IELTS Academic Reading Sample 173 - Zoo Conservation Programmes

You should spend about 20 minutes on Questions 16-28 which are based on Reading Passage 173 below.

Zoo Conservation Programmes

One of London Zoo's recent advertisements caused me some irritation, so patently did it distort reality. Headlined "Without zoos you might as well tell these animals to get stuffed", it was bordered with illustrations of several endangered species and went on to extol the myth that without zoos like London Zoo these animals "will almost certainly disappear forever". With the zoo world's rather mediocre record on conservation, one might be forgiven for being slightly skeptical about such an advertisement.

Zoos were originally created as places of entertainment, and their suggested involvement with conservation didn't seriously arise until about 30 years ago, when the Zoological Society of London held the first formal international meeting on the subject. Eight years later, a series of world conferences took place, entitled "The Breeding of Endangered Species", and from this point onwards conservation became the zoo community's buzzword. This commitment has now been clear defined in The World Zpo Conservation Strategy (WZGS, September 1993), which although an important and welcome document does seem to be based on an unrealistic optimism about the nature of the zoo industry.

The WZCS estimates that there are about 10,000 zoos in the world, of which around 1,000 represent a core of quality collections capable of participating in co-ordinated conservation programmes. This is probably the document's first failing, as I believe that 10,000 is a serious underestimate of the total number of places masquerading as zoological establishments. Of course it is difficult to get accurate data but, to put the issue into perspective, I have found that, in a year of working in Eastern Europe, I discover fresh zoos on almost a weekly basis.

The second flaw in the reasoning of the WZCS document is the naive faith it places in its 1,000 core zoos. One would assume that the calibre of these institutions would have been carefully examined, but it appears that the criterion for inclusion on this select list might merely be that the zoo is a member of a zoo federation or association. This might be a good starting point, working on the premise that members must meet certain standards, but again the facts don't support the theory. The greatly respected American Association of Zoological Parks and Aquariums (AAZPA) has had extremely dubious members, and in the UK the Federation

of Zoological Gardens of Great Britain and Ireland has

Occasionally had members that have been roundly censured in the national press. These include Robin Hill Adventure Park on the Isle of Wight, which many considered the most notorious collection of animals in the country. This establishment, which for years was protected by the Isle's local council (which viewed it as a tourist amenity), was finally closed down following a damning report by a veterinary inspector appointed under the terms of the Zoo Licensing Act 1981. As it was always a collection of dubious repute, one is obliged to reflect upon the standards that the Zoo Federation sets when granting membership. The situation is even worse in developing countries where little money is available for redevelopment and it is hard to see a way of incorporating collections into the overall scheme of the WZCS.

Even assuming that the WZCS's 1,000 core zoos are all of a high standard complete with scientific staff and research facilities, trained and dedicated keepers, accommodation that permits normal or natural behaviour, and a policy of co-operating fully with one another what might be the potential for conservation? Colin Tudge, author of Last Animals at the Zoo (Oxford University Press, 1992), argues that "if the world"s zoos worked together in co-operative breeding programmes, then even without further expansion they could save around 2,000 species of endangered land vertebrates'. This seems an extremely optimistic proposition from a man who must be aware of the failings and weaknesses of the zoo industry the man who, when a member of the council of London Zoo, had to persuade the zoo to devote more of its activities to conservation. Moreover, where are the facts to support such optimism?

Today approximately 16 species might be said to have been "saved" by captive breeding programmes, although a number of these can hardly be looked upon as resounding successes. Beyond that, about a further 20 species are being seriously considered for zoo conservation programmes. Given that the international conference at London Zoo was held 30 years ago, this is pretty slow progress, and a long way off Tudge's target of 2,000.

Do the following statements agree with the views of the writer in Reading Passage 3? In boxes **16-22** write :

Y if the statement agrees with the writer

N if the statement contradicts the writer

NG if it is impossible to say what the writer thinks about this

16 London Zoo's advertisements are dishonest.

17 Zoos made an insignificant contribution to conservation up until 30 years ago.

18 The WZCS document is not known in Eastern Europe.

19 Zoos in the WZCS select list were carefully inspected.

20 No-one knew how the animals were being treated at Robin Hill Adventure Park.

21 Colin Tudge was dissatisfied with the treatment of animals at London Zoo.

22 The number of successful zoo conservation programmes is unsatisfactory.

Questions 23-25

Choose the appropriate letters A-D and write them in boxes 23-25 on your answer sheet.

