IELTS Reading – Practice Test 18

Section 1

Running water

Does your house have supply of water? What happens when you open the tap – does it hiss at you angrily or obediently provides you with the treasured liquid? If the latter is the case then consider yourself lucky, because according to a recent United Nations report there are over 2 billion people without access to drinking water - a figure nothing short of a humanitarian disaster. Is access to reliable water supply a fairly recent thing then? Well, not at all.

The practice of storing water is almost as ancient as civilization itself. Archaeological findings indicate that the earliest examples of this took place around 6000 BC - or almost 8000 years ago - during the Neolithic period. People back then would dig makeshift wells - practically deep holes - and line their walls with material such as tree bark that would prevent water from escaping. The water could later be easily carried with buckets or pots. This saved a lot of time as opposed to going to the nearest natural source of water like a lake or a river. One of the earliest known examples of a more sophisticated water delivery system originates from ancient Indus Valley Civilization. It had been located in what is now modern-day Pakistan and India from around 3300 BCE to 1300 BCE. Archaeological evidence suggests that the Indus Valley cities had complex systems of wells, reservoirs and channels used to supply clean water to their populations.

A system of water storage and supply that was more similar to what we use today came from the ancient Rome. Roman aqueducts were a remarkable engineering achievement that allowed citizens of Rome to have a reliable supply of clean water fit for many purposes. The aqueduct system consisted of a network of channels, tunnels and bridges that transported water from distant sources into the city. The system itself is one of the most impressive engineering achievements of the ancient world. The first Roman aqueducts were built in the 4th century BC and were constructed using a combination of stone, brick, and concrete. The early aqueducts were relatively simple, consisting of a series of channels and tunnels that carried water from nearby hills and mountains to the city, using the natural gravitational forces.

Over time, the design of Roman aqueducts became more complex, growing in scale. Some of the most impressive examples were built during the reign of the Emperor Augustus in the 1st century AD. These structures were capable of transporting massive volumes of water over great distances. One of the most famous Roman aqueducts is the Aqua Claudia, which was built in the 1st century AD to supply water to the city of Rome. Named after the Emperor Claudius, this aqueduct was over 44 miles long, with some sections as high as 110 feet above the ground. To accomplish this, the aqueduct used both underground tunnels and above-ground arches, which were built to span valleys and ravines. At its peak, the Aqua Claudia was capable of delivering around 200,000 cubic meters of water per day to Rome. The water was used for a variety of purposes, including public baths, fountains, and private homes. The aqueduct also played a role in the development of Roman agriculture, as it allowed farmers to irrigate their fields and grow crops year-round.

A good example of development outside of Rome is The Pont du Gard. An impressive display of Roman engineering, it is considered one of the greatest surviving structures of the Roman Empire. The aqueduct consists of a series of arches that span the Gardon River, with the highest arches standing over 160 feet tall. The Pont du Gard was built using innovative materials, including a concrete-like substance called pozzolana, which was used to create the arches and the water channels. The construction of the aqueduct was a massive undertaking that involved thousands of workers and it is estimated that it took around 15 years to complete. The aqueduct itself was in use for around 200 years, providing water to the city of Nîmes and the surrounding areas. Over time the aqueduct fell into disrepair. During the French Wars of Religion in the 16th century it sustained some serious damage and could no longer be used. However, in the 18th century the aqueduct was renovated and became a popular tourist attraction. Today, the Pont du Gard is a UNESCO World Heritage Site and a popular destination for tourists as well as history enthusiasts, who come to marvel at its impressive scale and engineering ingenuity.

Access to clean water has been a fundamental requirement for human survival throughout history and a basic human right to be upheld. Water is the lifeblood of our planet, a precious resource that sustains all life forms. Yet, as we progress through the modern age, the problem of access to clean water embarassingly remains one of the most pressing issues facing humanity. It is a challenge that has far-reaching consequences, from the spread of waterborne diseases to the perpetuation of poverty and economic disadvantage. No matter how advanced the pumps and hydraulic systems we have if they can't be put to good use. Overcoming this problems calls for collective effort, a commitment to invest in water infrastructure and to educate people about the importance of clean water and proper sanitation practices. Only thus can we ensure that every person has access to this essential resource, and that we safeguard the future of our planet and all the life it sustains.

Questions 1-7
Do the following statements agree with the information given in Reading Passage 2?

TRUE if the statement agrees with the information
FALSE if the statement contradicts the information
NOT GIVEN if there is no information on this

1 People had access to running water since the beginning of times
2 Even most primitive liquid containers required certain modifications
3 Wood was the main material used in Roman aqueducts
4 Ancient Romans were the pioneers of water supply systems
5 The principle of transporting water through aqueducts largely relied on natural forces
6 Aqueduct planners found a way to traverse difficult terrain
7 Pont du Gard is still used for its intended purpose

Questions 8-13
Complete the summary below using words from the box. Each word can only be used once.

