

**ЗАДАНИЯ ДИСТАНЦИОННОГО ТЕСТИРОВАНИЯ УЧАСТНИКА ОЛИМПИАДЫ
ШКОЛЬНИКОВ СПбГУ****2019–2020****ПО КОМПЛЕКСУ ПРЕДМЕТОВ «СОВРЕМЕННЫЙ МЕНЕДЖЕР»****ЧАСТЬ 1. АНГЛИЙСКИЙ ЯЗЫК****ВАРИАНТ 1****Vocabulary and Grammar****1. Choose the word or the phrase A, B, C or D, which completes the sentence correctly.**

1. The _____ on the door said 'Out to lunch. Back soon.'
A indicator
B notice
C signature
D signpost
2. This person's job is to cook food but he or she is not a head of a kitchen: _____.
A chef
B chief
C cook
D cooker
3. She thought her son looked very _____ in his new naval uniform.
A clean
B neat
C smart
D tidy
4. The Parana river _____ into the sea north of Buenos Aires.
A crosses
B flies
C flows
D rushes
5. His attacker _____ him on the head with a metal object.
A damaged
B injured
C wounded
D struck
6. The ex-minister has a policeman to _____ the gate to her house.
A guard
B keep
C maintain
D support
7. John's not here. He's gone to _____ a friend of his from the airport.
A accompany
B bring
C fetch
D lead
8. The general _____ the troops to do everything they could to take the city.
A encouraged
B persuaded
C recommended

D suggested

9. I hated the job so much that I _____ one day and never went back again.
A laid off
B left
C retired
D sacked
10. He is _____ to marry her and nothing will change his mind.
A certain
B confident
C definite
D determined
11. In the club children under 12 are _____ to use the billiard equipment.
A excluded
B forbidden
C hindered
D prevented
12. The university museum has just _____ a set of early microscopes - shall we go and see them?
A neglected
B obtained
C possessed
D preserved

2. Identify the one underlined word or phrase (A, B, C, or D) that must be changed in order for the sentence to be correct.

13. Scientists at the medical center (A) is trying (B) to determine if there (C) is a relationship between (D) saccharine and cancer.
14. A (A) well-composed baroque opera (B) achieves a delicate balance by (C) focusing alternately on the aural, visual, emotional, and (D) philosophy elements.
15. (A) The widely (B) used natural (C) fiber of all (D) is cotton.
16. Alice in Wonderland, first (A) published in 1865, (B) has since (C) being (D) translated into thirty languages.
17. In (A) several of his paintings, Edward Hicks depicted the Quaker farm in Pennsylvania (B) where he (C) spends (D) his youth.

3. Decide which answer (A, B, C or D) best fits each space.

18. _____ discussed by the board of directors when it was proposed again by the supervisors.
A The problem had already
B The problem is already
C The problem had already been
D The problem has already
19. The growth of hair _____ cyclical process, with phases of activity and inactivity.
A it is
B is a
C which is
D a regular
20. Because of his reservations about the issue, _____ refused to vote for it.

- A who
- B and
- C which the senator
- D the senator

21. The planet Mercury _____ rotations during every two trips around the Sun.

- A three complete
- B completes three
- C the completion of three
- D completing three of the

22. It is at the age of approximately eighteen months _____ children begin to make combinations of two or three words.

- A when many
- B when are many
- C when do many
- D when have many of the

Reading

TEXT I

Read the passage below and choose the correct answer, (A), (B), (C) or (D).

A musician and his pupil

Paul Williams interviews the famous pianist Alfred Brendel.

Over six decades the pianist Alfred Brendel gradually built up and maintained a dominant position in the world of classical music. He was an intellectual, sometimes austere, figure who explored and recorded the mainstream European works for the piano. He wrote and played a great deal, but taught very little. Those who knew him best glimpsed a playful side to his character, but that was seldom on display in his concerts. It was a disciplined, never-ending cycle of study, travel and performance.

And then, four or five years ago, a young boy, Kit Armstrong, appeared backstage at one of Brendel's concerts and asked for lessons. Initially, Brendel didn't take the suggestion very seriously. He had had very few pupils and he saw no reason to start now. He quotes from another famous pianist: 'You don't employ a mountain guide to teach a child how to walk.' But there was something that struck him about the young boy – then about 14. He listened to him play. Brendel explained, 'He played remarkably well and by heart. Then he brought me a CD of a little recital he had given where he played so beautifully that I thought to myself, "I have to make time for him." It was a performance that really led you from the first to the last note. It's very rare to find any musician with this kind of overview and the necessary subtlety.'

As Brendel is bowing out of the public eye, so Kit is nudging his way into it – restrained by Brendel, ever nervous about the young man burning out early. Kit, now 19, is a restless, impatient presence away from the lessons – always learning new languages; taking himself off to study maths, writing computer code or playing tennis. All under the watchful eye of his ever-present mother. On top of all this he composes. 'This was very important,' Brendel says. 'If you want to learn to read music properly it is helped by the fact that you try to write something yourself. Then I noticed that Kit had a phenomenal memory and that he was a phenomenal sight reader. But more than this is his ability to listen to his own playing, his sensitivity to sound and his ability to listen to me when I try to explain something. He not only usually understands what I mean, but he can do it. And when I tell him one thing in a piece, he will do it everywhere in the piece where it comes in later.'

Brendel **catches himself** and looks at me severely. 'Now I don't want to raise any expectations. I'm very cross if some newspapers try to do this. There was one article which named him as the future great pianist of the 21st century, I mean, really, it's the worst thing. One doesn't say that in a newspaper. And it has done a great deal of harm. As usual, with gifted young players, he can play certain things amazingly well, while others need more time and experience. It would be harmful if a critic was there expecting the greatest perfection.'

23. What is the writer emphasising in the first paragraph?

- A the wide range of music that Brendel has played
- B the total dedication of Brendel to his art
- C the reluctance of Brendel to take on pupils
- D the light-hearted nature of Brendel's character

24. Brendel uses the quotation about the mountain guide to illustrate that

- A it is not always easy to teach people the basics.
- B it is unwise to try to teach new skills before people are ready.
- C people can learn new skills without help from others.
- D it is unnecessary for an expert to teach people the basics.

25. Which of Kit's musical abilities does Brendel admire the most?

- A He is able to write music himself.
- B He is able to understand and respond to advice.
- C He can play a piece of music the first time he sees it.
- D He is able to remember all the music he has ever played.

26. Why does the writer use the phrase '**catches himself**' (the phrase in bold)?

- A He realises he has said too much to a journalist.
- B He doesn't enjoy giving interviews to journalists.
- C He wants to be careful he doesn't upset any music critics.
- D He resents the way that he has often been misquoted.

TEXT II

Read the article below about students who take a year off after leaving the university, before looking for a job.

Choose the best sentence to fill each of the gaps.

For each gap 27–32, mark one letter (A–G).

Do not use any letter more than once.

Just the Ticket

Travel requires time, money and a desire to see beyond the supermarket on the edge of town. Despite financial limits, students have always been great travellers, as the vacations offer opportunities for long-distance travel, expeditions or just doing very little on a faraway beach.

(27) _____ They are now regarded by industry and commerce as an exercise in independence and learning how to rely on oneself. Ten years ago, employers looked on gap years with suspicion but now they have a more positive attitude towards them. (28) _____

There are basically three ways of spending a gap year. (29) _____ Most of these trips are short enough to be fitted into the summer vacation, but some can last up to six months. Unfortunately, many of the organisations only offer such projects for 18- and 19-year-olds, although a few may encourage young adults of all ages to apply. (30) _____ The cost of these trips can be fairly high, but people usually pay for some if not all of it through raising money from supporters.

The second way is the long holiday in which the student travels the world or a large part of it, perhaps working occasionally to add to spending money and pay for a new pair of trainers. (31) _____ Overall, however, it seems risky to expect to find work once you are abroad and it is much better to arrange it beforehand. Student travel specialists such as Campus Travel arrange special student conditions with airlines that allow customers to change their ticket date and route. It is surprising how cheap this type of holiday can be, and casual work is reasonably easy to find in some of the typical destinations.

The final type of gap year involves choosing a part of the world in order to study or work in a particular area. (32) _____ In this way people can develop skills and experience at an early age, which can lead to

permanent employment after a few years when they return to their own country.

