IELTSFever Academic IELTS Reading Test 122

Reading Passage 1

You should spend about 20 minutes on Questions 1-13, which are based on the IELTSFever Academic IELTS Reading Test 122 Reading Passage The Research for Intelligence below.

The Research for Intelligence

{A} In Robert Plomin's line of work, patience is essential. Plomin, a behavioral geneticist at the Institute of Psychiatry in London, wants to understand the nature of intelligence. As part of his research, he has been watching thousands of children grow up. Plomin asks the children questions such as “What do water and milk have in common?” and “In what direction does the sun set?” At first he and his colleagues quizzed the children in person or over the telephone. Today many of those children are in their early teens, and they take their tests on the Internet. In one sense, the research has been a rousing success. The children who take the tests are all twins, and throughout the study identical twins have tended to get scores closer to each other than those of non-identical twins, who in turn have closer scores than unrelated children. These results along with similar ones from other studies—make clear to the scientists that genes have an important influence on how children score on intelligence tests.

{B} But Plomin wants to know more. He wants to find the specific genes that are influencing. And now he has a tool for pinpointing genes that he could not have even dreamed of when he began quizzing children. Plomin and his colleagues have been scanning the genes of his subjects with a device called a microarray, a small chip that can recognize half a million distinctive snippets of DNA. The combination of this powerful tool with a huge number of children to study meant that he could detect genes that had only a tiny effect on the variation in scores.

{C} Still, when Plomin and his co-workers unveiled the results of their microarray study—the biggest dragnet for intelligence-linked genes ever undertaken—they were underwhelming. The researchers found only six genetic markers that showed any sign of having an influence on the test scores. When they ran stringent statistical tests to see if the results were flukes, only one gene passed. It accounted for 0.4 percent of variation in the scores. And to cap it all off, no one knows what the gene does in the body. “It's a real drag in some ways,” Plomin says.

{D} Plomin's experience is a typical one for scientists who study intelligence. Along with using microarrays, they are employing brain scans and other sophisticated technologies to document some of the intricate dance steps that genes and environment take together in the development of intelligence. They are beginning to see how differences in intelligence are reflected in the structure and function of the brain. Some scientists have even begun to build a new vision of intelligence as a reflection of the ways in which information flows through the brain. But for all these advances, intelligence remains a profound mystery. “It's amazing the extent to which we know very little,” says Wendy Johnson, a psychologist at the University of Minnesota.

{E} In some ways, intelligence is very simple. “It's something that everybody observes in others, "says Eric Turkheimer of the University of Virginia. Everybody knows that some people are smarter than others, whatever it means technically. It's something you sense in people when you talk to them.”'Yet that kind of gut instinct does not translate easily into a scientific definition. In 1996 the American Psychological Association issued a report on intelligence, which stated only that "individuals differ from one another in their ability to understand complex ideas, to adapt effectively to the environment, to learn from experience, to engage in various forms of reasoning, to overcome obstacles by taking thought.”

{F} To measure these differences, psychologists in the early 1900s invented tests of various kinds of thought, such as math, spatial reasoning and verbal skills. To compare scores on one type of test to those on another, some psychologists developed standard scales of intelligence. The most familiar of them is the intelligence quotient, which is produced by setting the average score at 100.IQ scores are not arbitrary numbers, however. Psychologists can use them to make strong predictions about other features of people's lives. It is possible to make reasonably good predictions, based on IQ scores in childhood, about how well people will fare in school and in the workplace. People with high IQs even tend to live longer than average. “If you have an IQ score, does that tell you everything about a person's cognitive strengths and weaknesses? No," says Richard J. Haier of the University of California, Irvine. But even a simple number has the potential to say a lot about a person. “When you go see your doctor, what's the first thing that happens? Somebody takes your blood pressure and temperature. So you get two numbers. No one would say blood pressure and temperature summarize everything about your health, but they are key numbers.”

{G} Then what underlies an intelligence score?"It's certainly tapping something," says Philip Shaw, a psychiatrist at the National Institute of Mental Health (NIMH). The most influential theory of what the score reflects is more than a century old. In 1904 psychologist Charles Spearman observed that people who did well on one kind of test tended to do well on others. The link from one score to another was not very tight, but Spearman saw enough of a connection to declare that it was the result of something he called a g factor, short for general intelligence factor. How general intelligence arose from the brain spearman could not say. In recent decades, scientists have searched for an answer by finding patterns in the test scores of large groups of people. Roughly speaking, there are two possible sources for these variations. Environmental influences—anything from the way children are raised by their parents to the diseases they may suffer as they develop—are one source. Genes are another. Genes may shape the brain in ways that make individuals better or worse at answering questions on intelligence tests.

