds at international matches may fall.
- B Clubs at the 'grass roots' of the game have not adequately benefited from the money raised by professional matches.
- C Although there are disadvantages to professionalism, the World Cup success shows that it has been very successful.
- D Despite the success of the national team at the World Cup, the long term interests of the game have been poorly served by professionalism.

[1]

- 2 The large number of empty seats seen at the Athens Olympics suggests that it was not a successful games, either financially or in terms of public involvement. If the next Olympic Games in 2012 are to be successful, London will need to address this problem by having plans that will ensure full venues throughout the two week period. It is therefore essential that the successful bid for the 2012 Games includes a commitment to lower ticket prices.

Which of the following is an **underlying assumption** of the above argument?

- A The people of Athens were uninterested in their Olympic Games.
- B The Athens Olympics was not well planned.
- C Olympic bids are only successful if they can demonstrate a benefit to the local community.
- D The high seat prices at Athens was an important reason for the many unsold tickets.

[1]

- 3 People who want to cover their houses in cheerful lights at Christmas time should be allowed to do so, despite suggestions that it should be banned for wasting electricity and contributing to global warming. We make use of many artificial lights in the winter time to light our pavements, roads and shops. This use of lights makes our lives easier and safer and it is absurd to suggest that it is a waste of electricity. It would be unreasonable to ban street lighting and it is therefore possible to dismiss the argument against Christmas lights.

Which of the following is the **best statement** of the **flaw** in the above argument?

- A There is no consideration of the fact that Christmas lights use a lot less electricity than street lighting.
- B It is not possible to compare the use of essential public lighting to decorative Christmas lights.
- C There is no recognition of the fact that Christmas lights on houses can cause a nuisance to neighbours.
- D Not everyone agrees that using electricity contributes to global warming.

[1]

- 4 The Universities of Oxford and Cambridge continue to complain that Government targets for admissions are reducing their freedom and financial stability. However, they are essentially public institutions that use taxpayers' money to provide a public service. Given the suspicion that the Universities benefit from considerable additional incomes from extensive landholdings and concealed public subsidies, it is not surprising that many believe that the Universities are not delivering a value for money service. It is right that taxpayers should be reassured that their money is being well spent and the publication of a thorough financial audit of the Universities' accounts is a matter of urgency for the Government.

Which of the following is the **best statement** of the **main conclusion** of the above argument?

- A The Government should continue to set admissions targets for Oxford and Cambridge.
- B The taxpayer has the right to be reassured that the two Universities are good value for money.
- C It is important that the Government quickly publishes an audit of the Universities' finances.
- D The Universities are wrong to argue against Government involvement in their affairs.

[1]

- 5 The increase in babies born by caesarean section is one more possible explanation for the rise in the number of childhood asthma cases. Babies born this way, rather than by a normal delivery, do not get the chance to swallow beneficial bacteria that play a key role in the development of the immune system. Researchers who studied over 800 babies have found that the 147 delivered by caesarean were more likely to suffer digestive problems and food intolerances – both signs of inappropriate immune system reactions. Asthma is a dangerous and debilitating condition and it is not surprising that the researchers involved have recommended that caesareans be discouraged for all non-medical reasons.

Which of the following is an **underlying assumption** of the above argument?

- A The treatments available for asthma have not improved.
- B Asthma is caused by the same faulty immune system reactions that can lead to a range of conditions, such as digestive problems and food intolerances.
- C Most women who give birth by caesarean section could give birth naturally.
- D Most of the 147 babies who were born by caesarean suffered from digestive problems, food intolerances and asthma.

[1]

- 6 Although depression is commonly thought to affect mainly younger adults, it is in fact one of the most under-diagnosed and under-treated medical illnesses affecting older adults. Of nearly 35 million Americans aged 65 and over, an estimated 2 million have a depressive illness and a further 5 million have a range of associated symptoms. Although existing anti-depressants have been found to be effective in treating late-life depression, data show that doctors are rarely prescribing them to this age group. Doctors are frequently mistaking symptoms of depression as typical and unavoidable signs of the ageing process, denying patients helpful and effective medication.