As time went on, Roman structures became increasingly **8 _____**. Cities grew in size, so the **9 _____** of water supply systems had to keep up. Newly-developed **10 _____** found their use in constructing aqueducts. Pont du Gard, a world-famous aqueduct that still stands to this day, is a living reminder of how Roman engineers' **11 _____**. Despite suffering greatly during one of the wars it was later **12 _____** to everybody's joy.

It is a well known fact that life is only **13 _____**with water. Without it no biological form can survive for long, whether a man or an animal. Only through joint effort the issue of insufficient supply of fresh drinkable water can be made a thing of the past.

Words for the gaps: expensive, effort, materials, restored, talent, scale, concrete, size, amount, ingenuity, complex, sustained, brought

Section 2

High in the sky: history of aviation

A The history of aviation is a fascinating tale of human ingenuity, perseverance, and innovation. From the earliest attempts at flight to the cutting-edge technology of modern aircraft, the story of aviation is one of humanity's greatest achievements. The path from soaring balloons to supersonic jets was rocky but exciting. Fasten your seat belts and expect some turbulence on the way!

B Leaving aside the ancient Greek myth of Icarus and his wings made of feathers and wax, the first attempts at flying were made as early as 1783. On November 21, 1783, the Montgolfier brothers launched the first untethered hot air balloon taking it to a height of 6,000 feet and traveled over 5 miles. This marked the beginning of the era of lighter-than-air aviation. While such balloons were mostly at the mercy of the wind and couldn't be steered with precision, they were the pioneers of manned flights. Throughout the 19th century further advancements were made in ballooning, with the first transatlantic balloon flight taking place in 1873.

C However, it was not until the Wright brothers' historic flight in 1903 that the era of powered flight truly began. Orville and Wilbur Wright were two brothers from Ohio who had been fascinated with flight since childhood. They began experimenting with gliders in the late 1890s, and in 1903 they achieved their dream of powered flight with their Wright Flyer. The plane flew for 12 seconds and covered a distance of 120 feet, but it was a monumental achievement that changed the course of history.

D Over the following years, aviation technology advanced rapidly, with airplanes becoming faster, more reliable and efficient. World War I played a significant role in the development of aviation, with planes being used for reconnaissance and later for combat. By the end of the war, planes had become more maneuverable with air superiority establishing itself an integral strategic component of any large-scale military conflict. World War II was no exception, further spurring the advancements in the field, with countries on both sides of the Atlantic funneling funds into research and development of aviation. The most iconic aircraft of the war was the infamous B-17 Flying Fortress, which played a crucial role in the Allied bombing campaign against Germany. The war also saw the first jet-powered aircraft, the German Messerschmitt Me 262, which had its maiden flight for the first time in 1941.

E The interwar period saw the development of commercial aviation, with companies like Boeing and Douglas producing planes designed for passenger travel. In 1927, Charles Lindbergh made the first solo transatlantic flight, flying from New York to Paris in his plane, the Spirit of St Louis. Lindbergh's achievement captured the world's imagination and ushered in the era of long-distance air travel. The 1930s saw further advancements in aviation technology with the introduction of pressurized cabins and first attempts at jet propulsion. In 1949, the first commercial jet aircraft, the British DH106 Comet, took off for the first time.

F After the war, aviation technology continued to advance rapidly, with the introduction of new technologies like radar, electronic navigation, and jet engines. In 1947, Chuck Yeager became the first person to break the sound barrier, flying the Bell X-1 at a speed of Mach 1.06. This marked a new era in aviation, with planes becoming faster and more capable than ever before. The 1950s saw the introduction of the first commercial jet airliners, with the British de Havilland Comet and the American Boeing 707 entering service. These planes revolutionized air travel, offering an unprecedented combination of comfort and affordability. The era of mass air travel had begun. The 1970s and 1980s saw the development of new technologies like fly-by-wire controls, GPS navigation, and composite materials. In 1988, the first fully electronic airliner, the Airbus A320, entered service, marking a new era in aviation technology.

G Fast forward to today and the two most prominent civic airliners – Airbus A320 and Boeing 737. The Boeing 737 has a more traditional design - engines on the wings and a T-shaped tail. The Airbus A320, on the other hand, has a more modern approach, placing engines under the wings and a swept-back tail. This design difference has important implications for the planes' performance - mostly benifitting A320 with more even aerdynamic profile which translated into better fuel efficiency. Another difference between the two planes is their cockpit layout. The Boeing has retained a more reserved cockpit layout with analog gauges and dials, while the Airbus has more modern controls with electronic displays and fly-by-wire interface. These differences reflect the two philosophies of the manufacturers. Boeing has traditionally favored a more hands-on approach to flying, while Airbus has emphasized automation and computer-controlled systems.

