

MOCK TEST 5

I. LISTENING (5.0 points)

Part 1. Read the statements. Listen and decide whether they are true (T) or false (F).

1. Emily interprets the statistical information she quotes as reflecting the particular appeal of traveling exhibitions.
2. Scott points out that an impressive museum building can distract attention from exhibits.
3. When asked about tour groups, Emily suggests that people should feel prejudiced against them.
4. How most people had few expectations before arriving surprised Scott when he was doing research into why people visited a museum.
5. Emily and Scott agree that virtual museum can't replicate the real-life experience.

Part 2. You are going to listen to a conversation between two students and a tutor. They are talking about essays. Listen and write NO MORE THAN FOUR WORDS and/or A NUMBER for each answer.

6. How many essays do the students have to write? →
7. What percentage does the written exam account for? →
8. How many marks did Carl get for his latest essay? →
9. How many marks did Pamela get for her latest essay? →
10. When was the marking system explained before? →

Part 3. Listen and choose the best option.

11. The purpose of the data was to
A. test people's reaction to different buildings B. collect detailed information on various buildings
C. assess the beauty of different public buildings
12. The initial plan to use a questionnaire was abandoned because
A. it would take too much time to reduce B. the questions were too difficult to write
C. it would take too long for people to complete
13. To make sure people could see the detail in the images better
A. only daylight images were used B. the images were produced in colour
C. black and white images were used
14. Among the people who formed part of the sample were
A. tourists from various places B. office workers during lunch break
C. commuters as they exited stations
15. What was the reason for appointing a leader for the group?
A. to comply with the instructions for the task B. to allocate tasks to the various members
C. to help hold the team together

Part 4. Complete the notes below. Write NO MORE THAN THREE WORDS for each answer.

ENGINEERING FOR SUSTAINABLE DEVELOPMENT

The Greenhouse Project (Himalayan mountain region)

Problem

Short growing season because of high altitude and (16)
Fresh vegetables imported by (17) so they are expensive
Need to use sunlight to prevent local plants from (18)
Previous programmes to provide greenhouses were (19)

New greenhouse meets (20)

Simple and cheap to build
Made mainly from local materials (mud or stone for the walls, wood and grass for the roof)
Building and maintenance done by (21)
Puns solely on (22)
Only families who have a suitable site can own one

Design

Long side faces south
Strong polythene cover
Inner walls are painted (23)

Social benefits

Owners' status is improved
Rural women have greater (24)
More (25) are educated

II. LEXICO-GRAMMAR (2,0 points)

Part 1. For questions 26-40, choose the correct answer A, B, C or D to each of the following questions.

26. _____ that she opened the mystical box sent from Zeus.
A. Her curiosity was such B. So curiosity was she C. Such her curiosity was D. So curious she was

27. It is imperative that the Glee Vietnam _____ immediately.
A. recasting B. recasts C. recast D. be recast

28. It was very sunny in Hanoi, but we had a good time _____.
A. all the best B. all the space C. all the same D. all the more

29. A new generation of performers, _____ those who by now had become a household name, honed their skills before following the same path onto television.
A. no less talented than B. along with talented as
C. together with talented as D. having been more talented than

30. Total color blindness, _____, is a result of a defect in the retina.
A. a rare condition B. that is a rare condition C. is a rare condition D. a rare condition that

31. I don't think it would be wise to try to make Max change his mind about divorcing Narnara. Well, in his place I _____.
A. needn't have married B. would never marry C. must never have married D. would never have married

32. With the economic crisis looming large, many families find it difficult to rear their _____.
A. offspring B. descendant C. lineage D. successor

33. The school authorities _____ the child's unruly behavior on his parents' lack of discipline.
A. attribute B. accuse C. ascribe D. blame

34. With its engine disabled, the finishing vessel was at the _____ of the storm.
A. mercy B. whim C. grip D. control

35. It was felt that the new bonus for increased production would provide an _____ to work overtime.
A. incitement B. incentive C. attraction D. initiative

36. The new teacher was taken advantage of by the students and often had to _____ her authority.
A. assert B. confirm C. inflict D. strike

37. Someone who is out of work and claiming money from the government can be said to be _____.
A. on the pull B. on the dole C. on the razzle D. on the level

38. Dealing with _____ refusal from an employee is easier than dealing with false compliance.
A. an offset B. a remedial C. an agile D. an outright

39. It was decided that the cost of the project would be _____ so it was abandoned.
A. repressive B. prohibitive C. restrictive D. exclusive

40. I must _____ my Spanish before I go to Seville.
A. brush up on B. make up for C. break out of D. cut out for

Part 2. For questions 41-45, write the correct form of each bracketed word in the numbered space provided.

