

**OXFORD CAMBRIDGE AND RSA EXAMINATIONS
AS GCE**

F502/01

F502/02

CRITICAL THINKING

Assessing and Developing Argument

THURSDAY 4 JUNE 2015: Morning

**DURATION: 1 hour 30 minutes
plus your additional time allowance**

MODIFIED ENLARGED

Candidate forename		Candidate surname	
-------------------------------	--	------------------------------	--

Centre number						Candidate number				
--------------------------	--	--	--	--	--	-----------------------------	--	--	--	--

**Candidates answer Section A on the Answer Sheet and
Sections B and C on the Question Paper.**

OCR SUPPLIED MATERIALS:

**Answer Sheet for Section A Multiple Choice
Resource Booklet (F502/01/02/RB)**

OTHER MATERIALS REQUIRED:

None

READ INSTRUCTIONS OVERLEAF

INSTRUCTIONS TO CANDIDATES

Write your name, centre number and candidate number in the boxes on the first page. 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.

Answer Section A, Questions 1–15, on the Answer Sheet provided. You are advised to spend no more than 20 minutes on Section A.

On completion of Section A move directly on to Sections B and C.

Answer Sections B and C in the spaces provided on the Question Paper.

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.

Additional paper may also be used if necessary.

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 75. Section A comprises 20% of the available marks, Sections B and C comprise 80% of the available marks.

Quality of written communication will be assessed in Section C.

The information contained in the Resource Booklet was accurate when it went to press, but may subsequently have changed. Questions should be answered on the basis that the information is correct.

Any blank pages are indicated.

SECTION A – Multiple choice

Answer ALL the questions in this section using the separate Answer Sheet provided.

You are advised to spend no more than 20 minutes on this section of the paper.

Questions 1 and 2 refer to the following passage:

Some people think that the pace of life is increasing, because of new communication technology that enables work colleagues to contact them at any time. The evidence, however, shows that the pace of life is decreasing. In a large survey carried out in 2004, 35% of respondents said that they ‘always’ felt rushed, whereas in 2012, the corresponding figure was only 28%. New communication technology, far from increasing the pace of life, has reduced the time we spend working, and enabled us to work more efficiently. We should then continue to welcome new communication technology because more time with our family and friends is always desirable.

- 1 Which of the following, if true, would MOST WEAKEN the above argument?**
- (a) New communication technology is the reason why the pace of life is slowing down.**
 - (b) New communication technology might create problems unrelated to workload.**
 - (c) Some people will always object to being contacted by work colleagues.**
 - (d) Working for less time is different from working more efficiently.**

[1]

- 2 Which of the following is an ASSUMPTION of the above argument?**
- (a) A reduction in the time we spend working will increase the time we spend with our family and friends.**
 - (b) It is unacceptable to feel rushed.**
 - (c) People have similar ideas of what it is to be rushed.**
 - (d) The same people were surveyed in 2004 and 2012.**

[1]

Questions 3, 4 and 5 refer to the following passage:

Whilst beneficial to inform the emergency services that a baby is in the car in the event of an accident, 'baby on board' signs must be used more thoughtfully. These signs are a distraction. They can obscure a driver's vision through the car's rear window. According to a confused.com survey of 2000 drivers, 46% of parents regarded them as a hazard. The original purpose of the signs, to encourage other motorists to drive more carefully, is offensive. Drivers should drive with care whoever is on the road or in the car.



- 3 Which of the following is the INTERMEDIATE CONCLUSION of the above argument?
- (a) 'Baby on board signs' must be used more thoughtfully.
 - (b) Drivers should drive with care whoever is on the road or in the car.
 - (c) These signs are a distraction.
 - (d) They can obscure a driver's vision through the car's rear window.

