IELTS Academic Reading Sample 157 - Creating Artificial Reefs

You should spend about 20 minutes on Questions 1-13 which are based on Reading Passage 157 below.

Creating Artificial Reefs

In the coastal waters of the US, a nation's leftovers have been discarded. Derelict ships, concrete blocks, scrapped cars, army tanks, tyres filled with concrete and redundant planes litter the sea floor. However, this is not waste disposal, but part of a coordinated, state-run programme. To recently arrived fish, plants and other sea organisms, these artificial reefs are an ideal home, offering food and shelter.

Sea-dumping incites widespread condemnation. Little surprise when oceans are seen as 'convenient' dumping grounds for the rubbish we have created but would rather forget. However, scientific evidence suggests that if we dump the right things, sea life can actually be enhanced. And more recently, purpose-built structures of steel or concrete have been employed - some the size of small apartment blocks -principally to increase fish harvests.

Strong currents, for example, the choice of design and materials for an artificial reef depends on where it is going to be placed. In areas of a solid concrete structure will be more appropriate than ballasted tyres. It also depends on what species are to be attracted. It is pointless creating high-rise structures for fish that prefer flat or low-relief habitat. But the most important consideration is the purpose of the reef.

In the US, where there is a national reef plan using cleaned up rigs and tanks, artificial reefs have mainly been used to attract fish for recreational fishing or sport-diving. But there are many other ways in which they can be used to manage the marine habitat. For as well as protecting existing habitat, providing purpose-built

accommodation for commercial species (such as lobsters and octupi) and acting as sea defences, they can be an effective way of improving fish harvests.

Japan, for example, has created vast areas of artificial habitat - rather than isolated reefs - to increase its fish stocks. In fact, the cultural and historical importance of seafood in Japan is reflected by the fact that it is a world leader in reef technology; what's more, those who construct and deploy reefs have sole rights to the harvest.

In Europe, artificial reefs have been mainly employed to protect habitat. Particularly so in the Mediterranean where reefs have been sunk as physical obstacles to stop illegal trawling, which is destroying sea grass beds and the marine life that depends on them. If you want to protect areas of the seabed, you need something that will stop trawlers dead in their tracks,' says Dr Antony Jensen of the Southampton Oceanography Centre.

Italy boasts considerable artificial reef activity. It deployed its first scientifically planned reef using concrete cubes assembled in pyramid forms in 1974 to enhance fisheries and stop trawling. And Spain has built nearly 50 reefs in its waters, mainly to discourage trawling and enhance the productivity of fisheries. Meanwhile, Britain established its first quarried rock artificial reef in 1984 off the Scottish coast, to assess its potential for attracting commercial species.

But while the scientific study of these structures is a little over a quarter of a century old, artificial reefs made out of readily available materials such as bamboo and coconuts have been used by fishermen for centuries. And the benefits have been enormous. By placing reefs close to home, fishermen can save tim e and fuel. But unless they are carefully managed, these areas can become over- fished. In the Philippines, for example, where artificial reef programmes have been instigated in response to declining fish populations, catches are often allowed to exceed the maximum potential new production of the artificial reef because there is no proper management control.

There is no doubt that artificial reefs have lots to offer. And while purpose-built structures are effective, the real challenge now is to develop environmentally safe ways of using recycled waste to increase marine diversity. This will require more scientific research. For example, the leachates from one of the most commonly used reef materials, tyres, could potentially be harmful to the creatures and plants that they are supposed to attract. Yet few extensive studies have been undertaken into the long- term effects of disposing of tyres at sea. And at the moment, there is little consensus about what is environmentally acceptable to dump at sea, especially when it comes to oil and gas rigs. Clearly, the challenge is to develop environmentally acceptable ways of disposing of our rubbish while enhancing marine life too. What we must never be allowed to do is have an excuse for dumping anything we like at sea.

Questions 1-3

The list below gives some of the factors that must be taken into account when deciding how to construct an artificial reef. Which **THREE** of these factors are mentioned by the writer of the article? Write the appropriate letters **A-F** in boxes 1-3 on your answer sheet.

