

ieltsfever.com

**Academic
Reading
Practice Test
45**

Reading Passage 1

You should spend about 20 minutes on Questions 1-13 which are based on Reading Passage 1 on the following page.

Questions 1-6

Reading Passage 1 has six sections A-F.

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

Write the correct number i-x in boxes 1-6 on your answer sheet.

List of Headings

- i Locations and features of different seaweeds
- ii Various products of seaweeds
- iii Use of seaweeds in Japan
- iv Seaweed species around the globe
- v Nutritious value of seaweeds
- vi Why it doesn't dry or sink
- vii Where to find red seaweeds
- viii Underuse of native species
- ix Mystery solved
- x How seaweeds reproduce and grow

- 1 Section A
- 2 Section B
- 3 Section C
- 4 Section D
- 5 Section E
- 6 Section F

New Zealand Seaweed

Call us not weeds, we are flowers of the sea.

Section A

Seaweed is a particularly nutritious food, which absorbs and concentrates traces of a wide variety of minerals necessary to the body's health. Many elements may occur in seaweed – aluminium, barium, calcium, chlorine, copper, iodine and iron, to name but a few – traces normally produced by erosion and carried to the seaweed beds by river and sea currents. Seaweeds are also rich in vitamins: indeed, Eskimos obtain a high proportion of their bodily requirements of vitamin C from the seaweeds they eat.

The nutritive value of seaweed has long been recognised. For instance, there is a remarkably low incidence of goitre amongst the Japanese, and for that matter, amongst our own Maori people, who have always eaten seaweeds, and this may well be attributed to the high iodine content of this food. Research into old Maori eating customs shows that jellies were made using seaweeds, fresh fruit and nuts, fuchsia and tutu berries, cape gooseberries, and many other fruits which either grew here naturally or were sown from seeds brought by settlers and explorers.

Section B

New Zealand lays claim to approximately 700 species of seaweed, some of which have no representation outside this country. Of several species grown worldwide, New Zealand also has a particularly large share. For example, it is estimated that New Zealand has some 30 species of *Gigartina*, a close relative of carrageen or Irish moss. These are often referred to as the New Zealand carrageens. The gel-forming substance called agar which can be extracted from this species gives them great commercial application in seameal, from which seameal custard is made, and in cough mixture, confectionery, cosmetics, the canning, paint and leather industries, the manufacture of duplicating pads, and in toothpaste. In fact, during World War II, New Zealand *Gigartina* were sent to Australia to be used in toothpaste.

Section C

Yet although New Zealand has so much of the commercially profitable red seaweeds, several of which are a source of agar (*Pterocladia*, *Gelidium*, *Chondrus*, *Gigartina*), before 1940 relatively little use was made of them. New Zealand used to import the Northern Hemisphere Irish moss (*Chondrus crispus*) from England and ready-made agar from Japan. Although distribution of the *Gigartina* is confined to certain areas according to species, it is only on the east coast of the North Island that its occurrence is rare. And even then, the east coast, and the area around Hokianga, have a considerable supply of the two species of *Pterocladia* from which agar is also available. Happily, New Zealand-made agar is now obtainable in health food shops.

Section D

Seaweeds are divided into three classes determined by colour – red, brown and green – and each tends to live in a specific location. However, except for the unmistakable sea lettuce (*Ulva*), few are totally one colour; and especially when dry, some species can change colour quite significantly – a brown one may turn quite black, or a red one appear black, brown, pink or purple.

Identification is nevertheless facilitated by the fact that the factors which determine where a seaweed will grow are quite precise, and they therefore tend to occur in very well-defined zones. Although there are exceptions, the green seaweeds are mainly shallow-water algae; the browns belong to medium depths, and the reds are plants of the deeper water. Flat rock surfaces near mid-level tides are the most usual habitat of sea bombs, Venus' necklace and most brown seaweeds. This is also the location of the purple laver or Maori karengo, which looks rather like a reddish-purple lettuce. Deep-water rocks on open coasts, exposed only at very low tide, are usually the site of bull kelp, strap weeds and similar tough specimens. Those species able to resist long periods of exposure to the sun and air are usually found on the upper shore, while those less able to stand such exposure occur nearer to or below the low-water mark. Radiation from the sun, the temperature level, and the length of time immersed all play a part in the zoning of seaweeds.