41. The nation is obliged to fulfill its responsibility with its position in the international community. (MEASURE)

42. Then Alvin endured a long, wait for a flight back to New York late that night. (SPIRIT)

43. She had enjoyed the of colleagues, and the mild flirtation which often underlay it. (COMRADE)

44. These side effects have forced researchers to seek alternative medications to, augment or delay traditional therapy. (PLANT)

45. I woke up on the day after my wedding with a feeling of joy. (DESCRIBE)

III. READING (5,0 points)

Part 1. For questions 46-55, read the passage and fill each of the following numbered blanks with ONE suitable word. Write your answers in the corresponding numbered boxes provided.

Traffic Jams are Nothing New

In the age before the motor car, what was travelling in London like? Photographs taken 100 years ago showing packed streets indicate that it was much the (46) as it is now. Commuters who choose the car to get to work probably travel at an average speed of 17 kph from their homes (47) the suburbs to offices in the centre. It is virtually the same speed that they would have traveled at in a horse and carriage a century ago.

As towns and cities grow, (48) does traffic, whether in the form of the horse and carriage (49) the modern motor car. It would seem that, wherever (50) are people who need to go somewhere, they would rather be carried than walk or pedal. The photographs show that, in terms (51) congestion and speed, traffic in London hasn't changed over the past 100 years. London has had traffic jams ever (52) it became a huge city. It is only the vehicles that have changed.

However, although London had traffic congestion long (53) the car came along, the age of the horse produced little unpleasantness apart (54) the congestion. Today, exhaust fumes create dangerous smogs that cause breathing problems for a great many people. Such problems could be reduced (55) many of us avoided jams by using bicycles or taking a brisk walk to school or work.

Part 2. Read the following passage and do the tasks that follow.

CORK

Cork - the thick bark of the cork oak tree (*Quercus suber*) - is a remarkable material. It is tough, elastic, buoyant, and fire-resistant, and suitable for a wide range of purposes. It has also been used for millennia: the ancient Egyptians sealed their sarcophagi (stone coffins) with cork, while the ancient Greeks and Romans used it for anything from beehives to sandals.

And the cork oak itself is an extraordinary tree. Its bark grows up to 20 cm in thickness, insulating the tree like a coat wrapped around the trunk and branches and keeping the inside at a constant 20°C all year round. Developed most probably as a defence against forest fires, the bark of the cork oak has a particular cellular structure - with about 40 million cells per cubic centimetre - that technology has never succeeded in replicating. The cells are filled with air, which is why cork is so buoyant. It also has an elasticity that means you can squash it and watch it spring back to its original size and shape when you release the pressure.

Cork oaks grow in a number of Mediterranean countries, including Portugal, Spain, Italy, Greece and Morocco. They flourish in warm, sunny climates where there is a minimum of 400 millimetres of rain per year, and no more than 800 millimetres. Like grape vines, the trees thrive in poor soil, putting down deep root in search of moisture and nutrients. Southern Portugal's Alentejo region meets all of these requirements, which explains why, by the early 20th century, this region had become the world's largest producer of cork, and why today it accounts for roughly half of all cork production around the world.

Most cork forests are family-owned. Many of these family businesses, and indeed many of the trees themselves, are around 200 years old. Cork production is, above all, an exercise in patience. From the planting of a cork sapling to the first harvest takes 25 years, and a gap of approximately a decade must separate harvests from an individual tree. And for top-quality cork, it's necessary to wait a further 15 or 20 years. You even have to wait for the right kind of summer's day to harvest cork. If the bark is stripped on a day when it's too cold - or when the air is damp - the tree will be damaged.

