

General Certificate of Secondary Education June 2014

## **General Studies**

## 47602/1

Unit 2

Wednesday 18 June 2014 9.00 am to 11.00 am

For this paper you must have:

- an objective test answer sheet for Section A
- a question paper/answer book for Sections B and C (enclosed).
- You may use a calculator.

## Time allowed

• 2 hours (for Sections A, B and C)

#### Instructions

• Use black ink or black ball-point pen.

## Section A

- Answer all questions.
- For each question there are four responses. When you have selected the response which you think is the best answer to a question, mark this response on your answer sheet.
- Mark all responses as instructed on your answer sheet. If you wish to change your answer to a
  question, follow the instructions on your answer sheet.
- Do all rough work in this book, not on your answer sheet.

## Section B and Section C

- Answer **all** questions in Section B and **one** question in Section C.
- You must answer the questions in Section B and Section C in the spaces provided in the enclosed question paper/answer book. Do not write outside the box around each page or on blank pages.
- At the end of the examination make sure you hand in **both** your Section A answer sheet and **your** Section B and C question paper/answer book.

## Information

- The maximum mark for this paper is 85. (There are 30 marks for Section A, 25 marks for Section B and 30 marks for Section C.)
- In Sections B and C you will be assessed for Quality of Written Communication.

## Advice

• You are advised to spend up to 40 minutes on Section A and up to 1 hour 20 minutes on Sections B and C.

## 47602/1

## Section A

Each of Questions A1 to A30 is followed by four responses, A, B, C and D. For each question select the best response and mark its letter on the answer sheet.

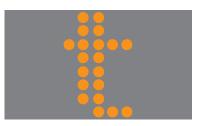
## Questions A1 and A2



© Alamy

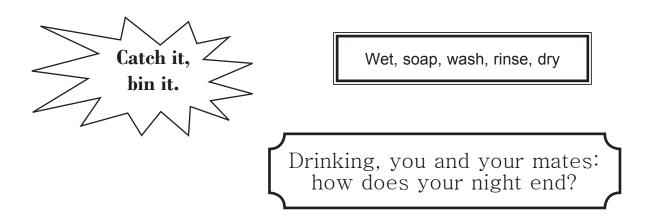
An information display shows letters by illuminating dots in a 5 x 8 rectangle.

## Figure 1



- A1 In Figure 1, what fraction of the possible number of dots is illuminated?
  - $\mathbf{A} \quad \frac{1}{3}$
  - **B**  $\frac{1}{-}$
  - **2** 21
  - **C**  $\frac{21}{40}$
  - **D**  $\frac{11}{20}$
- A2 In Figure 1, if the top half of the board displaying 't' was to break down, how many dots would no longer be visible?
  - **A** 9
  - **B** 10
  - **C** 11
  - **D** 12

## **Questions A3 and A4**



- A3 Each of the above is a title of a pamphlet from the
  - **A** Department for Transport.
  - **B** Department for Education.
  - **C** Department of Health.
  - **D** Department for Environment.
- A4 The Government Department responsible for funding art, theatre and music projects is the
  - A Department for Culture, Media and Sport.
  - **B** Department for Education.
  - **C** Department for International Development.
  - **D** Department for Communities and Local Government.

## Questions A5 and A6



© AFP/Getty

In March 2011, an earthquake measuring 9.0 on the Richter scale occurred 70 km off the coast of Japan. It was the most powerful to hit Japan since records began. It was so powerful, that the north-eastern part of the main Japanese island of Honshu moved 5.3 metres (17 feet) east. It also triggered a tsunami up to 10 metres (33 feet) high that travelled 10 km inland. Infrastructure was damaged and nuclear accidents occured including a meltdown at Fukushima nuclear power plant. In total 125 000 buildings were destroyed and approximately 16 000 people were killed, with 4000 missing.

(Source: © www.earthquake-report.com)

- **A5** Using the information above and the photographs, we can say that most damage in this Japanese earthquake was caused by
  - **A** a weakened infrastructure.
  - **B** a tsunami.
  - **C** nuclear accidents.
  - **D** collapsed buildings.
- A6 Earthquakes occur on a daily basis around the world. However, large earthquakes, such as in 2011 in Japan, create such destruction that they have long term detrimental effects on many other countries around the world.