A The fishing activity in the area
B The intended location of the reef
C The existing reef structures
D The type of marine life being targeted
E The function of the reef
F The cultural importance of the area

Questions 4-8

Complete the table below. Choose ***NO MORE THAN THREE WORDS*** from the passage for each answer.

Write your answers in boxes 4-8 on your answer sheet.

Area/Country	**Type of Reef**	**Purpose**
US	Made using old **….(4)….**	To attract fish for leisure activities
Japan	Forms large area of artificial habitat	to improve **….(5)….**
Europe	lies deep down to form **…(6)….**	to act as a sea defence
Italy	Consists of pyramid shapes of **….(7)…..**	to prevent trawling
Britain	made of rock	to encourage **….(8)….** Fish species

Questions 9-12

Using **NO MORE THAN THREE WORDS**, complete the following sentences. Write your answers in boxes 9-12 on your answer sheet.

In **.....(9) ....** , people who build reefs are legally entitled to all the fish they attract. Trawling inhibits the development of marine life because it damages the **.....(10).....** In the past, both **.....(11).....** were used to make reefs. To ensure that reefs are not over-fished, good **.....(12).....** is required.

Question 13

Choose the appropriate letter A-D and write it in box 13 on your answer sheet.

13 According to the writer, the next step in the creation of artificial reefs is

A to produce an international agreement.

B to expand their use in the marine environment.

C to examine their dangers to marine life.

D to improve on purpose-built structures.

Answer:

1, 2 & 3: B, D, E (In any order)

4 rigs and/or tanks

5 fish stocks

6 physical obstacles

7 concrete

8 commercial

9 Japan

10 sea [grass) beds/floor/bottom

11 bamboo and coconuts

12 management (control)

13 C

IELTS Academic Reading Sample 158 - The Discovery of Uranus

You are advised to spend about 20 minutes on Questions **27 - 40**

The Discovery of Uranus

Someone once put forward an attractive though unlikely theory. Throughout the Earth's annual revolution around the sun there is one point of space always hidden from our eyes. This point is the opposite part of the Earth's orbit, which is always hidden by the sun. Could there be another planet there, essentially similar to our own, but always invisible?

If a space probe today sent back evidence that such a world existed it would cause not much more sensation than Sir William Herschel's discovery of a new planet, Uranus, in 1781. Herschel was an extraordinary man — no other astronomer has ever covered so vast a field of work — and his career deserves study. He was born in Hanover in Germany in 1738, left the German army in 1757, and arrived in England the same year with no money but quite exceptional music ability. He played the violin and oboe and at one time was organist in the Octagon Chapel in the city of Bath. Herschel's was an active mind, and deep inside he was conscious that music was not his destiny; he therefore read widely in science and the arts, but not until 1772 did he come across a book on astronomy. He was then 34, middle-aged by the standards of the time, but without hesitation he embarked on his new career, financing it by his professional work as a musician. He spent years mastering the art of telescope construction, and even by present-day standards his instruments are comparable with the best.

Serious observation began 1774. He set himself the astonishing task of 'reviewing the heavens', in other words, pointing his telescope to every accessible part of the sky and recording what he saw. The first review was made in 1775; the second, and most momentous, in 1780-81. It was during the latter part of this that he discovered Uranus. Afterwards, supported by the royal grant in recognition of his work, he was able to devote himself entirely to astronomy. His final achievements spread from the sun and moon to remote galaxies (of which he discovered hundreds), and papers flooded from his pen until his death in 1822. Among these there was one sent to the Royal Society in 1781, entitled An Account of a Comet. In his own words:

On Tuesday the 13th of March, between ten and eleven in the evening, while I was examining the small stars in the neighbourhood of H Geminorum, I perceived one that appeared visibly larger than the rest; being struck with its uncommon magnitude, I compared it to H Geminorum and the small star in the quartile between Auriga and Gemini, and finding it to be much larger than either of them, suspected it to be a comet.