23 What were the objectives of the WZCS document?

A to improve the calibre of zoos world-wide

B to identify zoos suitable for conservation practice

C to provide funds for zoos in underdeveloped countries

D to list the endangered species of the world

24 Why does the writer refer to Robin Hill Adventure Park?

A to support the Isle of Wight local council

B to criticise the 1981 Zoo Licensing Act

C to illustrate a weakness in the WZCS document

D to exemplify the standards in AAZPA zoos

25 What word best describes the writer's response to Colin Tudges' prediction on captive breeding programmes?

A disbelieving

B impartial

C prejudiced

D accepting

Questions 26-28

The writer mentions a number of factors which lead him to doubt the value of the WZCS document Which THREE of the following factors are mentioned? Write your answers (**A-F**) in boxes **26-28** on your answer sheet.

List of Factors:

A the number of unregistered zoos in the world

B the lack of money in developing countries

C the actions of the Isle of Wight local council

D the failure of the WZCS to examine the standards of the "core zoos"

E the unrealistic aim of the WZCS in view of the number of species “saved” to date

F the policies of WZCS zoo managers

Answer:

16. Y 17. Y 18. NG 19. N 20. N 21. NG 22. Y 23. B 24. C 25. A 26. A 27. D 28. E (In any order)

IELTS Academic Reading Sample 175 - Population Viability Analysis

You should spend about **20** minutes on Questions 28-39 which are based on Reading Passage 175 below:

Population Viability Analysis

Part A

To make political decisions about the extent and type of forestry in a region it is important to understand the consequences of those decisions. One tool for assessing the impact of forestry on the ecosystem is population viability analysis (PVA). This is a tool for predicting the probability that a species will become extinct in a particular region over a specific period. It has been successfully used in the United States to provide input into resource exploitation decisions and assist wildlife managers and there is now enormous potential for using population viability to assist wildlife management in Australia's forests. A species becomes extinct when the last individual dies. This observation is a useful starting point for any discussion of extinction as it highlights the role of luck and chance in the extinction process. To make a prediction about extinction we need to understand the processes that can contribute to it and these fall into four broad categories which are discussed below.

Part B

A) Early attempts to predict population viability were based on demographic uncertainty whether an individual survives from one year to the next will largely be a matter of chance. Some pairs may produce several young in a single year while others may produce none in that same year. Small populations will fluctuate enormously because of the random nature of birth and death and these chance fluctuations can cause species extinctions even if, on average, the population size should increase. Taking only this uncertainty of ability to reproduce into account, extinction is unlikely if the number of individuals in a population is above about 50 and the population is growing.

B) Small populations cannot avoid a certain amount of inbreeding. This is particularly true if there is a very small number of one sex. For example, if there are only 20 individuals of a species and only one is a male, all future individuals in the species must be descended from that one male. For most animal species such individuals are less likely to survive and reproduce. Inbreeding increases the chance of extinction.

C) Variation within a species is the raw material upon which natural selection acts. Without genetic variability a species lacks the capacity to evolve and cannot adapt to changes in its environment or to new predators and new diseases. The loss of genetic diversity associated with reductions in population size will contribute to the likelihood of extinction.

D) Recent research has shown that other factors need to be considered. Australia's environment fluctuates enormously from year to year. These fluctuations add yet another degree of uncertainty to the survival of many

species. Catastrophes such as fire, flood, drought or epidemic may reduce population sizes to a small fraction of their average level. When allowance is made for these two additional elements of uncertainty the population size necessary to be confident of persistence for a few hundred years may increase to several thousand.

Part C

Beside these processes we need to bear in mind the distribution of a population. A species that occurs in five isolated places each containing 20 individuals will not have the same probability of extinction as a species with a single population of 100 individuals in a single locality. Where logging occurs (that is, the cutting down of forests for timber) forest-dependent creatures in that area will be forced to leave. Ground-dwelling herbivores may return within a decade. However, arboreal marsupials (that is animals which live in trees) may not recover to pre-logging densities for over a century. As more forests are logged, animal population sizes will be reduced further. Regardless of the theory or model that we choose, a reduction in population size decreases the genetic diversity of a population and increases the probability of extinction because of any or all of the processes listed above. It is therefore a scientific fact that increasing the area that is loaded in any region will increase the probability that forest-dependent animals will become extinct.

