

# IELTSFever Academic IELTS Reading Test 156

## Reading Passage 1

You should spend about 20 minutes on Questions 1-13, which are based on the IELTSFever Academic IELTS Reading Test 156 Reading Passage *Tea and the Industrial Revolution* below.

### Tea and the Industrial Revolution

**A Cambridge professor says that a change in drinking habits was the reason for the Industrial Revolution in Britain. Anjana Abuja reports**

**{A}** Alan Macfarlane, professor of anthropological science at King's College, Cambridge has, like other historians, spent decades wrestling with the enigma of the Industrial Revolution. Why did this particular Big Bang - the world-changing birth of industry-happen in Britain? And why did it strike at the end of the 18th century?

**{B}** Macfarlane compares the puzzle to a combination lock. 'There are about 20 different factors and all of them need to be present before the revolution can happen,' he says. For industry to take off, there needs to be the technology and power to drive factories, large urban populations to provide cheap labour, easy transport to move goods around, an affluent middle class willing to buy mass-produced objects, a market-driven economy and a political system that allows this to happen. While this was the case for England, other nations, such as Japan, the Netherlands and France also met some of these criteria but were not industrialising. All these factors must have been necessary. But not sufficient to cause the revolution, says Macfarlane. 'After all, Holland had everything except coal while China also had many of these factors. Most historians are convinced there are one or two missing factors that you need to open the lock.'

**{C}** The missing factors, he proposes, are to be found in almost even kitchen cupboard. Tea and beer, two of the nation's favourite drinks, fuelled the revolution. The antiseptic properties of tannin, the active ingredient in tea, and of hops in beer - plus the fact that both are made with boiled water - allowed urban communities to flourish at close quarters without succumbing to water-borne diseases such as dysentery. The theory sounds eccentric but once he starts to explain the detective work that went into his deduction, the scepticism gives way to wary admiration. Macfarlanes case has been strengthened by support from notable quarters - Roy Porter, the distinguished medical historian, recently wrote a favourable appraisal of his research.

**{D}** Macfarlane had wondered for a long time how the Industrial Revolution came about. Historians had alighted on one interesting factor around the mid-18th century that required explanation. Between about 1650 and 1740, the population in Britain was static. But then there was a burst in population growth. Macfarlane says: 'The infant mortality rate halved in the space

of 20 years, and this happened in both rural areas and cities, and across all classes. People suggested four possible causes. Was there a sudden change in the viruses and bacteria around? Unlikely. Was there a revolution in medical science? But this was a century before Lister's revolution\*. Was there a change in environmental conditions? There were improvements in agriculture that wiped out malaria, but these were small gains. Sanitation did not become widespread until the 19th century. The only option left is food. But the height and weight statistics show a decline. So the food must have got worse. Efforts to explain this sudden reduction in child deaths appeared to draw a blank.'

{E} This population burst seemed to happen at just the right time to provide labour for the Industrial Revolution. 'When you start moving towards an industrial revolution, it is economically efficient to have people living close together,' says Macfarlane. 'But then you get disease, particularly from human waste.' Some digging around in historical records revealed that there was a change in the incidence of water-borne disease at that time, especially dysentery. Macfarlane deduced that whatever the British were drinking must have been important in regulating disease. He says, 'We drank beer. For a long time, the English were protected by the strong antibacterial agent in hops, which were added to help preserve the beer. But in the late 17th century a tax was introduced on malt, the basic ingredient of beer. The poor turned to water and gin and in the 1720s the mortality rate began to rise again. Then it suddenly dropped again. What caused this?'

{F} Macfarlane looked to Japan, which was also developing large cities about the same time, and also had no sanitation. Water-borne diseases had a much looser grip on the Japanese population than those in Britain. Could it be the prevalence of tea in their culture? Macfarlane then noted that the history of tea in Britain provided an extraordinary coincidence of dates. Tea was relatively expensive until Britain started a direct dipper trade with China in the early 18th century. By the 1740s, about the time that infant mortality was dipping, the drink was common. Macfarlane guessed that the fact that water had to be boiled, together with the stomach-purifying properties of tea meant that the breast milk provided by mothers was healthier than it had ever been. No other European nation sipped tea like the British, which, by Macfarlane's logic, pushed these other countries out of contention for the revolution.

{G} But, if tea is a factor in the combination lock, why didn't Japan forge ahead in a tea-soaked industrial revolution of its own? Macfarlane notes that even though 17th-century Japan had large cities, high literacy rates, even a futures market, it had turned its back on the essence of any work-based revolution by giving up labour-saving devices such as animals, afraid that they would put people out of work. So, the nation that we now think of as one of the most technologically advanced entered the 19th century having 'abandoned the wheel'.