- A Indeed, students over 25 with the right qualities might be able to work as a leader on certain projects.
- B As a result of this change, many travel agencies, including Campus Travel, have seen a huge increase in demand for round-the-world tickets in the last few years.
- C According to the marketing manager of Campus Travel, a travel agency which specialises in student travel, gap years may even make students more attractive to future employers.
- D One advantage is that employers will often pay for the work that is done even if people are not fully qualified, so raising extra funds is not necessary.
- E This is the choice which offers the greatest freedom and is by far the most popular.
- F The first way is to join one of the expeditions or projects run by organisations or international charities.
- G The opportunities for linking a student's future employment with a work placement scheme or industrial training are on the increase.

Text III

You are going to read a magazine article about a couple who run a business from their farm in the North of England. Choose the most suitable heading from the list (A-I) for each part (33-39) of the article. There is one extra heading which you do not need to use. There is an example at the beginning (0).

- A Professional skills are exploited
- B Ensuring that nothing gets wasted
- C No shortage of ideas to come
- D A necessary alternative to farming
- E Time well spent is rewarded
- F Continuing investment in high standards
- G Professional recognition is obtained
- H Filling a gap in the market
- I The idea that began it all

Waste Not, Want not

A farming couple who hated to waste misshapen vegetables, have found a profitable way to put them to good use.

0 I

Bob and Clara Darlington, who own and run a farm in the North of England have always looked for new ways of making money out of the produce they grow. Their success began when they established a shop on their farm, so that people could come and buy fresh vegetables directly from them.

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The business was an immediate success, and soon scored top marks in a competition set up by the Farm Retail Association to find the best farm shop in the country. The Association's inspectors found the Darlingtons' shop offered excellent service and value for money as well as quality fruit and vegetables.

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Clara Darlington is a trained chef and, in addition to a range of home-grown foods and other local produce, she began offering a variety of prepared meals which she had made herself in the farmhouse kitchen. A small café alongside the farm shop was soon added, with everything that visitors could taste on the menu also being for sale in the shop.

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Clara admits that starting the business was expensive, and she has worked very hard, but maintains that if the product is good, the public recognise this and buy it. 'I aim to offer the highest quality to our customers, whether they come in for a loaf of bread, or take a whole dinner-party menu. I take it as a

compliment if people take home one of my dishes to serve to their family and friends and get away with pretending they made it themselves.'

36

So it was that the couple realised that they had a surplus of misshapen or damaged vegetables grown on the farm which were unsuitable for selling in the shop. Clara, not wishing to see them get thrown away, decided to turn them into soup.

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The soup met with the immediate approval of customers to the shop and Clara now produces ten different varieties. She spent much of the summer travelling up and down to London by rail, doing presentations of the soups. As a result, they are now served in first-class railway restaurant cars belonging to three companies as well as being stocked by a number of high-class London stores.

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'I realised there was a huge untapped demand in London and other big cities,' says Clara. 'Because people coming home late from the office find a tub of fresh soup and a slice of bread a quick and tasty easy-to-prepare meal, much healthier than a take-away.'

39

Clara's next idea is to produce a range of pasta sauces handmade to the same standards using natural ingredients and flavours. These she thinks she might be able to sell effectively through mail order. One thing you can be sure of at the Darlingtons' farm, there's always something new going on.

Key:

1. Vocabulary:

- 1. B
- 2. C
- 3. C
- 4. C
- 5. D
- 6. A
- 7. C
- 8. A
- 9. B
- 10. D
- 11. B
- 12. B

2. Grammar:

- 1. A
- 2. D
- 3. A
- 4. C
- 5. C

3. Grammar:

- 6. C
- 7. B
- 8. D
- 9. B
- 10. A

Reading

Text I

- 23. B
- 24. D
- 25. B
- 26. A

Text II

- 27. C
- 28. B
- 29. F
- 30. A
- 31. E
- 32. G

Text III

- 33. G
- 34. A
- 35. F
- 36. B
- 37. E
- 38. H
- 39. C

ВАРИАНТ 2

Vocabulary and Grammar

1. Choose the word or the phrase A, B, C or D, which completes the sentence correctly.

1. Your _____ shows drivers in front and behind when you intend to turn right or left.
A indicator
B notice
C signature
D signpost
2. This person is the head cook in a hotel or restaurant kitchen. She/he often wears a tall white hat: _____.
A chef
B chief
C cook
D cooker
3. His bathroom may not be very _____ but at least it's not dirty.
A clean
B neat
C smart
D tidy
4. The plane _____ from here to the capital once a day.
A crosses
B flies
C flows
D rushes
5. She recently _____ her knee in a skiing accident.
A damaged
B injured
C struck
D wounded
6. My neighbour used to _____ chickens which woke me up every morning.
A guard
B keep
C maintain
D support
7. The rider got off her horse to _____ the animal across the busy road.
A accompany
B bring
C fetch
D lead
8. The refugees were _____ to return home by promises of shelter and food.
A encouraged
B persuaded
C recommended
D suggested
9. The manager _____ the clerk for stealing money from the safe.
A laid off
B left
C retired

D sacked

10. She's _____ of passing the exam with flying colours.

- A** certain
- B** confident
- C** definite
- D** determined

11. The captain was _____ from playing in the match by a severe leg injury.

- A** excluded
- B** forbidden
- C** hindered
- D** prevented

12. The retiring professor _____ all the qualities necessary to run a university department.

- A** neglected
- B** obtained
- C** possessed
- D** preserved

2. Identify the one underlined word or phrase (A B, C, or D) that must be changed in order for the sentence to be correct.

13. On (A) the rim of the Kilauea volcano in the (B) Hawaiian Islands (C) are a hotel (D) called the Volcano Hotel.

14. The prison (A) population in this state, now (B) at an all-time high, (C) is higher than (D) any state.

15. The grizzly bear, (A) which can grow (B) up to eight feet tall, (C) has been called (D) a more dangerous animal of North America.

16. (A) The Peace Corps (B) was (C) establish on March 1, 1961, by (D) then President John F. Kennedy.

17. After (A) last week's meeting, the advertising department quickly (B) realized that the product (C) will (D) need a new slogan

3. Decide which answer (A, B, C or D) best fits each space.

18. The X-ray treatments _____ up to the time that he was dismissed from the hospital.

- A** gave daily
- B** were given daily
- C** basically have given
- D** daily had been given

19. In Roman numerals, _____ symbols for numeric values.

- A** are letters of the alphabet
- B** letters of the alphabet are
- C** which uses letters of the alphabet
- D** in which letters of the alphabet are

20. Bats avoid running into objects by _____ high-frequency sounds and listening for echoes.

- A** the emission
- B** emitted
- C** emitting
- D** they emit

21. In prehistoric _____ of western Utah was covered by Lake Bonneville.

- A** times, a large part
- B** times, there was a large part
- C** part of the time
- D** for large parts of time

22. As _____ in Greek and Roman mythology, harpies were frightful monsters that were half woman and half bird.

- A described
- B to describe
- C description
- D describing

Reading

TEXT I

Read the passage below and choose the correct answer, (A), (B), (C) or (D).

Getting away from it all

Somewhere around February it begins. The drizzle is coming down outside and the kids are bored on a Saturday afternoon. It's usually then that my husband decides it is time to plan our summer holiday. Out come the brochures and the discussion begins.

It's not that we're an argumentative family, but it seems that where we are to spend two weeks in the summer relaxing brings out the worst in us. Before too long, we're all insisting on places and refusing others, the volume steadily increasing. My daughter discovers a lifelong ambition to go to India. Funny how she never mentioned it before. My son isn't going anywhere unless he can bring his dog and my husband doesn't mind where he goes as long as it's within five miles of a golf course.

As usual, it's left to someone, and guess who, to find somewhere that everybody is willing to accept (the dog goes to the neighbours, though). This can take some weeks of persuading, reminding and convincing on my part, but usually there's a solution. Then it's time to plan the packing. It seems that everybody else believes that it can be done half an hour before we leave for the airport. My husband lays out things he wants to take and I put them back when he's not looking and get out the real holiday clothes. My daughter wants to take everything she owns. Each item she has to put back is the subject of another argument.

Finally the day arrives and we get to the airport in plenty of time. This happens because I start to shout five hours earlier that we are going in five minutes, ready or not. Once at the airport, we check in. It sounds simple enough, but the thing is that airports are full of people running around who don't know where to go. Not surprising since we only do it once a year and we've forgotten where we went last time. We finally find the right desk, get rid of the bags and go through to the departure lounge.

Somewhere around here I can finally think about relaxing. Not for me the cold sweats, shaking, and nervous wondering about the plane. Everything is somebody else's problem. If there's something wrong with the plane, the pilot can worry about it. If a passenger has a heart attack, the stewards can worry about it.