The most likely effect on the UK of the Japanese earthquake in 2011 was

- A aftershocks.
- **B** higher charitable donations to Japan.
- **C** loss of trade damage to the British economy.
- **D** an increase in radioactivity.

## Questions A7 and A8

The United Nations Convention on the Rights of the Child (UNCRC) is the first legally binding international agreement to include the full range of human rights – civil, cultural, economic, political and social rights. In 1989, world leaders decided that children needed a special convention just for them. The leaders also wanted to make sure that the world recognised that children have human rights too.

- A7 The Convention on the Rights of the Child was created because
  - A children cannot vote.
  - **B** children need greater protection than adults.
  - **C** children should not have responsibilities.
  - **D** children in undeveloped countries need more care.
- **A8** Despite most nations signing up to the UNCRC, it is estimated that across the world, 15 children die every minute.

The biggest factor in the deaths of children worldwide is

- **A** living in an earthquake zone.
- **B** a lack of charity donations.
- **C** being caught up in civil wars.
- **D** disease caused by poor sanitation.

## **Questions A9 and A10**

**A9** An oxymoron is a literary phrase which combines opposite or contradictory words, eg 'old news'.

Which of the following are oxymorons?

- 1 an open secret
- 2 ice cold
- 3 a fine mess
- 4 the living dead

Answer

- A If **1** and **3** only are correct.
- B If 2 and 4 only are correct.
- C If 1, 3 and 4 only are correct.
- D If all are correct.
- A10 Tautology is the needless repetition of an idea using different words. All of the following are examples of this **except** 
  - **A** a pair of twins.
  - **B** a new innovation.
  - **C** he was extremely lucky.
  - **D** he died of a fatal overdose.

## Questions A11 and A12

- "Hate cannot drive out hate; only love can do that."
   Martin Luther King Jnr
- "An eye for an eye only ends up making the whole world blind."
   Attributed to Mohandas 'Mahatma' Gandhi
- "If you kick a stone in anger, you will hurt your own foot." Korean proverb
- **A11** What is the common theme of these quotations?
  - **A** Revenge is destructive.
  - B Peace will live forever.
  - **C** Love is not enough.
  - D All people will die.
- A12 Mahatma Gandhi conducted non-violent protests in India between 1920–1948 against the British because
  - A he disliked British people living in India.
  - **B** many Indians had died in World War 2.
  - **C** he was experienced in civil disobedience.
  - **D** he wanted India to be independent.

## **Questions A13 and A14**



- **A13** In the past, which of the following measures have British farmers taken to increase the amount of land under cultivation?
  - 1 removal of hedgerows
  - 2 draining wetlands
  - **3** avoiding the use of pesticides

#### Answer

- A If 1 only is correct.
- B If 1 and 2 only are correct.
- C If 2 and 3 only are correct.
- D If all are correct.
- A14 Which of the following encourages farmers to be more environmentally friendly?
  - 1 European grants and subsidies
  - 2 public opinion moving to buying more organic food
  - 3 supermarkets demanding they produce cheaper food

#### Answer

- A If 1 only is correct.
- B If 1 and 2 only are correct.
- C If 2 and 3 only are correct.
- D If all are correct.

### Questions A15 and A16

- 1 Do you stay on into the sixth form for the sake of your future career or do you go out to work as soon as possible?
- **2** Do you save money until you can buy something you really like or do you spend it as you go along?
- **3** Do you keep the two pound coin you found in college or do you hand it in so someone might find the owner?
- **4** Do you tell your vegetarian friend that you knew the chips he has just eaten were cooked in animal fat?
- A15 Which of the above statements describes a moral dilemma?

#### Answer

- A if 2 alone is correct.
- **B** if **3** and **4** only are correct.
- **C** if **1**, **3** and **4** are correct.
- D if all are correct.
- A16 Each of the following phrases describes a moral dilemma except
  - A she found herself between a rock and a hard place.
  - **B** he was caught between the devil and the deep blue sea.
  - **C** they did not know which was the quickest route to take.
  - **D** it was hard to choose the lesser of two evils.

