Reading Passage 1

The History of Bicycle

The bicycle was not invented by one individual or in one country. It took nearly 100 years and many people for the modern bicycle to be born. By the end of those 100 years, bicycles had revolutionised the way people travelled from place to place.

Bicycles first appeared in Scotland in the early 1800s, and were called velocipedes. These early bicycles had two wheels but no pedals. The rider sat on a pillow and walked his feet along the ground to move his velocipede forward.

Soon, a French inventor added pedals to the front wheel. Instead of walking their vehicles, riders would use their feet to run the pedals. However, pedalling was hard because velocipedes were very heavy. The frame was made of solid steel tubes, and the wooden wheels were covered with steel. Even so, velocipedes were popular among rich young men who raced them in Paris parks.

Because the velocipedes were so hard to ride, no one thought about using them for transportation. People didn't ride velocipedes to the market or to their jobs. Instead, people thought velocipedes were just toys.

Around 1870, American manufacturers saw that velocipedes were very popular overseas. They began building them, too, but with one difference. They made frames from hollow steel tubes. This alteration made velocipedes considerably lighter, but riders still had to work hard to pedal just a short distance. In addition, the roads were bumpy, which made steering difficult. In fact, most riders preferred indoor tracks where they could rent a velocipede for a small fee and take riding lessons.

Subsequent changes by British engineers altered the wheels to make pedalling more efficient. They saw that when a rider turned the pedals once, the front wheel turned once. If the front wheel was small, the bicycle travelled just a small distance with each turn. They reasoned that if the front wheel were larger, the bicycle would cover a greater distance. So they designed a bicycle with a giant front wheel and a much smaller wheel at the back. Its primary purpose was to help the rider balance. Balancing was hard because the rider had to sit high above the giant front wheel in order to reach the pedals. This meant he was in danger of falling off the bicycle and injuring himself if he lost his balance. Despite this inherent danger, "high-wheelers" became very popular in England.

American manufacturers once again tried to design a better bicycle. Their primary concern was safety. They substituted the giant wheen with a smaller one and put the driving mechanism in a larger rear wheel. It would be impossible for a rider to pedal the rear wheel, so engineers designed a system of foot levers. By pressing first the right one and then the left, the rider moved a long metal bar up and down. This bar turned the rear axle. In turn, this axle propelled the rear wheel. This design minimised the risks associated with riding so more and more people began using bicycles in their daily activities.

The British altered the design one last time. They made the two wheels equal in size and created a mechanism that uses a chain to turn the rear wheel. With this final change, the modern bicycle was born.

Further improvements, such as brakes, rubber tires, and lights were added to make bicycles more comfortable to ride. By 1900, bicycle riding had become very popular with men and women of all ages. Bicycles revolutionised the way people worldwide ride bicycles for transportation, enjoyment, sport, and exercise.

Questions 1-6

Complete the sentences. Choose **NO MORE THAN THREE WORDS** from the passage above for each answer.

The invention of the bicycle was not made by one individual or country, but by the world in general over almost a **1**______ years. This invention was first found in Scotland in the first decades of 1800 and was known as velocipedes. They were not similar to today's bicycles and had two wheels, but they had no **2**______. The rider sat on a pillow and walked his feet along the ground in order to move his velocipede forward. Soon, a French inventor added pedals to the front wheel.

However, because of their difficulty in riding, nobody used them in a daily life, so they were accepted as **3**

_____. In mid 19th century, manufacturers in America found that this invention was popular **4**

______, which encouraged them to produce it, with a small but significant improvement. They implemented 5 ______, which made them much less heavy. Soon, the British inventors found a method that could make pedalling more efficient: turning pedals one by one. They designed a bicycle with a giant front wheel.

However, as the rider had to sit high above the giant front wheel it was too difficult to maintain balance. The safer bicycle was invented by Americans. They designed the rear **6**______, which minimised the danger of falling and getting injured. At last, the British changed the design one last time and added two wheels equal in size and the mechanism that made a chain turn the rear wheel. This is how the example of the modern bicycle was invented.