Questions 1-6

The reading passage has seven paragraphs, A-G

Choose the correct heading for paragraphs B-G from the list below. Write the correct number, i-x, in boxes 1-6 on your answer sheet.

List of Headings

(i) Low probability triggers unpersuasive findings

(ii) Understanding of intelligence remains limited

(iii) Difficulty in accurately defining intelligence

(iv) People with high IQ seldom fall sick

(V) An innovative appliance to improve the probe

(vi) The financial cost of a new research

(vii) Why an indicator is imperfect but referable

(viii) Genes mean extra when compared with environment

(ix). A vital indicator for kids' intelligence performance

(x) Multiple factors involved in intelligence

Example	**Answer**
Paragraph A	**(ix)**

(1) Paragraph B

(2) Paragraph C

(3) Paragraph D

(4) Paragraph E

(5) Paragraph F

(6) Paragraph G

Questions 7-10

Use the information in the passage to match the people (listed A-G) with opinions or deeds below. Write the appropriate letters A-G in boxes 7-10 on your answer sheet.

(A) Plomin
(B) Philip Shawn
(C) Eric Turkheimer
(D) Charles Spearman
(E) Richard J. Haier
(F) Wendy Johnson

(7). A full conclusion can be hardly reached just by the one example in the IQ test.

(8) It is not easy to exclude the occasionality that existed in the research.

(9) Humans still have more to explore in terms of the real nature of intelligence.

(10) It is quite difficult to find the real origins where general intelligence comes from.

Questions 11-13

Summary Complete the following summary of the paragraphs of Reading Passage, using ***no more than three words*** *from the Reading Passage for each answer. Write your answers in boxes 11-13 on your answer sheet.*

Many researchers including Plomin have faced the typical challenge when ....**11**......... are implemented. They try to use all possible methods to record certain ....**12**......... performed both by genes and environment which contributes to the progress of intelligence. The relationship between intelligence and brain become their targeted area. What's more, according to some researchers, intelligence is regarded to be ....**13**......... of how messages transmit in the brain.

Reading Passage 2

You should spend about 20 minutes on Questions 14-26, which are based on the IELTSFever Academic IELTS Reading Test 122 Reading Passage Bovids below.

Bovids

{A} The family of mammals called bovids belongs to the Artiodactyl class, which also includes giraffes. Bovids are a highly diverse group consisting of 137 species, some of which are man's most important domestic animals.

{B} Bovids are well represented in most parts of Eurasia and Southeast Asian islands, but they are by far the most numerous and diverse in the latter. Some species of bovid are solitary, but others live in large groups with complex social structures. Although bovids have adapted to a wide range of habitats, from arctic tundra to deep tropical forest, the majority of species favour open grassland, scrub or desert. This diversity of habitat is also matched by great diversity in size and form: at one extreme is the royal antelope of West Africa, which stands a mere 25 cm at the shoulder; at the other, the massively built bisons of North America and Europe, growing to a shoulder height of 2.2m.

{C} Despite differences in size and appearance, bovids are united by the possession of certain common features. All species are ruminants, which means that they retain undigested food in their stomachs, and regurgitate it as necessary. Bovids are almost exclusively herbivorous: plant-eating "incisors: front teeth

{D} herbivorous. Typically their teeth are highly modified for browsing and grazing: grass or foliage is cropped with the upper lip and lower incisors** (the upper incisors are usually absent), and then ground down by the cheek teeth. As well as having cloven, or split, hooves, the males of ail bovid species and the females of most carry horns. Bovid horns have bony cores covered in a sheath of horny material that is constantly renewed from within; they are unbranched and never shed. They vary in shape and size: the relatively simple horns of a large Indian buffalo may measure around 4 m from tip to tip along the outer curve, while the various gazelles have horns with a variety of elegant curves.