Herschel's care was the hallmark of a great observer; he was not prepared to jump any conclusions. Also, to be fair, the discovery of a new planet was the last thought in anybody's mind. But further observation by other astronomers besides Herschel revealed two curious facts. For comet, it showed a remarkably sharp disc; furthermore, it was moving so slowly that it was thought to be a great distance from the sun, and comets are only normally visible in the immediate vicinity of the sun. As its orbit came to be worked out the truth dawned that it was a new planet far beyond Saturn's realm, and that the 'reviewer of the heavens' had stumbled across an unprecedented prize. Herschel wanted to call it georgium sidus (Star of George) in honour of his royal patron King George III of Great Britain. The planet was later for a time called Herschel in honour of its discoverer. The name Uranus, which was first proposed by the German astronomer Johann Elert Bode, was in use by the late 19th century.

Uranus is a giant in construction, but not so much in size; its diameter compares unfavourably with that of Jupiter and Saturn, though on the terrestrial scale it is still colossal. Uranus' atmosphere consists largely of hydrogen and helium, with a trace of methane. Through a telescope the planet appears as a small bluish-green disc with a faint green periphery. In 1977, while recording the occultation 1 of a star behind the planet, the American astronomer James L. Elliot discovered the presence of five rings encircling the equator of Uranus. Four more rings were discovered in January 1986 during the exploratory flight of Voyager 2 2 , In addition to its rings, Uranus has 15 satellites ('moons'), the last 10 discovered by Voyager 2 on the same flight; all revolve about its equator and move with the planet in an east–west direction. The two largest moons, Titania and Oberon, were discovered by Herschel in 1787. The next two, Umbriel and Ariel, were found in 1851 by the British astronomer William Lassell. Miranda, thought before 1986 to be the innermost moon, was discovered in 1948 by the American astronomer Gerard Peter Kuiper.

Glossary:

'**Occultation**' : *in astronomy, when one object passes in front of another and hides the second from view, especially, for example, when the moon comes between an observer and a star or planet .*

'**Voyager 2**' : *an unmanned spacecraft sent on a voyage past Saturn, Uranus and Jupiter in 1986; during which it sent back information about these planets to scientists on earth .*

Questions 27-31

Complete the table below. Write a date for each answer.

Write your answers in boxes 27-31 on your answer sheet.

Event	**Date**

Example William Herschel was born	***Answer*** 1738
Herschel began investigating astronomy	(27)……
Discovery of the planet Uranus	(28)……
Discovery of the moons Titania and Oberon	(29)……
First discovery of Uranus' rings	(30)……
Discovery of the last 10 moons of Uranus	(31)……

Questions 32-36

Do the following statements reflect the claims of the writer of the Reading Passage?

In boxes 32-36 on your answer sheet write

YES if the statement reflects the claims of 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*

Herschel was multi-talented **YES**

32 It is improbable that there is a planet hidden behind the sun.

33 Herschel knew immediately that he had found a new planet.

34 Herschel collaborated with other astronomers of his time.

35 Herschel's newly-discovered object was considered to be too far from the sun to be a comet.

36 Herschel's discovery was the most important find of the last three hundred years.

Questions 37-40

Complete each of the following statements (Questions 37-40) with a name from the Reading Passage.

Write your answers in boxes 37-40 on your answer sheet.

The suggested names of the new planet started with **..... (37) .....**, then **..... (38).....**, before finally settling on Uranus. The first five rings around Uranus were discovered by **..... (39) .....**From 1948 until 1986, the moon **..... (40) .....**was believed to be the moon closest to the surface of Uranus.

Answer:

27. 1772
28. 1781
29. 1787
30. 1977
31. 1986
32. YES
33. NO
34. NOT GIVEN
35. YES
36. NOT GIVEN
37. georgium sidus
38. Herschel
39. James L. Elliot
40. Miranda

IELTS Academic Reading Sample 159 - The Danger Of Ecstasy

You are advised to spend about 20 minutes on Questions **32 - 40**.