And so begin two weeks of relaxation. I learned long ago that the only way to do it is to stop being called 'Mum'. For those two weeks, whenever I hear the word I look around as if it refers to someone else. I ignore any question that begins with 'Where's my...'. The funny thing is that they always find it anyway. The only thing I worry about is which book I'm going to take to the pool. My husband follows a ball around a course, my kids do whatever kids do these days and I become myself again for a short while.

23. The writer implies that her family

- A find it hard to agree on anything.
- B all have very different personalities.
- C don't usually fight over things.
- D don't care about each other's feelings.

24. The writer implies that

- A her son refuses to go with them.
- B the others try to make her agree.
- C nobody is really happy with the idea.
- D she gets the others to agree.

25. The writer thinks she is different from some other people because she

- A finds flying an enjoyable experience.
- B doesn't worry about problems.
- C understands what pilots face.
- D doesn't care about other passengers.

26. The writer thinks that her family

- A try to stop her from relaxing on holiday.
- B don't recognise her when she's on holiday.
- C don't need her as much as they think.
- D ignore her unless they need something.

TEXT II

Read the article below about a little-known sport called korfbal.

Choose the best sentence to fill each of the gaps.

For each gap 27–32, mark one letter (A–G).

Do not use any letter more than once.

It's not a basket or a net, it's a korf

In 1996 korfbal celebrated its fiftieth birthday in London with a special match – and very few people noticed.

(27) _____ In 1920 the game was demonstrated at the Olympic Games in Belgium and in 1946 Dutch players demonstrated the game for the first time in the UK. Although it became established in south-east London, its development was very limited. However, in the last fifteen years the development of korfbal has been very impressive worldwide. Moreover in 1987 a national league was formed in the UK which now attracts around 4,000 players in more than thirty centres. Interestingly, most of these centres are in university towns.

(28) _____ In order to describe it to the vast majority who have never heard of the game, it is best defined as a mixture of basketball and netball. The pitch is rectangular and measures 40 metres by 20 metres indoors or 60 metres by 30 metres on grass, and is divided into two like a football pitch. (29) _____

There are eight players in a team; two men and two women play in defence and the same numbers in attack, but after every two goals – scored by either team – the players change divisions, and roles: attackers become defenders and defenders become attackers. (30) _____ Since it is very much a team game, to succeed at the top level individuals require balance, speed and the ability to think ahead and move into space.

The most recent world championship was held in India in 1995, and internationally korfbal is established in more than fifty countries. It has recently been given full membership of the Olympic movement, and in magazines there have been articles about the game in various countries from Australia to Russia, South Africa to the USA. (31) _____

It may have taken a very long time to lay the foundations of the game, but with Olympic recognition perhaps in the not-too-distant future, korfbal seems set to expand. (32) _____

- A Play, therefore, can continue when a shot is missed.
- B The game was adapted by a Dutch teacher in a mixed school in Amsterdam, from a game he saw being played in southern Sweden in 1902.
- C In Taiwan the game even receives government funding.
- D If you touch the lines around your division, you are breaking the rules.
- E The day may then come when people stop asking, 'You play what?'
- F Players are not allowed to run with the ball so the use of space and movement away from your opponent are important.
- G By definition korfbal must be played by mixed teams and is a handball game of speed and immense variety.

Text III

You are going to read an extract from an article about a businesswoman. Choose from the list (A-I) the sentence which best summarises each part (33-39) of the extract. There is one extra sentence which you do not need to use. There is an example at the beginning (0).

- A** An up-market product
- B** Attracted to her latest interests
- C** Facing up to competition
- D** Building a range of colours
- E** Initial involvement pays off
- F** Personal taste influences a decision
- G** Building on previous success
- H** The thinking behind a decision
- I** An unusual combination of interests

The Lady with Blue Nails

Sandy Lerner is founder of an unusual range of nail-polish colours

0 *I*

The links between computers and cosmetics are not obvious, but one of the most successful self-made businesswomen in the USA, Sandy Lerner, has made her fortune in both.

33

With her long purple hair and taste for blue nail polish, it is not surprising that Sandy got fed up with not being able to find make-up she liked. After a brief spell of mixing her own colours, Sandy decided to set up her own company.

34

Since its launch in 1996, her company has taken the USA, Asia and Europe by storm. ‘At the time everyone was still heavily into pinks and reds,’ says Sandy, ‘and I thought that given other developments going on in the fashion world, the time was ripe for an alternative.’

35

It’s one thing to like blue nail polish yourself, but quite another to set up a company making it, however: ‘The more money you have, the easier that decision is to make,’ she admits. And she has plenty. Sandy made her fortune in a former career as a computer specialist. She set up a company in 1984 after designing a piece of technology which is now used in 80% of connections on the Internet.

36

The new company is proving to be a nice little earner too. As founder and chief executive of the company, Sandy was personally responsible for designing the eye-catching advertising campaigns that helped at the beginning, although she now tends to leave the day-to-day business to her partners.

37

But establishing the business was not easy, particularly when the large cosmetics companies realised there was a market for alternative colours and started selling them too. ‘As an alternative, we’re never going to threaten the main market of the big companies,’ says Sandy, ‘and although they now do similar colours, they only do a few of them. So people who want intense and complicated colours will still come to us.’

38

Although shades of blue, purple, yellow and green sound like just the thing for teenage girls and punks, the company actually aims its products at career women in their thirties and forties. Sandy thinks make-up is about a state of mind, ‘It’s for self-confident people who are not afraid of something you can wash off.’ Indeed, the unusual colours and successful marketing campaigns, make the company’s products a hit amongst Hollywood celebrities.

39

Although she keeps a close eye on the company. Sandy admits that she quickly loses interest once a project is up and running. She is now turning her attention to her current projects; a large country house in England, her farm in Virginia where she keeps horses and a new project for promoting nineteenth-century literature on the Internet.

Key:

1. Vocabulary:

1. A
2. A
3. D
4. B
5. B
6. B
7. D
8. B
9. D
10. B
11. D
12. C

2. Grammar:

13. C
14. D
15. D
16. C
17. C

3. Grammar:

18. B
19. B
20. C
21. A
22. A

Reading

Text I

23. C
24. D
25. A
26. C

Text II

27. B
28. G
29. D
30. F
31. C
32. E

Text III

33. F
34. H
35. G
36. E
37. C
38. A
39. B

ВАРИАНТ 3

Vocabulary and Grammar

1. Choose the word or the phrase A, B, C or D, which completes the sentence correctly.

1. We're lost - look out for a _____ that will tell us the way to the village.
 - A indicator
 - B notice
 - C signature
 - D signpost
2. This is the object on, or in, which food is cooked: _____.
 - A chef
 - B chief
 - C cook
 - D cooker
3. I have never known a doctor who has _____ handwriting.
 - A clean
 - B neat
 - C smart
 - D tidy
4. At the start of the play, an old man slowly _____ the room and opens the door.
 - A crosses
 - B flies
 - C flows
 - D rushes
5. The fire severely _____ the old castle.
 - A damaged

- B** injured
C struck
D wounded
6. That floor isn't strong enough to _____ a grand piano.
A guard
B keep
C maintain
D support
7. In the nineteenth century a young woman did not normally go out alone: an older woman would usually _____ her.
A accompany
B bring
C fetch
D lead
8. The government _____ everyone to stay indoors until the hurricane had passed.
A encouraged
B persuaded
C recommended
D suggested
9. Because there were no more orders, the factory _____ a third of the work force.
A laid off
B left
C retired
D sacked
10. Have you fixed a _____ date for the celebration yet?
A certain
B confident
C definite
D determined
11. Women are still _____ from membership of that club.
A excluded
B forbidden
C hindered
D prevented
12. This museum is very _____; everything is covered in dust and there are no explanations of the exhibits.
A neglected
B obtained
C possessed
D preserved

2. Identify the one underlined word or phrase (A B, C, or D) that must be changed in order for the sentence to be correct.

13. There are many (A) frequently (B) mentioned reasons why one out of (C) four arrests (D) involve a juvenile.
14. Manufacturers (A) may use food additives (B) for preserving, to color, to flavor, or (C) to fortify (D) foods.
15. Peter Abelard, (A) a logician and theologian, was (B) the (C) controversialest teacher (D) of his age.
16. The advisor (A) told himself, while (B) listening to the speech, that a dozen other reporters (C) would has already (D) asked that question.

17. Most people (A) had (B) written with quill (C) pens until pens with metal points (D) become popular in the middle of the nineteenth century.

3. Decide which answer (A, B, C or D) best fits each space.

18. The Military Academy at West Point _____ on the west bank of the Hudson River, north of New York City.

- A located
- B is located
- C which is located
- D whose location is

19. _____ inclined to push for such a reduction, it would probably not be successful.