Which of the following is the **conclusion that can best be drawn** from the above passage?

- A Doctors should undergo additional diagnostic training as one method of helping millions of over 65s cope with depression.
- B Doctors should offer a range of treatments to older adults suffering from depression.
- C Doctors dealing with older adults should undergo additional training to make sure that they are more sympathetic to this patient group.
- D Doctors have always prioritised younger patients when prescribing anti-depressant drugs.

[1]

- 7 Approaches to business decision-making fall into two main categories – thinking and feeling. ‘Thinking-deciders’, who are logical and analytical, represent the established management decision-making culture and are rewarded for their apparent clarity and willingness to make difficult decisions. However, the well-being of staff is increasingly important to the success of many complex businesses. It follows that businesses would be better advised to make more use of ‘feeling-deciders’, as their subjective, compassionate approach is more likely to improve morale and the goodwill of staff.

Which of the following, if true, would **most strengthen** the above argument?

- A ‘Feeling-deciders’ are more likely to take longer to reach a decision.
- B ‘Thinking-deciders’ are often idealists who are more likely to make decisions that are impractical when implemented and waste organisations’ resources.
- C ‘Feeling-deciders’ may be too emotional to make good decisions under pressure.
- D Management training schemes have always emphasised the importance of a thinking and feeling approach to decision-making.

[1]

- 8 Health experts claim that GPs are prescribing far too many anti-depressants. People with only minor symptoms of depression are often given drugs when some form of counselling would be more appropriate and effective. However, the current availability of such counselling services is very limited, with anything up to a six month waiting list for NHS treatment. We should provide a much better level of counselling support at GP practices as our GPs must be able to offer the best treatments to patients with symptoms of depression.

Which of the following is the **best statement** of the **main conclusion** of the above argument?

- A GPs should be provided with improved counselling services at their practices.
- B GPs should be able to offer the best treatments to those suffering symptoms of depression.
- C Counselling is a more appropriate method of treating the symptoms of depression than prescribing anti-depressants.
- D Prescribing fewer drugs should be a goal of modern treatments for depression.

[1]

- 9 The misery of traffic jams is only going to get worse according to trends revealed by Department of Transport figures. Over the last 20 years, total traffic volumes have increased by 77%, the majority of the increase being accounted for by car traffic which has increased by 83%. In the same period, investment in the road network has fallen by almost 20%. Traffic jams mean frustration for motorists and lost revenue for businesses. Increasing our investment in our road network is vital if we are to ease the many problems caused by traffic jams.

Which of the following, if true, would **most strengthen** the above argument?

- A The rate of increase of traffic volumes has decreased slightly in the last 10 years.
- B Motorways account for only 1% of total road capacity, but carry 19% of traffic.
- C New road building has increased the total available road capacity by 10% in the last 20 years.
- D Private investment in toll roads has increased dramatically in the last 20 years.

[1]

- 10 Life for pensioners in this country is likely to be cold and lonely according to 2001 census data. Nearly half of the 3.1 million living in a 'one person household' are pensioners and, of these, over 400,000 are without central heating. The social isolation and ill health that result are criminal in such an affluent society and place a huge burden on our health services over winter months. The problem is only going to get worse, given that the number of one person households increased by 30% between 1991 and 2001, and it is clear that we should prepare to commit much greater resources to the care and support of our pensioners.

Which of the following is the **best expression** of the author's use of the word '**criminal**' in the above argument?

- A That which is illegal.
- B That which offends a sense of social justice.
- C Someone who should be convicted by the courts.
- D That which is a sign of a selfishness.