Section E

Propagation of seaweeds occurs by spores, or by fertilisation of egg cells. None have roots in the usual sense; few have leaves, and none have flowers, fruits or seeds. The plants absorb their nourishment through their fronds when they are

surrounded by water: the base or "holdfast" of seaweeds is purely an attaching organ, not an absorbing one.

Section F

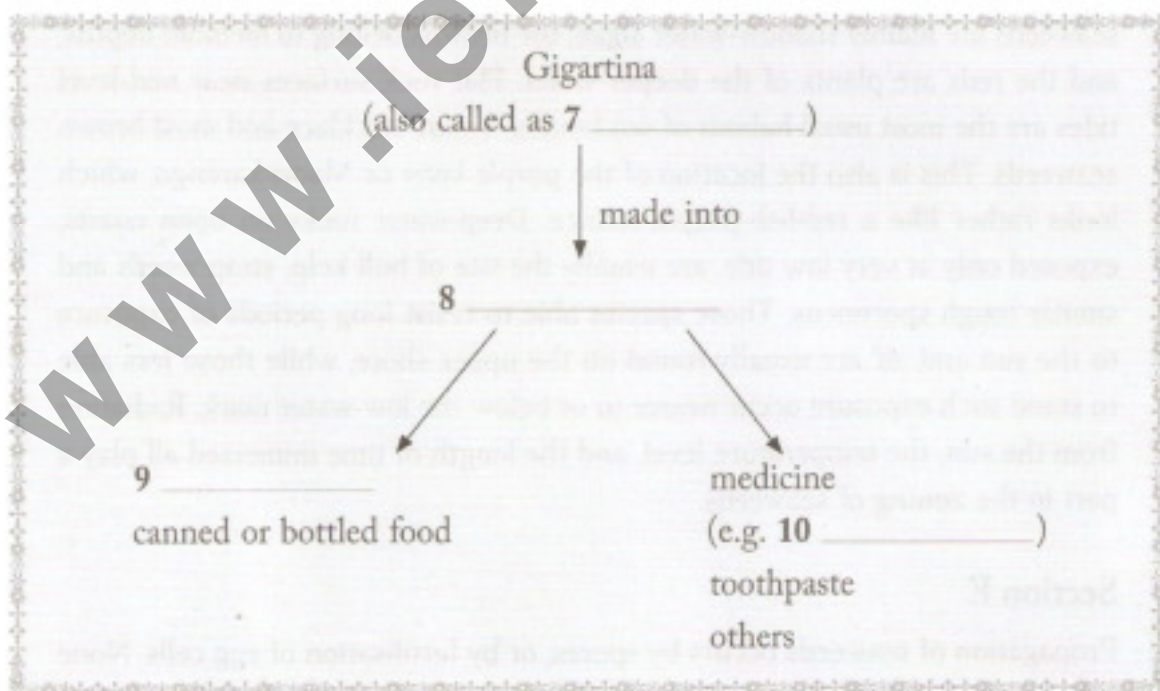
Some of the large seaweeds maintain buoyancy with air-filled floats; others, such as bull kelp, have large cells filled with air. Some, which spend a good part of their time exposed to the air, often reduce dehydration either by having swollen stems that contain water, or they may (like Venus' necklace) have swollen nodules, or they may have distinctive shape like a sea bomb. Others, like the sea cactus, are filled with slimy fluid or have coating of mucilage on the surface. In some of the larger kelps, this coating is not only to keep the plant moist but also to protect it from the violent action of waves.

Questions 7-10

Complete the flow chart below.

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

Write your answers in boxes 7-10 on your answer sheet.



Questions 11-13

Classify the following description as relating to

- A Green seaweeds
- B Brown seaweeds
- C Red seaweeds

Write the correct letter A, B, or C in boxes 11-13 on your answer sheet.

- 11 Can resist exposure to sunlight at high-water mark
- 12 Grow in far open sea water
- 13 Share their habitat with karengo

www.ieltsfever.com

Reading Passage 2

You should spend about 20 minutes on Questions 14-26 which are based on Reading Passage 2 below.