- A The Office of Management
- B The Office of Management was
- C In the Office of Management
- D Were the Office of Management

20. It has been estimated that if we intend to stay above the starvation level, _____ the food supply.

- A so we will have to double
- B and it must double
- C which it must be doubled
- D we must double

21. Before the Statue of Liberty arrived in the United States, newspapers invited the public to help determine where _____ placed after its arrival.

- A should the statue be
- B the statue being
- C it should be the statue
- D the statue should be

22. During the Precambrian period, the Earth's crust formed, and life _____ in the seas.

- A first appeared
- B the first to appear
- C the first appearance
- D appearing first

Reading

TEXT I

Read the passage below and choose the correct answer, (A), (B), (C) or (D).

How environmentally friendly am I?

Jane Gregson called in an expert to find out.

I like to think that I'm bringing my kids up to care about the world around them. They know that resources are scarce: that they shouldn't waste water and that they should turn lights off to save electricity when they're not in a room. They know that we have to save the rainforests and respect the world's fragile eco-balance. They know that we have to ensure that the air we breathe is clean. I thought my family was environmentally friendly, so I invited Tom Harper from Pollution Prevention Ltd to come and see if I was doing everything right.

Tom arrived at our detached house early on a Saturday morning. I was making breakfast, and my two children, Joshua (aged nine) and Rebecca (twelve) were watching cartoons on TV.

The first thing Tom asked when he came into the kitchen was 'How old's your fridge?' I told him it was about fifteen years old. 'Well, by the look of it, you ought to think about getting a new one.'

'A new one?' I said. 'I thought we were supposed to use products for as long as possible before buying new ones. It still works quite well'

‘Well,’ said Tom, ‘it may still keep your food cold, but look at those door seals. They’re old, so they’re leaking cold air. That means your fridge has to work harder to stay cold, so that uses more electricity. A new one would be much more efficient and cost-effective.’ We moved to the living room. It was November, so the heating was on. ‘It’s nice and warm in here,’ said Tom, ‘but, to be honest, there’s a problem with your windows. Those aluminium window frames let a lot more hot air out of the house than wooden or plastic frames do. And you don’t have double glazing. Double-glazed windows keep in almost twice as much heat as single pane windows. Once again, you’re using far more electricity than you need to.’ ‘Right, kids,’ I said. ‘Turn the TV off, have a quick shower, then come down for breakfast. Okay?’

‘Before they have their showers,’ said Tom, ‘let’s have a look at your bathroom. ‘We all went up. ‘You see that showerhead?’ said Tom. ‘It’s got lots of big holes. That’s going to let through about twenty litres of water per minute. A new water-saving showerhead lets through a lot less water, and you still get a good shower. So, if you fit **one of those**, you’ll not only save water, you’ll also save hot water, so you’ll lower your energy and heating costs.’

This was more like what I wanted to hear. A new fridge and double-glazing were expensive. A new shower? I could afford that.

While the kids had their showers – Tom was pleased they didn’t have baths – we went to look at the car. Now I know cars are bad for the environment, but when you’ve got two children wanting to go to parties and to the sports centre, what other option is there? The nearest bus stop is too far away. ‘If you have to have a car, you have to have a car,’ Tom said. ‘There’s no such thing as an environmentally friendly car, but there are things you can do to reduce the negative impact cars have on the environment.’

‘I only use it when absolutely necessary,’ I said proudly.

‘That’s good,’ said Tom. ‘But you should make sure the engine is kept properly tuned. This can increase fuel efficiency by as much as 8%. Also, regularly check that your air filters are clean. If they’re dirty, that will increase your fuel consumption.’ By now, the kids wanted their breakfast. We all sat down together in the kitchen. There are some things you can do,’ said Tom, ‘like checking your car, that won’t cost you much money, and they’ll save you money in the long run. Equally importantly, they’ll help a little to protect the environment. Other things we’ve talked about, like a new fridge, do cost quite a lot. But you have to be aware that your windows and your fridge at the moment are costing you more than they should in terms of heating bills and electricity use. Nobody benefits from that.’

23. Why did the writer invite Tom Harper to her house?

- A She wanted him to see how difficult it is to be environmentally friendly.
- B She wanted to know if she could be more environmentally friendly.
- C She wanted him to teach her children to be environmentally friendly.
- D She wanted to show him how to be environmentally friendly.

24. The writer was surprised by what Tom said about the fridge because

- A she had had it for so long.
- B it was only about fifteen years old.
- C she wanted it to stop working before she bought a new one.
- D she thought he would not recommend throwing things away.

25. What does the phrase ‘**one of those**’ refer to (the phrase in bold)?

- A a showerhead with big holes
- B a good shower
- C a water-saving showerhead
- D the shower in the writer’s bathroom

26. Tom points out to the writer that buying a new fridge

- A may save her money in other ways.
- B may not be as expensive as she thinks.
- C wouldn’t really benefit her.
- D is more important than checking the car.

TEXT II

Read the article below about a woman who liked adventure.

Choose the best sentence to fill each of the gaps.

For each gap 27–32, mark one letter (A–G).

Do not use any letter more than once.

Never Mind the Dress, How Much is that Plane?

Mary Bruce was shopping one day in one of the most expensive streets in London. She was looking for a nice new dress, when instead she noticed a showroom with a small light aircraft for sale at a fairly reasonable price. She went away to try on a dress. It did not suit her. The plane did. She asked the man in the shop whether the plane would take her round the world. (27) _____

That day in 1930 Mary Bruce was 35 years old and it was the beginning of an adventure for a very brave woman who became the most inexperienced pilot ever to fly round the world. She qualified for her pilot's licence in the minimum forty hours' flying time at the local airport near her home in the same year. (28) _____

Mary Bruce had faced danger on other occasions and loved anything that was risky and frightening. She was one of the first women to buy a motorcycle, and was always being taken to court for speeding down country lanes. (29) _____ As a couple they once drove as far as they could into the Arctic Circle before they ran out of road. In 1927, encouraged by her husband, she won a race for women drivers in the Monte Carlo rally, and two years later she was the first person to set a distance record for driving a powerboat.

(30) _____ In one instance she talks about how she has seen land, but as the plane's oil pressure was zero she wonders whether she will be able to stay up in the air long enough to reach it. (31) _____ No one listening to the recording could fail to be impressed by her bravery and sense of adventure.

One of her few complaints was that she attracted so much interest whenever she made an arranged stopover. (32) _____ That kind of remark was typical of her attitude, and it was hardly surprising that she drew crowds of people wherever she landed.

- A In 1926 she married a racing driver and started driving cars herself.
- B On another occasion she is afraid the engine will fail and so she decides to make an emergency landing in the sand.
- C She found time to write five books, including her autobiography, and at the age of 78 she drove at 110 miles per hour around a racing circuit.
- D He replied that it would, and within a week she was flying solo.
- E She remarked that the only chance she had to have her hair cut was by making crash-landings.
- F Immediately after qualifying she took off on a 16,500-mile flight around the world, crossing 23 countries on three continents.
- G After she had completed her trip round the world she made a record in which she talks about her various experiences in her tiny plane, sometimes even facing death.

Text III

You are going to read a newspaper article about living and working in Antarctica. Choose the most suitable heading from the list (A-I) for each part (33-39) of the article. There is one extra heading which you do not need to use. There is an example at the beginning (0).

- A Avoiding human contact
- B Forced to remain
- C The most lonely place on earth
- D A choice of routine
- E Freezing temperatures
- F Alternative routes
- G Looking ahead
- H A varied community
- I The need for human contact

Dark Days

0

The last ship of the season has left; the next will not be here until December. There will be eight months of isolation, cut off from the rest of the world on the edge of the world’s coldest, remotest continent: Antarctica.

33

The people who spend the winter at Davis Station in Antarctica regard the departure of the last ship not with fear but with something like a feeling of relief. Gone are the busy days of summer, the helicopters, the crowd of people. Now life starts again.

34

There are more than 40 research projects being carried out in Antarctica but many of the scientists have left by the time winter arrives. The station is home to physicists, biologists, weather observers, mechanics, communications technicians, electricians, carpenters, plumbers, a doctor and a chef. There is also a station leader whose job it is to keep everyone happy and productive and to look after all the paperwork. When most of the team arrive each year in December, the sun never sets. By the beginning of the following June it will never rise, so people have to get used to many dark days.

