IELTS Academic Reading Sample 67 - Telepathy

You should spend about 20 minutes on Questions **27-40**, which are based on Reading Passage 67 below:

Telepathy

Can human beings communicate by thought alone? For more than a century the issue of telepathy has divided the scientific community, and even today it still sparks bitter controversy among top academics

Since the 1970s, parapsychologists at leading universities and research institutes around the world have risked the derision of sceptical colleagues by putting the various claims for telepathy to the test in dozens of rigorous scientific studies. The results and their implications are dividing even the researchers who uncovered them.

Some researchers say the results constitute compelling evidence that telepathy is genuine. Other parapsychologists believe the field is on the brink of collapse, having tried to produce definitive scientific proof and failed. Sceptics and advocates alike do concur on one issue, however that the most impressive evidence so far has come from the so-called 'ganzfeld' experiments, a German term that means 'whole field'. Reports of telepathic experiences had by people during meditation led parapsychologists to suspect that telepathy might involve 'signals' passing between people that were so faint that they were usually swamped by normal brain activity. In this case, such signals might be more easily detected by those experiencing meditation-like tranquillity in a relaxing 'whole field' of light, sound and warmth.

The ganzfeld experiment tries to recreate these conditions with participants sitting in soft reclining chairs in a sealed room, listening to relaxing sounds while their eyes are covered with special filters letting in only soft pink light. In early ganzfeld experiments, the telepathy test involved identification of a picture chosen from a random selection of four taken from a large image bank. The idea was that a person acting as a 'sender' would attempt to beam the image over to the 'receiver' relaxing in the sealed room. Once the session was over, this person was asked to identify which of the four images had been used. Random guessing would give a hit-rate of 25 per cent; if telepathy is real, however, the hit-rate would be higher. In 1982, the results from the first ganzfeld studies were analysed by one of its pioneers, the American parapsychologist Charles Honorton. They pointed to typical hit-rates of better than 30 per cent — a small effect, but one which statistical tests suggested could not be put down to chance.

The implication was that the ganzfeld method had revealed real evidence for telepathy. But there was a crucial flaw in this argument — one routinely overlooked in more conventional areas of science. Just because chance had been ruled out as an explanation did not prove telepathy must exist; there were many other ways of getting positive results. These ranged from 'sensory leakage' — where clues about the pictures accidentally reach the

receiver — to outright fraud. In response, the researchers issued a review of all the ganzfeld studies done up to 1985 to show that 80 per cent had found statistically significant evidence. However, they also agreed that there were still too many problems in the experiments which could lead to positive results, and they drew up a list demanding new standards for future research.

After this, many researchers switched to autoganzfeld tests — an automated variant of the technique which used computers to perform many of the key tasks such as the random selection of images. By minimising human involvement, the idea was to minimise the risk of flawed results. In 1987, results from hundreds of autoganzfeld tests were studied by Honorton in a 'meta-analysis', a statistical technique for finding the overall results from a set of studies. Though less compelling than before, the outcome was still impressive.

Yet some parapsychologists remain disturbed by the lack of consistency between individual ganzfeld studies. Defenders of telepathy point out that demanding impressive evidence from every study ignores one basic statistical fact: it takes large samples to detect small effects. If, as current results suggest, telepathy produces hit-rates only marginally above the 25 per cent expected by chance, it's unlikely to be detected by a typical ganzfeld study involving around 40 people: the group is just not big enough. Only when many studies are combined in a meta-analysis will the faint signal of telepathy really become apparent. And that is what researchers do seem to be finding.

What they are certainly not finding, however, is any change in attitude of mainstream scientists: most still totally reject the very idea of telepathy. The problem stems at least in part from the lack of any plausible mechanism for telepathy.

Various theories have been put forward, many focusing on esoteric ideas from theoretical physics. They include 'quantum entanglement', in which events affecting one group of atoms instantly affect another group, no matter how far apart they may be. While physicists have demonstrated entanglement with specially prepared atoms, no-one knows if it also exists between atoms making up human minds. Answering such questions would transform parapsychology. This has prompted some researchers to argue that the future lies not in collecting more evidence for telepathy, but in probing possible mechanisms. Some work has begun already, with researchers trying to identify people who are particularly successful in autoganzfeld trials. Early results show that creative and artistic people do much better than average: in one study at the University of Edinburgh, musicians achieved a hit-rate of 56 per cent. Perhaps more tests like these will eventually give the researchers the evidence they are seeking and strengthen the case for the existence of telepathy.