Questions 7-10

Do the following statements agree with the information given in Reading Passage 1? Write

TRUE if the statement agrees with the information **FALSE** if the statement contradicts the information **NOT GIVEN** if there is no information on this

7 The bicycle was invented by Americans

8 It was too hard to ride the velocipedes because of their heavy weight

9 The alteration of velocipedes made operating them much easier.

10 The changes made by British inventors altered the wheels to make pedalling more efficient

Questions 11-13

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

11 The British inventors concluded that if the front wheel was large in _____, the bicycle would travel comparatively long distance.

12 American engineers designed a system of ______ that was driven by pressing first the right and then the left pedals.

13 The final alteration in creating the modern bicycle was making the two wheels equal in size and using the ______ to spin the rear wheel.

Reading Passage 2

Segway into the Future

Will the electric vehicle known as the Segway alter the way individuals get around? Dean Kamer, the inventor of the Segway, believes that this revolutionary vehicle will someday oust bicycles and automobiles that now crowd our cities. When he introduced the Segway in 2001, he believed it would change our lives.

Although the Segway uses up-to-the-minute technology, it looks very ordinary. The metal framework of the Segway consists of a platform where an individual stands. Attached to the front of the platform is a tall post with handles for the driver to hold on to. On each side of the platform is a wide, rubber wheel. Except for these two wheels, there are no mechanical parts on the Segway. It has no engine, no brakes, no pedal power, no gears, and no steering wheel. Instead, it uses a computer system that imitates the ability of humans to keep their balance.

This system seems to move to the driver's thoughts. For example, when the driver thinks "Go forward", the Segway moves forwards, and when the driver thinks, "Stop", it stops. The Segway is not really responding to the driver's thoughts, but to the tiny changes in balance that the driver makes as he prepares his body to move forward or to stop. For example, when the driver thinks about moving forward, he actually leans slightly forward, and when he thinks of stopping or slowing, he leans slightly back.

The Segway is powered by batteries that allow it to travel about 17 miles on one battery charge. It is designed for short-range, low-speed operation. It has three speed settings. The slowest is the setting for learning, with speeds of up to 6 miles per hour. Next is the sidewalk setting, with speeds of up to 9 miles per hour. The highest setting allows the driver to travel up to 12.5 miles per hour in open, flat areas. At all three speed settings, the Segway can go wherever a person can walk, both indoors and outdoors.

Workers who must walk a lot in their jobs might be the primary users of Segways. For example, police officers could drive Segways to patrol city streets, and mail carriers could drive from house to house to deliver letters and packages. Farmers could quickly inspect distant fields and barns. Security guards could protect neighbourhoods or large buildings.

Any task requiring a lot of walking could be made easier. In cities, shoppers could leave their cars at home and ride Segway from store to store. Also, people who cannot comfortably walk due to age, illness, or injury could minimise their walking but still be able to go many places on a Segway.

Why is it, then, that our job sites, parks, and shopping centres have not been subsequently filled with Segways since they were introduced in 2001? Why hasn't the expected revolution taken place? Studies have shown that Segways can help workers get more done in a shorter time. This saves money. Engineers admire Segways as a technological marvel.

Business, government agencies, and individuals, however, have been unwilling to accept the Segway. Yes, there have been some successes. In a few cities, for example, mail carriers drive Segway on their routes, and police officers patrol on Segways. San Francisco, California, and Florence, Italy, are among several cities in the world that offer tours on Segways for a small fee. Occasionally, you will see golfers riding Segways around golf courses. Throughout the world, more than 150 security agencies use Segways, and China has recently entered the overseas market. These examples are encouraging but can hardly be called a revolution.

The primary reason seems to be that people have an inherent fear of doing something new. They fear others will laugh at them for buying a "toy". They fear losing control of the vehicle. They fear being injured. They fear not

E Engexam.info – free IELTS, CAE, FCE tests with explanations

knowing the rules for using a Segway. They fear making people angry if they ride on the sidewalk. All these fears and others have kept sales low.

The inventor explained why people have been slow to accept the Segway. He said, "We didn't realise that although technology moves very quickly, people's mindset changes very slowly." Perhaps a hundred years from now, millions of people around the world will be riding Segways.

