

Academic Reading Paper 44

Stars, Scurvy and Species

Time allowed: 1 hour

INSTRUCTIONS TO CANDIDATES

- Do not open this booklet until you are told to do so.
- Write your name and the date at the top of the answer sheet.
- Answer **all** the questions.
- Write your answers **on the answer sheet**, not in this booklet.
- You must transfer your answers within the hour. **No extra time is given for transferring answers in the Reading test.**
- Do not remove this booklet from the examination room.

INFORMATION FOR CANDIDATES

- There are 40 questions in this paper.
- Each question carries one mark.
- There are three passages, with 13, 13 and 14 questions.

These passages were written for this library. They are **not** reproduced from any published past paper. The format, timing and task types follow the published specification for the Academic Reading test so that sitting this on paper feels like the real thing.

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

How a tyre company came to judge cooking

In 1900 two brothers who manufactured tyres in central France published a small red book and gave it away. There were at that time somewhere around three thousand motor vehicles in the whole country, and thirty-five thousand copies were printed, which is a ratio that tells you the book was not a response to demand. The preface announced that the work would last as long as the century. It has so far outlasted it, and the company that prints it has changed almost everything about itself except this.

The contents were practical to the point of bleakness. Town by town, the book listed the mechanics, the depots where fuel could be bought, the doctors, the telegraph offices and the places a traveller might sleep. It explained how to change a tyre. It marked which towns had a garage that could be relied on. The reader it imagined was somebody who might stop, without warning, a long way from anywhere, and who would otherwise have no idea where to look for help. Roads were unsurfaced, signposts were rare, and a driver leaving a town he knew was in a position closer to that of a traveller in an unmapped country than of a motorist today.

The commercial reasoning was never concealed and does not need to be reconstructed. A tyre is consumed by being driven on. Anything that made driving less alarming would increase the distance the public was willing to cover, and the distance covered is the quantity that sells tyres. The guide was an expense entered against a purpose, and the brothers said so. Nothing in the early volumes pretends otherwise, and the modern habit of treating the guide's origins as a curiosity misses that the logic was sound and worked.

The change that made it an authority happened by accident twenty years later. André Michelin, visiting a garage, found copies of his own book being used to prop up a workbench. He drew the conclusion that a thing given away is a thing not valued, and in 1920 the guide was put on sale at seven francs. Advertisements were removed at the same time. Neither decision was made in order to look impartial, but that is what the combination produced: a book you paid for, carrying nobody's advertising, which is the shape an authority has.

Restaurants entered gradually. From 1926 a single star marked an establishment thought worth stopping at. In 1931 the scale was extended to three levels, and the wording chosen then is still in use: one star for a very good restaurant, two for one worth going out of your way for, three for one worth making a journey to. Notice that all three definitions are about travel rather than about cooking. A restaurant is graded by how far a reasonable person should be prepared to drive to eat in it. The scale is a fossil of the book's original purpose, and the most famous grading system in food has never quite stopped being a set of instructions about driving.

The judging is done by employed inspectors who eat anonymously and pay their own bills, and who are instructed not to identify themselves to the kitchen. Their reports go to the company and are not published. How many inspectors work in a given country is not disclosed, and neither is who they are, on the argument that a known inspector is served a different meal and therefore cannot do the job.

That method has a cost which is rarely stated plainly. An authority resting on secrecy cannot be checked from outside. Nobody can compare two inspectors' accounts of the same evening, or test whether the standard applied in one country is the standard applied in another, or examine how a decision to remove a star was reached. The institution asks to be trusted on the strength of its results, which is a reasonable request and is not the same as being accountable. The pressure it exerts is not theoretical either: chefs have described the awards as a weight rather than a reward, some have asked to be removed from the book, and at least one death has been publicly connected with the fear of losing one.

What none of this was designed to produce is the situation that now exists. A promotional pamphlet, written to sell rubber to the few thousand people in France who owned a car, has become the instrument by which a national cuisine measures itself, has been extended to countries where the company sells a small fraction of its tyres, and is treated as an external standard by the very cooks whose work it ranks. The book outlived its argument, and the argument was about tyres.