35

It doesn’t matter what hours people choose to work so long as the work gets done, so they can start and finish work at whatever times suit them. The first real meal of the day, a hot breakfast, is served at 10am. There is a hot lunch and a hot supper but putting on weight is a potential problem for many people. The doctor is there to advise on diet and exercise and a gym is available to help people keep fit.

36

Inevitably, small social groups develop within this isolated community. There is usually a group of smokers a group of video watchers, a group of people who sit and chat. As people try to maintain contact with home so the cost of phone bills increases, but in any case there is nothing else to spend money on.

37

It is quite common for the sea to freeze during April and instead of waves lapping the beach, thick plates of ice lift and move with the tide. Once the sea ice has been checked to see if it is strong enough to walk on, one can ski over and fish through the holes. Eventually it becomes strong enough for vehicles to drive on it and the researchers can open up a new road system to enable them to drive around the coast in minutes, to huts which could only be reached after hours of walking in summer.

38

Trips to the huts are the only means of physically escaping from life on the station. Some trips are for science, others for recreation and a way of having some personal and private space. Some trips can be made on foot or skis, but in winter they are usually in vehicles.

39

There are no animals as they all leave for the winter, but in spring seals and seabirds and penguins arrive. Only humans stay in Antarctica for the full year, and although their lives are comfortable they are still isolated and imprisoned. They have good food, comfortable buildings, telephones, entertainment, the internet, but for many months at a time no chance of leaving.

Key:

1. Vocabulary:

- 1. D
- 2. D
- 3. B
- 4. A
- 5. C
- 6. D
- 7. A
- 8. C
- 9. A
- 10. C

2. Grammar:

- 13. D
- 14. B
- 15. C
- 16. C
- 17. D

3. Grammar:

- 18. B
- 19. D
- 20. D
- 21. D

Reading

Text I

- 23. B
- 24. D
- 25. C
- 26. A

Text II

- 27. D
- 28. F
- 29. A

11. A
12. A

22. A

30. G
31. B
32. E

Text III

33. G
34. H
35. D
36. I
37. F
38. A
39. B
40.

ВАРИАНТ 4**Vocabulary and Grammar****1. Choose the word or the phrase A, B, C or D, which completes the sentence correctly.**

1. A cheque isn't valid until it has a _____ on it.
A indicator
B notice
C signature
D signpost
2. The person is the leader of a group of people: _____.
A chef
B chief
C cook
D cooker
3. She makes sure the children have _____ underwear every day.
A clean
B neat
C smart
D tidy
4. When she hears the doorbell, she _____ excitedly to the window to see who it is.
A crosses
B flies
C flows
D rushes
5. His grandfather was _____ during his country's War of Independence.
A damaged
B injured
C struck
D wounded
6. It costs each flat-owner in the block over a thousand pounds a year to _____ the building.
A guard
B keep
C maintain
D support
7. Whenever he goes abroad on business, he always remembers to _____ back something for his children.
A accompany
B bring

- C fetch
D lead
8. The official _____ that the sailors checked the weather forecast before they set out.
A encouraged
B persuaded
C recommended
D suggested
9. When my grandfather _____, he was given a large clock by his company.
A laid off
B left
C retired
D sacked
10. She's _____ to enjoy going to college: she loves meeting new people.
A certain
B confident
C definite
D determined
11. The football manager's career has not been _____ by his lack of formal education.
A excluded
B forbidden
C hindered
D prevented
12. The old palace has been _____ as a conference and exhibition centre.
A neglected
B obtained
C possessed
D preserved

2. Identify the one underlined word or phrase (A, B, C, or D) that must be changed in order for the sentence to be correct.

13. Kepler's Laws, principles outlining planetary movement, (A) was (B) formulated (C) based on observations (D) made without a telescope.
14. In 1870, the attorney general (A) was made head of the Department of Justice, given an (B) enlarged staff, and (C) endow with clear-cut law-enforcement (D) functions.
15. The (A) leek, a member of the lily family, has a (B) mildest taste (C) than the (D) onion.
16. At the (A) start of the American Revolution, lanterns (B) were (C) hung in the Old North Church as a signal that the British were (D) came.
17. Automakers Nissan and Ford and (A) several aerospace research facilities in Great Britain (B) are working lately to apply (C) active noise cancellation to (D) entire cars and planes.

3. Decide which answer (A, B, C or D) best fits each space.

18. When _____ on July 4, 1789, the federal tariff, intended by the Founding Fathers to be the government's primary source of revenue, was remarkably even-handed.
A was first enacted
B first enacted
C was enacted first
D it first
19. _____ in the United States declined from twenty million in 1910 to nine million in the 1970s.
A For a number of horses
B The number of horses

- C When the number of horses
D That the number of horses
20. When lava reaches the surface, its temperature can be ten times _____ boiling water.
A the temperature
B it is
C that of
D more
21. _____ and terrifying, coral snakes can grow to 1.2 meters in length.
A They are extremely poisonous
B The poison is extreme
C Extremely poisonous
D An extreme amount of poison
22. D.W. Griffith pioneered many of the stylistic features and filmmaking techniques _____ as the Hollywood standard.
A that established
B that became established
C what established
D what became established

Reading

TEXT I

Read the passage below and choose the correct answer, (A), (B), (C) or (D).

Unusual storytelling

‘It’s the seventh minute into a match and we’re up against one of the top clubs in Britain. We’re expected to lose, I get the ball and I’m running as fast as I can for the goal. The goalkeeper runs towards me. Do I try to get round him or shall I shoot?’

‘Go round him,’ calls out one voice. ‘Shoot!’ shout a few of the kids gathered on the floor.

‘I decide to shoot and I can set the hall going wide. But then I look up and see my mum blowing hard on her whistle from the side of the pitch, and the ball swings to the right and falls inside the goal post. I’ve just scored and we’re one-nil up against the favourites.’

It’s gripping storytelling and not a single child has moved. It also happens that every word is true, with the exception of **the bit about his mum!** The speaker is a former football player, Barry Morgan, who now works as a community relations officer in a large city in southern England.

Part of Barry’s job involves visiting clubs, schools and libraries along with a professional storyteller. Rick Taylor, in order to try and reach the kids who mainly sit at the back of classrooms and don’t want to take part in lessons. They want to both excite the children’s imaginations and encourage them to read, and so far they are delighted with the success of the project.

The original idea for the project was Rick Taylor’s. Over the years he had collected a huge number of folk tales and stories and had earned his living travelling around the world telling them. After a one-off event with Barry Morgan, which was a tremendous success, Taylor decided that they should try and **do more.**

‘It was particularly good for the kids to have strong male role models involved. Many boys grow up wanting to be professional footballers and they listen to what we have to say far more readily than they would listen to their teachers. It’s not just the boys who get a lot out of it; even though a lot of the stories are football based, the girls never get bored,’ says Taylor.

But there are other groups for whom the storytelling has been a learning process. On one occasion, for example, Barry Morgan took some young professional footballers with him to one of the storytelling sessions. The players explained to the kids how relaxing with a book before a big game could improve

their performance. 'Footballers have a fairly short career,' says Morgan, 'and most of them move on to other jobs in the leisure industry, running a business or public speaking. For all these careers you need good communication skills and telling stories to a bunch of school kids is great practice for the future. When I first started playing football I had almost no self-confidence but nowadays I'm quite happy standing up in front of 500 children.'

23. Where is the speaker at the beginning of the article?

- A running on a football pitch
- B playing football with some children
- C reliving an earlier football match
- D sitting in a football stadium

24. What does '**the bit about his mum**' (the phrase in bold) add to what the speaker says?

- A It's intended to praise his mother.
- B It's intended to make his listeners laugh.
- C It's important to involve your mother.
- D It's unusual for a woman to referee a match.

25. What does Taylor mean by '**do more**' (the phrase in bold)?

- A He wanted the opportunity to earn more money.
- B He needed more stories from other parts of the world.
- C He felt the stories they told could be more successful.
- D He thought they could organise much more storytelling.

26. What did the young footballers recommend about reading?

- A It can make you play better.
- B It helps you to feel relaxed.
- C It makes you more confident.
- D It makes you a better storyteller.

TEXT II

Read the article below about long-distance medical treatment.

Choose the best sentence to fill each of the gaps.

For each gap 27–32, mark one letter (A–G).

Do not use any letter more than once.

