
GENERAL PAPER

8001/21

Paper 2

October/November 2017

INSERT

1 hour 30 minutes

READ THESE INSTRUCTIONS FIRST

You are required to answer **one** question.

This Insert contains three passages, one for each of Questions 1 to 3. You need to study the passage for the question you have chosen before starting your answer. The time needed to do this is allowed for within the time set for the examination.



This document consists of **7** printed pages and **1** blank page.

Passage 1 Study the information below to answer Question 1 parts (a)–(d).

A television company plans to film a series of 20 episodes about a ghost story set in a haunted building. They pay a small firm to find the most suitable and economical location and property. Eventually three potential properties are recommended to the television company, which is based in the city of Baskerville.

The properties

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A Blackcliffs Castle – a run-down, ancient castle standing on a high cliff-edge by the sea, in a remote but beautiful corner of the country. One wing has been recently renovated into 10 luxury rental apartments.

B Market Square House – a 250-year-old, unused row of five-storey terraced houses, with basements, in central Baskerville.

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C Greenlands Hall – a large country farmhouse set in delightful parkland and farmed fields, 80 km from the city by fast road.

The situation

i The television company has a budget of \$15 million, provided by two investors.

ii One investor has provided \$10 million and also has a 20 per cent share of Greenlands Hall.

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iii All of the filming will be at night.

iv The director's home is near Blackcliffs Castle and he spent 20 years growing up in the area.

v The electricity supply in the Blackcliffs Castle and Greenlands Hall areas has been unreliable of late.

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vi Three months' accommodation needs to be found for 125 people to stay close to the location.

vii Catering needs to feed a maximum of 150 people daily.

viii The script is unfinished as the writer has run out of fresh ideas, but he has assured the director that the right choice of location will inspire him to come up with a thrilling ending! The television company feels confident enough to agree to this as there would be insufficient time to rewrite a totally new script.

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ix The cost to rent each property (per month) is as follows: Blackcliffs Castle \$30 000, Market Square House \$150 000 and Greenlands Hall \$90 000.

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Considerations

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|-----------|--|----|
| 1 | All top quality hotels in the region are within 30 km of Baskerville. | |
| 2 | The leading actress, Leza Monell, has two young children and would like to go home frequently to the city to be with them. | |
| 3 | Internet reception is satisfactory around Blackcliffs Castle, but best in Baskerville. | 35 |
| 4 | It would need \$1 million to make the scenes realistic at Market Square House, \$0.5 million at Greenlands Hall and nothing at Blackcliffs Castle. | |
| 5 | At least eight of the cast have other potential job opportunities in the city. | |
| 6 | Blackcliffs Castle is over 10km away from any village, 28 km from any town and 143 km from any city. | 40 |
| 7 | The television company has budgeted enough money for the hire of two luxury limousines for the entire period. However, a helicopter could be hired instead, for 13 return trips, instead of one of the limousines. | |
| 8 | Three of the principal actors would prefer locally produced, organic farm food. | |
| 9 | The chairman of the local council around Greenlands Hall is a famous retired actor and a personal friend of Leza Monell. | 45 |
| 10 | Market Square House's owner is extremely rich and a cinema enthusiast. | |
| 11 | At the end of each week all the film shot must be rushed to the cutting studio in Baskerville for immediate pre-editing. | |
| 12 | The first scene is expected to need 100 extras (people for crowd scenes) for three days. | 50 |
| 13 | The leading actor, Per Schiller, and at least two of the other main actors, are not happy to stay in anything less than a top quality hotel. | |

Passage 2 Study the information below to answer Question 2 parts (a)–(f)

WHO GETS THE PAINTING?

Jaco	Have you finished now?	
Lawyer	I'm sorry, the reading of wills can be so tedious ...	
Doma	... yes, if you've nothing to gain from them!	
Lawyer	Hmm. There is actually only one thing left and it is ... er ... rather delicate and unorthodox.	5
Nolly	Is it that enormous painting by Tonino Totti?	
Lawyer	Well, yes it is, actually.	
Petra	So who has Daddy left it to? Come on, the suspense is killing me.	
Doma	Yeah, must be worth at least \$3 million by now.	
Lawyer	Actually, your father had it valued just before he died. At least \$4.1 million.	10
Jaco	Wow!	
Petra	Phew! Hope he's splitting it four ways then. That's still a million each.	
Lawyer	Ah, that is the delicate part ...	
Jaco	... how so?	
Lawyer	Your father has instructed that only one of you can have it.	15
Doma	Eh?	
Lawyer	Yes, and the unorthodox part is you have 30 minutes from now to decide what you would do with it, if it were given to you, and then you have to justify your reasons to me.	
Nolly	What? You have to choose one of us?	20
Lawyer	Precisely. Those were his strict instructions in the will.	
Doma	Heavens! Got pen and paper? Let's go!	
Lawyer	Certainly. So please go away somewhere and all come back in 30 minutes. Then we'll each hear one another's bids.	
Nolly	Together? In front of each other?	25
Lawyer	Yes. Sorry again, his wishes.	