## Questions 1-7

*IELTSFever Academic IELTS Reading Test 156 Reading Passage 1 has seven paragraphs, A-G.*

Choose the correct heading for each paragraph from the list of headings below.

Write the correct number, i-ix, in boxes 1-7 on your answer sheet

**List of Headings**

- (i) The search for the reasons for an increase in population
- (ii) Industrialisation and the fear of unemployment
- (iii) The development of cities in Japan 4 The time and place of the Industrial Revolution
- (iv) The time and place of the Industrial Revolution
- (v) The cases of Holland, France and China
- (vi) Changes in drinking habits in Britain
- (vii) Two keys to Britain's industrial revolution
- (viii) Conditions required for industrialisation
- (ix) Comparisons with Japan lead to the answer

- (1) Paragraph A
- (2) Paragraph B
- (3) Paragraph C
- (4) Paragraph D
- (5) Paragraph E
- (6) Paragraph F
- (7) Paragraph G

**Questions 8-13**

Do the following statements agree with the information given in IELTSFever Academic IELTS Reading Test 156 Reading Passage 1?

In boxes 8-13 on your answer sheet, write

TRUE	if the statement is True
FALSE	if the statement is false
NOT GIVEN	If the information is not given in the passage

- (8) China's transport system was not suitable for industry in the 18th century.
- (9) Tea and beer both helped to prevent dysentery in Britain.
- (10) Roy Porter disagrees with Professor Macfarlane's findings.
- (11) After 1740, there was a reduction in population in Britain.
- (12) People in Britain used to make beer at home.
- (13) The tax on malt indirectly caused a rise in the death rate.

## Reading Passage 2

You should spend about 20 minutes on Questions 14-25, which are based on the IELTSFever Academic IELTS Reading Test 156 Reading Passage ILLEGAL DOWNLOADS below.

### ILLEGAL DOWNLOADS

{A}. Downloading music from the internet has become a simple, fast and easy thing to do. The correct legal way of going about it seems to be ignored by those who find it too costly. Illegal music downloads have reached an all-time high, and a recent survey of high school students revealed an estimated 3.6 billion songs being downloaded per month. There are now endless possibilities available to the public where music can be downloaded for free and people are choosing to take this route even though it is illegal. iTunes is one of the most well-known sites where music can be bought legally for just over 51 per track. So when it is this cheap why are people still going to alternative unauthorized sites? Or is the legal route still considered a costly way to go about it?

{B}. If you think that copying music results in simply a slap on the wrist, think twice. Under government law, record companies are entitled to \$750 to \$30,000 per infringement but the law allows the jury to increase that to as much as \$150,000 per song if it finds the infringements were deliberate. The music industry has threatened about 35,000 people with charges of copyright infringement over the past decade. In recent months there have been more cases of music piracy heading to the courts. The industry estimates that more than a hundred of these cases remain unsettled in court, with fewer than 10 offenders actively arguing the case against them. The penalties

for breaching the copyright act differ slightly depending upon whether the infringing is for commercial or private financial gain, with the latter punishment being far milder.

**{C}**. Nonetheless, the potential gain from illegal downloading versus the punitive measures that can be taken is, in cases, poles apart. Recently, an American woman shared 27 illegally downloaded songs with her friends and was ordered to pay \$1.92 million to the record company for deliberate infringement of the companies' copyrights. More recently in America, a 12-year-old girl was sued for downloading music illegally and could face a penalty of 1150,000 per song. The order of payment from the courts to the American woman who shared the 27 tracks with her friends has spurred controversy as the public disagrees with the ordered infringement. The woman shared 27 songs at \$1.99 per song, so should she be liable to pay such a large and impossible amount?

**{D}**. It has also been noted that of all measures that can be taken, fining is actually the least likely method of preventing further abuse. With driving, for example, statistics have shown that those that repeatedly drive over the speed limit are not discouraged by the loss of a sum of money, but this attitude quickly changed when the penalty was possibly losing their driving license or even spending time in prison.

**{E}**. Being a difficult thing to police, the music industry has decided that it would be much easier to go after the internet service provider than to try and track down each individual case. The music industry feels internet piracy has decreased their artists' sales dramatically and is a danger to their business, although, on the other hand, online music sales promote individual tracks to be sold rather than albums, therefore increasing the amount spent by the purchaser.

**{F}**. If there are so many issues around the downloading of music, you might wonder why sales of MP3 players and CD burners are increasing rapidly. The answer is simple – these devices do have a legitimate purpose defined as 'fair use'. You can choose to make your personal back-up copy to use in an MP3 player, or you may visit one of many web sites, like iTunes, which offers music that you pay for as you download. While some may wonder why you would pay for something that can be had for free, those who do prefer to obey the copyright protection laws have purchased over 150 million songs from the iTunes site alone.