Telemedicine

Telemedicine, the practice of medicine at a distance, began with the telephone. (27) _____

A doctor in London can now examine a patient in the Middle East or South America. Three of the four Antarctic survey research bases now have computers, allowing transfer of medical information. (28) _____

Although telemedicine occurs in outer space, it will also change everyday medical practice on earth. It can help reduce queues and waiting times for doctors in hospitals. In addition, it can reduce the number of journeys a person might need to make to hospital for follow-up treatment and change the treatment of the elderly. (29) _____ In cases like these, telemedicine could make doctors and nurses aware of who needs help and use a 'video visit' to reduce the cost of a home visit or an unnecessary trip to hospital.

Before too long you may be able to pick up the phone for a 'video-conferencing call' and talk to a doctor for advice. Your spots may then be 'examined' by a doctor fifty kilometres away using this video link.

Whereas most people in the developed world can easily visit a doctor or a hospital for a medical check, people in some developing countries are not so lucky. (30) _____ For example, a young Swazi boy in South Africa suffering from an eye disease was 'examined' by doctors in London who were then able to decide what kind of treatment the boy needed.

Telemedicine could also change medical education by bringing the expert skills of the world's leading specialists to students throughout the world. Students in Africa or India can now watch a surgeon

performing an operation in Europe or the US. There is already a medical education link between a university in the UK and a university in the Middle East. (31) _____

Ships and off-shore installations like drilling platforms are also making increasing use of telemedicine. (32) _____ Stormy weather prevented him from being taken to the mainland, but a video discussion and examination by a doctor on land established that he was not at serious risk.

- A However, a satellite phone, a computer and some simple technology could establish a direct link between them and hospital specialists.
- B The new prescription is sent automatically to your home.
- C Today it includes video technology and high-speed communications using satellites.
- D In one recent case an oil-rig worker had a worsening headache two days after a head injury.
- E Many elderly people who live alone may suddenly fall ill or have an accident at home.
- F This means that students and teachers can share in live classes, which is a great improvement on traditional textbooks.
- G This can save lives when bad weather makes it impossible to fly home someone who is ill and needs to go to hospital.

Text III

You are going to read a magazine article about a woman who works for the film industry. Choose the most suitable heading from the list (A-I) for each part (33-39) of the article. There is one extra heading which you do not need to use. There is an example at the beginning (0).

- A Initial career move
- B The purpose of an audition
- C Huge effort to attend auditions
- D Determination is essential
- E Looking good on the screen
- F Choosing an alternative career
- G Chance of stardom in future
- H Turning down promising actors
- I The pressures in holding auditions

My Kind of Life

Fiona Bartlett is a talent scout for a film company. It is her job to find the right faces for the right film. She has spent the last month selecting the final cast for a new soap opera for teenagers.

0 B

I studied Theatre Arts at university and had intended to end up working as a stage manager in a theatre. However, during one summer holiday I did some voluntary work with a children's theatre group and I met a number of casting agents – people whose job it is to look for children to take part in any new production. They do this by holding auditions – which are rather like interviews – where they can assess a child's acting ability.

33

It was fascinating sitting in on the auditions. Children whom I thought were brilliant, who could sing and dance and had such confidence were not always the ones who got the parts. The casting agents would explain that one of the things they were looking for was how photogenic the child would appear in front of the camera, so each audition is videoed and watched on a monitor at the same time as the child is performing live.

34

Three people usually sat in on each audition and the director made the final decision. The schedule was always very tight and auditions were held in a different place each day for a period of up to two weeks at a time. So they were constantly on the move and might audition up to a hundred young hopefuls in one day. I spent two days accompanying children to these auditions, and it was that experience that attracted me to the profession.

35

However, when I first left university I worked as a personal assistant to the Production Manager of a

children’s animation and cartoon company. It was my job to look after his diary, arrange meetings, book actors and musicians for recording sessions and so on and in that way I met hundreds of different people. Then one day I heard that a TV company was looking for a casting agent and I applied for and got the job.

36

I was prepared for the hard work and the travel but one thing that I was completely unprepared for was the emotional strain of the job. You arrive at the hall where the auditions are being held to be greeted by hundreds of young people all desperate to be chosen. And sometimes, however good they are, they are simply not right for the part, so you end up disappointing the vast majority of these kids.

37

Obviously they’ve all worked and rehearsed enormously hard to get as far as the first audition. Most of them are accompanied by their teachers or a parent, they may have travelled miles to reach the place on time and spent money on fares and new clothes and so on. And they’ve got probably no more than five minutes to show us what they can do. Some of them are so nervous they just freeze, others are over-confident and burst into tears when you have to tell them they are not what you’re looking for.

38

In an ideal world you’d like to be able to offer everyone a job. But it is a very competitive world and if you can’t survive these knocks early on when you’re still a teenager, the chances are you’ve picked the wrong profession. But if you believe in yourself and you can cope with these setbacks, it is worth auditioning over and over again. Sometimes people wait years before they get through an audition and there are no guarantees that you’ll succeed in this business.

39

But on the positive side there’s enormous job satisfaction to be gained from choosing the right actors for a new production. I know that all the hours I’ve spent this last month will have been worth it when the first episode of this new soap is broadcast, and perhaps some of these new young faces will go on to become big names in the years ahead.

Key:

1. Vocabulary:

- 1. C
- 2. B
- 3. A
- 4. D
- 5. D
- 6. C
- 7. B
- 8. D
- 9. C
- 10. D
- 11. C
- 12. D

2. Grammar:

- 13. A
- 14. C
- 15. B
- 16. D
- 17. B

3. Grammar:

- 18. B
- 19. B
- 20. C
- 21. C
- 22. B

Reading

Text I

- 23. C
- 24. D
- 25. D
- 26. A

Text II

- 27. C
- 28. G
- 29. E
- 30. A
- 31. F
- 32. D

Text III

- 33. E
- 34. I
- 35. A
- 36. H
- 37. C
- 38. D
- 39. G

ЧАСТЬ 2. МАТЕМАТИКА

ЗАДАЧА 1

Вариант	Задание
1	Среднее арифметическое некоторых четырех чисел равно 537, среднее арифметическое других шести чисел равно 847. Чему равно среднее арифметическое всех десяти чисел? А) 661 Б) 692 В) 723 Г) Невозможно вычислить среднее арифметическое всех десяти чисел по имеющимся данным.
2	Среднее арифметическое некоторых шести чисел равно 537, среднее арифметическое других четырех чисел равно 847. Чему равно среднее арифметическое всех десяти чисел? А) 661 Б) 692 В) 723 Г) Невозможно вычислить среднее арифметическое всех десяти чисел по имеющимся данным.
3	Десять чисел, среднее арифметическое которых равно 749, разбили на две группы. Среднее арифметическое первой группы чисел равно 539, среднее арифметическое второй группы чисел равно 839. Найдите, сколько чисел в первой группе. А) 3 Б) 4 В) 5 Г) Невозможно определить количество чисел в первой группе по имеющимся данным.
4	Десять чисел, среднее арифметическое которых равно 749, разбили на две группы. Среднее арифметическое первой группы чисел равно 539, среднее арифметическое второй А) 3 Б) 4 В) 5 Г) Невозможно определить количество чисел в первой группе по имеющимся данным.

ЗАДАЧА 2

Вариант	Задание
1	Как изменится произведение двух чисел, если первое из них увеличить на 15%, а второе уменьшить на 20%? А) Произведение уменьшится на 8%. Б) Произведение уменьшится на 5%. В) Произведение уменьшится на 1%. Г) Произведение увеличится на 5%.
2	Как изменится произведение двух чисел, если первое из них увеличить на 20%, а второе уменьшить на 20%? А) Произведение уменьшится на 8%. Б) Произведение уменьшится на 4%. В) Произведение не изменится. Г) Произведение увеличится на 4%.
3	Как изменится дробь, если ее числитель увеличить на 20%, а знаменатель уменьшить на 20%?

