

---

**THINKING SKILLS**

Paper 4 Applied Reasoning

**9694/43**

**October/November 2016**

**1 hour 30 minutes**

No Additional Materials are required.

---

**READ THESE INSTRUCTIONS FIRST**

An answer booklet is provided inside this question paper. You should follow the instructions on the front cover of the answer booklet. If you need additional answer paper ask the invigilator for a continuation booklet.

Answer **all** the questions.

The number of marks is given in brackets [ ] at the end of each question.



---

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

- 1 Study the information below and answer the question that follows.

**Whole building abandoned in cancer scare**

An office building in Australia was abandoned after it became associated with a higher than average incidence of breast cancer. The average incidence of breast cancer in Australia is 60 per 100 000 population per year. However, 12 women from a single building, where only 200 people worked, were diagnosed with breast cancer over a period of 11 years. The causes of the outbreak were tested in a five-month investigation by an independent review panel. They tested for known cancer-causing chemicals in the water supply and air-conditioning as well as building radiation levels and all were within normal safe levels.

Since there was no other obvious explanation, it was decided to abandon the building completely.

Make **five** criticisms of the decision to abandon the building on the basis of the statistics and other information presented in the passage. [5]

Questions 2, 3 and 4 refer to Documents 1 to 5.

- 2 Briefly analyse Trib's argument in Document 1: *Who gets to vote?*, by identifying its main conclusion, intermediate conclusions and counter-assertions. [6]
- 3 Give a critical evaluation of the strength of Trib's argument in Document 1: *Who gets to vote?*, by identifying and explaining any flaws, implicit assumptions and other weaknesses. [9]
- 4 'The age at which people are allowed to vote in elections should be 21.'

Construct a reasoned argument to support **or** challenge this claim, commenting critically on some or all of Documents 1 to 5 and introducing ideas of your own. [30]

## DOCUMENT 1

### Who gets to vote?

People often look forward with excitement to their 16th, 17th, 18th or 21st birthday. Depending on which country you live in, this could be the age at which you can drive, get married, or buy alcohol – at least legally. We do have these laws for a reason – nobody wants to see a toddler behind the wheel of a car – but age should not be used as a criterion in deciding who should select the next government. Our obsession with age has distorted our reasoning in so many areas of life.

Voting is different from other issues and far too important to be based on such an arbitrary measure as a person's age. Drinking, relationships and driving are personal matters but voting affects other people. Governments are responsible for law and order, education, prosperity, international peace and the environment, and these things apply to you, your neighbours and people on the other side of the planet. In deciding who should govern us we need to take into account politics, economics, science and human nature. We do not suddenly develop a full understanding of these things when we wake up on our 18th birthday.

Many politicians have advocated lowering the voting age in an attempt to show that they are 'in touch with young people', but young people care less about voting and more about fashion and music. As a less dangerous alternative to these vote-grabbing measures, many areas have set up 'youth parliaments'. In the town of Middlesbrough in the north of England most of the local schools entered a candidate to be Youth Mayor of Middlesbrough. Unsurprisingly, the candidate from the school that cast the most votes won the election. This just shows that teenagers will vote for the candidate they perceive to be on their team, rather than consider the policies on offer.

Imagine you have applied for an important job, such as running a school, hospital or large corporation. You turn up for the job interview, and there on the panel are two 18-year-olds. Are you going to think, "This company has its finger on the pulse, I'd like to work here"? Or would you make your excuses and leave?

In terms of deciding anything, age is largely meaningless anyway. We might as well separate people based on height. Everyone knows people of the same age with wildly differing abilities, or people of different ages with the same ability. There is no upper age limit for voting. Nobody says "Sorry granddad, take your opinion elsewhere." So there should not be a lower age limit.

Of course there has to be some way of deciding who votes. Babies cannot do it and age is at least easy to apply. Alternative systems are practical, though. A basic questionnaire, similar to an IQ test, would be straightforward to administer. People registering to vote could complete the test, which would include questions on general knowledge as well as cognitive ability. Those who get above a certain score are registered to vote; those who do not can try again next time. That way the people who get to vote are those who deserve to.

### Trib

## DOCUMENT 2

### The minimum legal voting age of 25 years and its consequences in Italy

When asked about the minimum legal voting age in the world, your answer would probably be 18 years. You would be right, as this is the average and most common minimum legal voting age across the globe, with only 27 exceptions where it varies between 16 and 21 years. Only one country goes outside this range: the minimum legal voting age for the Senate in Italy is 25. The political, societal and economic consequences of this unusual constraint in Italy may well affect the whole of Europe.