The Danger of ECSTASY

Use of the illegal drug named Ecstasy (MDMA) has increased alarmingly in Britain over the last few years, and in 1992 the British Medical Journal claimed that at least seven deaths and many s,evere adverse reactions have followed its use as a dance drug. 14 deaths have so far been attributed to the drug in Britain, although it is possible that other drugs contributed to some of those deaths. While it is true that all drugs by their very nature change the way in which the body reacts to its environment and are therefore potentially dangerous, it is still unclear whether casual use of Ecstasy is as dangerous as authorities believe. What is certain is that the drug causes distinct changes to the body which, unless understood, may lead to fatal complicati ons in certain circumstances.

In almost all cases of MDMA-related deaths in Britain, overheating of the body and inadequate replacement of fluids have been noted as the primary causes of death. Yet in the United States, studies appear to implicate other causes since no deaths from overheating have yet been reported. It seems that normal healthy people are unlikely to die as a result of taking MDMA, but people with pre-existing conditions such as a weak heart or asthma may react in extreme ways and are well-advised not to take it.

Not all physical problems associated with the drug are immediate. Medium term and long term effects have been reported which are quite disturbing, yet not all are conclusively linked to the drug's use. Medium term effects include the possibility of contracting the liver disease hepatitis, or risking damage to the kidneys. However, animal studies show no such damage (although it is readily admitted by researchers that animal studies are far from conclusive since humans react in different ways than rats and monkeys to the drug), and cases of human liver or kidney damage have so far only been reported in Britain. Nonetheless, evidence to date suggests that alcohol and Ecstasy taken at the same time may result in lasting harm to bodily organs.

Evidence that MDMA causes long term cellular damage to the brain has, until recently, been based on experiments with animals alone; the most common method of detection is to cut out a section of the brain, and measure the level of the chemical serotonin. This is performed weeks or
months after use of a suspect drug. If the serotonin level, which is lowered as a result of the use of many drugs, fails to return to normal, then it is probable that the drug in question has caused damage to the cells of that part of the brain. Ecstasy has been implicated in causing brain damage in this way, but in most cases the serotonin level returns to normal, albeit after a long time.

Early experiments with monkeys, in which they were found to have permanent brain damage as a result of

being administered MDMA, were used to link brain damage in humans to Ecstasy use. These early concerns led to the drug being classified as extremely dangerous, and although the results of the research were doubted by some and criticised as invalid, no attempt was made to change the classification. However, the latest available data regarding permanent brain damage in humans who have taken Ecstasy regularly over many years (as little as once a week for four years) seem to justify the cautious approach taken in the past. The psychological effects of taking Ecstasy are also a major cause for concern. It is clear that the mind is more readily damaged by the drug than is the body. It is not difficult to find occasional or regular users of the drug who will admit to suffering mental damage as a result. Paranoia, depression, loss of motivation and desire, bouts of mania - all are common, and not unusual side effects of the drug.

To be fair to those who claim that Ecstasy frees the personality by removing one's defenses against psychological attack, it is true that the drug can be liberating for some users. Unfortunately, the experience is likely to be short-lived, and there is always the danger is that one's normal life might seem dull by comparison. .*

Perhaps the most damning evidence urging against the use of Ecstasy is that it is undoubtedly an addictive substance, but one that quickly loses its ability to transport the mind, while it increases its effect upon the body. Yet, unlike the classic addictive drugs, heroin, opium, morphine and so on, Ecstasy does not produce physical withdrawal symptoms. In fact, because one becomes quickly tolerant of its effect on the mind, it is necessary to forgo its use for a while in order to experience again its full effect. Any substance which produces such a strong effect on the user should be treated with appropriate respect and caution.

You are advised to spend about 10 minutes on Questions **32 - 35**.
Refer to Reading Passage **17** "**The Dangers of Ecstasy**", and decide which of the answers best completes the following sentences.
Write your answers in boxes **32 - 35** on your Answer Sheet.
The first one has been done for you as an example.

