

# Вступительное испытание по английскому языку

## ТЕСТ 2020

Время выполнения – 90 минут

### VARIANT III

#### Section 1. READING

1

*Установите соответствие между заголовками 1–8 и текстами A–G. Занесите свои ответы в таблицу. Используйте каждую цифру только один раз. В задании один заголовок лишний. / Match the headings 1-8 with the texts A-G. Fill in the table with your answers. Use one number only once. There is one extra heading in the task.*

1. Estimated Figures
2. The Advection Principle
3. How Ocean Waters Move
4. Increased Temperatures

5. Figuring the Sea Level Changes
6. The Diffusion Model
7. The Gyre Principle
8. The Greenhouse Effect

**A.** The average air temperature at the surface of the earth has risen this century, as has the temperature of ocean surface waters. Because water expands as it heats, a warmer ocean means higher sea levels. We cannot say definitely that the temperature rises are due to the greenhouse effect; the heating may be part of a "natural" variability over a long time-scale that we have not yet recognized in our short 100 years of recording. However, assuming the build up of greenhouse gases is responsible, and that the warming will continue. Scientists and inhabitants of low-lying coastal areas would like to know the extent of future sea level rises.

**B.** Calculating this is not easy. Models used for the purpose have treated the oceans as passive, stationary and one-dimensional. Scientists have assumed that heat simply diffused into the sea from the atmosphere. Using basic physical laws, they then predict how much a known volume of water would expand for a given increase in temperature. But the oceans are not one-dimensional, and recent work by oceanographers, using a new model which takes into account a number of subtle facets of the sea – including vast and complex ocean currents – suggests that the rise in sea level may be less than some earlier estimates had predicted.

**C.** An international forum on climate change, in 1986, produced figures for likely sea-level rises of 20 cm and 1.4 m, corresponding to atmospheric temperature increases of 1.5 and 4.5C respectively. Some scientists estimate that the ocean warming resulting from those temperature increases by the year 2050 would raise the sea level by between 10 cm and 40 cm. This model only takes into account the temperature effect on the oceans; it does not consider changes in sea level brought about by the melting of ice sheets and glaciers, and changes in groundwater storage. When we add on estimates of these, we arrive at figures for total sea-level rises of 15 cm and 70 cm respectively.

**D.** It's not easy trying to model accurately the enormous complexities of the ever-changing oceans, with their great volume, massive currents and sensitively to the influence of land masses and the atmosphere. For example, consider how heat enters the ocean. Does it just "diffuse" from the warmer air vertically into the water, and heat only the surface layer of the sea? (Warm water

is less dense than cold, so it would not spread downwards). Conventional models of sea-level rise have considered that this the only method, but measurements have shown that the rate of heat transfer into the ocean by vertical diffusion is far lower in practice than the figures that many models have adopted.

**E.** Much of the early work, for simplicity, ignored the fact that water in the oceans moves in three dimensions. By movement, of course, scientists don't mean waves, which are too small individually to consider, but rather movement of vast volumes of water in huge currents. To understand the importance of this, we now need to consider another process-advection. Imagine smoke rising from a chimney. On a still day it will slowly spread out in all directions by means of diffusion. With a strong directional wind, however, it will all shift downwind, this process is advection-the transport of properties (notably heat and salinity in ocean) by the movement of bodies of air or water, rather than by conduction or diffusion.

**F.** Massive oceans current called gyres do the moving. These currents have far more capacity to store heat than does the atmosphere. Indeed, just the top 3 m of the ocean contains more heat than the whole of the atmosphere. The origin of the gyres lies in the fact that more heat from the Sun reaches the Equator than the Poles, and naturally heat trends to move from the former to the latter. Warm air rises at the Equator, and draws more air beneath it in the form of winds (the "Trade Winds") that, together with other air movements, provide the main force driving the ocean currents.

**G.** Water itself is heated at the Equator and moves poleward, twisted by the Earth's rotation and affected by the positions of the continents. The resultant broadly circular movements between about 10 and 40 ' North and South are clockwise in the Southern Hemisphere. They flow towards the east at mind latitudes in the equatorial region. They then flow towards the Poles, along the eastern sides of continents, as warm currents. When two different masses of water meet, once will move beneath the other, depending on their relative densities in the subduction process. The densities are determined by temperature and salinity. The convergence of water of different densities from the Equator and the Poles deep in the oceans causes continuous subduction. This means that water moves vertically as well as horizontally. Cold water from the Poles travels as depth-it is denser than warm water-until it emerges at the surface in another part of the world in the form of a cold current.