Questions 27-30

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

Write the correct letter, **A—G**, in boxes **27-30** on your answer sheet.

27 Researchers with differing attitudes towards telepathy agree on

28 Reports of experiences during meditation indicated

29 Attitudes to parapsychology would alter drastically with

30 Recent autoganzfeld trials suggest that success rates will improve with

A the discovery of a mechanism for telepathy.

B the need to create a suitable environment for telepathy.

C their claims of a high success rate.

D a solution to the problem posed by random guessing.

E the significance of the ganzfeld experiments.

F a more careful selection of subjects.

G a need to keep altering conditions.

Questions 31-40

Complete the table below.

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

Write your answers in boxes **31-40** on your answer sheet.

Telepathy Experiments

Name/ Date	**Description**	**Result**	**Flaw**
Ganzfeld studies 1982	Involved a person acting as a **31**....., who picked out one**32**.....from a random selection of four, and a **33** ..... , who then tried to identify it.	Hit-rates were higher than with random guessing.	Positive results could be produced by factors such as**34**…… Or**35**……..……
Autoganzfeld studies 1987	**36**.....were used for key tasks to limit the amount of**37**..... in carrying out the tests.	The results were then subjected to a **38** ……..	**The 39** .....between different test results was put down to the fact that sample groups were not**40**..... (as with most ganzfeld studies).

Answer:

27 E

28 B

29 A

30 F

31 sender

32 picture/image

33 receiver

34 & 35 sensory leakage (or) (outright) fraud (*IN EITHER ORDER*)

36 computers

37 human involvement

38 meta-analysis

39 lack of consistency

40 big/ large enough

IELTS Academic Reading Sample 68 - Unmasking Skin

UNMASKING SKIN

A

If you took off your skin and laid it flat, it would cover an area of about twenty-one square feet, making it by far the body's largest organ. Draped in place over our bodies, skin forms the barrier between what's inside us and what's outside. It protects us from a multitude of external forces. It serves as an avenue to our most intimate physical and psychological selves.

B

This impervious yet permeable barrier, less than a millimetre thick in places, is composed of three layers. The outermost layer is the bloodless epidermis. The dermis includes collagen, elastin, and nerve endings. The innermost layer, subcutaneous fat, contains tissue that acts as an energy source, cushion and insulator for the body.

C

From these familiar characteristics of skin emerge the profound mysteries of touch, arguably our most essential source of sensory stimulation. We can live without seeing or hearing – in fact, without any of our other senses. But babies born without effective nerve connections between skin and brain can fail to thrive and may even die.

D

Laboratory experiments decades ago, now considered unethical and inhumane, kept baby monkeys from being touched by their mothers. It made no difference that the babies could see, hear and smell their mothers; without touching, the babies became apathetic, and failed to progress.

E

For humans, insufficient touching in early years can have lifelong results. "In touching cultures, adult aggression is low, whereas in cultures where touch is limited, adult aggression is high," writes Tiffany Field, director of the Touch Research Institutes at the University of Miami School of Medicine. Studies of a variety of cultures show a correspondence between high rates of physical affection in childhood and low rates of adult physical violence.

F

While the effects of touching are easy to understand, the mechanics of it are less so. "Your skin has millions of nerve cells of various shapes at different depths," explains Stanley Bolanowski, a neuroscientist and associate

director of the Institute for Sensory Research at Syracuse University. "When the nerve cells are stimulated, physical energy is transformed into energy used by the nervous system and passed from the skin to the spinal cord and brain. It's called transduction, and no one knows exactly how it takes place." Suffice it to say that the process involves the intricate, splitsecond operation of a complex system of signals between neurons in the skin and brain.

G

This is starting to sound very confusing until Bolanowski says: "In simple terms people perceive three basic things via skin: pressure, temperature, and pain." And then I'm sure he's wrong. "When I get wet, my skin feels wet," I protest. "Close your eyes and lean back," says Bolanowski.

H

Something cold and wet is on my forehead – so wet, in fact, that I wait for water to start dripping down my cheeks. "Open your eyes." Bolanowski says, showing me that the sensation comes from a chilled, but dry, metal cylinder. The combination of pressure and cold, he explains, is what makes my skin perceive wetness. He gives me a surgical glove to put on and has me put a finger in a glass of cold water. My finger feels wet, even though I have visual proof that it's not touching water. My skin, which seemed so reliable, has been deceiving me my entire life. When I shower or wash my hands, I now realize, my skin feels pressure and temperature. It's my brain that says I feel wet.