Optimism and Health

Mindset is all. How you start the year will set the template for the rest, and two scientifically backed character traits hold the key: optimism and resilience (if the prospect leaves you feeling pessimistically spineless, the good news is that you can significantly boost both of these qualities).

Faced with 12 months of plummeting economics and rising human distress, staunchly maintaining a rosy view might seem deludedly Pollyannaish. But here we encounter the optimism paradox. As Brice Pitt, an emeritus professor of the psychiatry of old age at Imperial College, London, told me: "Optimists are unrealistic. Depressive people see things as they really are, but that is a disadvantage from an evolutionary point of view. Optimism is a piece of evolutionary equipment that carried us through millennia of setbacks."

Optimists have plenty to be happy about. In other words, if you can convince yourself that things will get better, the odds of it happening will improve – because you keep on playing the game. In this light, optimism "is a habitual way of explaining your setbacks to yourself", reports Martin Seligman, the psychology professor and author of *Learned Optimism*. The research shows that when times get tough, optimists do better than pessimists – they succeed better at work, respond better to stress, suffer fewer depressive episodes, and achieve more personal goals.

Studies also show that belief can help with the financial pinch. Chad Wallens, a social forecaster at the Henley Centre who surveyed middle-class Britons' beliefs about income, has found that "the people who feel wealthiest, and those who feel poorest, actually have almost the same amount of money at their disposal. Their attitudes and behaviour patterns, however, are different from one another."

Optimists have something else to be cheerful about – in general, they are more robust. For example, a study of 660 volunteers by the Yale University

psychologist Dr. Becca Levy found that thinking positively adds an average of seven years to your life. Other American research claims to have identified a physical mechanism behind this. A Harvard Medical School study of 670 men found that the optimists have significantly better lung function. The lead author, Dr. Rosalind Wright, believes that attitude somehow strengthens the immune system. "Preliminary studies on heart patients suggest that, by changing a person's outlook, you can improve their mortality risk," she says.

Few studies have tried to ascertain the proportion of optimists in the world. But a 1995 nationwide survey conducted by the American magazine *Adweek* found that about half the population counted themselves as optimists, with women slightly more apt than men (53 per cent versus 48 per cent) to see the sunny side.

Of course, there is no guarantee that optimism will insulate you from the crunch's worst effects, but the best strategy is still to keep smiling and thank your lucky stars. Because (as every good sports coach knows) adversity is character-forming – so long as you practise the skills of resilience. Research among tycoons and business leaders shows that the path to success is often littered with failure: a record of sackings, bankruptcies and blistering castigation. But instead of curling into a foetal ball beneath the coffee table, they resiliently pick themselves up, learn from their pratfalls and march boldly towards the next opportunity.

The American Psychological Association defines resilience as the ability to adapt in the face of adversity, trauma or tragedy. A resilient person may go through difficulty and uncertainty, but he or she will doggedly bounce back.

Optimism is one of the central traits required in building resilience, say Yale University investigators in the *Annual Review of Clinical Psychology*. They add that resilient people learn to hold on to their sense of humour and this can help them to keep a flexible attitude when big changes of plan are warranted. The ability to accept your lot with equanimity also plays an important role, the study adds.

One of the best ways to acquire resilience is through experiencing a difficult childhood, the sociologist Steven Stack reports in the *Journal of Social Psychology*. For example, short men are less likely to commit suicide than tall guys, he says, because shorties develop psychological defence skills to handle the

bullies and mickey-taking that their lack of stature attracts. By contrast, those who enjoyed adversity-free youths can get derailed by setbacks later on because they've never been inoculated against aggro.

If you are handicapped by having had a happy childhood, then practising proactive optimism can help you to become more resilient. Studies of resilient people show that they take more risks; they court failure and learn not to fear it.

And despite being thick-skinned, resilient types are also more open than average to other people. Bouncing through knock-backs is all part of the process. It's about optimistic risk-taking – being confident that people will like you. Simply smiling and being warm to people can help. It's an altruistic path to self-interest – and if it achieves nothing else, it will reinforce an age-old adage: hard times can bring out the best in you.