{E} Five groups, or sub-families, may be distinguished: Bovinae, Antelope, Caprinae, Cephalophinae and Antilocapridae. The sub-family Bovinae comprises most of the larger bovids, including the African bongo, and nilgae, eland, bison and cattle. Unlike most other bovids they are all non-territorial. The ancestors of the various species of domestic cattle banteng, gaur, yak and water buffalo are generally rare and endangered in the wild, while the auroch (the ancestor of the domestic cattle of Europe) is extin

{F} The term 'antelopel is not a very precise zoological name - it is used to loosely describe a number of bovids that have followed different lines of development. Antelopes are typically long-legged, fast-running species, often with long horns that may be laid along the back when the animal is in full flight. There are two main sub-groups of antelope: Hippotraginae, which includes the oryx and the addax, and Antilopinae, which generally contains slighter and more graceful animals such as gazelle and the springbok. Antelopes are mainly grassland species, but many have adapted to flooded grasslands: pukus, waterbucks and lechwes are all good at swimming, usually feeding in deep water, while the sitatunga has long, splayed hooves that enable it to walk freely on swampy ground.

{G} The subfamily Caprinae includes the sheep and the goat, together with various relatives such as the goral and the tahr. Most are woolly or have long hair. Several species, such as wild goats, chamois and ibex, are agile cliff — and mountain-dwellers. Tolerance of extreme conditions is most marked in this group: Barbary and bighorn sheep have adapted to arid deserts, while Rocky Mountain sheep survive high up in mountains and musk oxen in arctic tundra.

{H} The duiker of Africa belongs to the Cephalophinae sub-family. It is generally small and solitary, often living in thick forest. Although mainly feeding on grass and leaves, some duikers - unlike most other bovids -are believed to eat insects and feed on dead animal carcasses, and even to kill small animals.

{I} The pronghorn is the sole survivor of a New World sub-family of herbivorous ruminants, the Antilocapridae in North America. It is similar in appearance and habits to the Old World antelope. Although greatly reduced in numbers since the arrival of Europeans, and the subsequent enclosure of grasslands, the pronghorn is still found in considerable numbers throughout North America, from Washington State to Mexico. When alarmed by the approach of wolves or other predators, hairs on the pronghorn's rump stand erect, showing and emphasising the white patch there. At this signal, the whole herd gallops off at a speed of over 60 km per hour.

Questions 14-16

Choose the correct letter, A. B. C or D. Write the correct letter in boxes 14-16 on your answer sheet.

Question 14 In which region is the biggest range of bovids to be found?

(A) Africa

(B) Eurasia

(C) North America

(D) South-east Asia

Question 15 Most bovids have a preference for living in

(A) isolation

(B) small groups

(C) tropical forest

(D) wide open spaces

Question 16 Which of the following features do all bovids have in common?

(A) Their horns are shot

(B) They have upper incisors

(C) They store food in the body

(D) Their hooves are undivided

Questions 17-21

Look at the following characteristics (Question 17-21) and the list of sub-families below. Match each characteristic with the correct sub-family, A, B, C or D. Write the correct letter, A, B, C or D, in boxes 4-8 on your answer sheet. ***NB You may use any letter more than once***

(17) can endure very harsh environments

(18) includes the ox and the cow

(19) may supplement its diet with meat

(20) can usually move at speed

(21) does not defend a particular area of land

List of sub-families

(A) Antelope

(B) Bovinae

(C) Caprinae

(D) Cephalophinae

Question 22-26

Answer the questions below.

Choose ***NO MORE THAN THREE WORDS*** *from the passage for each answer. Write your answers in boxes 22-26 on your answer sheet.*

(22) What is the smallest species of Bovid called?

(23) Which species of Bovinae has now died out?

(24) What facilitates the movement of the sitatunga over wetland?

(25) What sort of terrain do barbary sheep live in?

(26) What is the only living member of the Antilocapridae sub-family?

Reading Passage 3

You should spend about 20 minutes on Questions 27-40, which are based on the IELTSFever Academic IELTS Reading Test 122 Reading Passage The History of building Telegraph lines below.

The History of building Telegraph lines

{A} The idea of electrical communication seems to have begun as long ago as 1746, when about 200 monks at a monastery in Paris arranged themselves in a line over a mile long, each holding ends of 25 ft iron wires. The abbot, also a scientist, discharged a primitive electrical battery into the wire, giving all the monks a simultaneous electrical shock. “This all sounds very silly, but is in fact extremely important because, firstly, they all said ‘ow' which showed that you were sending a signal right along the line; and, secondly, they all said 'ow' at the same time, and that meant that you were sending the signal very quickly, "explains Tom Standage , author of the Victorian Internet and technology editor at the Economist. Given a more humane detection system, this could be a way of signaling over long distances.