Questions 28-31

Do the following statements agree with the views of the writer in *Part A* of Reading Passage 1? In boxes 28-31 on your answer sheet write:

YES if the statement agrees with the writer

NO if the statement contradicts the writer

NOT GIVEN if it is impossible to say what the writer thinks about this

Example	**Answer**
A link exists between the consequences of decisions and the decision making process itself.	**YES**

28 Scientists are interested in the effect of forestry on native animals.

29 PVA has been used in Australia for many years.

30 A species is said to be extinct when only one individual exists.

31 Extinction is a naturally occurring phenomenon.

Questions 32-35

These questions are based on Part B of Reading Passage 1. In paragraphs **A** to **D** the author describes four processes which may contribute to the extinction of a species. Match the list of processes (**i-vi**) to the paragraphs. Write the appropriate number (**i-vi**) in boxes **32-35** on your answer sheet.

NB There are more processes than paragraphs so you will not use all of them.

32	Paragraph A	**Processes**
		i Loss of ability to adapt
33	Paragraph B	ii Natural disasters
		iii An imbalance of the sexes
34	Paragraph C	iv Human disasters
		v Evolution
35	Paragraph D	vi The haphazard nature of reproduction

Questions 36-38

Based on your reading of Part C, complete the sentences below with words taken from the passage. Use **NO MORE THAN THREE WORDS** for each answer. Write your answers in boxes 36-38 on your answer sheet.

While the population of a species may be on the increase, there is always a chance that small isolated groups **..... (36) .....** Survival of a species depends on a balance between the size of a population and its **..... (37) .....** The likelihood that animals which live in forests will become extinct is increased when **..... (38) .....**

Question 39

Choose the appropriate letter **A-D** and write it in box 39 on your answer sheet.

39 An alternative heading for the passage could be:

A The protection of native flora and fauna

B Influential factors in assessing survival probability

C An economic rationale for the logging of forests

D Preventive measures for the extinction of a species

Answer:

28. Yes 29. No 30. No 31. Not Given 32. vi : The haphazard nature of reproduction 33. iii: An imbalance of the sexes 34. i: Loss of ability to adapt 35. ii: Natural disasters 36. will (/may) not survive / will (/ may)could become extinct 37. locality/ distribution 38. logging takes place (/ occurs) 39. B

IELTS Academic Reading Sample 174 - Visual Symbols and the Blind

You should spend no more than 20 minutes on Questions 27-40 which are based on Reading Passage 174 below.

Visual Symbols and the Blind

Fig. 1

Part 1

From a number of recent studies, it has become clear that blind people can appreciate the use of outlines and perspectives to describe the arrangement of objects and other surfaces in space. But pictures are more than literal representations. This fact was drawn to my attention dramatically when a blind woman in one of my investigations decided on her own initiative to draw a wheel as it was spinning. To show this motion, she traced a curve inside the circle (Fig. 1). I was taken aback, lines of motion, such as the one she used, are a very recent invention in the history of illustration. Indeed, as art scholar David Kunzle notes, Wilhelm Busch, a trend-setting nineteenth-century cartoonist, used virtually no motion lines in his popular figure until about 1877.
When I asked several other blind study subjects to draw a spinning wheel, one particularly clever rendition appeared repeatedly: several subjects showed the wheel's spokes as curves lines. When asked about these curves, they all described them as metaphorical ways of suggesting motion. Majority rule would argue that this device somehow indicated motion very well. But was it a better indicator than, say, broken or wavy lines-or any other kind of line, for that matter? The answer was not clear. So I decided to test whether various lines of motion were apt ways of showing movement or if they were merely idiosyncratic marks. Moreover, I wanted to discover whether there were differences in how the blind and the sighted interpreted lines of motion.

To search out these answers, I created raised-line drawings of five different wheels, depicting spokes with lines that curved, bent, waved, dashed and extended beyond the perimeters of the wheel. I then asked eighteen blind volunteers to feel the wheels and assign one of the following motions to each wheel: wobbling, spinning

fast, spinning steadily, jerking or braking. My control group consisted of eighteen sighted undergraduates from the University of Toronto.

Words associated with circle/square	Agreement among subjects(%)
SOFT-HARD	100
MOTHER-FATHER	94
HAPPY-SAD	94
GOOD-EVIL	89
LOVE-HATE	89
ALIVE-DEAD	87
BRIGHT-DARK	87
LIGHT-HEAVY	85
WARM-COLD	81
SUMMER-WINTER	81
WEAK-STRONG	79
FAST-SLOW	79
CAT-DOG	74
SPRING-FALL	74
QUIET-LOUD	62
WALKING-STANDING	62
ODD-EVEN	57
FAR-NEAR	53
PLANT-ANIMAL	53
DEEP-SHALLOW	51

All but one of the blind subjects assigned distinctive motions to each wheel. Most guessed that the curved spokes indicated that the wheel was spinning steadily; the wavy spokes, they thought; suggested that the wheel was wobbling; and the bent spokes were taken as a sign that the wheel was jerking. Subjects assumed that spokes extending beyond the wheel's perimeter signified that the wheel had its brakes on and that dashed spokes indicated the wheel was spinning quickly.