Questions 14-17

Complete the summary below using **NO MORE THAN THREE WORDS** from Reading Passage 2 for each answer.

Write your answers in boxes 14-17 on your answer sheet.

A study group from Yale University had discovered that optimism can stretch one's life length by 14 _____ years. And another group from Harvard thinks they have found the biological basis – optimists have better 15 _____ because an optimist outlook boosts one's 16 _____. The study on 17 _____ was cited as evidence in support of this claim.

Questions 18-22

Complete each sentence with the correct ending A-H on the next page.

Write the correct letter A-H in boxes 18-22 on your answer sheet.

18 Brice Pitt believes

19 The research at Henley Centre discovers

- 20 The study conducted by *Adweek* finds
21 The *Annual Review of Clinical Psychology* reports
22 Steven Stack says in his report

- A material wealth doesn't necessarily create happiness.
B optimists tend to be unrealistic about human evolution.
C optimism is advantageous for human evolution.
D adversity is the breeding ground of resilience.
E feelings of optimism vary according to gender.
F good humour means good flexibility.
G evenness of mind under stress is important to building resilience.
H having an optimistic outlook is a habit.

Questions 23-26

Do the following statements agree with the claims of the writer in Reading Passage 2?

In boxes 23-26 on your answer sheet write

- YES if the statement agrees with the claims of the writer
NO if the statement contradicts the claims of the writer
NOT GIVEN if it is impossible to say what the writer thinks about this

- 23 The benefits of optimism on health have been long known.
24 Optimists have better relationships with people than pessimists.
25 People with happy childhoods won't be able to practise optimism.
26 Resilient people are often open, and even thick-skinned.

Reading Passage 3

You should spend about 20 minutes on Questions 27–40 which are based on Reading Passage 3 below.

The Columbian Exchange

- A** Millions of years ago, continental drift carried the Old World and New World apart, splitting North and South America from Eurasia and Africa. That separation lasted so long that it fostered divergent evolution; for instance, the development of rattlesnakes on one side of the Atlantic and of vipers on the other. After 1492, human voyagers in part reversed this tendency. Their artificial re-establishment of connections through the commingling of Old and New World plants, animals, and bacteria, commonly known as the Columbian Exchange, is one of the more spectacular and significant ecological events of the past millennium.
- B** When Europeans first touched the shores of the Americas, Old World crops such as wheat, barley, rice, and turnips had not travelled west across the Atlantic, and New World crops such as maize, white potatoes, sweet potatoes, and manioc had not travelled east to Europe. In the Americas, there were no horses, cattle, sheep, or goats, all animals of Old World origin. Except for the llama, alpaca, dog, a few fowl, and guinea pig, the New World had no equivalents to the domesticated animals associated with the Old World, nor did it have the pathogens associated with the Old World's dense populations of humans and such associated creatures as chickens, cattle, black rats, and *Aedes aegypti* mosquitoes. Among these germs were those that carried smallpox, measles, chickenpox, influenza, malaria, and yellow fever.
- C** As might be expected, the Europeans who settled on the east coast of the United States cultivated crops like wheat and apples, which they had brought with them. European weeds, which the colonists did not cultivate, and, in fact, preferred to uproot, also fared well in the New World. John Josselyn, an Englishman and amateur naturalist who visited New England twice in the seventeenth century, left us a list, "Of Such Plants as Have Sprung Up since the English Planted and Kept Cattle in New England," which included couch grass, dandelion, shepherd's purse, groundsel, sow thistle, and chickweed.

One of these, a plantain (*Plantago major*), was named "Englishman's Foot" by the Amerindians of New England and Virginia who believed that it would grow only where the English "have trodden, and was never known before the English came into this country". Thus, as they intentionally sowed Old World crop seeds, the European settlers were unintentionally contaminating American fields with weed seeds. More importantly, they were stripping and burning forests, exposing the native minor flora to direct sunlight, and the hooves and teeth of Old World livestock. The native flora could not tolerate the stress. The imported weeds could, because they had lived with large numbers of grazing animals for thousands of years.