**{G}**. Online music sales are a business just like any other and music companies are fighting to salvage their industry. Cary Sherman, the President of RIAA (Recording Industry Association of America), stated that when your product is being regularly stolen, there comes a time when you have to take appropriate action. At the same time, the RIAA has offered amnesty to the illegal downloads who decide to come forward and agree to stop illegally downloading music over the Internet. People who have already been sued are obviously not eligible for amnesty.

**{H}**. When high school students were asked how they felt about the business of downloading illegally from the net they appeared to be divided on the issue. Some seemed to think there was absolutely nothing wrong with it. Others felt that it should be thought of as a serious crime like any other form of theft.

## Questions 14-18

*The IELTSFever Academic IELTS Reading Test 156 reading passage has eight paragraphs, A-H. Which paragraph contains the following information?*

Type the correct letter A-H in boxes 14-18.

- (14). The disparity between fines and costs
- (15). The potential costs of piracy to the defendant
- (16). The number of songs illegally obtained from the internet
- (17). Ambivalence towards the problem
- (18). A reprieve for illegal downloaders

### Questions 19-22

Answer the questions below using **NO MORE THAN THREE WORDS AND/OR A NUMBER** from the IELTSFever Academic IELTS Reading Test 156 passage for each answer.

Write your answers in boxes 19 – 22 on your answer sheet.

- (19). The maximum fine that a record company can impose is \_\_\_\_\_.
- (20). The penalty for breaking copyright laws is harsher when undertaken for \_\_\_\_\_ benefit.
- (21). The music industry targets each \_\_\_\_\_ rather than each specific person downloading illegally.
- (22). Appliances used in connection with illegal downloads are sold under the term \_\_\_\_\_.

### Questions 23-25

Do the following statements agree with the information given in the IELTSFever Academic IELTS Reading Test 156 reading passage?

In boxes 23-25 on your answer sheet write

TRUE	if the statement is True
FALSE	if the statement is false
NOT GIVEN	If the information is not given in the passage

(23). Most people sued for illegal downloading actively fight back against the record company.

(24). Illegal downloading can be difficult to monitor and control.

(25). High school students are responsible for illegally downloading the most music.

## Reading Passage 3

*You should spend about 20 minutes on Questions 27-40, which are based on the IELTSFever Academic IELTS Reading Test 156 Reading Passage Plant Scents below.*

### What's so funny?

John McCrone reviews recent research on humour

The joke comes over the headphones: 'Which side of a dog has the most hair? The left.' No, not funny. Try again. 'Which side of a dog has the most hair? The outside.' Hah! The punchline is silly yet fitting, tempting a smile, even a laugh. Laughter has always struck people as deeply mysterious, perhaps pointless. The writer Arthur Koestler dubbed it the luxury reflex: 'unique in that it serves no apparent biological purpose'.

Theories about humour have an ancient pedigree. Plato expressed the idea that humour is simply a delighted feeling of superiority over others. Kant and Freud felt that joke-telling relies on building up a psychic tension which is safely punctured by the ludicrousness of the punchline. But most modern humour theorists have settled on some version of Aristotle's belief that jokes are based on a reaction to or resolution of incongruity, when the punchline is either a nonsense or, though appearing silly, has a clever second meaning.

Graeme Ritchie, a computational linguist in Edinburgh, studies the linguistic structure of jokes in order to understand not only humour but language understanding and reasoning in machines. He says that while there is no single format for jokes, many revolve around a sudden and surprising conceptual shift. A comedian will present a situation followed by an unexpected interpretation that is also apt.

So even if a punchline sounds silly, the listener can see there is a clever semantic fit and that sudden mental 'Aha!' is the buzz that makes us laugh. Viewed from this angle, humour is just a form of creative insight, a sudden leap to a new perspective.

However, there is another type of laughter, the laughter of social appeasement and it is important to understand this too. Play is a crucial part of development in most young mammals. Rats produce ultrasonic squeaks to prevent their scuffles turning nasty. Chimpanzees have a 'play-face' – a gaping expression accompanied by a panting 'ah, ah' noise. In humans, these signals have mutated into smiles and laughs. Researchers believe social situations, rather than cognitive events such as jokes, trigger these instinctual markers of play or appeasement.

Both social and cognitive types of laughter tap into the same expressive machinery in our brains, the emotion and motor circuits that produce smiles and excited vocalisations. However, if cognitive laughter is the product of more general thought processes, it should result from more expansive brain activity.

Psychologist Vinod Goel investigated humour using the new technique of 'single event' functional magnetic resonance imaging (fMRI). An MRI scanner uses magnetic fields and radio waves to track the changes in oxygenated blood that accompany mental activity. Until recently, MRI scanners needed several minutes of activity and so could not be used to track rapid thought processes such as comprehending a joke. New developments now allow half-second 'snapshots' of all sorts of reasoning and problem-solving activities.

