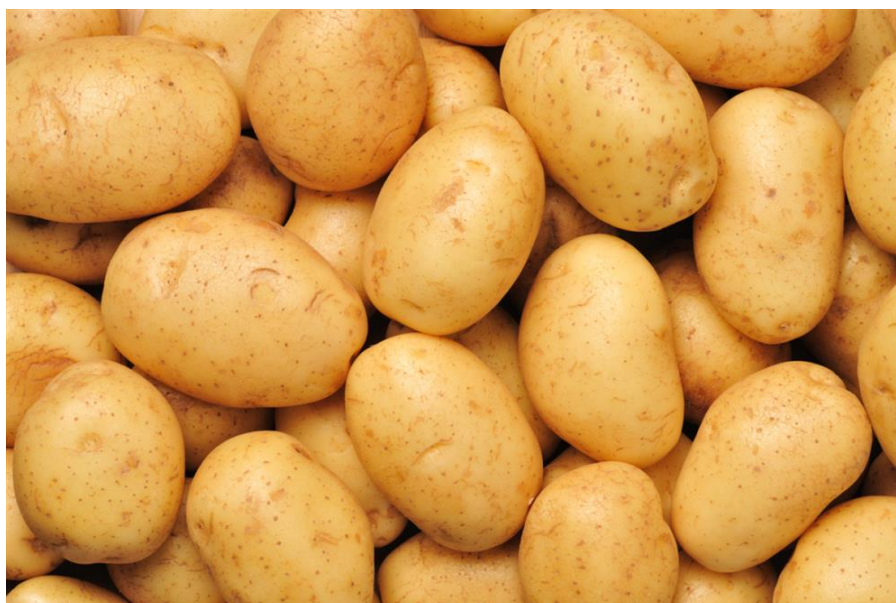


Reading Practice Test 4

READING PASSAGE 1

*You should spend about 20 minutes on **Questions 1-13**, which are based on Reading Passage 1 below.*



The Impact of the Potato

Jeff Chapman relates the story of history the most important vegetable

A The potato was first cultivated in South America between three and seven thousand years ago, though scientists believe they may have grown wild in the region as long as 13,000 years ago. The genetic patterns of potato distribution indicate that the potato probably originated in the mountainous west-central region of the continent.

B Early Spanish chroniclers who misused the Indian word batata (sweet potato) as the name for the potato noted the importance of the tuber to the Incan Empire. The Incas had learned to preserve the potato for storage by dehydrating and mashing potatoes into a substance called Chuchu could be stored in a room for up to 10 years, providing excellent insurance against possible crop failures. As well as using the food as a staple crop, the Incas thought potatoes made childbirth easier and used it to treat injuries.

C The Spanish conquistadors first encountered the potato when they arrived in

Peru in 1532 in search of gold, and noted Inca miners eating chuchu. At the time the Spaniards failed to realize that the potato represented a far more important treasure than either silver or gold, but they did gradually begin to use potatoes as basic rations aboard their ships. After the arrival of the potato in Spain in 1570 a few Spanish farmers began to cultivate them on a small scale, mostly as food for livestock.

D Throughout Europe, potatoes were regarded with suspicion, distaste and fear. Generally considered to be unfit for human consumption, they were used only as animal fodder and sustenance for the starving. In northern Europe, potatoes were primarily grown in botanical gardens as an exotic novelty. Even peasants refused to eat from a plant that produced ugly, misshapen tubers and that had come from a heathen civilization. Some felt that the potato plant's resemblance to plants in the nightshade family hinted that it was the creation of witches or devils.

E In meat-loving England, farmers and urban workers regarded potatoes with extreme distaste. In 1662, the Royal Society recommended the cultivation of the tuber to the English government and the nation, but this recommendation had little impact. Potatoes did not become a staple until, during the food shortages associated with the Revolutionary Wars, the English government began to officially encourage potato cultivation. In 1795, the Board of Agriculture issued a pamphlet entitled "Hints Respecting the Culture and Use of Potatoes" this was followed shortly by pro-potato editorials and potato recipes in *The Times*. Gradually, the lower classes began to follow the lead of the upper classes.