H When it comes to performance, there are some notable differences between the two planes. The 737 has a slightly longer range than the A320 - 3,500 and 3,300 nautical miles respectively. This might stem from the slightly higher top speed of the latter with 540 knots as opposed to 530 knots of the 737. Another performance difference worth noting is their fuel efficiency. The Airbus A320 boasts 15% lower jet fuel consumption, which could be down to its more modern design and use of advanced materials.

I So, what does the future hold for modern aviation? New alloys are discovered yearly, the progress in electronics development is at its peak, planes grow increasingly automated. Rumours of new hybrid engines and advanced fuels promise increased range and lower environmental impact. Others wager that we might see AI-piloted aircrafts in our lifetime. The fact that takes little guessing is that planes have carved a large niche for themselves and are here to stay.

Questions 14-21
Reading Passage 2 has eight paragraphs labelled **A-I**.
Choose the most suitable headings for paragraphs **B-I** from the list of headings below.

Write the appropriate numbers (**I-XIII**) in boxes 1-8 on your answer sheet.
One of the headings has been done for you as an example.
Note: There are more headings than paragraphs, so you will not use all of them.

Example: Paragraph A — Answer VII

List of Headings
I Less analog, more digital
II The Flying Greek
III Forged in fire
IV Flying in the future
V Brothers in arms
VI Numbers matter
VII A long road
VIII What's on the horizon?
IX Taking off
X Head to head
XI David and Goliath
XII A historic moment of triumph
XIII Not for fighting alone

14 Paragraph B
15 Paragraph C
16 Paragraph D
17 Paragraph E
18 Paragraph F
19 Paragraph G
20 Paragraph H
21 Paragraph I

Questions 22-27
In boxes 22-27 on your answer sheet, write

TRUE if the statement agrees with the information
FALSE if the statement contradicts the information
NOT GIVEN if it is impossible to say what the writer thinks about this

22 No attempts at flying were made before 18th century
23 Wright brothers are credited to have made the first controlled flight
24 World conflicts facilitated further development in the domain of aviation
25 Second half of the twentieth century saw planes getting more electronic equipment
26 Airbus A320 requires less human input from pilots as opposed to Boeing 737
27 We are likely to see unmanned passenger planes in the future

Section 3

A Weather, just like faith, is a cruel mistress. From the gentle patter of raindrops on a rooftop to the ferocious roar of a thunderstorm, Earth's atmosphere is a symphony of elemental forces. To unravel the mysteries of the skies above to predict the caprice of the weather has been one of the biggest dreams. And to nobody's surprise, humanity has been getting increasingly successful at exactly that. Like a master painter, modern meteorology blends science and art to create a portrait of the future, a canvas of colors and forms that captures the essence of the heavens above. But how do they do it?

B From the dawn of times humanity have been making attempts to predict the weather using a variety of methods, ranging from observing the behavior of animals to studying the movements of the stars. While some of these methods were based on superstition or folklore, others relied on careful observation and scientific principles. There were those that used consistent patterns. An example is the saying "Red sky at night, sailor's delight. Red sky in the morning, sailor's warning" comes to mind. This saying suggests that a red sky at sunset indicates good weather the following day, while a red sky at sunrise is a harbinger of poor weather conditions. More wild superstitions went like "Rain on your wedding day is good luck." This belief sees precipitation on that special day as a sign of fertility and abundance. This of course wouldn't always be accurate. Therefore, let us take a look at a more science-based approach to weather forecasting.

C Weather prediction is a complex process that involves gathering and analyzing information from a number of sources. It relies on analysing the present situation just as much as looking at historical patterns and using extrapolation to make long-term predictions. One of the key sources of weather data is satellites that supply information on cloud cover, temperature and precipitation across the globe - something that is hard to come by otherwise. Satellites also provide data on ocean temperatures and currents, which can in turn help predict the formation of hurricanes and other tropical storms. Of course, meteorologists are not limited to satellite feed alone. The more conventional approach, predominantly used in pre-space era, is weather stations located on the ground that measure variables like temperature, air pressure, humidity and wind speed.