Questions 14-16

Do the following statements agree with the information given in Reading Passage 2?

TRUE if the statement agrees with the information **FALSE** if the statement contradicts the information **NOT GIVEN** if there is no information on this

14 The Segway's frame consists of a platform and a post with handles

15 The driver can alter the direction of the Segway by leaning to the left or right

16 The Segway was primarily designed for students to make their travel much more comfortable

Questions 17-19

Choose the correct letter, A , B, C or D.

17 Why the Segway has been accepted as the most comfortable vehicle for people with moving problems?

A they could leave their cars at home and ride Segway from store to store

 ${\bf B}$ they could drive from house to house to deliver letters and packages

C they could quickly inspect distant fields and barns

 ${\bf D}$ it could minimise their walking

18 Why have people been slow to accept the Segway?

- A it wastes too much money
- **B** people have various kinds of fears
- **C** it is too hard to control
- **D** people don't want to replace the existing vehicles

19 According to the point of view of Dean Kamer, "although technology moves very quickly, people's mindset changes very slowly", what did he mean by this?

A people cannot accept the innovation at once

B because of people worldwide who ride bicycles for transportation, they cannot accept other kinds of vehicles

C people have fears and thus cannot get accustomed to new forms of transport

 ${\bf D}$ the ideas and attitudes with which a person approaches a situation cannot be quickly altered

Questions 20-27

Complete the sentences. Choose **NO MORE THAN THREE WORDS** from the passage for each answer.

Dean Kamer, the inventor of the Segway, believes that this revolutionary vehicle will replace all conveyances we use today, and in 2001 he presented his innovation to the public. Even though the Segway uses up the minimum energy, it has a very **20** ______ appearance. It has no engine, brakes, gears or even **21** ______, however, the attribute it does have is a **22** ______ with wide rubber wheels attached to it. Moreover, this invention is designed for short-term destinations and works with **23** ______. As it minimises the moving time or energy, the Segway particularly fits those people who have an active lifestyle, such as **24** ______, mail carriers, farmers,

security guards and even those who have difficulties because of their **25** ______ or _____. However, the inventor explains why people have difficulties accepting the Segway. He believes that the main reason for this is that people have an innate **26** ______ of innovation and that's why people's **27** ______ always changes gradually; it is too hard to accept the new invention over a short time.

Reading Passage 3

The Meaning of Volunteering

A Volunteering, as some people consider it mistakenly, is a plethora of people from all walks of life as well as activities, but data from the other side of the world suggests otherwise. For example, a survey on who participated in volunteering by the Office for National Statistics (ONS) in the United Kingdom (UK) showed that people in higher-income households are more likely than others to volunteer. In England and Wales, 57% of adults with gross annual household incomes of £75.000 or more have volunteered formally in the 12 months prior to the survey date. They were almost twice as likely to have done so than those living in households with an annual income under £10.000.

B As well as having high household incomes, volunteers also tend to have higher academic qualifications, be in higher socio-economic groups, and be in employment. Among people with a degree or postgraduate qualification, 79 percent had volunteered informally, and 57 percent had volunteered formally in the previous 12 months. For people with no qualifications, the corresponding proportions were 52 percent and 23 percent at all. However, voluntary work is certainly not exclusive to the rich. Does the answer not lie perhaps in the fact that the rich tend to have money to allow them the time to become involved in voluntary work compared to less well-off people?

C A breakdown in the year 2000 of the range of volunteering activities taken from The Australia Bureau of Statistics gives an idea of the scale of activities in which people are typically involved. Eleven sectors are given, ranging from Community and Welfare, which accounted for just over a quarter of the total hours volunteered in Australia, to Law/Justice/Politics with 1.2 percent at the other end of the scale. Other fields included Sports/ Recreation, religious activities and education, following at 21.1 percent, 16.9 and 14.3 percent of the total hours. The data here also seems to point to a cohort of volunteers with expertise and experience.