F A similar pattern emerged across the English Channel in the Netherlands, Belgium and France. While the potato slowly gained ground in eastern France (where it was often the only crop remaining after marauding soldiers plundered wheat fields and vineyards), it did not achieve widespread acceptance until the late 1700s. The peasants remained suspicious, in spite of a 1771 paper from the *Faculté de Paris* testifying that the potato was not harmful but beneficial. The people began to overcome their distaste when the plant received the royal seal of approval: Louis XVI began to sport a potato flower in his buttonhole, and Marie-Antoinette wore the purple potato blossom in her hair.

G Frederick the Great of Prussia saw the potato's potential to help feed his nation and lower the price of bread, but faced the challenge of overcoming the people's prejudice against the plant. When he issued a 1774 order for his subjects to grow potatoes as protection against famine, the town of Kolberg replied: "The things have neither smell nor taste, not even the dogs will eat

them, so what use are they to us?" Trying a less direct approach to encourage his subjects to begin planting potatoes, Frederick used a bit of reverse psychology: he planted a royal field of potato plants and stationed a heavy guard to protect this field from thieves. Nearby peasants naturally assumed that anything worth guarding was worth stealing, and so snuck into the field and snatched the plants for their home gardens. Of course, this was entirely in line with Frederick's wishes.

H Historians debate whether the potato was primarily a cause or an effect of the huge population boom in industrial-era England and Wales. Prior to 1800—the English diet had consisted primarily of meat, supplemented by bread, butter and cheese. Few vegetables were consumed, most vegetables being regarded as nutritionally worthless and potentially harmful. This view began to change gradually in the late 1700s. The Industrial Revolution was drawing an ever increasing percentage of the populace into crowded cities, where only the richest could afford homes with ovens or coal storage rooms, and people were working 12-16 hour days which left them with little time or energy to prepare food. High yielding, easily prepared potato crops were the obvious solution to England's food problems.

I Whereas most of their neighbors regarded the potato with suspicion and had to be persuaded to use it by the upper classes, the Irish peasantry embraced the tuber more passionately than anyone since the Incas. The potato was well suited to the Irish the soil and climate, and its high yield suited the most important concern of most Irish farmers: to feed their families.

J The most dramatic example of the potato's potential to alter population patterns occurred in Ireland, where the potato had become a staple by 1800. The Irish population doubled to eight million between 1780 and 1841—this without any significant expansion of industry or reform of agricultural techniques beyond the widespread cultivation of the potato. Though Irish landholding practices were primitive in comparison with those of England, the potato's high yields allowed even the poorest farmers to produce more healthy food than they needed with scarcely any investment or hard labor. Even children could easily plant, harvest and cook potatoes, which of course required no threshing, curing or grinding. The abundance provided by potatoes greatly decreased infant mortality and encouraged early marriage.

Questions 1-5

Do the following statements agree with the views of the writer in Reading

Passage 1?

In boxes **1-5** on your answer sheet, write

TRUE	if the statement is true
FALSE	if the statement is false
NOT GIVEN	if the information is not given in the passage

- 1 The early Spanish called potato as the Incan name 'Chuchu'
- 2 The purposes of Spanish coming to Peru were to find out potatoes
- 3 The Spanish believed that the potato has the same nutrients as other vegetables
- 4 Peasants at that time did not like to eat potatoes because they were ugly
- 5 The popularity of potatoes in the UK was due to food shortages during the war

Questions 6-13

Complete the sentences below with **NO MORE THAN ONE WORD** from the passage 1 for each answer.

Write your answers in boxes **6-13** on your answer sheet.

In France, people started to overcome their disgusting about potatoes because the King put a potato 6 in his button hole.

Frederick realized the potential of potato but he had to handle the 7 against potatoes from ordinary people.

The King of Prussia adopted some 8 psychology to make people accept potatoes.

Before 1800 the English people preferred eating 9 with bread, butter and cheese.

The obvious way to deal with England food problems were high yielding potato 10

The Irish 11 _____ and climate suited potatoes well.

Between 1780 and 1841, based on the 12 _____ of the potatoes, the Irish population doubled to eight million.

The potato's high yields help the poorest farmers to produce more healthy food almost without 13 _____

READING PASSAGE 2

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



Life-Casting and Art

Julian Barnes explores the questions posed by Life-Casts, an exhibition of plaster moulds of living people and objects which were originally used for scientific purposes

A Art changes over time and our idea of what art is changes too. For example, objects originally intended for devotional, ritualistic or re-creational purposes may be recategorised as art by members of other later civilisations, such as our own, which no longer respond to these purposes.