Cork harvesting is a very specialised profession. No mechanical means of stripping cork bark has been invented, so the job is done by teams of highly skilled workers. First, they make vertical cuts down the bark using small sharp axes, then lever it away in pieces as large as they can manage. The most skilful cork- strippers prise away a semi-circular husk that runs the length of the trunk from just above ground level to the first branches. It is then dried on the ground for about four months, before being taken to factories, where it is boiled to kill any insects that might remain in the cork. Over 60% of cork then goes on to be made into traditional bottle stoppers, with most of the remainder being used in the construction trade. Corkboard and cork tiles are ideal for thermal and acoustic insulation, while granules of cork are used in the manufacture of concrete.

Recent years have seen the end of the virtual monopoly of cork as the material for bottle stoppers, due to concerns about the effect it may have on the contents of the bottle. This is caused by a chemical compound called 2,4,6-trichloroanisole (TCA), which forms through the interaction of plant phenols, chlorine and mould. The tiniest concentrations - as little as three or four parts to a trillion - can spoil the taste of the product contained in the bottle. The result has been a gradual yet steady move first towards plastic stoppers and, more recently, to aluminium screw caps. These substitutes are cheaper to manufacture and, in the case of screw caps, more convenient for the user.

The classic cork stopper does have several advantages, however. Firstly, its traditional image is more in keeping with that of the type of high quality goods with which it has long been associated. Secondly - and very importantly - cork is a sustainable product that can be recycled without difficulty. Moreover, cork forests are a resource which support local biodiversity, and prevent desertification in the regions where they are planted. So, given the current concerns about environmental issues, the future of this ancient material once again looks promising.

Questions 1-5

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

In boxes 1-5 on your answer sheet, write T/F or NG

TRUE (T) if the statement agrees with the information **FALSE (F)** if the statement contradicts the information

NOT GIVEN (NG) if there is no information on this

- 56. The cork oak has the thickest bark of any living tree.
- 57. Scientists have developed a synthetic cork with the same cellular structure as natural cork.
- 58. Individual cork oak trees must be left for 25 years between the first and second harvest.
- 59. Cork bark should be stripped in dry atmospheric conditions.
- 60. The only way to remove the bark from cork oak trees is by hand.

Questions 61-68

Complete the notes below.

Choose **ONE WORD ONLY** from the passage for each answer.

Comparison of aluminium screw caps and cork bottle stoppers

Advantages of aluminium screw caps

- do not affect the (61) of the bottle contents
- are (62) to produce
- are (63) to use

Advantages of cork bottle stoppers

- suit the (64) of quality products
- made from a (65) material
- easily (66)
- cork forests aid (67)
- cork forests stop (68) happening

Part 3.

You are going to read an extract from a novel. Seven paragraphs have been removed from the extract. Choose from the paragraphs A-H the one which fits each gap (69-75). There is one extra paragraph which you do not need to use.

THE PLAY

Briony Tallis was one of those children possessed by a desire to have the world just so. Whereas her big sister's room was a stew of unclosed books, unfolded clothes and unmade bed, Briony's was a shrine to her controlling demon: the model farm spread across a deep window ledge consisted of the usual animals, but all facing one way - towards their owner - as if about to break into song, and even the farmyard hens were neatly corralled. In fact, Briony's was the only tidy upstairs room in the house.

(69)

Another was a passion for secrets: in a prized varnished cabinet, a secret drawer was opened by pushing against the grain of a cleverly turned dovetail joint, and here she kept a locked diary, and a notebook written in a code of her own invention. An old tin box hidden under a removable floorboard beneath her bed contained treasures that dated back four years to her ninth birthday. But all this could not conceal from Briony the simple truth: she had no secrets.

(70)

The unfortunate truth was that nothing in her life was sufficiently interesting or shameful to merit hiding. None of this was particularly an affliction; or rather, it appeared so only in retrospect, once a solution had been found. At the age of eleven she wrote her first story - a foolish affair, imitative of half a dozen folk tales and lacking, she realised later, that vital knowingness about the ways of the world that compels a reader's respect.

(71)

Even writing out the *she says*, the and *thens*, made her wince, and she felt foolish, appearing to know about the emotions of an imaginary being. Self-exposure was inevitable the moment she described a character's weakness; the reader was bound to speculate that she was describing herself.

(72)

Her efforts received encouragement. In fact, the Tallises soon realised that the baby of the family possessed a strange mind and a facility with words. The long afternoons she spent browsing through dictionary and thesaurus made for constructions that were inept, but hauntingly so. Briony was encouraged to read her stories aloud in the library and it surprised her parents and older sister to hear their quiet girl perform so boldly, unapologetically demanding her family's total attention as she cast her narrative spell. Even without their praise and obvious pleasure, Briony could not have been held back from her writing.