Out of the 50.3 million 18-year-old and older Italian citizens who are entitled to vote for the Chamber of Deputies, 4.3 million (8%) are not allowed to vote for the Senate. Given the substantially different electorates of the two chambers, the political make-up of the Senate and that of the Chamber of Deputies are often different. This was the case in Italy's elections in February, which have led to the formation of an odd coalition of left, right and middle parties, the 62nd government in just 68 years.

The minimum legal voting age of 25 is both the cause and the consequence of other imbalances in Italy, most often to the disadvantage of the young. In Italy, social spending on the elderly is more than twice as high as in Europe's most successful economies. Italy has the fifth-highest poverty rate among young people. The public debt per young person is €220 000, compared with just €4600 in Estonia. In Italy, the interests of the elderly are well defended by pensioners' lobby groups, but young people do not have a similar voice.

Lastly, many Italian senior citizens have greater power than senior citizens living elsewhere. In Italy, most influential positions in politics and business are often occupied by men who could be the fathers or grandfathers of their counterparts in other nations. The President of the Republic, Giorgio Napolitano, is 88 years old. The former (and perhaps returning) prime minister, Silvio Berlusconi, is almost 77 years old.

With one in two adults under 25 unemployed, it is ironic that the group most in need of political change is without full voting rights. The younger generation deserves a stronger role in politics to secure a better future. Despite decades of active debate surrounding this issue, the desperately needed reforms of Italian institutions are unlikely to be realised in the near future. Lowering the voting age from 25 to 18 is a simple measure that could be done immediately and at zero cost. The resulting intergenerational balance would offer more political stability in Italy, which could, in turn, relax Italy's burden on Europe.

**DOCUMENT 3****Comments on a political blog for young people**

I can work and pay taxes at 17, why shouldn't I get to decide on the laws that apply to me? No taxation without representation!

JP, USA

Being a teenager doesn't mean you are less intelligent than an older person. Your brain starts to shrink after the age of 18 or something like that. What if an old person has a 'senior moment' as they are casting their vote? Old people got the world in the mess it is today so maybe having younger people decide would get us out of it.

TT, Canada

I'm not interested in politics and I don't know much about it. Maybe if I was allowed to vote I would make an effort to find out.

CG, Spain

We've got all these old people making decisions and laws about the internet, TV and social media. We need some people in there who actually understand these things.

PO, Ireland

You can drive when you are 17 and you could, potentially, kill someone in a car accident. In many countries you can join the army. In Germany we can drink beer and wine from the age of 16. How come you are old enough to drink, operate dangerous machines or weapons but not put a cross on a piece of paper that is never going to hurt anyone?

HH, Germany

We have been studying history at school. There was a time when only rich landowners or taxpayers were allowed to vote. And only then if they were men! Women didn't get to vote in Britain until after the First World War but they had to be 30, when it was 21 for men. It's only been 18 since 1970 but the trend seems to be downwards. I think it is inevitable that the voting age will be reduced to 16 soon.

JM, England

16-year-olds can vote in many countries around the world such as Austria, Brazil, Hungary and Ecuador. They also get to vote in state elections in Germany – seen by many as the richest country in Europe.

AS, Scotland

## DOCUMENT 4

### The voting age should be raised, not lowered

To be against lowering the voting age is seen by most progressives as symptomatic of losing one's youth and gaining some grumpiness. So for a relatively young progressive such as myself to be against lowering the voting age – well, I might as well have said, "Let's abolish the vote altogether", going by the looks I have received from many of my colleagues on the Left.

The Electoral Commission releases its report on lowering the voting age today, and it is likely that the Labour Party will come out in favour of it. This is a mistake, for two reasons.

Yes, it is a sad fact that over 40% of those eligible to vote in this country did not exercise their right to do so in the last general election. It is generally agreed that this constitutes some kind of crisis of political engagement. However, by increasing the number of people eligible to vote you merely have the same percentage of a larger number of people not voting, or perhaps an even larger percentage of people not voting.

But the most important reason is that the majority of 16-year-olds are just not responsible enough or mature enough to have the vote. Those who argue against this use the bundling of rights argument: the age of consent is 16; people can get married at 16; people can join the armed forces at 16. Therefore, they think, it follows that 16-year-olds should also have the vote.

Well, we know that just because a person has sex does not mean that they are responsible. Animals have sex, yet we do not propose giving our pets the vote.