In addition, the favored description for the sighted was favored description for the blind in every instance. What is more, the consensus among the sighted was barely higher than that among the blind. Because motion devices are unfamiliar to the blind, the task I gave them involved some problem solving. Evidently, however, the blind not only figured out meaning for each of motion, but as a group they generally came up with the same meaning at least as frequently as did sighted subjects.

Part 2

We have found that the blind understand other kinds of visual metaphors as well. One blind woman drew a picture of a child inside a heart-choosing that symbol, she said, to show that love surrounded the child. With Chang Hong Liu, a doctoral student from china, I have begun exploring how well blind people understand the symbolism behind shapes such as hearts that do not directly represent their meaning.

We gave a list of twenty pairs of words to sighted subjects and asked them to pick from each pair the term that best related to a circle and the term that best related to assure. For example, we asked: what goes with soft? A circle or a square? Which shapes goes with hard?

All our subjects deemed the circle soft and the square hard. A full 94% ascribed happy to the circle, instead of sad. But other pairs revealed less agreement: 79% matched fast to slow and weak to strong, respectively. And only 51% linked deep to circle and shallow to square. (*see Fig. 2*) When we tested four totally blind volunteers using the same list, we found that their choices closely resembled those made by he sighted subjects. One man, who had been blind since birth, scored extemely well. He made only one match differing from the consensus, assigning 'far' to square and 'near' to circle. In fact, only a small majority of sighted subjects-53%-had paired far and near to the opposite partners. Thus we concluded that the blind interpret abstract shapes as sighted people do.

Questions :

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

Write your answers in boxes **27 –29** on your answer sheet.

27 In the first paragraph the writer makes the point that blind people

A. may be interested in studying art.
B. can draw outlines of different objects and surfaces.
C. can recognize conventions such as perspective.
D. can draw accurately.

28 The writer was surprised because the blind woman

A. drew a circle on her own initiative.
B. did not understand what a wheel looked like.
C. included a symbol representing movement.
D. was the first person to use lines of motion.

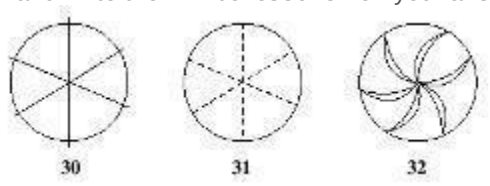
29 From the experiment described in Part 1,the writer found that the blind subjects

A. had good understanding of symbols representing movement.
B. could control the movement of wheels very accurately.
C. worked together well as a group in solving problems.
D. got better results than the sighted undergraduates.

Questions 30 –32

Look at the following diagrams (Questions 30 –32), and the list of types of movement below. Match each

diagram to the type of movement **A–E** generally assigned to it in the experiment. Choose the correct letter **A–E** and write them in boxes**30–32** on your answer sheet.



A	**steady spinning**
B	**jerky movement**
C	**rapid spinning**
D	**wobbling movement**
E	**use of brakes**

Questions 33 –39

Complete the summary below using words from the box. Write your answers in boxes 33 –39 on your answer sheet. **NB** You may use any word more than once.

In the experiment described in Part 2, a set of word **33**..... was used to investigate whether blind and sighted people perceived the symbolism in abstract **34**.....in the same way. Subjects were asked which word fitted best with a circle and which with a square. From the **35**..... volunteers, everyone thought a circle fitted 'soft 'while a square fitted 'hard'. However, only 51% of the **36** ..... volunteers assigned a circle to **37.....** .When the test was later repeated with **38**..... volunteers, it was found that they made **39.....** choices..

associations	**blind**	**deep**	**hard**	**hundred**	**identical**	**pairs**	**shapes**
Sighted	**similar**	**shallow**	**soft**	**words**			

Question 40

Choose the correct letter, **A , B , C** or **D**. Write your answer in box 40 on your answer sheet.

Which of the following statements best summarizes the writer 's general conclusion?

A The blind represent some aspects of reality differently from sighted people.

B The blind comprehend visual metaphors in similar ways to sighted people.

C The blind may create unusual and effective symbols to represent reality.

D The blind may be successful artists if given the right training.

Answer:

27. C 28. C 29. A 30. use of breaks 31. rapid spinning 32. steady spinning 33. pairs 34. shapes 35. sighted 36. sighted 37. deep 38. blind 39. similar 40. B