B What also happens is that techniques and crafts which would have been judged inartistic at the time they were used are reassessed. Life-casting is an interesting example of this. It involved making a plaster mould of a living person or thing. This was complex, technical work, as Benjamin Robert Haydon discovered when he poured 250 litres of plaster over his human model and nearly killed him. At the time, the casts were used for medical research and, consequently, in the nineteenth century life-casting was considered inferior to sculpture in the same way that, more recently, photography was thought to be a lesser art than painting. Both were viewed as unacceptable shortcuts by the "senior" arts. Their virtues of speed and unwavering realism also implied their limitations; they left little or no room for the imagination.

C For many, life-casting was an insult to the sculptor's creative genius. In an

infamous lawsuit of 1834, a moulder whose mask of the dying French emperor Napoleon had been reproduced and sold without his permission was judged to have no rights to the image. In other words, he was specifically held not to be an artist. This judgement reflect the view of established members of the nineteenth-century art world such as Rodin, who commented that life-casting 'happens fast but it doesn't make Art'. Some even feared that 'if too much nature was allowed in, it would lead Art away from its proper course of the Ideal.

D The painter Gauguin, at the end of the nineteenth century, worried about future developments in photography. If ever the process went into colour, what painter would labour away at a likeness with a brush made from squirrel-tail? But painting has proved robust. Photography has changed it, of course, just as the novel had to reassess narrative after the arrival of the cinema. But the gap between the senior and junior arts was always narrower than the traditionalists implied. Painters have always used technical back-up such as studio assistants to do the boring bits, while apparently lesser crafts involve great skill, thought, preparation and, depending on how we define it, imagination.

E Time changes our view in another way, too. Each new movement implies a reassessment of what has gone before. What is done now alters what was done before. In some cases this is merely self-serving, with the new art using the old to justify itself. It seems to be saying, look at how all of that points to this! Aren't we clever to be the culmination of all that has gone before? But usually it is a matter of re-alerting the sensibility, reminding us not to take things for granted. Take, for example, the cast of the hand of a giant from a circus, made by an anonymous artist around 1889, an item that would now sit happily in any commercial or public gallery. The most significant impact of this piece is on the eye, in the contradiction between unexpected size and verisimilitude. Next, the human element kicks in. you note that the nails are dirt-encrusted, unless this is the caster's decorative addition, and the fingertips extend far beyond them. Then you take in the element of choice, arrangement, art if you like, in the neat, pleated, buttoned sleeve-end that gives the item balance and variation of texture. This is just a moulded hand, yet the part stands utterly for the whole. It reminds us slyly, poignantly, of the full-size original

F But is it art? And, if so, why? These are old tediously repeated questions to which artists have often responded, 'It is art because I am an artist and therefore what I do is art. However, what doesn't work for literature works much better for art – works of art do float free of their creators' intentions. Over time the "reader" does become more powerful. Few of us can look at a medieval altarpiece as its painter intended. We believe too little and

aesthetically know too much, so we recreate and find new fields of pleasure in the work. Equally, the lack of artistic intention of Paul Richer and other forgotten craftsmen who brushed oil onto flesh, who moulded, cast and decorated in the nineteenth century is now irrelevant. What counts is the surviving object and our response to it. The tests are simple: does it interest the eye, excite the brain, move the mind to reflection and involve the heart. It may, to use the old dichotomy, be beautiful but it is rarely true to any significant depth. One of the constant pleasures of art is its ability to come at us from an unexpected angle and stop us short in wonder.

Questions 14-18

Reading Passage 2 has six paragraphs, A-F.

Which paragraph contains the following information?

Write the correct letter, A-F, in boxes 14-18 on your answer sheet.







- 14 an example of a craftsman's unsuccessful claim to ownership of his work
- 15 an example of how trends in art can change attitudes to an earlier work
- 16 the original function of a particular type of art
- 17 ways of assessing whether or not an object is art
- 18 how artists deal with the less interesting aspects of their work

Questions 19-24

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

In boxes 19-24 on your answer sheet, write

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

- 19  Nineteenth-century sculptors admired the speed and realism of life-casting
- 20  Rodin believed the quality of the life-casting would improve if a slower process were used
- 21  The importance of painting has decreased with the development of colour photography
- 22  Life-casting requires more skill than sculpture does
- 23  New art encourages us to look at earlier work in a fresh way
- 24  The intended meaning of a work of art can get lost over time

Questions 25-26

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

Write the correct letter in boxes **25-26** on your answer sheet.