I

Perceptions of pressure, temperature and pain manifest themselves in many different ways. Gentle stimulation of pressure receptors can result in ticklishness; gentle stimulation of pain receptors, in itching. Both sensations arise from a neurological transmission, not from something that physically exists. Skin, I'm realizing, is under constant assault, both from within the body and from forces outside. Repairs occur with varying success.

J

Take the spot where I nicked myself with a knife while slicing fruit. I have a crusty scab surrounded by pink tissue about a quarter inch long on my right palm. Under the scab, epidermal cells are migrating into the wound to close it up. When the process is complete, the scab will fall off to reveal new epidermis. It's only been a few days, but my little self-repair is almost complete. Likewise, we recover quickly from slight burns. If you ever happen to touch a hot burner, just put your finger in cold water. The chances are you will have no blister, little pain and no scar. Severe burns, though, are a different matter.

Questions 1-4

The passage has 10 paragraphs **A–J**. Which paragraph contains the following information?

Answer the questions below by writing the correct letters, **A-J**, in boxes **1-4** on your answer sheet.

1 the features of human skin, on and below the surface

2 an experiment in which the writer can see what is happening

3 advice on how you can avoid damage to the skin

4 cruel research methods used in the past

Questions 5 and 6

Choose the correct letter, A, B, C or D from the following questions and write your answres in boxes 5 and 6 on your answer sheet.

5 How does a lack of affectionate touching affect children?

A It makes them apathetic.

B They are more likely to become violent adults.

C They will be less aggressive when they grow up.

D We do not really know.

6 After the 'wetness' experiments, the writer says that

A his skin is not normal.

B his skin was wet when it felt wet.

C he knew why it felt wet when it was dry.

D the experiments taught him nothing new.

Questions 7–11

Complete each sentence with the correct ending **A–I** from the box below. Write the correct letter **A–I** in boxes **7–11** on your answer sheet.

7 Touch is unique among the five senses

8 A substance may feel wet

9 Something may tickle

10 The skin may itch

11 A small cut heals up quickly

A because it is both cold and painful.

B because the outer layer of the skin can mend itself.

C because it can be extremely thin.

D because there is light pressure on the skin.

E because we do not need the others to survive.

F because there is a good blood supply to the skin.

G because of a small amount of pain.

H because there is a low temperature and pressure.

I because it is hurting a lot.

J because all humans are capable of experiencing it.

Questions 12-14

Do the following statements agree with the information given in Reading Passage 107?

In boxes 12-14 on your answer sheet, write:

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

12 Even scientists have difficulty understanding how our sense of touch works.

13 The skin is more sensitive to pressure than to temperature or pain.

14 The human skin is always good at repairing itself.

Answer:

1. B 2. H 3. J 4. D 5. B 6. C 7. E 8. H 9. D 10. G 11. B 12. TRUE 13. NOT GIVEN 14. FALSE

IELTS Academic Reading Sample 69 - Colorblindness

Questions 1-5

The following reading passage has five sections **A-E**.

Choose the correct heading for each section from the list of headings.

Write the correct number **i-viii** in boxes **1-5** on your answer sheet.

NB. *There are more headings than sections, so you will not use them all.*

1 Section **A**

2 Section **B**

3 Section **C**

4 Section **D**

5 Section **E**

List of Headings

i Colorblindness' in different countries

ii Diagnosing colorblindness

iii What is colorblindness?

iv Curing colorblindness

v Unsolved myths

vi Animals and colorblindness

vii Developing the ability to see color

viii Colorblindness and the sexes

Colorblindness

A Myths related to the causes and symptoms of "colorblindness" abound throughout the world. The term itself is misleading, since it is extremely rare for anyone to have a complete lack of color perception. By look ing into the myths related to color blindness, one can learn many facts about the structure and genetics o the human eye. It is a myth that colorblind people see the world as if it were a black and white movie. There are very few cases of complete colorblindness. Those who have a complete lack of color perception are referred to as monochromatics, and usually have a serious problem with their overall vision as well as an inability to see colors. The fact is that in most cases of colorblindness, there are only certain shades that a person cannot distinguish between. These people are said to be dichromatic. They may not be able to tell the difference between red and green, or orange and yellow. A person with normal color vision has what is called trichromatic vision. The difference between the three levels of color perception have to do with the cones in the human eye. A normal human eye has three cones located inside the retina: the red cone, the green cone, and the yellow

cone. Each cone contains a specific pigment whose function is to absorb the light of these colors and the combinations of them. People with trichromatic vision have all three cones in working order. When one of the three cones does not function properly, dichromatic vision occurs.