30 minutes later

Lawyer	So who would like to speak first?	
Jaco	I will if you like. Simple, I'd like to sell the painting. Now, right now.	
Nolly	Really? And keep the money for yourself?	30
Jaco	[<i>laughing</i>] Oh no, of course not. Give it to two charities – Animal Rescue and Doctors Overseas.	
Lawyer	By all means ask questions, any of you.	
Nolly	Okay. Why, Jaco? That seems most irregular.	
Jaco	As you all know, I have a steady, well-paid job and a comfortable lifestyle so I believe others should share Dad's inheritance.	35
Lawyer	A noble gesture.	
Doma	Yes, but giving away so much of Dad's hard-earned wealth? Sinful, I think.	
Nolly	And if you sell it you won't know where it will go. I, on the other hand, would like to donate it to the Galleri Nationali.	40
Doma	What? Give it away? To some art gallery?	
Nolly	So what? Daddy has left us enough already. Anyway, it's not just 'some art gallery', it's the country's leading gallery. This way the nation would get to keep it.	
Doma	Yeah, you've always had the easy way, haven't you? After all, your husband is loaded. Private schools, luxury cars, jet set holidays ...	45
Nolly	Well, that may be, but our father <i>did</i> have to earn it the hard way, you know, Doma.	
Petra	True, but Nolly, we couldn't possibly give it away. What a waste. I would keep it, let it increase in value, retain it for the family and then decide later.	
Jaco	But no-one would ever see it then.	50

- Nolly Yes, and it's a national treasure, so it's about time it stopped gathering dust.
- Doma Talking of dust, have you seen the state of the family home?
- Jaco Not lately. Remember, Dad left five years ago for the nursing home, so I never went to the house again.
- Doma Well, it's falling to bits. I would like to auction Totti's 'Sleeping Madonna' and use the money to renovate the house. 55
- Petra But why? It's going to be put up for sale soon, isn't it?
- Doma [*sheepishly*] Actually, I'd like to live in it, with permission from you all, of course.
- Jaco What? It's worth millions. No way!
- Doma I'm not so sure. Maybe the painting is worth more? 60
- Lawyer So what *are* you all going to do with the house? You could sell just the house itself now, and then later the grounds separately to put some more houses on. It would be worth even more that way.
- Nolly That way it *would* be worth more than the Totti. Makes the painting not seem so important, then, eh? 65
- Lawyer Certainly puts it into perspective, I must admit.
- Jaco So, who *does* get the painting, Mr Ranieri?
- Lawyer er ...

Passage 3 Study the magazine article below to answer Question 3 parts (a)–(f).

BeiDou

China's fledgling satellite navigation system will soon benefit hundreds of millions of users around the world and provide a cheaper and, in some cases, better alternative to the Global Positioning System (GPS), say industry specialists. The BeiDou network has sixteen navigation satellites hovering over the Asia-Pacific region, but global coverage will be achieved when the network has more than thirty-five satellites. By 2020 China will introduce this world-leading navigation system to more than 100 cities and 200 million users across its own country before spreading it to the rest of the world.

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BeiDou has recognisable advantages over the three other global navigation systems – *GPS* of the United States, *Galileo* of Europe and Russia's *Glonas* – said Cao Jianlin, Vice-Minister of Science and Technology. The most important is short-message communication. The military is already reaping the benefits of the new system even though it has not yet reached full capacity. A naval fleet conducting patrols in the South China Sea have used BeiDou since 2013 to provide positioning, security and protection for its ships.

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BeiDou can provide valuable intelligence for the government, and its success is in part owing to the technology behind the atomic clock. Atomic clocks are a crucial tool in navigation systems as their accuracy and stability are key requisites. Only the United States and a few countries in Europe have mastered this technology to date, and Washington banned its export to China. But Chinese scientists have made a breakthrough themselves in this research so that BeiDou can now achieve a positioning accuracy of 10 metres for public use (but as little as 10 centimetres for military use), comparable to GPS.

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The system began in 2000, originally solely for military use, but China's planned injection of \$300 million into Europe's civilian Compass system in 2003 did not materialise, so instead the Chinese government decided to plough full steam ahead on its own. BeiDou was then tested successfully at Nyingchi Airport in Tibet, sitting in a narrow valley between towering mountains. Without BeiDou it is unlikely planes would be able to operate there safely. In May 2008 when a devastating earthquake hit Sichuan Province and severed communications with the outside world, rescue teams carried BeiDou handsets capable of sending and receiving 120 Chinese characters to communicate with their headquarters. Border guards in Yunnan Province now carry hand-held tracking devices. The system also provides precision in those transactions that require utmost speed and accuracy, such as bank transfers.

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'BeiDou will eventually have broader applications than GPS and will be easier for users to locate other people,' commented Cao Hongjie, vice-president of UniStrong, the global navigation company producing BeiDou. One example is a locating system that can be installed on bicycles or carried by elderly people or children. Users can set a range of activities on the locator, and an alarm will be triggered if the monitored object goes offline. Similarly ships and aircraft can be tracked, hopefully avoiding in the future the pain of mysteriously disappearing craft. Opponents to the system, of course, immediately point fingers towards Big Brother in this brave new world. But in January 2013 UniStrong introduced BeiDou to the Beijing city government at a cost of \$45 million to serve the city's transport and logistics system and help control the flow patterns of an ever-increasing traffic behemoth. Transport companies can also keep better track of their vehicles and can use the short-message function to dispatch drivers more efficiently. Indeed, China's transport ministry decreed that 80% of all coaches, tourist buses and dangerous goods vehicles in nine major provinces had to install BeiDou by 2013.

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However, science observers are warning that excessive government support for BeiDou could make it less competitive, and they suggest that the market should have the final say. Only success in the open market can really prove its worth.

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China has also opened BeiDou for foreign users. The government has produced an interface control document in English describing how to access its functions and services. Unlike other systems BeiDou is totally open and can be used concurrently with other systems. Vice-Minister Cao has invited international companies to develop client-side devices and services based on BeiDou. 'We welcome the competition,' he said.

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