- 25 The most noticeable contrast in the cast of the giants hand is between the
- A** ☐ dirt and decoration
 - B** ☐ size and realism
 - C** ☐ choice and arrangement
 - D** ☐ balance and texture
- 26 According to the writer, the importance of any artistic object lies in
- A** ☐ the artist's intentions
 - B** ☐ the artist's beliefs

- C** ☐ the relevance it has to modern life
- D** ☐ the way we respond to it

READING PASSAGE 3

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



Honey bees in trouble

Can native pollinators fill the gap?

A Recently, ominous headlines have described a mysterious ailment, colony collapse disorder (CCD)—that is wiping out the honeybees that pollinate many crops. Without honeybees, the story goes, fields will be sterile, economies will collapse, and food will be scarce.

B But what few accounts acknowledge is that what's at risk is not itself a natural state of affairs. For one thing, in the United States, where CCD was first reported and has had its greatest impacts, honeybees are not a native species. Pollination in modern agriculture isn't alchemy, it's industry. The total number of hives involved in the U.S. pollination industry has been somewhere between 2.5 million and 3 million in recent years. Meanwhile, American farmers began using large quantities of organophosphate insecticides, planted large-scale crop mono-cultures, and adopted "clean farming" practices that scrubbed native vegetation from field margins and roadsides. These practices killed many native bees outright—they're as vulnerable to insecticides as any agricultural pest—and made the agricultural landscape inhospitable to those that remained. Concern about these practices and their effects on pollinators isn't new—in her 1962 ecological alarm cry *Silent Spring*, Rachel Carson warned of a 'Fruitless Fall' that could result from the disappearance of insect pollinators.

C If that 'Fruitless Fall, has not—yet—occurred, it may be largely thanks to the honeybee, which farmers turned to as the ability of wild pollinators to service crops declined. The honeybee has been semi-domesticated since the time of the ancient Egyptians, but it wasn't just familiarity that determined this choice: the bees' biology is in many ways suited to the kind of agricultural system that was emerging. For example, honeybee hives can be closed up and moved out of the way when pesticides are applied to a field. The bees are generalist pollinators, so they can be used to pollinate many different crops. And although they are not the most efficient pollinator of every crop, honeybees have strength in numbers, with 20,000 to 100,000 bees living in a single hive. "Without a doubt, if there was one bee you wanted for agriculture, it would be the honeybee," says Jim Cane, of the U.S. Department of Agriculture. The honeybee, in other words, has become a crucial cog in the modern system of industrial agriculture. That system delivers more food, and more kinds of it, to more places, more cheaply than ever before. But that system is also vulnerable, because making a farm field into the photosynthetic equivalent of a factory floor, and pollination into a series of continent-long assembly lines, also leaches out some of the resilience characteristic of natural ecosystems.

D Breno Freitas, an agronomist, pointed out that in nature such a high degree of specialization usually is a very dangerous game: it works well while all the rest is in equilibrium, but runs quickly to extinction at the least disbalance. In effect, by developing an agricultural system that is heavily reliant on a single pollinator species, we humans have become riskily overspecialized. And when the human-honeybee relationship is disrupted, as it has been by colony collapse disorder, the vulnerability of that agricultural system begins to become clear.

E In fact, a few wild bees are already being successfully managed for crop pollination. "The problem is trying to provide native bees in adequate numbers on a reliable basis in a fairly short number of years in order to service the crop," Jim Cane says. "You're talking millions of flowers per acre in a two-to three-week time frame, or less, for a lot of crops." On the other hand, native bees can be much more efficient pollinators of certain crops than honeybees, so you don't need as many to do the job. For example, about 750 blue orchard bees (*Osmia lignaria*) can pollinate a hectare of apples or almonds, a task that would require roughly 50,000 to 150,000 honeybees. There are bee tinkerers engaged in similar work in many corners of the world. In Brazil, Breno Freitas has found that *Centris tarsata*, the native pollinator of wild cashew, can survive in commercial cashew orchards if growers provide a source of floral oils, such as by interplanting their cashew trees with Caribbean cherry.