(73)

If this was supposed to be a joke, Briony ignored it. She was on course now, and had found satisfaction on other levels; writing stories not only involved secrecy, it also gave her all the pleasures of miniaturisation.

(74)

Her passion for tidiness was also satisfied, for the unruly aspects of our existence could be made just so. A crisis in a heroine's life could be made to coincide with hailstones and thunder, whereas nuptials were generally blessed with good light and soft breezes. A love of order also shaped the principles of justice, with death and marriage the main engines of housekeeping, the former being set aside exclusively for the morally dubious, the latter a reward withheld until the final page.

The Trials of Arabella, the play Briony wrote for her brother's homecoming, was her first excursion into drama. She had found the transition quite effortless. It was a relief not to be writing out the *she says*, or describing the weather or the onset of spring or her heroine's face - beauty, she had discovered, occupied a narrow band.

(75)

The play may have been a melodrama, but its author had yet to hear the term. The innocent intensity with which Briony set about the project made her particularly vulnerable to failure. She could easily have welcomed her brother with another of her stories, but it was the news that her cousins were coming to stay that had prompted this leap into a new form.

A

An entire world could be created in five pages, and one that was more pleasing than a model farm. The childhood of a spoiled prince could be framed within half a page, a moonlit dash through sleepy villages was one rhythmically emphatic sentence, falling in love could be achieved in a single word - a *glance*. The pages of a recently finished story seemed to vibrate in her hand with all the life they contained.

B

A room near Briony's had been dusted down, new curtains had been hung and furniture carried in from other rooms. Normally, she would have been involved in these preparations, but they coincided with her two-day writing bout.

C

Only when a story was finished, all fates resolved and the whole matter sealed off at both ends so it resembled, at least in this one respect, every other finished story in the world, could she feel immune, and ready to bind the chapters with string, paint or draw the cover, and take the finished work to show to her mother or her father.

D

In any case, she was discovering, as had many writers before her, that not all recognition is helpful. Cecilia's enthusiasm, for example, seemed a little overstated, tainted with condescension perhaps, and intrusive too; her big sister wanted each bound story catalogued and placed on the library shelves, between Rabindranath Tagore and Quintus Tertullian.

E

What was unpleasant and distasteful, on the other hand, had infinite variation. A universe reduced to what was said in it was tidiness indeed, almost to the point of nullity, and to compensate, every utterance was delivered at the extremity of some feeling or other, in the service of which the exclamation mark was indispensable.

F

But this early attempt showed her that the imagination itself was a source of secrets: while she was writing a story, no one could be told. Pretending in words was too tentative, too vulnerable, too embarrassing to let anyone know.

G

Her straight-backed dolls in their many-roomed mansion appeared to be under strict instructions not to touch the walls; the various thumb-sized figures to be found standing about her dressing table suggested by their even ranks and spacing a citizen's army awaiting orders. This taste for the miniature was just one aspect of an orderly spirit.

H

Her wish for a harmonious, organised world denied her the reckless possibilities of wrongdoing. Mayhem and destruction were too chaotic for her tastes, and she did not have it in her to be cruel. Her effective status as an only child, as well as the relative isolation of the Tallis house, kept her, at least during the long summer holidays, from girlish intrigues with friends.

Part 4.

For questions 76-85, read the following passage and choose the answer that fits best according to the text.

THE LONG-TERM STABILITY OF ECOSYSTEMS

Plant communities assemble themselves flexibly, and their **particular** structure depends on the specific history of the area. Ecologists use the term "succession" to refer to the changes that happen in plant communities and ecosystems over time. The first community in a succession is called a pioneer community, while the long-lived community at the end of succession is called a climax community. Pioneer and successional plant communities are said to change over periods from 1 to 500 years. These changes- in plant numbers and the mix of species- are cumulative. Climax communities themselves change but over periods of time greater than about 500 years.

An ecologist who studies a pond today may well find it relatively unchanged in a year's time. Individual fish may be replaced, but the number of fish will tend to be the same from one year to the next. We can say that the properties of an ecosystem are more stable than the individual organisms that compose the ecosystem.