[1]

- 11 Everyone wants to live longer, demonstrated by the popularity of all manner of lotions and potions designed to stop us ageing. However, the solution may be much simpler. A French woman who lived to be 122 years old put her longevity down to the benefit of a vegetarian diet – and regular glasses of red wine! Clearly, one example cannot prove a causal connection. However, compared to the vast majority who are meat eaters, it has also been found that life long vegetarians are 22% less likely to visit hospital and, when they are in hospital, have shorter stays. It is clear that a meat-free diet is the best way to live longer.

Which of the following is the **best statement** of the **flaw** in the above argument?

- A A vegetarian diet is a relatively new approach to healthy eating so it is too soon to make a judgement about the benefit of meat-free diets.
- B Evidence of few visits to hospital does not prove that vegetarians are not eating unhealthy, fatty foods, that are known to lead to life threatening illnesses.
- C Human life expectancy increased over the last century despite the low percentage of people who are vegetarians.
- D Evidence of fewer visits to hospital does not prove that vegetarians live longer.

[1]

- 12 It is now estimated that about 120,000 people owe their livelihoods to Private Finance Initiatives (PFIs) which involve the private sector in state sector projects like building schools and hospitals. There are now over 700 schemes in operation, worth a staggering £43 billion. The impressive scale of these initiatives ought to silence the opponents of PFIs who have sought to criticise the efficiency of such projects and guarantee acceptance of this approach as an important way of funding the much needed renewal of our schools, hospitals and railway networks.

Which of the following is the **best statement** of the **flaw** in the above argument?

- A Evidence of large scale investment in PFIs is not necessarily an indication that state money is being used efficiently.
- B The criticisms put forward by PFIs opponents have not been properly explained.
- C The £43 billion spent may be a relatively small sum compared to overall state spending on hospitals and schools.
- D Evidence of large scale investment in PFIs is not evidence that there are not other methods for funding future schools and hospitals.

[1]

- 13 Clearing dead wood from forests is common practice in many countries. However, scientists argue that the rotting wood provides a vital resource, shelter and habitat for thousands of species, as well as returning vital nutrients to the soil. The rare hermit beetle illustrates their point: it lives only in dead wood and will face possible extinction if we continue to remove its natural habitat. Continuing with this approach to forest management will sterilize our forests, reduce the number of animal species and go against the current efforts to maintain diversity.

Which of the following is the **conclusion that can best be drawn** from the above passage?

- A Current forestry management techniques have not considered the plight of the hermit beetle.
- B The actions of the countries that currently clear away dead wood from forest floors are unjustified.
- C Forestry management techniques should change to reflect the current emphasis on maintaining diversity.
- D The current emphasis on maintaining diversity has had no impact on forestry management techniques.

[1]

- 14 Americans are currently against legalising gay marriage by almost two to one. However, these figures obscure significant differences between age groups. Support for gay marriage is highest amongst the under 30s, whilst opposition is greatest in the over 50s. Part of this difference is undoubtedly due to the greater level of education amongst the under 30s. Education opportunities continue to expand and with each new generation there will be more young people in favour of gay marriage. So, it is only a question of time before the majority of Americans favour legalising gay marriages.

Which of the following is an **underlying assumption** of the above argument?

- A The education that most Americans receive promotes legalising gay marriage.
- B Support for gay marriage by people currently under 30 will not change significantly as they become older.
- C The lack of support for gay marriage in people over 50 is caused by the lack of education.
- D The number of gay people wanting to marry will not change significantly in the near future.

[1]



- 15 Many of our museums have exhibits and multi-media presentations that depict and simulate the horrors of public executions. Like the 'real' executions of the past, these presentations have drawn large crowds. As a result of the effort to make museums more entertaining, the presentations have trivialised a gruesome reality and appealed to our less civilised instincts. It is important that our museums should attract visitors, but they must recognise that they have a duty to do more than offer cheap entertainment. A better balance needs to be found that reflects museums' role in civilising society and maintaining historical accuracy, in addition to the need to be educational and entertaining.

Which of the following is the **best statement** of the **main conclusion** of the above argument?