Questions 1–5

Complete the sentences below.

Choose **NO MORE THAN TWO WORDS AND/OR A NUMBER** from the passage for each answer.

- 1 The first edition of 1900 ran to copies.
- 2 As well as mechanics, doctors and places to sleep, the book listed offices.
- 3 From 1920 the guide was sold for francs.
- 4 At the same time all were taken out of it.
- 5 Inspectors eat without being recognised and settle their own

Questions 6–9

Complete the flow-chart below.

Choose **NO MORE THAN TWO WORDS AND/OR A NUMBER** from the passage for each answer.

From free pamphlet to grading system

1900 — the book is given away, at a time when France holds about **6** motor vehicles.



1920 — copies are found propping up a **7** , and the guide is put on sale.



1926 — a single **8** marks a restaurant worth stopping at.



1931 — three levels are defined, the highest being a restaurant worth making a **9** to.

Questions 10–13

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

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

- 10** Far more copies were printed in 1900 than there were cars in France.
- 11** The two changes made in 1920 were intended to make the guide look impartial.
- 12** Inspectors are paid more than restaurant critics who work for newspapers.
- 13** The company will not say how many inspectors it has in a given country.

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

Found, lost, and found again

- A** For most of the age of sail, scurvy killed more seamen than storms and fighting together. On the voyage that took a British squadron round the world between 1740 and 1744, something like two thirds of the nineteen hundred men who set out died, and the great majority of them died of it. What made the disease so hard to think about was that it behaved unreliably. It appeared on some long voyages and not on others, it lifted when a ship reached land, and the ships that suffered worst were not always the ones that had been at sea longest. A commander could take two identical vessels on the same route and lose the men in only one of them.
- B** In 1747, aboard a naval vessel in the Channel, a surgeon named James Lind did something that is now taught as one of the first controlled trials in medicine. He took twelve sailors who had the disease, put them on the same diet, divided them into six pairs and gave each pair a different remedy of the kind then recommended: cider, a preparation of sulphuric acid, vinegar, seawater, a medicinal paste, and, to the last pair, two oranges and a lemon. Within six days the pair given the fruit were well enough to nurse the others. Nobody else improved much, though the pair on cider did a little better than the rest.
- C** The story usually stops there, and it should not, because Lind did not conclude what he is credited with concluding. His treatise of 1753 runs to several hundred pages, presents the trial as one observation among a great many, and goes on discussing blocked perspiration and foul air as causes. He recommended citrus among other things rather than instead of them. He also devised a way of storing the juice by boiling it down into a syrup, a process which destroys most of the substance that was doing the work, so that his own method of preservation undid his own best result.
- D** What changed the practice was administration rather than argument. Gilbert Blane, a physician with access to the Admiralty and a habit of collecting figures, pressed for lemon juice to be issued as a matter of routine. From 1795 it was supplied to the fleet, and within a few years scurvy had very largely disappeared from the Navy. Nobody involved knew why it worked. The lemon juice was issued because a well-connected physician had counted cases and would not let the matter drop, not because anybody had shown what the juice contained. A policy resting on a mistaken theory of the disease was carried out reliably enough to end it, which is a more common shape in the history of medicine than the tidy version admits.
- E** Then the knowledge was lost, and it was lost by a decision about supply. In the eighteen-sixties the Navy moved from Mediterranean lemons to limes grown in the West Indies, which were cheaper and came from British territory. Limes contain much less of the active substance. The juice was also now pumped through copper piping and stored for long periods, both of which reduce what re-

mains. Ships provisioned in the new way went on getting scurvy. Because the remedy had visibly failed, the citrus explanation lost its standing, and by the end of the century the favoured accounts blamed bacteria or the tainted meat coming out of tins.

