MINI TEST – IELTS READING

PASSAGE 1

Read the text and answer questions 1–13

SEAWEED

Seaweed, a common plant that grows in the sea, has been an important food, fuel, and fertilizer since prehistoric times. For example, it has supplemented the diet of sheep in the Orkneys, islands off the coast of Scotland, since Neolithic times, roughly 5000 years ago. In the early part of the 8th century in Japan, seaweed was already such a key part of people's regular diet that legislation was introduced giving people the right to pay their taxes to the Emperor in the form of seaweed.

The oldest evidence of seaweed use was found in South America, dating from 12,500 years ago. The remains of red seaweed mixed with a medicinal herb were discovered on the floor of a medicine hut at Monte Verde, Chile, one of the oldest human habitation sites in the Americas. The Monte Verde findings led to a re-evaluation of the importance of plants to the communities of that region. It was previously believed that their diet was predominantly meat-based, and therefore reliant on the hunting skills of men. However, these findings suggest that women, known to be responsible for the gathering of plants such as seaweed, also played an important pait in the provision of food.

The first recorded commercial use of seaweed in Europe was in the 17th century in France and Norway. Coastal populations, mainly farmers, gathered and burnt seaweed to produce potash, a substance which is used in the production of glass and soap. In 1800, Norway exported 1500 tonnes of potash.

Simple seaweed cultivation techniques were first developed in Japan in the mid-17th century and became increasingly popular over the next three centuries. In 1948, however, a series of typhoons combined with increased pollution in coastal waters led to a total collapse in Japanese production of nori, the type of seaweed used to make sushi. And because almost nothing was known about its life cycle, no one could figure out how to grow new plants from scratch to repopulate the depleted seaweed beds. The country's nori industry ground to a halt, and many farmers lost their livehoods. It was a British scientist, Dr. Kathleen Drew-Baker, who was credited with saving Japan's seaweed farming industry. Based at Manchester University in the 1940s, she was studying a seaweed called laver, which is the Welsh equivalent of nori. In 1949, she published a paper outlining her discovery that certain tiny algae were actually baby seaweed, rather than an entirely separate species, as had previously been thought. After reading her research, Japanese scientists quickly developed methods for seeding these tiny algae artificially so that new plants could be grown. This made the mass production of nori possible. Although hardly anyone has heard of Dr Drew-Baker in the UK, she is known as the 'Mother of the Sea' in Japan, and a statue of her can be found in the Japanese city of Osaka.

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In the United States, Professor Charles Yarish of the University of Connecticut should probably be called the 'Father of the Sea' for his work on kelp, a large brown seaweed. The renowned scientist, who has been studying the biology of seaweed since the early 1970s, recently turned his attention to the development of revolutionary techniques for the harvesting of this species. Yarish has helped make it an economically viable crop for the New England fishermen whose livelihoods were threatened by a combination of overfishing, pollution, and warming waters.

As the world population grows and the climate changes, there is increased interest from businesses and development organizations in the use of seaweed for food and energy. Seaweed, which can grow rapidly and efficiently, provides plant-based proteins, and could also be used as a source of biofuels to replace fossil fuels. Its ability to absorb a number of environmentally unfriendly chemicals discharged by farms, factories and wastewater treatment plants also makes it valuable as a means of reducing pollution.

Seaweed cultivation in Asia has grown from the late 1950s into an industry offering sustainable employment in developing and emerging economies in many countries, notably Indonesia and China. However, seaweed farming is not very well developed in Europe and the industry still relies on the harvesting, either manually or mechanically, of wild seaweed. The main constraints on the development of seaweed farming in Europe have been the lack of markets and the relative expense of European production compared to Asian production.

A 2016 report from the World Bank estimates that annual global seaweed production could reach 500 million dry tons by 2050 if the industry is able to increase its harvest by 14% per year. Hitting that 500 million mark would boost the world's food supply by 10% from the current level, generating 50 million jobs in the process. As a biofuel for vehicles, it could also replace about 1.5% of the fossil fuels used today.

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Questions 1–5

Choose **TRUE** if the statement agrees with the information given in the text, choose **FALSE** if the statement contradicts the information, or choose **NOT GIVEN** if there is no information on this.

1 Seaweed has been used to feed animals on some Scottish islands for thousands of years.

2 In the 8th century in Japan, eating seaweed was reserved for special occasions.

3 The findings at Monte Verde revealed new information about the significance of women's roles in prehistoric times.

4 Potash was Norway's largest export in the 1800s.

5 Dr Kathleen Drew-Banker is more famous in Japan than she is in the UK.

Questions 6–13

Complete the table below.

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

Japanese seaweed industry

- was destroyed by pollution and **6**_____ in 1948
- recovered as a result of Kathleen Drew-Baker's research into **7**_____ a seaweed species similar to nori

Seaweed farming in the USA

- new methods have resulted in the type of seaweed called **8**_____ becoming a successful crop
- has provided an alternative source of income for **9**_____

Seaweed production in the future

- may be used to minimise the harmful effects of various **10**_____ produced by different industries
- the cost of production and shortage of **11**_____ may be preventing growth of the industry in Europe
- could create very large numbers of new **12**_____
- could be used instead of oil to power a small percentage of **13**_____

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PASSAGE 2

Read the text and answer questions 14–26

THE HISTORY OF CELTIC LANGUAGE

A In November 1897, in a field near the village of Coligny in eastern France, a local inhabitant unearthed two strange objects. One was an imposing statue of Mars, the Roman god of war. The other was an ancient bronze tablet, 1.5 metres wide and 1 metre high. It bore numerals in Roman but the words were in Gaulish, a version of the Celtic language spoken by the inhabitants of France before the Roman conquest in the first century BC. The tablet turned out to be one of the most important sources of words from this extinct language.