F In certain places, native bees may already be doing more than they're getting credit for. Ecologist Rachael Winfree recently led a team that looked at pollination of four summer crops (tomato, watermelon, peppers, and muskmelon) at 29 farms in the region of New Jersey and Pennsylvania. Winfree's team identified 54 species of wild bees that visited these crops, and found that wild bees were the most important pollinators in the system: even though managed honeybees were present on many of the farms, wild bees were responsible for 62 percent of flower visits in the study. In another study focusing specifically on watermelon, Winfree and her colleagues calculated that native bees alone could provide sufficient pollination at 90 percent of the 23 farms studied. By contrast, honeybees alone could provide sufficient pollination at only 78 percent of farms.

G "The region I work in is not typical of the way most food is produced," Winfree admits. In the Delaware Valley, most farms and farm fields are relatively small, each farmer typically grows a variety of crops, and farms are interspersed with suburbs and other types of land use which means there are opportunities for homeowners to get involved in bee conservation, too. The landscape is a bee-friendly patchwork that provides a variety of nesting habitat and floral resources distributed among different kinds of crops, weedy field margins, fallow fields, suburban neighborhoods, and semi natural habitat like old woodlots, all at a relatively small scale. In other words, "pollinator-friendly" farming practices would not only aid pollination of agricultural crops, but also serve as a key element in the overall conservation strategy for wild pollinators, and often aid other wild species as well.

H Of course, not all farmers will be able to implement all of these practices. And researchers are suggesting a shift to a kind of polyglot agricultural system. For some small-scale farms, native bees may indeed be all that's needed. For larger operations, a suite of managed bees—with honeybees filling the generalist role and other, native bees pollinating specific crops—could be augmented by free pollination services from resurgent wild pollinators. In other words, they're saying, we still have an opportunity to replace a risky monoculture with something diverse, resilient, and robust.

Questions 27-30

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

*In boxes **27-30** on your answer sheet, write*

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

- 27 In the United States, farmers use honeybees in a large scale over the past few years.
- 28 Cleaning farming practices would be harmful to farmers.
- 29 The blue orchard bee is the most efficient pollinator among native bees for every crop.
- 30 It is beneficial to other local creatures to protect native bees.

Questions 31-35

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

Write your answers in boxes **31-35** on your answer sheet.

- 31 The example of the "Fruitless Fair" underlines the writer's point about
- A** ☐ needs for using pesticides.
 - B** ☐ impacts of losing insect pollinators.
 - C** ☐ vulnerabilities of native bees.
 - D** ☐ benefits in building more pollination industries.
- 32 Why can honeybees adapt to the modern agricultural system?
- A** ☐ the honeybees can pollinate more crops efficiently
 - B** ☐ The bees are semi-domesticated since ancient times.
 - C** ☐ Honeybee hives can be protected away from pesticides.
 - D** ☐ The ability of wild pollinators used to serve crops declines.
- 33 The writer mentions factories and assembly lines to illustrate
- A** ☐ one drawback of the industrialised agricultural system.
 - B** ☐ a low cost in modern agriculture.
 - C** ☐ the role of honeybees in pollination.

D ☐ what a high yield of industrial agriculture.

34 In the 6th paragraph Winfree's experiment proves that

A ☐ honeybee can pollinate various crops.

B ☐ there are many types of wild bees as the pollinators.

C ☐ the wild bees can increase the yield to a higher percentage

D ☐ wild bees work more efficiently as a pollinator than honey bees in certain cases

35 What does the writer want to suggest in the last paragraph?

A ☐ the importance of honey bees in pollination

B ☐ adoption of different bees in various sizes of agricultural system

C ☐ the comparison between the intensive and the rarefied agricultural system


D ☐ the reason why farmers can rely on native pollinators

Questions 36-40

Complete each sentence with the correct ending, **A-F**, below.

Write the correct letter, **A-F**, in boxes **36-40** on your answer sheet

36  Headline of colony collapse disorder states that

37  Viewpoints of Freitas manifest that

38  Examples of blue orchard bees have shown that

39  *Centris tarsata* is mentioned to exemplify that

40  One finding of the research in Delaware Valley is that

- | | |
|----------|---|
| A | native pollinators can survive when a specific plant is supplied. |
| B | it would cause severe consequences both to commerce and agriculture. |
| C | honey bees cannot be bred. |
| D | some agricultural landscapes are favorable in supporting wild bees. |
| E | a large scale of honey bees are needed to pollinate. |
| F | an agricultural system is fragile when relying on a single pollinator |