[1]

4 Which of the following is an ALTERNATIVE MAIN CONCLUSION that could best be drawn from the above argument?

- (a) 'Baby on board' signs are physically and mentally dangerous.**
- (b) 'Baby on board' signs are used by selfish and ignorant parents.**
- (c) 'Baby on board' signs should be placed carefully in cars.**
- (d) 'Baby on board' signs should not be used.**

[1]

5 Which of the following, if true, would MOST STRENGTHEN the above argument?

- (a) 5% of those surveyed said they have been involved in an incident due to signs or toys in car windows obscuring their view.**
- (b) 37% of those surveyed have displayed a 'Baby on Board' sign either currently or in the past.**
- (c) 46% of those surveyed admitted being careless in not removing the signs when the baby is not in the car.**
- (d) 80% of those surveyed who use 'Baby on Board' signs think that they improve safety.**

[1]

Questions 6, 7, 8 and 9 refer to the following passage:

There is a surprising connection between the language people speak and their attitude to the future. So-called ‘futures’ languages have a special tense for talking about the future: for example, English-speakers say, ‘I will do that tomorrow’. ‘Futureless’ languages, on the other hand, have no such tense: Mandarin-speakers say, ‘I do that tomorrow’. Futureless language speakers are more likely to save money for their retirement. To demonstrate this, researchers took a large group of futureless language speakers and matched each one to a futures language speaker with a similar income. On average, the futureless language speakers saved 39% more by the time they retired. They were also 24% less likely to smoke. It appears then that futures languages encourage a reckless attitude to the future, because requiring a different tense makes the future seem less real.

- 6 Which of the following is a REASON in the above argument?**
- (a) Futures languages encourage a reckless attitude to the future.**
 - (b) Futureless language speakers are more likely to save money for their retirement.**
 - (c) So-called ‘futures’ languages have a special tense for talking about the future.**
 - (d) There is a surprising connection between the language people speak and their attitude to the future.**

[1]

7 Which of the following, if true, would MOST STRENGTHEN the above argument?

- (a) Of the five countries with the highest savings rates, three speak a futuristic language.**
- (b) Savings rates in the UK and the US, where English is the dominant language, are among the worst in the developed world.**
- (c) The researchers studied the behaviour of over 145 000 people.**
- (d) The speakers compared not only had similar incomes but had the same age, sex, religion, and nationality.**

[1]

8 Which of the following is an ASSUMPTION of the above argument?

- (a) If you don't save for your retirement, then you are bound to experience problems when you retire.**
- (b) Mandarin is a futureless language.**
- (c) Smoking is reckless.**
- (d) The language we speak affects the way we think.**

[1]

- 9 Which of the following is a FLAW in the above argument?**
- (a) conflation**
 - (b) confusing necessary and sufficient conditions**
 - (c) hasty generalisation**
 - (d) slippery slope**

[1]

Questions 10, 11 and 12 refer to the following passage:

With full and partial solar eclipses in March and September, and the alignment of Earth, Venus and Jupiter in July, the year 2015 is a special one for those interested in space exploration. There is also a rise in the number of private companies who are intending to provide space tourism on the cheap, such as Virgin Galactic. Space tourism will get rid of the need for space exploration and research. It is good that governments will no longer need to fund expensive space exploration and research. There are no direct benefits from the research, just by-products like Velcro® and solar panels. It will release money for governments to spend on more worthwhile issues, such as pollution and poverty.

- 10 Which of the following is the MAIN CONCLUSION of the above argument?**
- (a) It is good that governments will no longer need to fund expensive space exploration and research.**
 - (b) It will release money for governments to spend on more worthwhile issues, such as pollution and poverty.**
 - (c) Space tourism will get rid of the need for space exploration and research.**
 - (d) There is also a rise in the number of private companies who are intending to provide space tourism on the cheap.**

[1]

11 Which of the following is a FLAW in the above argument?

- (a) conflation**
- (b) false cause**
- (c) hasty generalisation**
- (d) tu quoque**

[1]

12 Which of the following, if true, would MOST STRENGTHEN the above argument?

- (a) Accurate weather forecasting using data from satellites saves lives, property and money.**
- (b) Despite problems in the economy, the government has increased its funding for space research.**
- (c) Tourists can have a trip to space and a four-minute session of weightlessness for \$200 000.**
- (d) Virgin Galactic encourages researchers to use its spacecraft for free for experiments in space.**

[1]

Questions 13, 14 and 15 refer to the following passage:

We must extend ‘human’ rights to the ‘great apes’ such as chimpanzees and gorillas, as Spain did in 2008. Apes are special because they are so closely related to us. The genes of chimpanzees and humans are so similar that humans could accept a blood transfusion or a kidney from them. All beings which show intelligence should have basic rights. Chimpanzees have been seen to solve complex puzzles better than two-year-old humans. Without protection, the great apes will be caged, experimented upon and endangered.