B Some people believe that only men can be colorblind. This is also a myth, though it is not completely untrue. In an average population, 8% of males exhibit some form of colorblindness, while only 0.5% of women do. While there may be some truth to the idea that more men have trouble matching their clothing than women, the reason that color vision deficiency is predominant in males has nothing to do with fashion. The fact is that the gene for color blindness is located on the X chromosome, which men only have one of. Females have two X chromosomes, and if one carries the defective gene, the other one naturally compensates. Therefore, the only way for a female to inherit colorblindness is for both of her X chromosomes to carry the defective gene. This is why the incidence of color deficiency is sometimes more prevalent in extremely small societies that have a limited gene pool.

C It is true that all babies are born colorblind. A baby's cones do not begin to differentiate between many different colors until he is approximately four months old. This is why many of the modern toys for very young babies consist of black and white patterns or primary colors, rather than traditional soft pastels. However, some current research points to the importance of developing an infant's color visual system. In 2004, Japanese researcher Yoichi Sugita of the Neuroscience Research Institute performed an experiment that would suggest that color vision deficiency isn't entirely genetic. In his experiment, he subjected a group of baby monkeys to monochromatic lighting for one year. He later compared their vision to normal monkey who had experienced the colorful world outdoors. It was found that the test monkeys were unable to perform the color-matching tasks that the normal monkeys could. Nevertheless, most cases of colorblindness are attributed to genetic factors that are present at birth.

D Part of the reason there are so many inconsistencies related to colorblindness, or "color vision deficiency" as it is called in the medical world, is that it is difficult to know exactly which colors each human can see. Children are taught from a very young age that an apple is red. Naming colors allows children to associate a certain shade with a certain name, regardless of a color vision deficiency. Someone who never takes a color test can go through life thinking that what they see as red is called green. Children are generally tested for colorblindness at about four years of age. The Ishihara Test is the most common, though it is highly criticized' because it requires that children have the ability to recognize numerals. In the Ishihara Test, a number made up of colored dots is hidden inside a series of dots of a different shade. Those with normal vision can distinguish the number from the background, while those with color vision deficiency will only see the dots.

E While many of the myths related to colorblindness have been busted by modern science, there are still a

few remaining beliefs that require more research in order to be labeled as folklore. For example, there is a long-standing belief that colorblindness can aid military soldiers because it gives them the ability to see through camouflage. Another belief is that everyone becomes colorblind in an emergency situation. The basis of this idea is that a catastrophic event can overwhelm the brain, causing it to utilize only those receptors needed to perform vital tasks. In general, identifying color is not considered an essential task in a life or death situation.

Questions 6-8

Choose the correct letter, **A, B, C,** or **D**. Write your answers in boxes **6-8** on your Answer Sheet.

6 People who see color normally are called

A monochromatic.

B dichromatic.

C tichromatic.

D colorblind.

7 Children usually begin to see a variety of colors by the age of

A one month.

B four months.

C one year.

D four years.

8 Children who take the Ishihara Test must be able to

A distinguish letters.

B write their names.

C read numbers.

D name colors.

Questions 9-12

Complete the summary using words from the box below.

\Write your answers in boxes **9-12** on your Answer Sheet.

There are more answers than spaces, so you will not use them all.

It is a common 9 ..... that only men suffer from colorblindness. On average 10..... than ten percent of men have this problem. Women have two 11 ..... For this reason it is 12..... for a woman to suffer from colorblindness.

myth	**a little less**
X chromosomes	**defective genes**

fact	**slightly more**
exactly	**less likely**
more probable	

Answer:

1. iii 2. viii 3. vii 4. ii 5. v 6. C 7. B 8. C 9. myth 10. a little less 11. X chromosomes 12. less likely

IELTS Academic Reading Sample 70 - What is music?

What is music?

A. Music has probably existed for as long as man has been human, and it certainly predates civilization by tens of millenia. Yet even today there is no clear definition of exactly what music is. For example, birdsong is certainly melodic, but it is not tuneful, and it is not created with the intention of being musical (in fact it is sometimes meant to sound threatening) - therefore does it count as music?

B. On the other hand, some modern composers have been challenging the idea that music should be arranged in a pleasant manner with the notes falling in an orderly succession. Others, famously the avant guarde composer John Cage have even used silence and called the result music. As a result there is no one definition of music. Perhaps it should be said that music, like beauty, is what the person who sees or hears it believes it to be.