A	B	C	D	E	F	G

2

*Прочитайте текст и заполните пропуски А–F частями предложений, обозначенными цифрами 1–7. Одна из частей в списке 1–7 — лишняя. Занесите цифру, обозначающую соответствующую часть предложения, в таблицу./ Read the text and fill in the gaps A-F with the parts of the sentences 1-7. One of the parts 1-7 is extra. Complete the table with the number of the part of the sentence.*

### Smart Shoes

Sports shoes that work out whether their owner has done enough exercise to warrant time in front of the television have been devised in the UK. The shoes, dubbed Square Eyes,

(A) \_\_\_\_\_ and a tiny computer chip to record how many steps the wearer has taken in a day. A wireless transmitter passes the information to a receiver connected to a television, and this decides how much evening viewing time (B) \_\_\_\_\_, based on the day's exertions. The design (C) \_\_\_\_\_ among British teenagers, says Gillian Swan, who developed Square Eyes as a final-year design project at Brunel University in London, UK. 'We looked at current issues and childhood obesity really stood out,' she says. 'And I wanted (D) \_\_\_\_\_'. Once a child has used up her daily allowance gained through exercise, the television automatically switches off. And further time in front of the TV can only be earned through more steps.

Existing pedometers normally clip onto a belt or slip into a pocket and keep count of steps (E) \_\_\_\_\_. Swan says these can easily be tricked into recording steps through shaking. But her shoe (F) \_\_\_\_\_ to deceive. 'It is possible, but it would be a lot of effort', she says. 'That was one of my main design considerations.'

- 1) the wearer deserves
- 2) to tackle that with my design
- 3) contain an electronic pressure sensor
- 4) has been built to be harder for lazy teenagers
- 5) by measuring sudden movement
- 6) reveal how teenagers prefer to spend their time
- 7) was inspired by a desire to combat the rapidly ballooning waistlines

A	B	C	D	E	F

3

*Прочитайте текст и выполните задания 3–9. В каждом задании обведите букву A, B, C или D, соответствующую выбранному вами варианту ответа./ Read the text and answer the questions 3-9. Circle the correct letter A, B, C or D in each question.*

### The Joy of Plumbing

I'm driving along a road in Leicestershire, in the tidy heart of the English countryside, where slick green fields roll out on either side to the horizon. I drive through the village of Shenton, a quiet place without so much as a pub, past prosperous-looking farms and neat brick houses. And then I pull up outside a rather shabby bungalow. Around the bungalow is a sea of mud. Between the road and the bungalow there is a ditch, choked with weeds, with a little muddy stream trickling along it. I push open the door of the bungalow to find Albert Juttus, a gentle-looking 73-year-old, sitting in his front room before a tiny heater running off a cylinder of Calor gas. He's lived in this house for 46 years, and in all that time his only source of water has been that muddy ditch.

'I'm on the move from the 17<sup>th</sup> century,' he says. 'They're putting me right in the 21<sup>st</sup> century.' He had lived his life in total obscurity until last week, when the local council awarded him its biggest-ever grant, over £40,000, to transform his tiny property. It will now be connected to running water, given a new roof, windows and doors, as well as a lavatory, a sink and a shower. His wife, Grace, has moved temporarily into a nursing home while the work is in progress. Since the announcement of that grant, the council has been rather embarrassed by the interest that Albert Juttus's belated journey into the 21<sup>st</sup> century has attracted: front-page coverage in the local paper and visits to his humble dwelling by television journalists.

But Albert Juttus's life isn't just an odd curiosity: it says something about communities and how they work, or don't work, in Britain today. Having become rather frail and vulnerable in the last few years, he and his wife were heavily reliant on the good nature of one neighbour, who declines to be named. Her tales of their neglected life strike a chill into your heart. 'Every time I came back from seeing them my son would say, 'you've been down at Albert's'. The stink was so bad in their house it would get in my clothes.'

For two people in their seventies, coping without running water and electricity had already become too much many years ago. The couple, who have no family, did not realize they were entitled to an improvement grant. 'We have never had very much, but we have always had each other,' said Albert, 'and that's all we ever wanted. We've never been comfortable with the idea of handouts.' The local council said they'd have acted sooner, had they known about the Juttuses, but the couple had obviously been slipping through the net for a long time.