- A Museum exhibits should reflect the full range of a museum's role in society.
- B Helping to civilise society should be the primary role of museum exhibits.
- C The need to attract visitors has led museums to pick more gruesome exhibits.
- D Museums should not trivialise important historical events.

[1]

- 16 Everyone knows that cars contribute to global warming, but less publicity is given to the fact that, world wide, one in three premature deaths is now caused by fatal road accidents involving cars. It follows that ensuring that cars are safer by insisting that all new cars meet the most stringent safety standards is an urgent priority. Although manufacturers are beginning to introduce safety features in response to consumer pressure, progress has been slow. We need to send car manufacturers clear messages and make the highest safety standards a legal requirement.

Which of the following is an **underlying assumption** of the above argument?

- A Adoption of the most stringent safety standards would reduce the number of road accidents.
- B Adoption of stringent safety standards will not cause drivers to drive faster because they feel safer.
- C The majority of fatal accidents are caused by poor driving skills.
- D The majority of fatal road accidents involve cars that do not meet the highest safety standards.

[1]

- 17 Children born by IVF (an assisted fertility treatment) have been found to be not dissimilar to children born normally by the age of 8. However, IVF babies are more likely to be born premature and underweight (often associated with poorer health and mental performance) and are more likely to die soon after birth. There is also no firm evidence on the incidence of rare genetic disorders and little research on children over 14. It is not surprising that many scientists believe that comprehensive research is long overdue, particularly as potential parents need to fully understand the impact of IVF treatments.

Which of the following is the **best statement** of the **main conclusion** of the above argument?

- A There are significant developmental differences between children born naturally and children born by IVF.
- B The possible incidence of rare genetic disorders in babies born by IVF should concern scientists involved in fertility treatment.
- C Potential parents should have a comprehensive understanding of the effects of IVF treatment on children.
- D There is enough evidence to suggest that extensive research into the long term effects of IVF treatments is a priority.

[1]

- 18 Although it is the romantic norm for couples to sleep together, it might be better for our relationships to sleep in separate rooms. Couples who have separate bedrooms have been found to be less likely to break up and have a greater sense of satisfaction in their relationship than those who sleep in the same room. With as many as 2 in 5 marriages ending in divorce, all couples would be wise to consider having separate bedrooms to ensure the continuation of their relationship.

Which of the following is the **best statement** of the **flaw** in the above argument?

- A Couples do not need to worry about sleeping in separate rooms because the majority of marriages do not end in divorce.
- B The argument does not show how sleeping in separate rooms makes relationships more successful.
- C Some people would consider sleeping in separate rooms a sign of the breakdown of a relationship.
- D Sleeping in separate rooms may be only a sign of a lasting relationship rather than the reason for its longevity.

[1]

- 19 Research by doctors has shown that harsh physical punishment of children, particularly when it is inconsistent, is a cause of undesirable criminality, violence and alcohol abuse in later life. There is also a connection between the amount of physical punishment and the extent of these problems. There are clearly many problems associated with physical punishment of children and it is not surprising that many have called for an outright ban. However, whilst it remains legal, there are many parents who will want to use physical punishment as one method of disciplining their children.

Which of the following is a **conclusion that can best be drawn** from the above passage?

- A It would be best if parents who wish to use physical punishment used it only occasionally and in a consistent way.
- B There are several negative outcomes to the use of physical punishment of children.
- C An outright ban on the physical punishment of children would prevent adult alcohol abuse.
- D Physical punishment of children would be the best method of discipline if parents used it only occasionally and in a consistent way.

[1]

- 20 Two new competing blue laser technologies are set to revolutionise DVD playback/recording and will eventually offer consumers improved picture quality, extended storage capacity as well as improved versatility. This competition between the two formats is good news for consumers. The intense rivalry between the electronics companies means that the format that finally becomes dominant will have to outperform the rival blue laser format and is sure to be the highest quality, best value for money DVD playback/recording system available.