D The knock-on effect of volunteering on the lives of individuals can be profound. Voluntary work helps foster independence and imparts the ability to deal with different situations, often simultaneously, thus teaching people how to work their way through different systems. It therefore brings people into touch with the real world and, hence, equips them for the future.

E Initially, young adults in their late teens might not seem to have the expertise or knowledge to impart to others that, say, a teacher, agriculturalist, or nurse would have, but they do have many skills that can help others. And in the absence of any particular talent, their energy and enthusiasm can be harnessed for the benefit of their fellow human beings and ultimately themselves. From all this, the gain to any community, no matter how many volunteers are involved, is immeasurable.

F Employers will generally look favourably on people who have shown an ability to work as part of a team. It demonstrates a willingness to learn and an independent spirit, which would be desirable qualities in any employee. So to satisfy employers' demands for experience when applying for work, volunteering can act as a means of gaining experience that might otherwise elude would-be workers and can ultimately lead to paid employment and the desired field.

G But what are the prerequisites for becoming a volunteer? One might immediately think of attributes like kindness, selflessness, strength of character, ability to deal with others, determination, adaptability, flexibility, and a capacity to comprehend the ways of other people. While offering oneself selflessly, working as a volunteer makes further demands on the individual. It requires a strong sense of will, a sense of moral responsibility for one's fellow human beings, and the ability to fit into the ethos of an organisation. But it also requires something that in no way detracts from the valuable work done by volunteers and which may seem at first glance both contradictory and surprising: self-interest.

H Organisations involved in any voluntary work have to be realistic about this. If someone, whatever their age, is going to volunteer and devote their time without money, they do need to receive something from it for themselves. People who are unemployed can use volunteer work as a stepping stone to employment, as a means of finding out whether they really like the field they plan to enter, or as a way to help them find themselves.

I It is tempting to use some form of community work as an alternative to national service or as punishment for petty criminals by making the latter, for example, clean up parks, wash away graffiti, or work with victims of their own or other people. Those may be acceptable, but it does not constitute volunteer work, two cardinal rules of which are the willingness to volunteer without coercion and working unpaid.

Questions 28-33

Reading Passage 3 has nine paragraphs **A-I**. Which paragraph contains the following information? Write the letter, **A-I**, in boxes 28-33 on your Answer Sheet

28 a description of what does not satisfy the criteria for volunteer work
29 the impact of voluntary work on the development of individuals
30 the requirement for both selflessness and self-interest in volunteers
31 various areas in which people volunteer
32 the benefit of voluntary work for the young
33 a mistaken view of volunteering

Questions 34-37

Choose the correct letter A, B, C or D. Write the correct letter in boxes **34-37** on your answer sheet.

34 The ONS survey was done to find out

- A why people undertook volunteering.
- **B** how many people participated in volunteering.
- **C** how many rich people did volunteer work.
- **D** which people were involved in volunteering.

35 The ONS survey found that people with university qualifications were

- A as likely to volunteer as those with no qualifications.
- **B** more likely to volunteer than those with no qualifications.
- C less likely to volunteer than those with no qualifications.

D the only group likely to do formal volunteer work.

36 It is suggested that rich people volunteer as a result of having **A** clearer goals.

- **B** fewer children.
- **C** more spare time.
- **D** greater guilt.

37 Volunteer work benefits people by teaching them how to

- **A** function in a system.
- **B** communicate clearly.
- **C** deal with failure.
- **D** overcome shyness.

Questions 38-40

Complete each sentence with the correct ending, **A-F** below. Write the correct letter, **A-F**, in boxes 38 - 40 on your Answer Sheet

- **38** One of the requirements of being a volunteer is being able to
- **39** Volunteering can be used as a way for the unemployed to
- 40 Employers in general tend to
- A consider workers with volunteer work experience an asset.
- **B** gain a very well paid job.
- C gain access to a job in a field of interest.
- **D** benefit most from volunteer work.
- E understand how people behave.
- **F** want much younger workers.

Answer Keys

IELTS Reading Part 1 — The History of Bicycle

1. hundred/100. 'Nearly' shouldn't be used here, as there is already a definite article that means certainty.