	<p>А) Дробь уменьшится на 40%. Б) Дробь увеличится на 40%. В) Дробь не изменится. Г) Дробь увеличится на 50%.</p>
4	<p>Как изменится дробь, если ее числитель увеличить на 12%, а знаменатель уменьшить на 20%? А) Дробь уменьшится на 40%. Б) Дробь увеличится на 40%. В) Дробь не изменится. Г) Дробь увеличится на 50%.</p>

ЗАДАЧА 3

Вариант	Задание
1	<p>Решите уравнение $\sqrt{x^2 + 2 x + 1} = x + 1$. Какое из перечисленных утверждений является верным? А) Решением уравнения является любое целое число. Б) Решением уравнения является любое отрицательное число. В) Решением уравнения является любое неотрицательное число. Г) Среди перечисленных утверждений нет верного.</p>
2	<p>Решите уравнение $\sqrt{x^2 - 2 x + 1} = x + 1$. Какое из перечисленных утверждений является верным? А) Решением уравнения является любое целое число. Б) Решением уравнения является любое положительное число. В) Решением уравнения является любое неположительное число. Г) Среди перечисленных утверждений нет верного.</p>
3	<p>Решите неравенство $\sqrt{x^2 + 2 x + 1} > x + 1$. Какое из перечисленных утверждений является верным? А) Решением неравенства является любое целое число. Б) Решением неравенства является любое отрицательное число. В) Решением неравенства является любое не отрицательное число. Г) Среди перечисленных утверждений нет верного.</p>
4	<p>Решите неравенство $\sqrt{x^2 - 2 x + 1} < x + 1$. Какое из перечисленных утверждений является верным? А) Решением неравенства является любое целое число. Б) Решением неравенства является любое отрицательное число. В) Решением неравенства является любое не отрицательное число. Г) Среди перечисленных утверждений нет верного.</p>

ЗАДАЧА 4

Вариант	Задание
1	<p>Студент Петя вышел из общежития и пошел в университет со скоростью 3 км/ч. Через 10 минут он вспомнил, что забыл в общежитии свой смартфон, и поспешил за ним обратно со скоростью 5 км/ч. Когда Петя взял смартфон, он заметил, что опаздывает на контрольную. Петя побежал в университет со скоростью 8 км/ч и появился в аудитории ровно в то время, в которое пришел бы, если бы не забыл смартфон. Найдите расстояние от общежития до университета. А) 1 км Б) 1,2 км В) 1,28 км Г) 1,36 км</p>
2	<p>Студент Петя вышел из дома со скоростью 3 км/ч, чтобы дойти до университета ровно к началу занятий. Однако, по пути он встретил своего друга Васю, остановился и</p>

	<p>проговорил с ним 15 минут. После разговора Петя шел со скоростью 4 км/ч и добрался до университета ровно в то время, что и планировал. Найдите расстояние, пройденное Петей от места разговора с Васей до университета.</p> <p>А) 2,5 км Б) 3 км В) 3,5 км Г) 4 км</p>
3	<p>Студент Петя идет к трамвайной остановке вдоль путей по ходу движения транспорта. За 200 метров до остановки Петя увидел, что его догоняет трамвай. В этот момент расстояние между Петей и трамваем составляет 400 метров, трамвай едет со скоростью 15 км/ч, а Петина скорость 4 км/ч. Перед остановкой есть светофор, который может задержать прибытие транспорта. Сколько времени трамвай должен простоять на светофоре, чтобы Петя оказался на остановке одновременно с трамваем?</p> <p>А) 30 секунд Б) 32 секунды В) 34 секунды Г) 36 секунд</p>
4	<p>Студент Петя тренируется на круговой дорожке длиной 2 км. Сначала Петя пробежал два круга со скоростью 10 км/ч, потом четверть круга со скоростью 15 км/ч, а далее он бегал со скоростью 12 км/ч. Сколько времени заняла Петина тренировка, если всего он пробежал 8 км?</p> <p>А) 40 минут Б) 41 минуту В) 42 минут 30 секунд Г) 43 минуты 30 секунд</p>

ЗАДАЧА 5

Вариант	Задание
1	<p>Проходит ли график функции $f(x) = \frac{27x}{2\sqrt{7}-1} + \frac{47}{3\sqrt{7}-4} + \frac{111}{1-4\sqrt{7}}$ через хотя бы одну точку с рациональными координатами?</p> <p>А) Нет, не проходит. Б) Да, проходит, ордината такой точки равна 0. В) Да, проходит, ордината такой точки равна $\frac{3}{2}$. Г) Да, проходит, ордината такой точки равна $\frac{7}{2}$.</p>
2	<p>Проходит ли график функции $f(x) = \frac{51x}{2\sqrt{13}-1} + \frac{12}{\sqrt{13}+5} + \frac{199}{4\sqrt{13}+3}$ через хотя бы одну точку с рациональными координатами?</p> <p>А) Нет, не проходит. Б) Да, проходит, ордината такой точки равна 0. В) Да, проходит, ордината такой точки равна $\frac{1}{2}$. Г) Да, проходит, ордината такой точки равна $\frac{7}{2}$.</p>
3	<p>Проходит ли график функции $f(x) = \frac{19x}{2\sqrt{11}+5} + \frac{83}{3\sqrt{11}-4} + \frac{7}{\sqrt{11}+2}$ через хотя бы одну точку с рациональными координатами?</p> <p>А) Нет, не проходит. Б) Да, проходит, ордината такой точки равна 0. В) Да, проходит, ордината такой точки равна 12. Г) Да, проходит, ордината такой точки равна $\frac{7}{2}$.</p>
4	<p>Проходит ли график функции $f(x) = \frac{11x}{2\sqrt{5}+3} + \frac{176}{6\sqrt{5}-2} + \frac{44}{\sqrt{5}+7}$ через хотя бы одну точку с рациональными координатами?</p> <p>А) Нет, не проходит.</p>

	<p>Б) Да, проходит, ордината такой точки равна 0.</p> <p>В) Да, проходит, ордината такой точки равна $\frac{7}{2}$.</p> <p>Г) Да, проходит, ордината такой точки равна $\frac{33}{2}$.</p>
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ЗАДАЧА 6

Вариант	Задание
1	<p>Вершины В и D подобных треугольников ABC и ACD лежат по разные стороны от прямой, проходящей через точки А и С. Найдите отношение отрезков BC:AD, если AB=4, CD=6, а прямые BC и AD параллельны.</p> <p>А) 4/9</p> <p>Б) 2/3</p> <p>В) 4/3</p> <p>Г) 2/9</p>
2	<p>Вершины В и D подобных треугольников ABC и ACD лежат по разные стороны от прямой, проходящей через точки А и С. Точки Е и F лежат на отрезках АВ и CD соответственно. Найдите в каком отношении отрезок EF делит отрезок AC, считая от точки А, если AD=7, BC=4, EF=5.4 а прямые BC, AD и EF параллельны.</p> <p>А) 8/7</p> <p>Б) 4/7</p> <p>В) 7/5</p> <p>Г) 4/5</p>
3	<p>Вершины В и D подобных треугольников ABC и ACD лежат по разные стороны от прямой, проходящей через точки А и С. Найдите расстояние от точки D до прямой AC, если AD=5, BC=3, прямые BC и AD параллельны, а расстояние от точки D до прямой BC равно $2\sqrt{3}$.</p> <p>А) $2\sqrt{3}$</p> <p>Б) $2\sqrt{5}$</p> <p>В) $2\sqrt{15}$</p> <p>Г) $\sqrt{15}$</p>
4	<p>Вершины В и С подобных треугольников ABD и ACD лежат по разные стороны от прямой, проходящей через точки А и D. Найдите отношение радиусов окружностей, вписанных в треугольники ABD и ACD соответственно, если BD=8, AC=9, а прямые BD и AC параллельны.</p> <p>А) 8/9</p> <p>Б) $2\sqrt{2}/3$</p> <p>В) 4/3</p> <p>Г) $2\sqrt{2}/9$</p>

ЗАДАЧА 7

Вариант	Задание
1	<p>Решите неравенство $\frac{\sqrt{5-4x-x^2}}{x+11} \leq \frac{\sqrt{5-4x-x^2}}{2x+11}$. Сколько целых чисел являются решениями данного неравенства?</p> <p>А) Неравенство имеет бесконечно много целых решений.</p> <p>Б) Неравенство имеет 5 целых решений.</p> <p>В) Неравенство имеет 6 целых решений.</p> <p>Г) Неравенство имеет 7 целых решений.</p>
2	<p>Решите неравенство $\frac{\sqrt{5-4x-x^2}}{x+11} \geq \frac{\sqrt{5-4x-x^2}}{2x+11}$. Сколько целых чисел являются решениями данного неравенства?</p> <p>А) Неравенство имеет бесконечно много целых решений.</p> <p>Б) Неравенство имеет 1 целое решений.</p>

	<p>В) Неравенство имеет 2 целых решений. Г) Неравенство имеет 3 целых решений.</p>
3	<p>Решите неравенство $\frac{\sqrt{8+2x-x^2}}{x+8} \geq \frac{\sqrt{8+2x-x^2}}{2x+5}$. Сколько целых чисел являются решениями данного неравенства? А) Неравенство имеет бесконечно много целых решений. Б) Неравенство имеет 1 целое решений. В) Неравенство имеет 2 целых решений. Г) Неравенство имеет 3 целых решений.</p>
4	<p>Решите неравенство $\frac{\sqrt{8+2x-x^2}}{x+8} \leq \frac{\sqrt{8+2x-x^2}}{2x+5}$. Сколько целых чисел являются решениями данного неравенства? А) Неравенство имеет бесконечно много целых решений. Б) Неравенство имеет 5 целых решений. В) Неравенство имеет 6 целых решений. Г) Неравенство имеет 7 целых решений.</p>