Example: In recent years, use of the illegal drug Ecstasy in Britain:

a) has increased

b) has decreased alarmingly

c) has decreased

d) has increased a little

Q32. *It is not known whether:*

a) drugs change the way the body reacts

b) the British Medical Journal has reported seven deaths caused Ecstasy

c) Ecstasy alone was responsible for the 14 deaths in Britain

d) Ecstasy causes changes to the body

Q33. *The use of Ecstasy:*

a) is usually fatal

b) is less dangerous than the authorities believe

c) is harmless when used as a dance drug

d) none of the above

Q34. *Deaths from Ecstasy are sometimes caused by:*

a) people with pre-existing conditions

b) too much fluid in the body

c) overheating of the body

d) all of the above

Q35. *MDMA studies conducted on animals:*

a) show damage to the kidneys

b) cannot provide absolute proof of the effect of the drug on humans

c) are cruel and have been discontinued

d) have yet to indicate long term brain damage

Questions 36 - 40

Using information from Reading Passage 17, complete the following sentences using **NO MORE THAN THREE WORDS.**

Write your answers in boxes **36 - 40** on your Answer Sheet.

Q36. Permanent damage to the body may result if Ecstasy is taken simultaneously with

Q37. Cellular damage to the brain is detected by measuring the amount of

Q38. The serotonin level of Ecstasy users takes a long time to

Q39. One of the positive effects of taking Ecstasy is that it can

Q40. Ecstacy produces no withdrawal symptoms even though it is

Answer:

32. c 33. d 34. c 35. b 36. alcohol 37. (the chemical) serotonin 38. return to normal 39. free the personality /liberate someusers / remove one's defenses 40. addictive

IELTS Academic Reading Sample 160 - Destinations For International English Students

You are advised to spend about 20 minutes on Questions 1-15.

DESTINATIONS FOR INTERNATIONAL ENGLISH STUDENTS

Paragraph (i)

At any given time, more than a million international students around the world are engaged in the study of the English language in a predominantly English-speaking country. The five most popular destinations, in order of popularity, are the U. S., Britain, Australia, New Zealand, and Canada. The reasons for choosing to study English abroad differ with each individual, as do the reasons for the choice of destination.

Paragraph (ii)

Numerous studies conducted in Britain and the United States show that the country of choice depends to a large extent on economic factors. While this should not provoke much surprise, careful analysis of the data suggests that students and their parents are most influenced by the preconceptions they have of the countries considered for study abroad, which, in turn, influence the amount they or their parents are prepared to outlay for the experience. The strength of international business connections between countries also gives a good indication of where students will seek tuition. In the main, students tend to follow the traditional pattern of study for their national group.

Paragraph (iii)

The United States attracts the most diverse array of nationalities to its English language classrooms - this heterogeneity being largely due to its immense pulling power as the world's foremost economy and the resulting extensive focus on U.S. culture. Furthermore, throughout the non-European world, in Asia and North and South America especially, the course books used to teach English in most elementary and high schools introduce students to American English and the American accent from a very early age. Canada also benefits from worldwide North American exposure, but has the most homogenous group of students - most with French as their first language. Before furthering their English skills, students in Europe study from predominantly British English material; most Europeans, naturally, opt for neighbouring Britain, but many Asian, Middle-Eastern, and African students decide upon the same route too.

Paragraph (iv)

Australia and New Zealand are often overlooked, but hundreds of thousands of international students have discovered the delights of studying in the Southern Hemisphere. The majority are Asian for reasons that are not

difficult to comprehend: the proximity of the two countries to Asia, (Jakarta, the capital of Australia's closest Asian neighbor, Indonesia, is only 5506 kilometers from Sydney), the comparatively inexpensive cost of living and tuition, and, perhaps of most importance to many Asian students whose English study is a prelude to tertiary study, the growing awareness that courses at antipodean universities and colleges are of an exceptionally high standard. In addition, revised entry procedures for overseas students have made it possible for an increasing number to attend classes to improve their English for alternative reasons.