## **Questions A17 and A18**

	2008	2009	2010
All commodities	28	-30	26
Metals	-8	-20	48
Beverages*	23	2	14
Food	23	-15	12
Agricultural raw material	-1	-17	33
Energy	40	-37	26

## Export prices of selected products, 2008-10 Annual % change

\* Comprising coffee, cocoa beans and tea

Source: IMF International Financial Statistics

- A17 The commodity which has seen the greatest percentage change in export price during the period is
  - A metals.
  - **B** beverages.
  - **C** food.
  - D energy.

A18 Large variations in export prices can greatly affect people from developing countries because

- A their citizens cannot buy so many imports.
- **B** crops cannot be produced quickly enough.
- **C** poorer producers cannot rely on a steady income.
- D richer countries will stop all orders.

## Questions A19 and A20

A19 19th century Impressionist painting is described as

- including small yet visible brush strokes.
- breaking many of the rules of painting.
- emphasising depiction of light as it changes.
- using ordinary subjects and giving a sense of movement.

Which of the following pictures is in the Impressionist style?



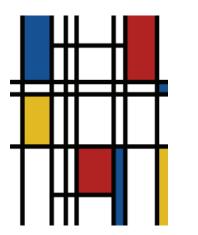
Α



В



D





- A20 17th century Baroque painting is described as
  - expressing great dramatic moments.
  - having rich, deep colours.
  - portraying intense light and dark shadows.

Which of the following pictures is in the Baroque style?

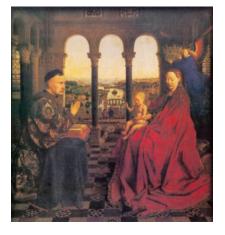








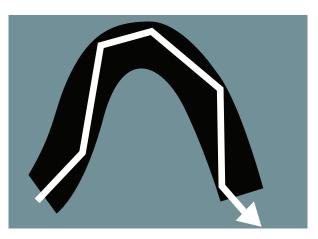




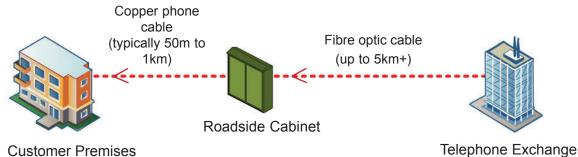
D



## Questions A21 and A22



- A21 The diagram above shows how light moves along a fibre optic cable. Which of the following best describes this process?
  - **A** internal refraction
  - B external refraction
  - **C** internal reflection
  - D external reflection
- A22 Fibre optic cable is being used to upgrade the broadband service across the UK. Most of the cable from the exchange to the customer premises is fibre optic. The last part of the connection is made using traditional copper wiring.

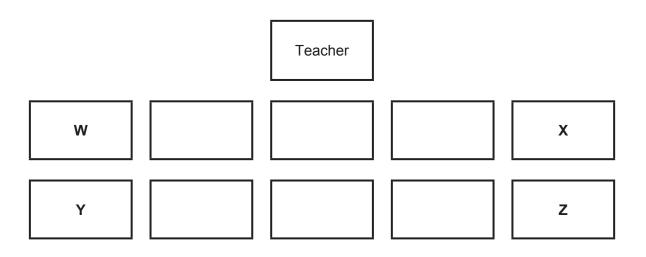


(residential or business)

Which of the following statements best explains this set up?

- A There is large data loss over fibre optic cable: copper wiring results in a large loss of signal over short distances.
- **B** There is no data loss over fibre optic cable: copper wiring results in a large loss of signal over short distances.
- **C** There is large data loss over fibre optic cable: copper wiring results in virtually no loss of signal over short distances.
- **D** There is no data loss over fibre optic cable: copper wiring results in virtually no loss of signal over short distances.

## **Questions A23 and A24**



- A23 In the classroom above, Dominic is sitting directly facing the teacher. Ben is on his left, in front of Zoë. Ayesha is between Zoë and Edward. John is in front of Edward and next to Jacob. Ben is next to Ella. Isaac is sitting next to a girl. Isaac is sitting at the desk marked
  - A W
  - B X
  - **C** Y
  - D Z
- A24 There is a spare desk marked
  - A W
  - B X
  - **C** Y
  - D Z

## Questions A25 and A26

- A25 'Considering people of several different ethnicities, religions, languages and traditions' is a definition of
  - A multiculturalism.
  - **B** inclusion policy.
  - **C** ecumenical churches.
  - **D** the European Union.
- A26 Making allowances and giving encouragement for a particular disability, gender, religion or belief, sexual orientation, age or racial group to receive access to education and training or to be given particular work (where it can be shown that these groups have been disadvantaged in the past or are presently under-represented) is called
  - A prejudice.
  - B cultural diversity.
  - **C** institutional racism.
  - **D** positive action.