To get married in England and Wales, people under 18 require parental consent. How many of us really think a 16-year-old is capable of making a life-changing and legally binding decision such as marriage? Financial institutions certainly do not think so. You must be 18 to sign binding contracts or to own land in your own name. Therefore 16-year-olds, married with parental permission or not, cannot apply for a mortgage or own the house in which they live.

Similarly, under-18s need parental consent to join the armed forces, and in normal circumstances are not deployed on operations until they are 18. In fact, the UN supports raising the age of joining the forces to 18.

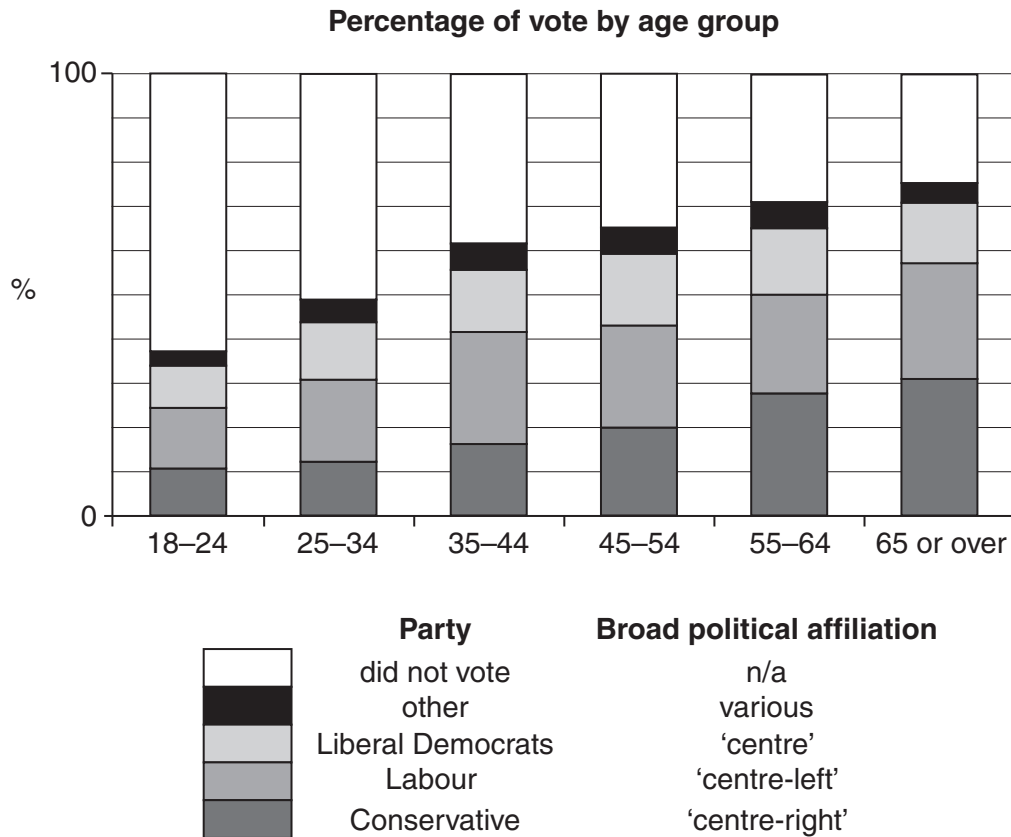
It is during a person's teenage years that they are most likely to be exposed to new ideas and points of view. This is the age at which people should be able to think through their political ideas and change them at will, debate and try out policies without having to act on them and without having to take responsibility for their ideas.

And it is at this age that teenagers are at their most rebellious and negative, a time when they are more keen on making a statement than acting responsibly. Rebellion against your parents' taste in music and their rules is one thing; let's not make that part of the democratic process by which our government is elected.

Voting is a serious matter. It is what makes a democracy, and must be taken seriously by all voters. I don't think most 16-year-olds are mature enough to vote. So perhaps "Should we lower the voting age?" is the wrong question. Instead, it should be "Should we raise it, and if so, to what age?" I am 25. I think this would be a good age.

## DOCUMENT 5

## Statistics from UK general election 2005



Data compiled by a respected polling company on the basis of an 'exit poll'. Voters were asked how they had voted as they were leaving the polling station after voting.

The proportion of those who did not vote in each age group was established by comparing the electoral roll with the number of votes counted.

**BLANK PAGE**

---

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced online in the Cambridge International Examinations Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at [www.cie.org.uk](http://www.cie.org.uk) after the live examination series.

Cambridge International Examinations 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.