Paragraph (v)

Australia and New Zealand have roughly the same mix of students in their language classrooms, but not all students of English who choose these countries are from Asia. The emerging global consciousness of the late twentieth century has meant that students from as far as Sweden and Brazil are choosing to combine a taste for exotic travel with the study of English 'down under' and in 'the land of the long white cloud'. But even the Asian economic downturn in the 1990s has not significantly altered the demographic composition of the majority of English language classrooms within the region.

Paragraph (vi)

Nor have the economic problems in Asia caused appreciable drops in full-time college and university attendances by Asian students in these two countries. This is partly because there has always been a greater demand for enrolment at Australian and New Zealand tertiary institutions than places available to overseas students. In addition, the economic squeeze seems to have had a compensatory effect. It has clearly caused a reduction in the number of students from affected countries who are financially able to study overseas. However, there has been a slight but noticeable shift towards Australia and New Zealand by less wealthy Asian students who might otherwise have chosen the United States for English study.

Paragraph (vii)

The U.S. and Britain will always be the first choice of most students wishing to study the English language abroad, and it is too early to tell whether this trend will continue. However, economic considerations undoubtedly wield great influence upon Asian and non-Asian students alike. If student expectations can be met in less traditional study destinations, and as the world continues to shrink, future international students of English will be advantaged because the choice of viable study destinations will be wider.

Questions 1-4

You are advised to spend about 5 minutes on Questions 1-4.

Complete the missing information in the table below by referring to Reading Passage 1 *"Destinations for International English Students"*.

Write your answers in boxes 1 - 4 on your Answer Sheet. The first one has been done for you as an example.

	U.S.	**Britain**	**Australia**	**New Zealand**	**Canada**

order of popularity	1st American	*Ex:… 2nd…* **1……..**	3rd **2……..**	4th not given	5th not given
type of English in course books used in this country	1	2	**3…….**	Equal 3	5
student heterogeneity (1 = most heterogenous 5 = least heterogenous)					

You are advised to spend about 5 minutes on Questions 4 -9.

Choose the most suitable heading from the list of headings below for the seven paragraphs of Reading Passage 1 "Destinations for International English Students". Write your answers in boxes **5 - 10** on your Answer Sheet.

List of Heading

A. Heterogeneity in the language classroom
B. Enrollment demand in Australia & New Zealand.
C. Reasons for the choice of destination
D. The attractions of studying in the antipodes
Example: E. Conclusion
F. Additional student sources
G. Student destinations

Q4. Paragraph (i) ..... Q5. Paragraph (ii) .....

Q6. Paragraph (iii)..... Q7. Paragraph (iv).....

Q8. Paragraph (v)..... Q9. Paragraph (vi).....

Example: Paragraph (vii) ..... **E**.....

Questions 10-15

You are advised to spend about 10 minutes on questions 10 -15.

Refer to Reading Passage 1 "Destinations for International English Students", and look at the statements below.

Write your answers in boxes 10 -15 on your Answer Sheet.

Write **T** if the statement is True; **F** if the statement is False; **N** if the information is Not Given in the text.

Example: There are presently more than 1,000,000 foreign students of English abroad.

T F N

Q10. Study destination choices are mostly influenced by proximity to home.

T F N

Q11. Students who wish to study business will probably study English overseas.

T F N

Q12. Students of the same nationality usually make similar study choices.

T F N

Q13. English language classrooms in the U.S. have the widest range of student nationalities.

T F N

Q14. Standards at Australian and New Zealand tertiary institutions are improving.

T F N

Q15. Despite the 1990s Asian economic crisis, Asian students still dominate the English language classrooms of Australia and New Zealand.

T F N

Answer:

1. British 2. not given 3. (equal) 3 4. G 5. C 6. A 7. D 8. F 9. B 10. F 11. N 12. T 13. T 14. N 15. T