## **Questions A27 and A28**

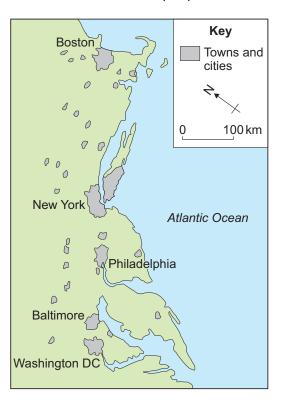
## SOME GREAT AUTHORS

Date (approx.)	Author(s)	Titles	
1815	Jane Austen	Pride and Prejudice, Emma	
1837	Charles Dickens	Oliver Twist, Pickwick Papers	
1847	Emily and Charlotte Brontë	Wuthering Heights, Jane Eyre	
1900	H.G. Wells	The Invisible Man, War of the Worlds	
1945	George Orwell	Animal Farm, 1984	
2000	Ian McEwan	Enduring Love, Atonement	

- **A27** Which author's books helped to expose the poor living conditions in London during the Industrial Revolution?
  - A Jane Austen
  - B Charles Dickens
  - C H.G. Wells
  - D Ian McEwan
- **A28** Which author's most famous book described a world the author feared could exist nearly 40 years after it was written?
  - A Emily Brontë
  - B Charlotte Brontë
  - **C** George Orwell
  - **D** Ian McEwan

#### Questions A29 and A30

In the early 1960s Jean Gottman used the word 'megalopolis' to refer to the area between Boston and Washington DC in the USA. With over 50 million people it is sometimes known as 'BosWash'.



- A29 Using the map above, the most accurate definition of a megalopolis is
  - **A** a great city.
  - **B** any area with more than 10 million people.
  - **C** a continuous urban area.
  - **D** a chain of highly populated adjacent urban areas.
- A30 For somewhere to be called a 'World / Global' city it is likely to be a
  - 1 location for the headquarters of many international companies.
  - 2 centre for international banking and finance.
  - 3 centre for knowledge, information and research and development.
  - 4 hub for cultural interaction and communication.

#### Answer

- A if 1 alone is correct.
- **B** if **1** and **2** only are correct.
- C if 2 and 3 only are correct.
- D if all are correct.

## \_\_\_\_\_

17

## END OF SECTION A

## Turn over for Section B

## Section B

## **Stimulus Material**

Study the following information and answer **all** the questions in Section B which are printed in the enclosed question paper/answer book.

#### Item A

## One in four 16 year-olds predicted to become centenarians.



Society will have to embark on some radical rethinking of everything from pensions to the work-life balance if it is to cope with increasing numbers of people living to be 100 and older, experts have warned.

According to figures released recently by the Office for National Statistics, more than a quarter of children aged 16 and under can expect to see their 100th birthdays.

The statistics revealed that in Britain as many as 11 million people alive now will become centenarians: 3.3 million are aged 16 and under; 5.4 million of them are between 17 and 50; 1.4 million are 51-65, and more than 900,000 are already over 65.

The pensions minister, Steve Webb, said the state pension system had to be made "fair and affordable for future generations if people were likely to be spending more than a third of their lives in retirement." But others have suggested that a far more radical approach is required.

David Sinclair, Head of Policy and Research at the International Longevity Centre, said that while the increase in life expectancy was a huge success, it would come at a price. If the projections are true, then the impact on service provision is huge and as a society we are heading towards huge economic pressures.

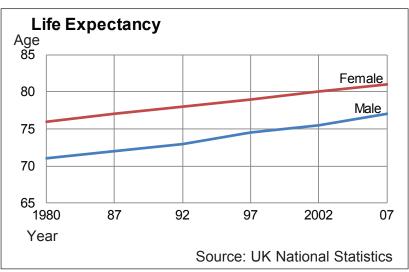
"The pressures on local authorities and central government will have a very, very significant impact - as will the knock-on impact on other ages and other generations. If the older population demands more and more resources, then it has to come from their own wealth and assets - or from someone else."