F The bill for that arrived in the Antarctic. The British expeditions of 1901 and 1910 sailed with no working theory of the disease at all. Men on the southern journeys developed it, and their medical officers argued about poisoning from preserved food while it was happening. A century and a half after a naval surgeon had watched two sailors recover on three pieces of fruit, an expedition could be equipped by a scientific nation with no reliable idea of how to prevent scurvy.

G The recovery came from an animal. In 1907 Axel Holst and Theodor Frølich, looking for something else, produced the disease in guinea pigs, which are among the few mammals that cannot manufacture the vitamin themselves and therefore behave like people. For the first time there was a test that did not require a ship, a two-year voyage and a crew willing to fall ill. Albert Szent-Györgyi isolated the substance in quantity in the following decades, working from adrenal glands and then from paprika, and Charles Glen King's laboratory showed it to be the factor that prevents scurvy. The tidy account says Lind proved it and the Navy applied it. What actually happened is that a working remedy was adopted for the wrong reasons, degraded by a purchasing decision, disbelieved for two generations, and made secure only when somebody finally understood the mechanism.

Questions 14–20

Reading Passage 2 has seven paragraphs, A–G.

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

Write the correct number, I–X.

List of Headings

- i** A remedy adopted for the wrong reasons
- ii** How the disease was treated before the eighteenth century
- iii** A disease that would not behave predictably
- iv** A trial, and what it appeared to show
- v** A trial, and what its author actually concluded
- vi** A purchase that undid a working solution
- vii** The bill paid by a later generation
- viii** An animal that made testing possible
- ix** How the fleet was provisioned under sail
- x** A disease that spread faster than anyone expected

14 Paragraph A

15 Paragraph B

- 16** Paragraph C
- 17** Paragraph D
- 18** Paragraph E
- 19** Paragraph F
- 20** Paragraph G

Questions 21–26

Complete the summary below.

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

The sequence in full

Lind's trial of 1747 gave six pairs of sick sailors six different remedies while holding the **21** constant, and only the pair given citrus recovered. His own treatise nevertheless went on discussing blocked **22** and foul air, and the syrup he devised for storing the juice destroyed most of its effect. Practice was altered instead by **23**, when lemon juice was issued to the fleet from 1795. The solution was then undone by a switch to West Indian **24**, and by storage in **25** piping. Belief collapsed, and recovery came only when guinea pigs provided a **26** that needed no voyage.

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

Why we save the wrong species

Conservation money does not follow danger. Studies that track where funding goes find that the great majority of it reaches a small number of vertebrates, overwhelmingly mammals and birds, while amphibians, which are the most threatened vertebrate class on the planet, and invertebrates, on which almost every terrestrial system depends, receive a share so small that in some accounts it rounds to nothing. The pattern is not a secret and it is not seriously disputed. What is disputed is whether it is a problem, and that turns out to be a better question than it sounds.

The obvious explanation is charisma, and as far as it goes it is correct. Most conservation income is raised from the public, and the public responds to size, to faces, to fur and to animals whose young look like human young. An organisation that depends on donations is not free to ignore what donors respond to, and nobody has invented a poster invertebrate. The distribution of funding is, in the first instance, a distribution of public feeling, and it would be strange if it were anything else.

There is a real defence of this and it deserves to be stated at full strength rather than dismissed. Money raised on a tiger is not spent on the tiger alone. It buys and guards habitat, and everything living in that habitat is protected by the same fence, including the species nobody would have paid for. On this account the charismatic animal is not the beneficiary but the instrument: an advertisement that funds a system. If that is what happens, the apparent distortion is not a distortion at all.

The trouble is that this is an empirical claim and it is mostly left untested. Whether the money reaches the system is a question with an answer, and the answer varies. Some flagship campaigns have plainly bought and defended large areas. Others have funded captive breeding, publicity and enforcement directed at one species, none of which does much for anything else in the neighbourhood. The defence is offered as though it were a principle when it is a prediction, and predictions can be checked. The organisations making it are also, as a rule, the organisations best placed to check it, and they are not the ones who publish the answer.