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

- A Most consumers rate style and practicality over cost and quality.
- B The VHS video format became dominant in the early 1980s despite the technical superiority of the competing Betamax format.
- C In other areas, such as video cameras, there remain several different formats available to consumers.
- D In past battles over formats, the products produced by the largest electronics corporations have always been dominant.

[1]

Total marks for Section A [20] marks

**Section B: Analysing and evaluating argument**

Read Document 1, 'Degrees of value?', and answer questions 21 to 33.

**21** Identify the **main conclusion** of the argument presented in the passage.

.....

.....

..... [1]

**22** Identify **five reasons** that are given to support the conclusion.

1 .....

.....

2 .....

.....

3 .....

.....

4 .....

.....

5 .....

..... [10]

**23** Identify the **counter argument** within the passage.

Reason .....

..... [2]

Conclusion .....

..... [2]

24 In paragraph 2, the author uses evidence about average graduate starting salaries of £17,000 to suggest that graduates will not be able to pay off debts of up to £15,000 when they leave university. Give **two** possible **weaknesses** in this evidence.

Weakness 1 .....  
.....  
.....  
..... [2]

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

25 In paragraph 3, the author uses the results of research conducted on 16,000 university students.

(a) Give **two** ways in which this evidence strongly supports the author's argument in paragraph 3.

1 .....  
.....  
2 .....  
..... [2]

(b) Suggest **one** way in which this evidence could be challenged to show that it may not offer such strong support to the author's argument in paragraph 3.

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

26 At the end of paragraph 3, the author puts forward figures to suggest that all the checkouts in supermarkets will soon be operated by graduates.

Identify and explain the **flaw** in this suggestion.

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

27 In paragraph 3, the author comments on the increasing numbers of graduates taking further qualifications.

(a) Give **one** explanation for this increase that would fit with the author's argument.

.....  
.....  
..... [1]

(b) Give **two** other possible explanations for this increase.

1 .....  
.....  
2 .....  
..... [2]

28 In paragraph 4, the author links the skills shortage in construction and engineering with degrees not reflecting the needs of the economy.

Identify and explain the **flaw** in this reasoning.

.....  
.....  
.....  
..... [3]

29 In paragraph 5, the author uses evidence about the numbers of students taking management degrees.

What must the author **assume** about the entry requirements of management courses to support his argument that degrees have been devalued?

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

30 In paragraph 6, the author attempts to show how vocational degrees will not raise the status of degrees. Explain **one** way in which the author's attempt is unsuccessful.

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

31 In paragraph 7, the author dismisses the support of principals of further education colleges for plans to allow more institutions to become universities.

Evaluate this dismissal.

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

32 Identify a possible **contradiction** in the passage.

.....  
.....  
..... [1]

33 Identify **one** example of **hypothetical reasoning** used by the author in the passage.

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

Read Document 2, 'What's the point of chemistry?', and answer questions 34 to 37.

34 In paragraph 1, the author uses evidence about chemistry department closures to support the idea that the subject of chemistry is in serious decline. Explain the **weakness** in the author's use of this evidence.

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

35 In paragraph 1, the author gives two explanations for the decline in numbers of students taking chemistry. Pick **one** of these explanations and suggest what you would have to do to **counter** the effect described in the document.

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

36 The author makes use of an **analogy**. Identify the two things that are being compared.

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

37 Evaluate this analogy by giving **two** separate points. You can give points that are strengths or weaknesses.

1 .....

.....

.....

.....

2 .....

.....

..... [4]

Total marks for Section B [50] marks



**Section C: Developing your own arguments**

Questions 38 to 40 refer to Document 1, 'Degrees of value?'

**38** The document suggests that there may be difficult choices ahead for those involved in university education. A brand new university that wanted to ensure that its degrees met the needs of students and employers would be faced with two options.

**(a)** Identify these **two** options.

.....  
..... [1]

**(b)** What would be the advantage of each option?

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

**39** State **two general principles** which support the author's overall argument.

1 .....  
.....  
..... [2]

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





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