2. pedals. Make sure you use the word in the plural. When used in the singular, the word would give you no points even though you got the general idea right.

3. toys. Last sentence of the last paragraph. Again, if you don't pluralize the word, it won't be scored as correct.

4. overseas. 'Overseas' is one word, not two.

5. hollow steel tubes. You can use up to three words for your answer.

6. axle. Word 'rear' helps find the answer in the seventh paragraph.

7. False. Inventors from Scotland and France are clearly mentioned. Moreover, the very first sentence openly states that it was a collective effort of many people from different countries.

8. True. Third paragraph, third sentence states that it was hard to move the bicycle forward due to its heavy weight. **9. True.** It is said that it was easier to maintain balance, and the whole experience was much less likely to end in an injury.

10. True. First sentence of Paragraph Six confirms this. The sentences that follow explain in detail how the new modification helped to make pedalling more efficient.

11. size. The word 'diameter' would be the wrong answer, as you have to use words from the text, not your own. The word 'size' is mentioned in last but one paragraph.

12. foot levers. Paragraph Seven, fourth sentence. 'Levers' has to be plural.

13. chain. Last but one paragraph mentions this alteration.

IELTS Reading Part 2 — Segway into the Future

14. True. Second paragraph lists the main components of Segway's frame. Although wheels are mentioned too, they are not part of the framework.

15. Not given. There is no information about how Segway turns. Only acceleration and stopping are mentioned.16. Not given. No particular occupation is mentioned as a focus customer for Segway. There are only examples of how Segway could make life easier for people of different professions. Moreover, students are not mentioned at all.

17. D. Answers A, B and C refer to shoppers, mailmen and farmers respectively. Second sentence of paragraph 6 has the answer.

18. B. Second paragraph from the bottom lists all the fears that stop people from choosing Segway over the more conventional modes of transportation such as cars.

19. D. The way a person thinks nowadays doesn't progress as rapidly as technology.

20. ordinary. Second paragraph, first sentence: "it looks very ordinary".

21. steering wheel. Paragraph 2 gives a list of what Segway doesn't have in comparison to conventional vehicles. The steering wheel is the only one omitted.

22. platform. Paragraph 2 mentions two wheels attached to the platform.

23. batteries. Paragraph 4 states that Segway is powered by batteries.

24. police officers. Paragraph 5 enumerates people who stand to benefit from the use of Segway. Police officers

(make sure to use the plural form) are the only ones omitted from the task text.

25. age, injury (in any order). Paragraph Five lists age and injury as reasons for some people to prefer Segway over more conventional walking.

26. fear. Second paragraph from the bottom, first sentence mentions "inherent fear of doing something new".

27. mindset. Last paragraph mentions a mindset that evolves slower in comparison to today's rate of science.

IELTS Reading Part 3 — The Meaning of Volunteering

28. I. This paragraph gives examples of 'volunteering' as means of punishing people. This contradicts the idea of volunteering, as the help has to be provided willingly.

29. D. The paragraph lists the ways in which an individual can gain personal benefits from doing volunteer work. **30.** G. Selflessness is mentioned at the beginning. Self-interest is the last word mentioned in this paragraph. Scanreading helps greatly reduce the amount of time needed to find the answer here.

31. C. A number of different fields of volunteering are mentioned.

32. E. The paragraph starts with 'young adults' and continues to expand on the ways young people can benefit from volunteer work.

33. A. The first paragraph starts with a statement that many people believe to be true but that is false. Then it goes on explaining why exactly it is not correct.

34. D. The survey took place to find out what kind of people take part in volunteering projects. ONS easily stands out from the text, being the most obvious keyword to use here.

35. B. The data from paragraph B makes it easier to answer this question.

36. C. Paragraph B suggests that the rich tend to volunteer more than the poor because they have more free time on their hands. They don't have to earn their living all the time; therefore, they are more likely to volunteer.

37. A. Paragraph D mentions that skills and knowledge acquired during volunteering can help you understand how to function effectively in the system of society.

38. E. Paragraph G, second sentence mentions the ability to understand how people think (end of the sentence). **39.** C. Last sentence of Paragraph F says that volunteering can eventually help you get a job in the field you are interested in.