And it would be wrong to see Albert Juttus as just someone to be pitied. In many ways he's a real survivor. Fleeing from Estonia in 1946, he came to Britain without knowing a word of English. After a succession of low-paid jobs on farms and in mills, he found work in a nearby tyre factory. He had friends there, but although he knew he was the only one without running water and electricity, his only thought was of the bills they must have had to pay each month. 'I didn't think I could deal with those big bills,' he remembers. – 'And didn't they tell you to get your life together?' Juttus looks a little shocked. 'They wouldn't speak out of turn,' he says quietly. So this man, living on a labourer's wage, with a wife who didn't work, clearly believed he was just locked out of the lifestyle that everyone around him took for granted.

So how did change ever come to this little house lost in time? Albert Juttus, in his bizarrely modest but oddly practical way, decided that it was indeed pretty hard getting water out of the ditch, but that it would be easier if he had a proper well. So some time ago he asked a health worker whether they could get someone to dig a well and their case was referred to a charity called Care and Repair. Shocked beyond belief by what they saw when they visited the house, these people began to put pressure on the council to rectify the situation.

Doesn't Mr Juttus wish he'd managed to change it all much earlier? 'It's too late to wish now,' he says, stubbing out a cigarette. 'Times never return.' And clearly something in him even feels ambivalent about the new life that looms ahead. 'It's easy, isn't it, you just switch a button or turn a tap, it all just happens. But, I'll get spoilt. They'll be bringing me slippers and a pipe next.'

It would have been a lot easier for the council if he had agreed to move into a spanking new home on a smart estate, but he wouldn't do that. At the back of his house the view sweeps on and on over green fields and to the soft surge of low hills fringed with trees. 'That's the good thing about the country,' he says, looking out over the familiar prospect. 'You see long distances. I can sit out before sunset, when the birds start singing. I wouldn't like to move. What for?'

3 On arriving at the Juttuses' bungalow, the writer was struck by

- A) its isolation from the rest of the community.
- B) the ease with which she entered it.
- C) the contrast it made with the surrounding area.

D) the beauty of the countryside in which it was situated.

**4** What had recently changed for Albert Juttus at the time of the writer's visit?

- A) He had achieved a certain amount of fame.
- B) His house had been completely renovated.
- C) He had had new lightning installed.
- D) He had inherited a large sum of money.

**5** The Juttuses went so long without basic amenities because

- A) they had not previously qualified for a grant.
- B) they had refused offers of financial aid.
- C) the authorities were unaware of their situation.
- D) they had always received help from local people.

**6** What does Albert imply about his workmates in the tyre factory?

- A) They were probably earning more than he was.
- B) They did not appreciate how lucky they were.
- C) They had more right to running water and electricity than he did.
- D) They were not the type of people to interfere in the affairs of others.

**7** What led to the Juttuses receiving an improvement grant?

- A) They applied to a charity for some money.
- B) They complained about the health risks.
- C) Other people decided to act on their behalf.
- D) Albert came down with a serious illness.

**8** What does Albert feel about the changes to his house?

- A) He regrets not making them before.
- B) He is uncertain whether he will like them.
- C) He thinks the council could do more.
- D) He cannot believe fortunate he is.

**9** In the last paragraph we learn that Albert does not want to leave his house because

- A) a suitable new home has not yet been offered to him.
- B) he is mistrustful of the local authorities.
- C) the view reminds him of where he used to live.
- D) he is very attached to his surroundings.

3	4	5	6	7	8	9

## Section 2. GRAMMAR AND VOCABULARY

4

*Прочитайте приведённый ниже текст. Преобразуйте, если необходимо, слова, напечатанные заглавными буквами в конце строк, обозначенных номерами 10–16, так, чтобы они грамматически соответствовали содержанию текста. Заполните пропуски полученными словами. Каждый пропуск соответствует отдельному заданию из группы 10–16. / Read the text below. Change the form of the words in capitals if it is needed and fill them in the gaps at the end of each line 10-16 so they are grammatically correct and in accordance with the context.*