"The down side is that there is a very real risk that it could generate even more tensions if you end up with a clash for resources between young and old - and that is what we really need to avoid."

Prof. Jane Falkingham, Head of the School of Social Sciences at Southampton University, said the main challenges would be deciding when to have children, when to work and possibly not to retire until we are in our 70s.

## **UK Life Expectancy**

The graph indicates life expectancy within the UK based on changes in the mortality rate. Much of the improvement has been due to the decline in coronary heart disease, previously Britain's biggest killer. Fewer people smoking is attributed as the biggest factor in this change. Historically, gains were mainly due to the reductions in infant mortality rates.



#### Item C

# Stem cell study aims to find out why New York Jews who originated in Eastern Europe live for so long

Scientists will study stem cells of some New York Jews with East European roots in a bid to work out what is the secret to their longevity. Many live to 100, despite the fact that a large number drink, smoke and eat fatty food. Experts are hoping to crack their amazing genetic code.

They are to study almost a dozen people in an attempt to find out how they live such long lives. Research will be performed on the heart, lung, liver and other cells.

The lead scientist told the New York Post: "The reason they live so long is not because they live healthy lives. They don't get heart disease, cancer, nerve degeneration or diabetes."

Lilly Port turned 98 recently. She is one of the Ashkenazi Jews who will be taking part in the study and she claims that she has never been ill.

It will be some time before the results have been carefully dissected and conclusions drawn, but this survey should go some way to unlocking the code to a long life.

Source: © Daily Mail 2011

END OF SECTION B

Turn over for Section C

## Section C

Answer **one** question, **either** Question 5 **or** Question 6. Write your answers in the spaces provided on pages 8 to 19 of the other booklet. There are a total of 30 marks for either question.

## Either

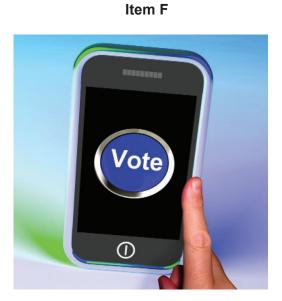
**5** Look at the items below and then answer the following questions.

Item D

Item E







Item G



**5 (a)** Identify **four** roles undertaken by an MP during their term of office.

[4 marks]

**5 (b)** Argue the case **for** increasing the amount of time spent in schools teaching about the world of government and politics.

[8 marks]

5 (c) In the 2010 general election, only 65.1% of adults in the UK actually voted. Young people aged 18–24 were even less likely to vote – only 37% of them turned out on the day.

Discuss what could be done by Government **to increase voter participation** in the UK general elections.

In your answer you may wish to consider: the role of the media, the image of politicians and the voting process, alongside ideas of your own.

[18 marks]

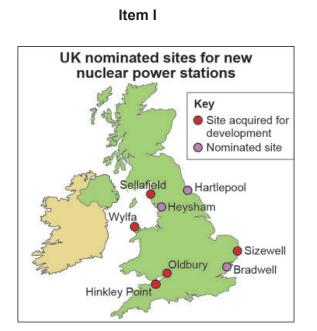


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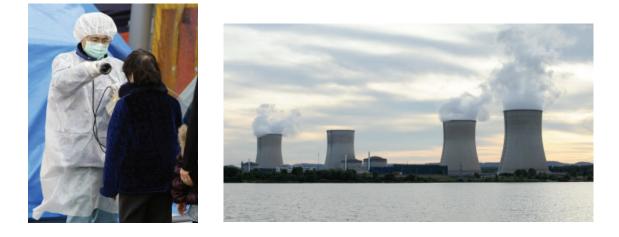
Look at the items below and then answer the following questions.











The government has announced plans for the next generation of UK nuclear plants. Ministers confirmed a list of eight sites it considered suitable.

Due to a looming energy crisis the government has decided to back nuclear power. This will also help to meet global climate change targets.

- 6 (a) Identify four reasons why the development of wind power in the UK has been criticised. [4 marks]
- **6 (b)** Explain **four** issues examined by the government in deciding where to build the nuclear power plants.

## [8 marks]

6 (c) Examine the case for and against the government's decision to extend its nuclear power programme

In your answer you may wish to consider: environmental issues, energy supply and political opinion, alongside ideas of your own.

[18 marks]

## END OF QUESTIONS

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