

## **PRACTICE 1**

### **The Motor Car**

**A** There are now over 700 million motor vehicles in the world - and the number is rising by more than 40 million each year. The average distance driven by car users is growing too - from 8km a day per person in western Europe in 1965 to 25 km a day in 1995. This dependence on motor vehicles has given rise to major problems, including environmental pollution, depletion of oil resources, traffic congestion and safety.

**B** While emissions from new cars are far less harmful than they used to be, city streets and motorways are becoming more crowded than ever, often with older trucks, buses and taxis which emit excessive levels of smoke and fumes. This concentration of vehicles makes air quality in urban areas unpleasant and sometimes dangerous to breathe. Even Moscow has joined the list of capitals afflicted by congestion and traffic fumes. In Mexico City, vehicle pollution is a major health hazard.

**C** Until a hundred years ago, most journeys were in the 20km range, the distance conveniently accessible by horse. Heavy freight could only be carried by water or rail. Invention of the motor vehicle brought personal mobility to the masses and made rapid freight delivery possible over a much wider area. In the United Kingdom, about 90 per cent of inland freight is carried by road. The world cannot revert to the horse-drawn wagon. Can it avoid being locked into congested and polluting ways of transporting people and goods?

**D** In Europe most cities are still designed for the old modes of transport. Adaptation to the motor car has involved adding ring roads, one-way systems and parking lots. In the United States, more land is assigned to car use than to housing. Urban sprawl means that life without a car is next to impossible. Mass use of motor vehicles has also killed or injured millions of people. Other social effects have been blamed on the car such as alienation and aggressive human behaviour.

**E** A 1993 study by the European Federation for Transport and Environment found that car transport is seven times as costly as rail travel in terms of the external social costs it entails - congestion, accidents, pollution, loss of cropland and natural habitats, depletion of oil resources, and so on. Yet cars easily surpass trains or buses as a flexible and convenient mode of personal transport. It is unrealistic to expect people to give up private cars in favour of mass transit.

**F** Technical solutions can reduce the pollution problem and increase the fuelled efficiency of engines. But fuel consumption and exhaust emissions depend on which cars are preferred by customers and how they are driven. Many people buy larger cars than they need for daily purposes or waste fuel by driving aggressively. Besides, global car use is increasing at a faster rate than the improvement in emissions and fuel efficiency which technology is now making possible.

**G** Some argue that the only long-term solution is to design cities and neighbourhoods so that car journeys are not necessary - all essential services being located within walking distance or easily accessible by public transport. Not only would this save energy and cut carbon dioxide emissions, it would also enhance the quality of community life, putting the emphasis on people instead of cars. Good local government is already bringing this about in some places. But few democratic communities are blessed with the vision – and the capital – to make such profound changes in modern lifestyles.

**H** A more likely scenario seems to be a combination of mass transit systems for travel into and around cities, with small 'low emission' cars for urban use and larger hybrid or lean burn cars for use elsewhere. Electronically tolled highways might be used to ensure that drivers pay charges geared to actual road use. Better integration of transport systems is also highly desirable - and made more feasible by modern computers. But these are solutions for countries which can afford them. In most developing countries, old cars and old technologies continue to predominate.

Questions 14 – 19

Sample Passage 7 has eight paragraphs labelled **A-H**.

Which paragraphs contains the following information?

*Write the correct letter **A-H** in boxes 14-19 on your answer sheet.*

**NB** *You may use any letter more than once.*

- 14** a comparison of past and present transportation methods
- 15** how driving habits contribute to road problems
- 16** the relative merits of cars and public transport
- 17** the writer's prediction on future solutions
- 18** the increasing use of motor vehicles
- 19** the impact of the car on city development

## PRACTICE 2

### **Black rats rainforest invasion 'speeded by deforestation'**

**(A)** Cutting down trees in rainforests facilitates the spread of invasive black rats, a study suggests. The rodents normally avoid mature forests with large trees as they provide little in the way of cover. But researchers, writing in *Biotropica*, say that logging makes rainforests more attractive for rats as fallen wood contains more insects which they eat.

**(B)** Scientists are concerned that the invading black rats will be bad news for native mammals. Sometimes called the ship rat, these rodents have spread around the world over the past 400 years, often causing the extinctions of native species and spreading disease.

**(C)** Much of their notoriety rests on the idea that black rats were the origin of bubonic plague, although recent research casts doubt on that notion. Black rats have usually avoided older forests as they contain large trees which do not provide much in the way of ground level protection. They also tend to have leafy forest floors which are noisy for rats to run through, as they attract predators.

**(D)** This new study examined the idea that logging of trees in rainforests might facilitate the spread of the rodents. The researchers looked at the island of Borneo where large tracts of the natural forest have been degraded.

**(E)** It had been believed that black rats were confined to urban areas in Borneo. To test the idea that they might spread into deforested regions, the scientists trapped rats from four different species - they then attached small spools of cotton thread to their backs and tracked their movements.

**(F)** Across the animals in the study, the researchers found that the black rats had the strongest preference for the type of disturbed habitat associated with logging. The increased amount of fallen wood boosted the amount of insects which the rats eat. The logged forests also have more undergrowth which provides better cover. The researchers believe that black rats favour these small changes far more than related species.

**(G)** "Logging creates micro-environments that black rats love, helping them move in," said study co-author Dr Rob Ewers from Imperial College London. "This could be bad news for native mammals who might not be able to

compete with black rats for food and resources. It's also bad for the forest, as many small mammals are important seed dispersers, helping rainforest plants to grow, and they are also prey for larger animals."

**(H)** The researchers say that the widespread destruction of forests throughout the tropics may well be multiplying the threat from invasive species like black rats. They believe the presence of these rats could pose a significant threat to nesting birds and other small mammals. The scientists say that the way that logging is done can have a big impact on the suitability of the land for the black rats. The more dead wood that is left behind the better the black rats like it. If felled trees were more accurately cleared as well as the vines that connect the trees, the rat's progress might be curbed.

### Questions 1-8

The text has eight paragraphs **A-H**. Which paragraph contains the following information? Write the correct letter, **A-H**, in boxes **1-8** on your answer sheet.

1. A valid concern
2. The experiment
3. More food for rats
4. Possible threats
5. Bad news
6. A place of the research
7. The difference between species
8. The reason for bad reputation