13 Which of the following is the INTERMEDIATE CONCLUSION of the above argument?

- (a) All beings which show intelligence should have basic rights.**
 - (b) Apes are special.**
 - (c) The genes of chimpanzees and humans are so similar that humans could accept a blood transfusion or a kidney from them.**
 - (d) We must extend ‘human’ rights to the ‘great apes’.**
- [1]**

14 'Humans share 50% of their genes with bananas.'

How does this ADDITIONAL CLAIM, if true, affect the above argument?

- (a) It both strengthens and weakens the argument.**
- (b) It neither strengthens nor weakens the argument.**
- (c) It strengthens the argument.**
- (d) It weakens the argument.**

[1]

15 Which of the following is a FLAW in the above argument?

- (a) ad hominem**
- (b) sweeping generalisation**
- (c) slippery slope**
- (d) two wrongs don't make a right**

[1]

SECTION B – Analysing and evaluating argument

Answer ALL the questions.

Read the passage in the Resource Booklet.

For all parts of Questions 16 and 17, you should use the exact words of the author.

16 State the MAIN CONCLUSION of the argument.

[1]

17 (a) State one INTERMEDIATE CONCLUSION used in paragraphs 1 to 3.

[2]

(b) State one INTERMEDIATE CONCLUSION used in paragraphs 4 to 6.

[2]

(c) State one PRINCIPLE used in paragraphs 1 to 3.

[2]

(d) State one PRINCIPLE used in paragraphs 4 to 6.

[2]

18 Explain TWO WEAKNESSES in the use of the evidence in paragraphs 2 and 3. You must explain the impact of each weakness on the author's reasoning.

Weakness 1

Weakness 2

[6]

19 Explain TWO WEAKNESSES in the reasoning in paragraphs 4 and 5. In your answer you may consider the following: assumptions, flaws, appeals, hypothetical reasoning or other evaluative points. You must EXPLAIN the impact of each weakness on the author's reasoning.

Weakness 1

Weakness 2

[6]

20 In paragraph 6, the author claims:

‘The views of those who want to stick with the current system of grouping students by age can be dismissed because they rely on extreme negative examples of bright but lonely 16-year-olds having to go to university and less able students being forced to repeat year after year.’

Name and explain a flaw in the author’s reasoning. You must explain clearly the impact of this weakness on the author’s reasoning.

(a) Name

_____ [1]

(b) Explanation

_____ [2]

21 In paragraph 6, there is an ANALOGY.

(a) Identify precisely the situations being compared.

[3]

(b) Explain ONE weakness in the analogy. You must explain clearly the impact of this weakness on the author's reasoning.

[3]

SECTION C – Developing your own arguments

Answer ALL the questions.

22 ‘We should never make students repeat a school year.’

Write your own argument to support or challenge this claim.

Marks will be given for a well-structured, sustained and developed argument. You should include:

a main conclusion

an INTERMEDIATE CONCLUSION

at least THREE reasons.

Your argument may also contain other argument elements. You may use information and ideas from the passage, but you must use them to form a new argument. No credit will be given for repeating the arguments in the passage.

[12]

23 'Car insurance should cost the same for everybody.'

(a) Give TWO reasons of your own to SUPPORT this claim. In each instance, you must give only a reason and not add other argument elements.

Reason 1

Reason 2

[4]

(b) Give ONE reason of your own to CHALLENGE this claim. You must give only a reason and not add other argument elements.

[2]

24 'Friendship is more important than achievement.'

Write your own argument to support or challenge this claim.

Marks will be given for a well-structured, sustained and developed argument. You should include:

a main conclusion

a counter-argument and response

at least TWO reasons.

Your argument may also contain other argument elements. You may use information and ideas from the passage, but you must use them to form a new argument. No credit will be given for repeating the arguments in the passage.

[12]

END OF QUESTION PAPER

Copyright Information

OCR is committed to seeking permission to reproduce all third-party content that it uses in its assessment materials. OCR has attempted to identify and contact all copyright holders whose work is used in this paper. To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced in the OCR Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download from our public website (www.ocr.org.uk) after the live examination series.

If OCR has unwittingly failed to correctly acknowledge or clear any third-party content in this assessment material, OCR will be happy to correct its mistake at the earliest possible opportunity.

For queries or further information please contact the Copyright Team, First Floor, 9 Hills Road, Cambridge CB2 1GE.

OCR is part of the Cambridge Assessment Group; Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.