At one time, ecologists believed that species diversity made ecosystems stable. They believed that the greater the diversity the more stable the ecosystem. Support for this idea came from the observation that long-lasting climax communities usually have more complex food webs and more species diversity than pioneer communities. Ecologists concluded that the apparent stability of climax ecosystems depended on their complexity. To take an extreme example, farmlands dominated by a single crop are so unstable that one year of bad weather or the invasion of a single pest can destroy the entire crop. In contrast, a complex climax community, such as a temperate forest, will tolerate considerable damage from weather or pests.

The question of ecosystem stability is complicated, however. The first problem is that ecologists do not all agree what "stability" means. Stability can be defined as simply lack of change. In that case, the climax community would be considered the most stable, since, by definition, it changes the least over time. Alternatively, stability can be defined as the speed with which an ecosystem returns to a particular form following a major disturbance, such as a fire. This kind of stability is also called resilience. In that case, climax communities would be the most fragile and the least stable, since they can require hundreds of years to return to the climax state.

Even the kind of stability defined as simple lack of change is not always associated with maximum diversity. At least in temperate zones, maximum diversity is often found in mid-successional stages, not in the climax community. Once a redwood forest matures, for example, the kinds of species and the number of individuals growing on the forest floor are reduced. In general, diversity, by itself, does not ensure stability. Mathematical models of ecosystems likewise suggest that diversity does not **guarantee** ecosystem stability - just the opposite, in fact. A more complicated system is, in general, more likely than a simple system to break down. (A fifteen-speed racing bicycle is more likely to break down than a child's tricycle.)

Ecologists are especially interested in knowing what factors contribute to the resilience of communities because climax communities all over the world are being severely damaged or destroyed by human activities. The destruction caused by the volcanic explosion of Mount St. Helens, in the northwestern United States, for example, **pales** in comparison to the destruction caused by humans. We need to know what aspects of a community are most important to the community's resistance to destruction, as well as its recovery.

Many ecologists now think that the relative long-term stability of climax communities comes not from diversity but from the "patchiness" of the environment; an environment that varies from place to place supports more kinds of organisms than an environment that is uniform. A local population that goes extinct is quickly replaced by immigrants from an **adjacent** community. Even if the new population is of a different species, it can approximately fill the niche vacated by the extinct population and keep the food web intact.

76. According to paragraph 1, which of the following is NOT true of climax communities?

- A. The numbers of plants in them and the mix of species do not change.
- B. They occur at the end of a succession.
- C. They last longer than any other type of community.
- D. They remain stable for at least 500 years at a time.

77. According to paragraph 2, which of the following principles of ecosystems can be learned by studying a pond?

- A. Ecosystem properties change more slowly than individuals in the system.
- B. The stability of an ecosystem tends to change as individuals are replaced.
- C. Individual organisms are stable from one year to the next.
- D. A change in the numbers of an organism does not affect an ecosystem's properties.

78. According to paragraph 3, ecologists once believed that which of the following illustrated the most stable ecosystems?

- A. Single-crop farmlands
- B. Successional plant communities
- C. Pioneer communities
- D. Climax communities

79. According to paragraph 4, why is the question of ecosystem stability complicated?

- A. There are many different answers to ecological questions.
- B. The exact meaning of the word "stability" is debated by ecologists.
- C. The reasons for ecosystem change are not always clear.
- D. Ecologists often confuse the word "stability" with the word "resilience."

80. According to paragraph 4, which of the following is true of climax communities?

- A. They are stable because they recover quickly after major disturbances.
- B. They can be considered both the most and the least stable communities.
- C. They are the most resilient communities because they change the least over time.
- D. They are more resilient than pioneer communities.

81. Which of the following can be inferred from paragraph 5 about redwood forests?

- A. They are found in temperate zones.
- B. They have reduced diversity during mid-successional stages.
- C. They become less stable as they mature.
- D. They support many species when they reach climax.

82. In paragraph 5, why does the author provide the information that "**A fifteen-speed racing bicycle is more likely to break down than a child's tricycle**"?

- A. To illustrate a general principle about the stability of systems by using an everyday example
- B. To demonstrate that an understanding of stability in ecosystems can be applied to help understand stability in other situations
- C. To make a comparison that supports the claim that, in general, stability increases with diversity
- D. To provide an example that contradicts mathematical models of ecosystems

83. The word "**pales**" in the passage is closest in meaning to _____

- A. is common
- B. increases proportionally
- C. differs
- D. loses significance

84. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.

