

GENERAL PAPER 8807/02

Paper 2 1 hour 30 minutes

## **READ THESE INSTRUCTIONS FIRST**

Write your C.T. group, index number and name on all the work you hand in. Write in dark blue or black pen.

Do not use staples, paper clips, glue or correction fluid.

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Answer **all** questions.

Note that up to 15 marks out of 50 will be awarded for your use of language.

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

## Passage 1. Mathew Jordan writes about the war against noise.

- The new film "A Quiet Place" is an edge-of-your-seat tale about a family struggling to avoid being heard by monsters with hypersensitive ears. Conditioned by fear, they knew the slightest noise would provoke a violent response and almost certain death. Audiences have come out in droves to dip their toes into its quiet terror, and they are loving it: the film has raked in over US\$100 million at the box office. Like fairy tales and fables that dramatise cultural phobias or anxieties, the movie may be resonating with audiences. For hundreds of years, Western culture has been fanatically at war with noise.
- As long as people have lived in close quarters, they have been complaining about the noises other people make and yearning for quiet. But in the 19<sup>th</sup> century, the problem got exponentially worse. During the Industrial Revolution, people swarmed to cities roaring with factory furnaces and shrieking with train whistles. The cacophony was seen as a torture for intellectual people, and thinkers argued that they needed quietness to do good work. Only stupid people, it seemed, could tolerate noise.
- 3 By the 20<sup>th</sup> century, governments all over the world were engaged in an endless war on noisy people and things. Anti-noise organisations sprang up around the globe in order to combat what the activists considered to be "one of the greatest banes of city life". These groups, counting governors among their members, used their political clout to get "quiet zones" established around hospitals and schools. Violating a quiet zone was punishable by fine, imprisonment or both. After World War I, with ears across Europe still ringing from explosions, the transnational war against noise really took off.

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- 4 Cities all over the world targeted noise technologies, like the Klaxon automobile horn, which was banned in London, Paris and Chicago in the 1920s. In the 1930s, the New York mayor launched a "noiseless nights" campaign aided by sensitive noise-measuring devices stationed throughout the city. Planes were forced to fly higher and slower around populated areas, while factories were required to mitigate the noise they produced.
- Yet, legislating against noisemakers rarely satisfied people's growing demand for quietness, so products and technologies emerged to meet the demands of increasingly noise-sensitive consumers. In the early 20<sup>th</sup> century, sound-muffling curtains, softer floor materials, room dividers and ventilators kept the noise from coming in, while preventing sounds from bothering neighbours or the police. However, no matter how thoughtful the design, unwanted sound continued to be part of everyday life. Unable to suppress noise, disquieted consumers started trying to mask it with wanted sound, buying gadgets like the Sleepmate white noise machine or by playing recorded sounds of nature, from breaking waves to rustling forests, on their stereos. Today, the quietness industry is a booming international market. There are hundreds of digital apps and technologies created by psychoacoustic engineers for consumers, including noise cancellation products with adaptive algorithms that detect outside sounds and produce anti-phase sonic waves, rendering them inaudible. Headphones like Beats by Dr. Dre promise a life "Above the Noise".
- The marketing efforts of these products aim to convince us that noise is intolerable and the only way to be happy is to shut out other people and their unwanted sounds. In a Sony advertisement for their noise cancelling headphones, the company depicts a world in which the consumer exists in a sonic bubble in an eerily empty cityscape. Content as some may feel in their ready-made acoustic cocoons, the more people accustom themselves to life without unwanted sounds from others, the more they become like the family in "A Quiet Place". To hypersensitive ears, the world becomes unbearably noisy and hostile.
- 7 Perhaps, it is this intolerant quietism that is the real monster.

## Passage 2. Neel Patel writes about noise as the next great public health crisis.

- 1 Cities do not just get filthy in the visual sense urban spaces can often be a raging mess of sound. The blaring car horns, the police sirens screaming through the usual waves of traffic, the clatter of passing trains, the constant cacophony of voices rising and falling as a strange melody this deluge of noise can be devastating to the human psyche. As a society, we are becoming much more aware of the noise around us, how excessive noise has detrimental effects on us, and realising how those effects add up.
- By 2100, 84 percent of the world's estimated 10.8 billion people will likely live in cities. That means noise pollution will escalate in those areas and beyond, in surrounding suburbs and rural spaces. It is impossible to overstate how much noise pollution can wreak havoc on human health and safety. High noise levels can exacerbate hypertension, cause insomnia or sleep disturbances, result in hearing loss, and worsen a plethora of other medical conditions. All of these problems can aggravate other health issues by inducing higher levels of stress, which can cascade into worsened immune systems, heart problems, increased anxiety and depression ... These health effects, in turn, can lead to social handicap, reduced productivity, decreased performance in learning, absenteeism in the workplace and school, increased drug use, and accidents. There is enough literature for everyone to agree that noise pollution is a public health hazard.

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- Where is most of this noise coming from? Traffic is the biggest contributor to noise pollution. A diesel truck at 50 feet away, for instance, generates up to 90 decibels of 20 noise. Generally speaking, prolonged exposure to anything over 85 decibels puts someone at risk for temporary or permanent hearing loss.
- But noise pollution is more than just automobiles. Increased development in the big city or in a quaint suburb means construction sites, where heavy machinery creates a fitful, ugly noise that can echo into the placid surrounding areas. People living close to train tracks or airports are bludgeoned with noise (and usually accompanying vibrations and shakes) at all hours. Air traffic can be a major headache. All these factors are exacerbated by poor city planning and community zoning, which fail to mitigate noise for residents.
- We need to do much more to keep future society from turning into a deaf, noise-addled dystopia. More than just awareness, cities need a responsible combination of technological innovations and more radical policy measures, as the problem is bound to get worse. Critics may decry all this spending and attention as premature, particularly on an issue that does not seem immediately hazardous. But solving noise pollution is a preemptive measure that can forestall bigger physiological and learning issues people may develop much later. No one who wants to fight the war against noise should be called intolerant.