{B} With wars in Europe and colonies beyond, such a signalling system was urgently needed. All sorts of electrical possibilities were proposed, some of them quite ridiculous. Two Englishmen, William Cooke and Charles Wheatstone came up with a system in which dials were made to point at different letters, but that involved five wires and would have been expensive to construct.

{C} Much simpler was that of an American, Samuel Morse, whose system only required a single wire to send a code of dots and dashes. At first, it was imagined that only a few highly skilled encoders would be able to use it but it soon became clear that many people could become proficient in Morse code. A system of lines strung on telegraph poles began to spread in Europe and America.

{D} The next problem was to cross the sea. Britain, as an island with an empire, led the way. Any such cable had to be insulated and the first breakthrough came with the discovery that a rubber-like latex from a tropical tree on the Malay peninsula could do the trick. It was called gutta percha. The first attempt at a cross channel cable came in 1850. With thin wire and thick installation, it floated and had to be weighed down with lead pipe.

{E} It never worked well as the effect of water on its electrical properties was not understood, and it is reputed that a French fishermen hooked out a section and took it home as a strange new form of seaweed The cable was too big for a single boat so two had to start in the middle of the Atlantic, join their cables and sail in opposite directions. Amazingly, they succeeded in 1858, and this enabled Queen Victoria to send a telegraph message to President Buchanan. However, the 98-word message took more than 19 hours to send and a misguided attempt to increase the speed by increasing the voltage resulted in failure of the line a week later.

{F} By 1870, a submarine cable was heading towards Australia. It seemed likely that it would come ashore at the northern port of Darwin from where it might connect around the coast to Queensland and New South Wales. It was an undertaking more ambitious than spanning an ocean. Flocks of sheep had to be driven with the 400 workers to provide food. They needed horses and bullock carts and, for the parched interior, camels. In the north, tropical rains left the teams flooded. In the centre, it seemed that they would die of thirst. One critical section in the red heart of Australia involved finding a route through the McDonnell mountain range and then finding water on the other side.

{G} The water was not only essential for the construction team. There had to be telegraph repeater stations every few hundred miles to boost the signal and the staff obviously had to have a supply of water. Just as one mapping team was about to give up and resort to drinking brackish water, some aboriginals took pity on them. Altogether, 40,000 telegraph poles were used in the Australian overland wire. Some were cut from trees. Where there were no trees, or where termites ate the wood, steel poles were imported

{H} On Thursday, August 22, 1872, the overland line was completed and the first messages could be sent across the continent; and within a few months, Australia was at last in direct contact with England via the submarine cable, too. The line remained in service to bring news of the Japanese attack on Darwin in 1942. it could cost several pounds to send a message and it might take several hours for it to reach its destination on the other side of the globe, but the world would never be same again. Governments could be in touch with their colonies. Traders could send cargoes based on demand and the latest prices. Newspapers could publish news that had just happened and was not many months old.

Questions 27-32

Do the following statements agree with the information given in Reading Passage 3 ? In boxes 27-32 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

(27) In the research of French scientists, the metal lines were used to send message

(28) Abbots gave the monks an electrical shock at the same time, which constitutes the exploration of long-distance signaling.

(29) Using Morse Code to send message need to simplify the message firstly

(30) Morse was a famous inventor before he invented the code

(31) The water is significant to early telegraph repeater on continent.

(32) US Government offered fund to the 1st overland line across the continent

Questions 33-40

Answer the questions below.

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

Write your answers in boxes 33-40 on your answer sheet.

(33) Why is the disadvantage for the Charles Wheatstone's telegraph system to fail in the beginning

(34) What material was used for insulating cable across the sea ?

(35) What was used by British pioneers to increase the weight of the cable in the sea?

(36) What did Fisherman mistakenly take the cable as?

(37) Who was the message firstly sent across the Atlantic by the Queen?

(38) What giant animals were used to carry the cable through the desert?

(39) What weather condition did it delay the construction in north Australia ?

(40) How long did it take to sent a telegraph message from Australia to England