- A. A patchy environment is thought to increase stability because it is able to support a wide variety of organisms.
- B. Ecologists now think that the stability of an environment is a result of diversity rather than patchiness.
- C. Patchy environments that vary from place to place do not often have high species diversity.
- D. Uniform environments cannot be climax communities because they do not support as many types of organisms as patchy environments.

85. The word "**adjacent**" in the passage is closest in meaning to _____

- A. foreign
- B. stable
- C. neighboring
- D. fluid

Part 5.

You are going to read a magazine article about members of a part-time drama club called The Globe Players. For questions 86-95, choose from the people (A-F).

Which person or people

mentions joining because of loneliness?	86. _____
had some theatre experience before joining The Globe Players?	87. _____
has a high opinion of The Globe Players?	88. _____
joined to keep busy?	89. _____
have difficulty finding suitable roles?	90. _____
enjoys being with people who have different ideas?	91. _____
thinks that acting is out of character for them?	92. _____
mentions the publicity they sometimes receive?	93. _____
believes the other members are like them in character?	94. _____
feel that not everyone approves of them acting?	95. _____

The Globe Players

A. Christina Howard

When I moved to this area the children were quite little, and I wondered how I was ever going to meet people. Then I met Susanna Dickster, who was the organiser of The Globe Players, and she said, 'Do you want to join?' And I said, 'Well, yes, all right.' They appeared to be incredibly extrovert people, which I suppose I am by nature too. For three years I was the theatre manager. I think I make a better manager than an actress, but I did have a dream role in a play the year before last.

B. Eric Plumber

I do about one play a year, just out of interest. But I'm a quiet sort of chap, not one of the world's extroverts, and yet here I am in an extrovert field, doing theatrical activities. There is a sort of magic to the theatre. There's a sense of togetherness with the rest of the actors in the cast. When a play is over, on the last night, there's a combination of anticlimax and relief. It's rather nice to think you will be able to do all the things that you weren't able to do when the play was on. But there's also a sense of loss, so you look forward to the next play.

C. Claura Goldcrest

I have done some stage management for productions at my school and when I saw the play The Globe Players were going to do next, I thought I'd try for it. Usually there are not a lot of parts for people my age, so when there was this opportunity, I went along and auditioned. It went all right, and I got the part. Lots of my friends just hang around with people of their own age, but there are people at The Globe Players who are quite old, and I get talking to them about all sorts of things. It's amazing how our views differ, but we have lovely conversations.

D. Clare MacDonald

When I was at school, I used to think I'd rather like to go on stage. But then other things came along. One job I did was as a stewardess for an airline. That's like giving a performance. I left the airline and joined The Globe Players. My husband will always come to performances, but he does tend to moan a bit because he feels it takes up too much time. As a club I feel we are very professional. I do about one play a year, which is quite enough for me. Obviously, there are fewer parts as you get older, particularly for women: one can no longer play Juliet or other young parts, which I feel sad about.

E. Robin Wilson

I work behind the scenes with The Globe Players because it's always a challenge. For instance, the last play I did needed a full-sized, working swimming pool. Well, most amateur theatres have a bucket of water in the wings. But our director said, 'I want a real swimming pool on that set. Go away and do it.' It was a real challenge for me. However, we did it. We got more reviews than we usually do because, of course, it was something different. And quite a lot of amateur societies came to see if they could do it - and a lot of them decided they couldn't.

F. Mike James

I was a science teacher and took early retirement from my college. After twenty-four years it was a bit hard and I got rather bored. During that time it was good to have the drama group. It takes your mind off things; you can't act and worry about something else. But it's very disruptive to a family - my wife will tell you that. Teaching in a way is like being on stage. When you go into a class you may not be feeling very well, you are not necessarily very keen on the subject you are teaching - the whole thing adds up to a no-no. But you go in, you are enthusiastic and you try to generate interest, and it's an act.

IV. WRITING (6,0 points)

Part 1. Read the following extract and use your own words to summarize it. Your summary should be between 100 and 120 words long. You MUST NOT copy the original.

Wi-Fi has become an integral part of our fast-paced everyday lives. Thanks to Wi-Fi, we no longer have to be tethered to the Internet with cables. But have you ever stopped to wonder how it works?