- D Cattle and horses were brought ashore in the early 1600s and found hospitable climate and terrain in North America. Horses arrived in Virginia as early as 1620 and in Massachusetts in 1629. Many wandered free with little more evidence of their connection to humanity than collars with a hook at the bottom to catch on fences as they tried to leap over them to get at crops. Fences were not for keeping livestock in, but for keeping livestock out.
- E Native American resistance to the Europeans was ineffective. Indigenous peoples suffered from white brutality, alcoholism, the killing and driving off of game, and the expropriation of farmland, but all these together are insufficient to explain the degree of their defeat. The crucial factor was not people, plants, or animals, but germs. Smallpox was the worst and the most spectacular of the infectious diseases mowing down the Native Americans. The first recorded pandemic of that disease in British North America detonated among the Algonquin of Massachusetts in the early 1630s. William Bradford of Plymouth Plantation wrote that the victims "fell down so generally of this disease as they were in the end not able to help one another, no, not to make a fire nor fetch a little water to drink, nor any to bury the dead". The missionaries and the traders who ventured into the American interior told the same appalling story about smallpox and the indigenes. In 1738 alone, the epidemic destroyed half the Cherokee; in 1759 nearly half the Catawbans; in the first years of the next century, two thirds of the Omahas and perhaps half the entire population between the Missouri River and New Mexico; in 1837-38 nearly every last one of the Mandans and perhaps half the people of the high plains.
- F The export of America's native animals has not revolutionised Old World agriculture or ecosystems as the introduction of European animals to the New World did. America's grey squirrels and muskrats and a few others have established

themselves east of the Atlantic and west of the Pacific, but that has not made much of a difference. Some of America's domesticated animals are raised in the Old World, but turkeys have not displaced chickens and geese, and guinea pigs have proved useful in laboratories, but have not usurped rabbits in the butcher shops.

G The New World's great contribution to the Old is in crop plants. Maize, white potatoes, sweet potatoes, various squashes, chiles, and manioc have become essentials in the diets of hundreds of millions of Europeans, Africans, and Asians. Their influence on Old World peoples, like that of wheat and rice on New World peoples, goes far to explain the global population explosion of the past three centuries. The Columbian Exchange has been an indispensable factor in that demographic explosion.

H All this had nothing to do with superiority or inferiority of biosystems in any absolute sense. It has to do with environmental contrasts. Amerindians were accustomed to living in one particular kind of environment, Europeans and Africans in another. When the Old World peoples came to America, they brought with them all their plants, animals, and germs, creating a kind of environment to which they were already adapted, and so they increased in number. Amerindians had not adapted to European germs, and so initially their numbers plunged. That decline has reversed in our time as Amerindian populations have adapted to the Old World's environmental influence, but the demographic triumph of the invaders, which was the most spectacular feature of the Old World's invasion of the New, still stands.

Question 27-34

Reading Passage 3 has eight paragraphs A-H.

Which paragraph contains the following information?

Write the correct letter A-H in boxes 27-34 on your answer sheet.

- 27 A description of an imported species that is named after the English colonists
- 28 The reason why both the New World and Old World experienced population growth
- 29 The formation of new continents explained
- 30 The reason why the indigenous population declined

- 31 An overall description of the species lacked in the Old World and New World
- 32 A description of some animal species being ineffective in affecting the Old World
- 33 An overall explanation of the success of the Old World species invasion
- 34 An account of European animals taking roots in the New World

Questions 35-38

Do the following statements agree with the information given in Reading Passage 3?

In boxes 35-38 on your answer sheet 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

- 35 European settlers built fences to keep their cattle and horses inside.
- 36 The indigenous people had been brutally killed by the European colonists.
- 37 America's domesticated animals, such as turkey, became popular in the Old World.
- 38 Crop exchange between the two worlds played a major role in world population growth.

Questions 39-40

Answer the questions below using NO MORE THAN THREE WORDS from the passage for each answer.

Write your answers in boxes 39-40 on your answer sheet.

- 39 Who reported the same story of European diseases among the indigenes from the American interior?
- 40 What is the still existing feature of the Old World's invasion of the New?