B Two researchers, geneticist Dr Peter Forster and linguist Dr Alfred Toth, have now used the calendar and other Celtic inscriptions to reconstruct the history of Celtic and its position in the Indo-European family of languages. They say that Celtic became a language in its own right and entered the British Isles much earlier than supposed. Then in the first century BC, the Romans defeated the Celts, both in France and in Britain, so decisively that their language, Latin, and its successor languages displaced Celtic over much of its former territory. In the British Isles, Celtic speakers survived in two main groups: the Goidelic branch of Celtic, which includes Irish and Scots Gaelic, and the Brythonic branch, formed mainly of Welsh and Breton, a Celtic tongue carried to Brittany in France by emigrants from Cornwall.

C Because languages change so fast, historical linguists have little faith in language trees that go back more than a few thousand years. Dr Forster has developed a new dating method for relating a group of languages, basing it on the tree-drawing techniques used to trace the evolutionary relationships among genes. The method will work on just a handful of words, a fortunate circumstance since only some 30 Gaulish words have known counterparts in all the other languages under study. Dr Forster and Dr Toth have used the method to draw up a tree relating the different branches of Celtic to one another and to other Indo-European languages like English, French, Spanish, Latin and Greek. In a published article, they say that soon after the ancestral Indo-European language arrived in Europe over 5,000 years ago, it split into different branches leading to Celtic, Latin, Greek and English. Within Celtic, their tree shows that Gaulish the mainland European version of the language separated from its Goidelic and Brythonic cousins, much as might be expected from the facts of geography

D The researchers' method even dates the points at which their language tree divides, although the dates have a wide range of possibility. They calculate that the Indo-European language initially fragmented in Europe around 8100 BC, plus or minus 1,900 years, and the divergence between the mainland European and British versions of Gaelic took place in 3200 BC, plus or minus 1,500 years. These dates are much earlier than previously estimated. ‘The traditional date of the Indo-European fragmentation has been 4000 BC for some time,’ said linguist Dr Merritt

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Ruhlen. He said the new method 'seems pretty reasonable' and should be useful in tracing back the earlier history of the Indo-European language.

E Specialists have long debated which country was the homeland of the Indo-Europeans and whether their language was spread by conquest or because its speakers were the first agriculturists whose methods and tongue were adopted by other populations. The second theory, that it was spread by agriculture, has been advocated by archaeologist Dr Colin Renfrew. Dr Forster, who works with Dr Renfrew, said in an interview that the suggested date 8100 BC for the arrival of Indo-European in Europe does seem to vindicate Renfrew's archaeological idea that the Indo-European languages were spread by farmers. Agriculture started to arrive in Europe from the Near East around 6000 BC, which is earlier than the traditional date proposed by linguists for the spread of Indo-European. This writing would fit with the lower end of Dr Forster's range of dates.

F Dr Forster said that his estimated date of 3200 BC for the arrival of Celtic speakers in the British Isles is also much earlier than the usual date, 600 BC, posited on the basis of archaeological evidence. Dr Forster and Dr Toth said their method of evaluating groups of languages against each other was similar to historical linguists, many of whom restrict their research to how words in only one single language have changed over time. Asked what linguists thought of his approach he said: 'To be honest, they don't understand it, most of them. They don't even know what I'm talking about.' The method used by Dr Forster and Dr Toth has two parts. One is to draw a tree on the basis of carefully chosen words; the second is to date the splits in the tree by calibrating them with known historical events. This is similar to the way geneticists date their evolutionary trees by tying one or more branch points to known dates from the fossil record.

G Dr April McMahon, a linguist at the University of Sheffield in England, said that Dr Forster's method 'seems to me to be a good start', and that it was reasonable to base a language family tree on just a handful of well-chosen words. She had less confidence in the dating method, she said, because language changes in an irregular way based on social factors like the size of the speaker's group and its degree of contact with others.

Questions 14–18

Reading Passage 2 has seven paragraphs, **A-G**.

Which paragraph contains the following information?

Choose the correct letter, **A-G**, in boxes **14-19**.

14 a difference of opinion about where a group of languages originated

15 a reference to a mythological figure

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16 an expression of one person's doubt about a particular method of analysing scientific data

17 an explanation of how one particular Celtic language spread due to the movement of people

18 the reason why some language experts distrust language trees

Questions 19–22

Look at the following statements (**Questions 19-22**) and the list of people below.

Match each statement with the correct researcher or researchers, A, B, C or D.

Choose the correct letter, **A**, **B**, **C** or **D**, in boxes **19-22**.

NB You may use any letter more than once.

List of Researchers	
A	Dr Peter Forster & Dr Alfred Toth
B	Dr Merritt Ruhlen
C	Dr Colin Renfrew
D	Dr April McMahon

19 An approach commonly used in language research has too narrow a focus.

20 The number of people who use a language has an effect on the modifications the language undergoes.

21 The Celtic language has been a distinct language for longer than experts previously thought.

22 The use of one family of languages may have become more extensive due to farming practices.

Questions 23–26

Complete the sentence below.

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

The script on the bronze tablet discovered in Coligny in France was written in a form of Celtic called **23**_____

After the success of the Roman Empire in conquering many parts of Europe, **24**_____ and its related languages became the predominant languages.

25_____ is known to have occurred among the various versions of the Gaelic language around 3200 BC.

For social reasons, developments in languages are **26**_____

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