The opposite position is triage, and it is more respectable than its reception suggests. Rank the candidates by what it costs to remove a unit of extinction risk, fund downwards, and stop when the money is gone. New Zealand has operated an explicit version of this for years and has been unusually honest about what it implies, which is that some species will be allowed to go. The objection is not squeamishness. It is that the income being allocated was raised by exactly the appeal that triage proposes to discard, and a scheme that spends its own funding base is not efficient, whatever the ranking says.

So neither position survives on its own, and the choice between them is not the useful question. Saving everything is not a policy but a way of declining to prioritise, and declining to prioritise does not prevent prioritisation; it simply moves the decision to whoever runs the loudest campaign, where it is made with-

out criteria and cannot be argued with. A budget allocates whether or not anybody admits to allocating. The only choice available is between doing it with reasons and doing it without them.

The concession should be made without reluctance. Caring more about some animals than others is not a failure of reasoning, and treating it as one is both wrong and a poor way to talk to the people paying. There is nothing irrational in being moved by an elephant. A public that funds work on charismatic species is in every respect better than a public that funds no work at all, and an argument which forgets this ends by lecturing its own supporters.

What can be asked is narrower and harder to refuse. Hold the flagship argument to the claim it actually makes. If a species is being funded on the grounds that protecting it protects a system, then publish what proportion of that money reached the system, and how much habitat it secured, and what else lives there. Where the claim holds, it is vindicated and the criticism falls away. Where it does not, the spending is what the critics said it was, and the organisation doing it has been told so by its own figures rather than by an opponent. Either way the argument stops being about which animals people happen to like, which is an argument nobody can win, and becomes one about whether a stated mechanism is working, which is an argument that can be settled.

Questions 27–32

Do the following statements agree with the claims of the writer in Reading Passage 3?

Write **YES** if the statement agrees with the claims of the writer, **NO** if the statement contradicts the claims of the writer, or **NOT GIVEN** if it is impossible to say what the writer thinks about this.

- 27** The writer thinks it is unreasonable to care more about some animals than about others.
- 28** The writer accepts that the flagship argument is a serious one.
- 29** The writer believes conservation budgets should be larger overall.
- 30** The writer regards saving every species as a workable alternative.
- 31** The writer thinks the bodies best able to test the flagship claim generally do not publish the answer.
- 32** The writer thinks New Zealand's approach should be adopted by other countries.

Questions 33–36

Complete each sentence with the correct ending, A–G, below.

List of Endings

- A an advertisement that pays for a habitat.
- B hands the decision to the loudest campaign.
- C they are the most threatened class of vertebrates.
- D they are cheaper to protect than mammals.
- E it would spend the appeal that raises its own income.
- F most donors would prefer it.
- G it has already been tested and confirmed.

- 33 Amphibians receive very little funding despite the fact that
- 34 On the flagship argument the well-known animal is not the beneficiary but
- 35 The objection to pure triage is that
- 36 Declining to prioritise does not avoid prioritising; it only

Questions 37–40

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

- 37 What does the writer say about the way conservation funding is distributed?
- A Researchers disagree about what the pattern is.
 - B It is well documented and not seriously argued about.
 - C It has begun to change in recent years.
 - D It follows the level of extinction risk closely.
- 38 What is the writer's main criticism of the flagship defence?
- A It turns out to be false in every case examined.
 - B It is a prediction being offered as a principle.
 - C It was invented by the people who give the money.
 - D It holds for mammals but not for birds.
- 39 Why is New Zealand mentioned?
- A as a country that tried ranking and then gave it up
 - B as a case where the consequences of ranking have been admitted openly
 - C to demonstrate that triage always fails
 - D because its wildlife is unusually attractive to donors

- 40** What does the writer finally ask for?
- A** that funding be moved away from large mammals
 - B** that organisations publish how much of the money reached the habitat
 - C** that the public be taught more about invertebrates
 - D** that all triage rankings be made public