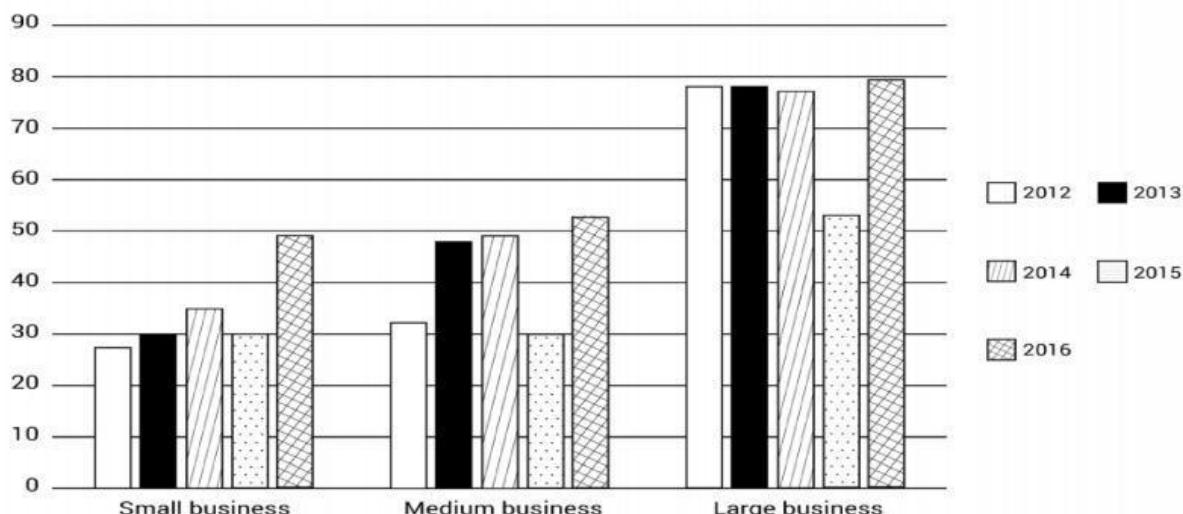
Wi-Fi uses radio waves to transmit information between your device and a router via frequencies. Two radio-wave frequencies can be used, depending on the amount of data being sent: 2.4 gigahertz and 5 gigahertz. What does that mean, though? Well, a hertz is just a measurement of frequency. For example, let's say you're sitting on a beach, watching the waves crash to shore. If you measured the time between each wave crash, you'd be measuring the frequency of the waves. One hertz is a frequency of one wave per second. One gigahertz, on the other hand, is one billion waves per second. (Thank goodness beaches aren't like that—it probably wouldn't be too relaxing.) The higher the frequency, the greater the amount of data transmitted per second.

The two Wi-Fi frequencies are split into multiple channels so as to prevent high traffic and interference. When it comes to sharing the data across these channels, well, that's when the magic—er, computer science—happens. The first step in the process is initiated by you (the user). When you access the Internet on your device, it converts the information you've requested into binary code, the language of computers. Everything computers do is based in binary code, a series of 1s and 0s. When you click on this article, your request is translated into a bunch of 1s and 0s. If you're using Wi-Fi, these 1s and 0s are translated into wave frequencies by the Wi-Fi chip embedded in your device. The frequencies travel across the radio channels mentioned earlier and are received by the Wi-Fi router that your device is connected to. The router then converts the frequencies back into binary code and translates the code into the Internet traffic that you requested, and the router receives that data through a hardwired Internet cable. The process repeats itself until you have loaded this article—or anything that requires the Internet. All of this happens at an unbelievably fast rate; most routers operate at 54 Mbps (megabits per second), meaning that when such routers translate and transmit binary data, 54 million 1s and 0s are taken in or sent out in a single second.

Part 2. The bar chart below shows the percentage of small, medium, large companies which used social media for business purposes between 2012 to 2016. Summarise the information by selecting and reporting the main features, and make comparisons where relevant.

You should write about 150 words.

The percentage of businesses that have social media presence



Part 3. Write an essay of 350 words on the following topic.

In many countries today the retirement age from work has been raised. Do the advantages of raising the retirement age outweigh the disadvantages?

SPEAKING (2.0 PTS)

Describe a change that will improve your local area

You should say

- What the change is
- How the change works
- What kinds of problems the change may cause
- How you feel about the change