C. Music is divided in many ways. Music itself is split into notes, clefts, quavers, and semi-demi quavers. Ancient and medieval musicologists believed that these notes could be arranged 'horizontally' into melody (making notes that match on the same scale) and 'vertically' (going up and down the scales to create harmony). Another very basic measurement of music is the 'pulse'. This is present in almost all forms of music, and is particularly strong in modern popular music. The pulse is the regular beat which runs through a tune. When you tap your foot or clap your hands in time to a song, you are beating out the pulse of that song.

D. Another way of dividing music is by genre. Even a child who does not know that (for example) rock and roll and classical music are different genres will be instantly aware that these are very different sounds; though he will not be aware that one is a percussion-led melody while the other emphasizes harmony over rhythm and timbre. Each genre of music has numerous sub-divisions. Classical music is divided by type - for example symphonies, concertos and operas, and by sub-genre, for example baroque and Gregorian chant. Just to make it more fun, modern musicians have also been experimenting with crossover music, so that we get Beatles tunes played by classical orchestras, and groups like Queen using operatic themes in songs such as 'Bohemian rhapsody'.

E. Almost all music is a collaboration between the composer, and the performer, while song requires a lyricist to write the words as well. Sometimes old tunes are adapted for new lyrics - for example the song 'Happy Birthday' is based on a tune originally called 'Have a nice Day'. At other times a performer might produce a song in a manner which the original composer would not recognize. (A famous example is the punk rock band the Sex Pistols performing the British national anthem 'God save the Queen'.)

F. This is because the composer and lyricist have to leave the performer some freedom to perform in the way that suits him or her best. While many classical compositions have notes stressing how a piece should be performed (for example a piece played 'con brio' should be light and lively) in the end, what the listener hears is the work of the performer. Jazz music has fully accepted this, and jazz performers are not only expected to put their own interpretation on a piece, but are expected to play even the same piece with some variation every time.

G. Many studies of music do not take into account where the music is to be played and who the audience will be. This is a major mistake, as the audience is very much a part of the musical experience. Any jazz fan will tell you that jazz is best experienced in small smoky bars some time after midnight, while a classical fan will spend time and money making sure that the music on his stereo comes as close as possible to the sound in a large concert hall. Some music, such as dance music, is designed to be interactive, while other music is designed to remain in the background, smoothing out harsh sounds and creating a mood. This is often the case with cinema music - this powerfully changes the mood of the audience, yet remains so much in the background that many cinemagoers are unaware that the music is actually playing.

H. Music is very much a part of human existence, and we are fortunate today in having music of whatever kind we choose instantly available at the touch of a button. Yet spare a thought for those who still cannot take advantage of this bounty. This includes not only the deaf, but those people who are somehow unable to understand or recognize music when they hear it. A famous example is United President Ulysses Grant, who famously said 'I can recognise two tunes. One is 'Yankee doodle' and the other one isn't.'

Questions 1-3

Choose which of these sentences is closest to the meaning in the text.

Write **A, B** or **C i**n your answer sheet (**1-3**)

1.

A) Modern composers do not always want their music to sound pleasant

B) Some modern composers do not want their music to be enjoyable

C) A modern musical composition should not be orderly

2.

A) Crossover music is when classical orchestras play modern tunes

B) Crossover music moves between musical genres

C) Crossover music is a modern musical genre

3.

A) Performers, lyricists and composers each have a seperate function

B) Performers of a song will need to become lyricists

C) Composers instruct musicians to play their work 'con brio'.

Questions 4-7

Match the follwowing groups of words(**4-7**) with one of the words in the box opposite(**A- F**).

NB. There are more workds in the right column than you need.

4. Rock and roll, classical music, jazz

5. Composer, lyricist, performer

6. Symphony, concerto, opera

7. Cinemagoer, Jazz fan, dancer

A. Collaborators

B. John Cage

C. Classical

D. Baroque

E. Audience

F. Genres

Questions 8- 12

The reading passage has 8 paragraphs which are numbered **A-H**.

On your answer sheet write the letter of the paragraph which contains the following information (*You can choose a paragraph more than once*).

8. People can tell genres of music apart even without musical training.

9. Where you hear music can be as important as the skill of the performer.

10. Music has been a part of human existence for many thousands of years.

11. A piece of music might have more than one set of words to go with it.

12. Some people cannot tell the difference between classical music and birdsong.

Answer:

1. A (Modern composers do not always want their music to sound pleasant)

2. B (Crossover music moves between musical genres)

3. A (Performers, lyricists and composers each have a separate function)
4. F
5. A
6. C
7. E
8. D
9. G
10. A
11. E
12. H