40. A. Paragraph F mentions how employers favour employees who have shown the ability to work in a team.

Vocabulary

The vocabulary below is meant to help you with the more difficult words. If the word isn't on the list then you are either supposed to know it or it is too specific to be worth learning and you don't have to know it to answer the question. Symbols in brackets mean part of speech (see bottom of the list). Sentences in italics give examples of usage for some more complex words and phrases.

And remember — you are not given a vocabulary list (or a dictionary) at your real exam.

Section 1

Tube (n) - a piece of metal with a round profile that can be either hollow (empty inside) or solid.Bumpy (adj) - with an uneven surface. *Country roads are usually much bumpier than city ones*.Subsequent (adj) - something that follows; something that comes later. *The new government and its subsequent*

reforms helped to improve the economy of the country.

Alter (v) - to change something.

Reason (v) - to figure something out based on the information you have; to believe. *The management figured that if they increased performance bonuses, then the employees would be more involved in their duties.*

Inherent (adj) - if something is inherent, then it is a natural part of something. *The inherent danger of working as a police officer can be attractive to some people looking for a challenge.*

Concern (n) - something you are worried about; something you want to focus on.

Propel (v) - to move something forward.

Section 2

Oust (v) - to replace something because it is better than the thing it replaces. *Manual labour will eventually be completely ousted by automated machines*.

Up-to-the-minute (adj) - the newest and most advanced.

Sidewalk (n) - American English for word pavement - the part of the street dedicated to pedestrians (people who walk rather than drive or cycle).

Lean (v) - to move your body to one side, as if trying to reach for something. *I leaned out of the window to see who was making all the noise outside.*

Subsequently (adv) - (here) as a result, because of.

Section 3

Plethora (n) - a large amount of something, especially if there is more than enough of it. *A plethora of YouTube vloggers, covering the same topic over and over again.*

Gross (adj) - (about money and finance) income figure that does not include the expenses. *The opposite is 'net'*. *His gross salary is \$450 a week, but when he has paid all the bills, he ends up with only \$120 left.*

Prior to (adj) - before. Prior to this day, I had never met our teacher.

Breakdown (n) - (here) a detailed analysis or explanation. *We need a breakdown of the company's expenses in the last five years to find areas where we could reduce spending.*

Cohort (n) - (here) a group of people who have certain similarities.

Knock-on effect - an indirect effect of something. A knock-on effect of having many parks around this part of the *city is that it now attracts many artists that like to perform there.*

Profound (adj) - considerable, very intense. *Your profound knowledge in the area proved to be invaluable in our research.*

Foster (v) - to encourage and welcome the development of something. *One of the biggest responsibilities a teacher has is to foster natural curiosity in his students.*

Simultaneously (adv) - at the same time.

Hence (adv) - because of that, that is why, so; *Today is my birthday, hence the many calls from my relatives.* **Equip** (v) - (here) prepare you for something.

Impart (v) - to share with somebody, especially something like wisdom or knowledge. *Jay's grandmother would often impart her knowledge to us whenever we were around.*

Harness (v) - make use of something, bring it under your control. *Harnessing the forces of nature is one of humanity's bigger aims*.

Elude (v) - when something eludes you, you fail to get or understand it. *The purpose of this meeting eludes me; I*

believe we could have done without it.

Prerequisite (n) - a requirement for something. One of the prerequisites for job candidates at our company is to be fluent in at least one foreign language.

Selflessness (n) - the quality of being selfless - putting other people's interests before yours.

Detract from (v) - to make something seem less valuable or interesting. *The fact that the boss didn't show up today detracts from the significance of the whole opening ceremony.*

Stepping stone - one of the stages on the way to something bigger. *College is a fundamental stepping stone to a good career.*

Tempting (adj) - something that you want to do or have. *It is tempting to spend your weekend just watching silly TV shows and eating ready-made meals.*

Petty criminals - people who commit less serious crimes like littering or being drunk in public.

Coercion (n) - if you coerce somebody to do something, you ask or persuade them to do it, especially if they don't want to.