### John

- Liverpool was famous for many things but first and foremost for its music.
- 10 John Lennon took centre stage at the Cavern Club, Liverpool, during a lunch time session on 21<sup>st</sup> February 1961. The group was called ‘The Beatles’ and the other band members \_\_\_\_\_ John as the leader. REGARD
- 11 Although Ringo was the \_\_\_\_\_, they all looked up to John – in Paul’s words, ‘He was the quickest wit, the smartest and all that jazz’. BRAVE
- 12 It wasn’t John’s \_\_\_\_\_ performance at The Cavern and neither was it his first. AMAZING
- 13 He had been there some years before, \_\_\_\_\_ at exactly the same place at the centre of the stage. STAND
- 14 It was actually there in 1957 that John Lennon introduced his first group, ‘The Quarry Men’. He \_\_\_\_\_ it quite a challenging experience. CONSIDER
- 15 Even then women \_\_\_\_\_ him, calling out his name over the music. FANCY
- 16 In 1957 they came to hear a particular type of music known as ‘Skiffle’ but John, \_\_\_\_\_ Elvis, gave them rock and roll. IMPERSONATE

10	11	12	13	14	15	16

*Прочитайте приведённый ниже текст. Преобразуйте слова, напечатанные заглавными буквами после номеров 17–23 так, чтобы они грамматически и лексически соответствовали содержанию текста. Заполните пропуски полученными словами. Каждый пропуск соответствует отдельному заданию из группы 17-23./ Read the text below. Change the form of the words in capitals and fill in the gaps 17-23 so they are grammatically and lexically correct and in accordance with the context.*

### Rewarding Children

- 17 Cash rewards are a common form of motivation used by parents with high

- \_\_\_\_\_ to encourage their children to work hard at exam time. EXPECT
- 18** Some youngsters receive \_\_\_\_\_ of as much as \$100 for each A grade they obtain at GCSE. PAY
- 19** But should such ‘bribes’ be based on exam performance or should they, as many parents and teachers feel, be offered in \_\_\_\_\_ of a child’s effort, regardless of results? RECOGNIZE
- 20** The latter approach would solve the problem of how parents reward children with different levels of \_\_\_\_\_. ABLE
- 21** Imagine, for example, a family with one child who is \_\_\_\_\_ gifted and another who has learning difficulties. ACADEMIC
- 22** The dangers of result-related incentives for the second child are clear; with little hope of obtaining the higher grades, the withholding of promised \_\_\_\_\_ rewards would only compound the child’s feeling of failure. FINANCE
- 23** However, some leading educational psychologists believe that parents should rely on their own \_\_\_\_\_ in such matters. JUDGE

17	18	19	20	21	22	23

Прочитайте текст с пропусками, обозначенными номерами **24–30**. Эти номера соответствуют заданиям **24–30**, в которых представлены возможные варианты ответов. Обведите номер выбранного вами варианта ответа. / Read the text with gaps **24–30**. For gaps **24–30** choose the correct word from the options A, B, C or D below. Circle the correct answer.

### Virtual Doctors

Mary Hudson rarely **24**\_\_\_\_\_ ill and hates going to the doctor’s when she does. So when she recently **25**\_\_\_\_\_ out in a painful rash down one side of her body she emailed her symptoms, which also included a **26**\_\_\_\_\_ fever, to e-doc, the medical Internet service. Two hours later she was diagnosed as having shingles (Herpes Zoster) by her online doctor, who

**27**\_\_\_\_\_ a special cleansing solution for the rash and analgesics to help **28**\_\_\_\_\_ the pain.

Health advice is now the second most popular topic that people search for on the Internet, and online medical consultation is big business. Sites **29**\_\_\_\_\_ enormously in what they offer, with services ranging from the equivalent of a medical agony aunt to a live chat with a doctor via email. They are clearly meeting a demand from people who are too busy or, in some cases, too embarrassed to discuss their medical **30**\_\_\_\_\_ with their GP.

Not all practitioners, however, are in favour of sites such as e-doc; many point to the potential dangers of online medical advice, particularly in the case of more serious illnesses.

- 24**      A) falls                      B) stays                      C) goes                      D) turns
- 25**      A) came                      B) passed                      C) worked                      D) ran
- 26**      A) small                      B) weak                      C) mild                      D) calm
- 27**      A) determined                      B) concluded                      C) prescribed                      D) intended
- 28**      A) relieve                      B) disappear                      C) improve                      D) lighten
- 29**      A) alter                      B) distinguish                      C) change                      D) vary
- 30**      A) complaint                      B) story                      C) hardship                      D) harm

24	25	26	27	28	29	30