D A notable tool in the tricky art of weather prediction is the weather balloon. These balloons are typically made of latex or similar synthetic material and are filled with a lighter-than-air gas such as helium to provide the lift needed to carry it and its cargo aloft. Once the balloon is launched, it ascends through the atmosphere, carrying with it of sensors and instruments. These typically include a radiosonde, which is a small box that contains sensors for data collection. As the balloon rises, it expands due to the decreasing atmospheric pressure. Eventually, the balloon reaches a point where the atmospheric pressure is equal to the pressure inside the balloon, stopping its rise. At this point the balloon bursts and the radiosonde with other instruments are released to fall back to Earth on a parachute. During its ascent, the radiosonde sends data back to a ground station via radio waves. This data is invaluable when creating a vertical profile of the atmosphere. It is later collected and analyzed by meteorologists, who use computer models to create weather forecasts. These models take into account factors such as the rotation of the Earth, the influence of the sun and the movement of air masses.

E Such computer models are an integral part of modern meteorology. They use complex mathematical equations to simulate the behavior of the atmosphere and make informed predictions. Probably the most widely used model is the Global Forecast System (GFS) maintained by the National Oceanic and Atmospheric Administration (NOAA) in the United States. Other notable models include the European Centre for Medium-Range Weather Forecasts (ECMWF) and one made by the Canadian Meteorological Centre (CMC). Once a model has generated a forecast, meteorologists review the data and make adjustments based on their own expertise and experience. They may also consult with other experts, such as oceanographers, to refine their predictions. Therefore, even highly-computerised, it still remains an art that is highly reliant on professional human input.

F One of the biggest challenges in weather forecasting is predicting the behavior of severe weather events like hurricanes and tornadoes. Like most other weather occurences, these are influenced by a variety of factors, including temperature, humidity, wind speed and the movement of air masses. To help with processing all these variables, meteorologists use radar and satellite data to track the movement of storms. In addition to anticipating such conditions, meteorologists also issue warnings and advisories when (and what kind of) severe weather is expected. This can include tornado notifications, hurricane and flash flood warnings. The latter are events of sudden flooding of a normally dry area, caused by an abnormally strong rainfall or failure of certain infrastructure objects such as dams. The risk factor of such events is that they can reach dangerous levels of water level within hours or even minutes.

G Looking back at the sheer amount of development weather forecasting has undergone over the years you can't help but think if we could really do without it. Today's world hinges upon accurately predicted weather - air and sea travel, construction and development, even planning a casual walk doesn't go without looking up what the rest of the day might be like. So all we are left with is to hope that advances in technology and accumulated collective understanding of the atmosphere will reflect in growing accuracy of these predictions.

Questions 28-34

Reading Passage 3 has seven paragraphs, **A-G**.
Which paragraph contains the following information?
Write the correct letter **A-G** for questions **28-34** .
NB You may use any letter more than once

28 far-reaching implications of weather forecasting
29 a misconception held by many people
30 an example of collaboration with other fields of science
31 how time-sensitive certain information can be
32 a celestial body that affects the weather
33 an overly artistic comparison
34 a combination of high and low technologies complementing each other

Questions 35-40
Complete the summary
Choose **NO MORE THAN TWO WORDS** for each gap.

Paying close attention to the way **35 _____** behave has been one of the earliest methods of telling the weather. Of course, to make the predictions more consistent, people had to devise more complex approaches. Using **36 _____** - that is, looking back at previous years to find a systematic trend - is one of the older methods that is still in use to this day. A more technologically advanced idea was to use balloons filled with helium. Said balloon carries a **37 _____** whose sole purpose is to gather data on its way down to the ground. This would allow meteorologists to have a more comprehensive array of data.

Advancements in aerospace industry enable weathermen and women to reach new levels of precision in predicting the weather. Images from **38 _____** provide invaluable information that practically completes the weather picture. One last touch is utilising **39 _____** that are a part of a purpose-made computer models. These process multiple factors and ensure even higher accuracy of forecasting. Finally, people rely on meteorologists when it comes to timely **40 _____** about extreme weather phenomena such as floods and hurricanes.

Answer Keys

1 FALSE **2** TRUE **3** FALSE **4** FALSE **5** TRUE **6** TRUE **7** NOT GIVEN **8** complex **9** scale **10** materials **11** ingenuity **12** restored **13** sustained **14** IX **15** XII **16** III **17** XIII **18** I **19** X **20** VI	**21** VIII **22** NOT GIVEN **23** FALSE **24** TRUE **25** TRUE **26** TRUE **27** TRUE **28** G **29** B **30** E **31** F **32** D **33** A **34** D **35** animals **36** historical patterns **37** radiosonde **38** satellites **39** mathematical equations **40** warning/notifications

IELTS Reading Score Reference Table

Band	9.0	8.5	8.0	7.5	7.0	6.5	6.0	5.5	5.0
Score/40	39,40	37,38	35,36	33,34	30-32	27-29	23-26	19-22	15-18