Although Goel felt being inside a brain scanner was hardly the ideal place for appreciating a joke, he found evidence that understanding a joke involves a widespread mental shift. His scans showed that at the beginning of a joke the listener's prefrontal cortex lit up, particularly the right prefrontal believed to be critical for problem solving. But there was also activity in the temporal lobes at the side of the head (consistent with attempts to rouse stored knowledge) and in many other brain areas. Then when the punchline arrived, a new area sprang to life – the orbital prefrontal cortex. This patch of brain tucked behind the orbits of the eyes is associated with evaluating information.

Making a rapid emotional assessment of the events of the moment is an extremely demanding job for the brain, animal or human. Energy and arousal levels may need to be retuned in the blink of an eye. These abrupt changes will produce either positive or negative feelings. The orbital cortex, the region that becomes active in Goel's experiment, seems the best candidate for the site that feeds such feelings into higher-level thought processes, with its close connections to the brain's sub-cortical arousal apparatus and centres of metabolic control.

All warm-blooded animals make constant tiny adjustments in arousal in response to external events, but humans, who have developed a much more complicated internal life as a result of language, respond emotionally not only to their surroundings, but to their own thoughts. Whenever a sought-for answer snaps into place, there is a shudder of pleased recognition. Creative discovery being pleasurable, humans have learned to find ways of milking this natural response. The fact that jokes tap into our general evaluative machinery explains why the line between funny and disgusting, or funny and frightening, can be so fine. Whether a joke gives pleasure or pain depends on a person's outlook.

Humour may be a luxury, but the mechanism behind it is no evolutionary accident. As Peter Derks, a psychologist at William and Mary College in Virginia, says: 'I like to think of humour as the distorted mirror of the mind. It's creative, perceptual, analytical and lingual. If we can figure out how the mind processes humour, then we'll have a pretty good handle on how it works in general.'

## Questions 14-20

*Do the following statements agree with the information given in IELTSFever Academic IELTS Reading Test 156 Reading Passage 2?*

*For questions 26-32, write*



TRUE	if the statement is True
FALSE	if the statement is false
NOT GIVEN	If the information is not given in the passage

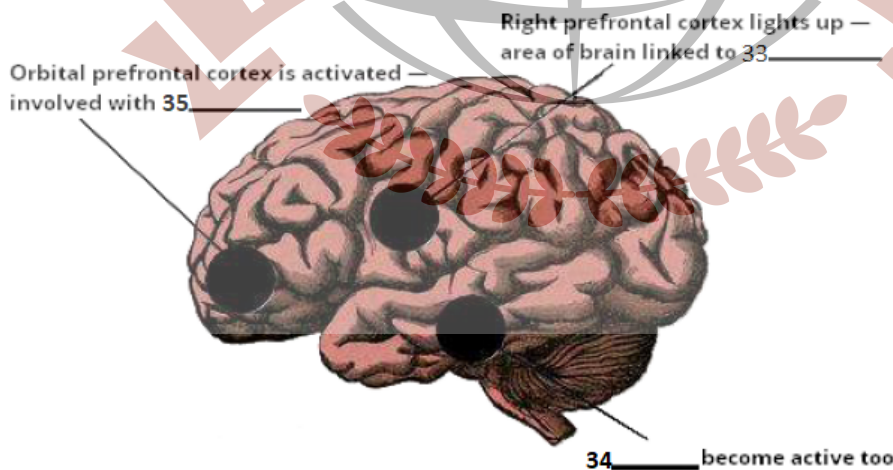
- (26) Arthur Koestler considered laughter biologically important in several ways.
- (27) Plato believed humour to be a sign of above-average intelligence.
- (28) Kant believed that a successful joke involves the controlled release of nervous energy.
- (29) Current thinking on humour has largely ignored Aristotle’s view on the subject.
- (30) Graeme Ritchie’s work links jokes to artificial intelligence.
- (31) Most comedians use personal situations as a source of humour.
- (32) Chimpanzees make particular noises when they are playing.

Questions 33-35

The diagram below shows the areas of the brain activated by jokes.

Label the diagram.

Choose **NO MORE THAN TWO WORDS** from the passage for each answer.




## Questions 36-39

Complete each sentence with the correct ending A-G below.

Write the correct letter A-G next to questions 36-39.

- (36) One of the brain's most difficult tasks is to
- (37) Because of the language they have developed, humans
- (38) Individual responses to humour
- (39) Peter Derks believes that humour

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- (A) react to their own thoughts.
- (B) helped create language in humans.
- (C) respond instantly to whatever is happening.
- (D) may provide valuable information about the operation of the brain.
- (E) cope with difficult situations.
- (F) relate to a person's subjective views.
- (G) led our ancestors to smile and then laugh.