ЗАДАЧА 8

Вариант	Задание
1	<p>Точки М и N – середины сторон АВ и ВС параллелограмма ABCD. Отрезки AN и DM пересекаются в точке E, а отрезки DN и CM пересекаются в точке F. Найдите EF, если АВ=2, ВС=5, BD=3. А) 2.8 Б) 3 В) $\sqrt{7}$ Г) 5</p>
2	<p>Точки М и N – середины сторон АВ и ВС ромба ABCD. Отрезки AN и DM пересекаются в точке E, а отрезки DN и CM пересекаются в точке F. Найдите EF, если $AB = \frac{5\sqrt{3}}{2}$, а угол BAD равен 120°. А) 2.8 Б) 3 В) $\sqrt{7}$ Г) 5</p>
3	<p>Точки М и N – середины сторон АВ и ВС прямоугольника ABCD. Отрезки AN и DM пересекаются в точке E, а отрезки DN и CM пересекаются в точке F. Найдите EF, если $AB = \frac{5\sqrt{3}}{2}$, ВС=5. А) 2.8 Б) 3 В) $\sqrt{7}$ Г) 5</p>
4	<p>Точки М и N – середины сторон АВ и ВС квадрата ABCD. Отрезки AN и DM пересекаются в точке E, а отрезки DN и CM пересекаются в точке F. Найдите EF, если $AB = \frac{25\sqrt{2}}{4}$. А) 2.8 Б) 3 В) $\sqrt{7}$ Г) 5</p>

ЗАДАЧА 9

Вариант	Задание
1	<p>Точки М и N – середины ребер A_1B_1 и AD куба $ABCD A_1 B_1 C_1 D_1$, точка К лежит на прямой $C_1 D_1$. Найдите наименьшее возможное значение площади треугольника MNК,</p>

	<p>если ребро куба равно $\sqrt{5}$.</p> <p>А) $\frac{\sqrt{30}}{2}$</p> <p>Б) $\frac{\sqrt{30}}{4}$</p> <p>В) $\frac{5\sqrt{6}}{2}$</p> <p>Г) $\frac{5\sqrt{6}}{4}$</p>
2	<p>Точки М и N – середины ребер A_1B_1 и AD куба $ABCD A_1B_1C_1D_1$, точка К лежит на прямой ВС. Найдите наименьшее возможное значение площади треугольника MNK, если ребро куба равно $\sqrt{5}$.</p> <p>А) $\frac{\sqrt{30}}{2}$</p> <p>Б) $\frac{\sqrt{30}}{4}$</p> <p>В) $\frac{5\sqrt{6}}{2}$</p> <p>Г) $\frac{5\sqrt{6}}{4}$</p>
3	<p>Точки М и N – середины ребер A_1B_1 и AD куба $ABCD A_1B_1C_1D_1$, точка К лежит на прямой CD. Найдите наименьшее возможное значение площади треугольника MNK, если ребро куба равно $\sqrt{5}$.</p> <p>А) $\frac{\sqrt{30}}{2}$</p> <p>Б) $\frac{\sqrt{30}}{4}$</p> <p>В) $\frac{5\sqrt{6}}{2}$</p> <p>Г) $\frac{5\sqrt{6}}{4}$</p>
4	<p>Точки М и N – середины ребер A_1B_1 и AD куба $ABCD A_1B_1C_1D_1$, точка К лежит на прямой B_1C_1. Найдите наименьшее возможное значение площади треугольника MNK, если ребро куба равно $\sqrt{5}$.</p> <p>А) $\frac{\sqrt{30}}{2}$</p> <p>Б) $\frac{\sqrt{30}}{4}$</p> <p>В) $\frac{5\sqrt{6}}{2}$</p> <p>Г) $\frac{5\sqrt{6}}{4}$</p>

ЗАДАЧА 10

Вариант	Задание
1	<p>Сколько решений имеет уравнение $x^4 + 19x^2 + y^2 + 9 = 2xy + \sqrt{3}(4x^3 + 12x)$? Решение – это пара чисел (x, y), обращающая уравнение в верное равенство. А) Уравнение не имеет решений. Б) Уравнение имеет бесконечно много решений. В) Уравнение имеет единственное решений. Г) Уравнение имеет четыре решения.</p>
2	<p>Сколько решений имеет уравнение $2x^4 + 18x^2 + y^2 + 9 = 2x^2y + \sqrt{3}(4x^3 + 12x)$? Решение – это пара чисел (x, y), обращающая уравнение в верное равенство. А) Уравнение не имеет решений. Б) Уравнение имеет бесконечно много решений. В) Уравнение имеет единственное решений. Г) Уравнение имеет четыре решения.</p>
3	<p>Сколько решений имеет уравнение $x^4 + y^4 + x^2 + 6x^2y^2 + 3 = 4 xy (x^2 + y^2) +$</p>

	$2\sqrt{3} x $? Решение – это пара чисел (x, y) , обращающая уравнение в верное равенство. А) Уравнение не имеет решений. Б) Уравнение имеет бесконечно много решений. В) Уравнение имеет два решения. Г) Уравнение имеет четыре решения.
4	Сколько решений имеет уравнение $x^4 + 19x^2 + y^2 + 9 = 2xy + 4\sqrt{3} x (x^2 + 3)$? Решение – это пара чисел (x, y) , обращающая уравнение в верное равенство. А) Уравнение не имеет решений. Б) Уравнение имеет бесконечно много решений. В) Уравнение имеет два решения. Г) Уравнение имеет четыре решения.

ЧАСТЬ 3. ОБЩЕСТВОЗНАНИЕ

ЗАДАНИЕ 1

Вариант	Задание
1	Одной из задач экономической науки является разработка 1) бюджета страны на следующий год 2) ресурсосберегающих технологий 3) путей преодоления социальной апатии в обществе 4) методов использования модели «затраты – выпуск»
2	Одной из задач экономической науки является исследование 1) влияния окружающей среды на работоспособность человека 2) закономерностей взаимодействия социальных общностей 3) влияния инвестиционной политики на профессиональный состав безработных 4) факторов, способствующих социальной мобильности
3	Существует несколько значений понятия «экономика». Какая позиция иллюстрирует экономику как науку? 1) открытие нового супермаркета 2) расчёт изменения спроса на мобильные телефоны 3) оказание населению медицинских услуг 4) расширение сети парикмахерских салонов
4	Существует несколько значений понятия «экономика». Какая позиция иллюстрирует экономику как науку? 1) изучение моделей функционирования фондового рынка 2) оказание населению образовательных услуг 3) развитие сетей мобильной связи 4) производство крупной партии легковых автомобилей

ЗАДАНИЕ 2

Вариант	Задание
1	По какому критерию осуществляется деление экономических систем на рыночные и нерыночные? 1) по уровню эффективности общественного производства 2) по времени возникновения 3) по типу политического режима 4) по способу регулирования хозяйственной деятельности
2	Что из приведённого ниже относится к сфере потребления? 1) оказание страховых услуг 2) производство мебели на заказ 3) использование в быту отопления 4) сбор налогов
3	На макроэкономическом уровне регулируются показатели 1) объёмов производства продукции фирмы 2) уровня безработицы в народном хозяйстве 3) изменения цен на локальном рынке 4) роста цен на автомобильные перевозки в регионе
4	Свободные блага в экономической теории – это блага, 1) производство которых гарантируется и обеспечивается государством 2) которые для потребления не требуют отказа от других благ и могут потребляться в неограниченном количестве 3) доступные в ограниченном количестве и вынуждающие потребителя осуществлять выбор предпочтений 4) производимые частными производителями на свой страх и риск

ЗАДАНИЕ 3

Вариант	Задание
1	Обязательным свойством любой ценной бумаги является 1) доступность для гражданского оборота 2) поддержание стабильности национальной валюты 3) регулирование количества денег в стране 4) право владельца на получение дивидендов
2	Финансовым институтом является 1) пенсионный фонд 2) высшее учебное заведение 3) туристическая фирма 4) промышленное предприятие
3	Какие ценные бумаги могут принести наибольший доход? 1) облигации 2) обыкновенные акции 3) привилегированные акции 4) все ценные бумаги могут принести одинаково высокий доход
4	Вид потребительского кредита — 1) предоставление государственного кредита оборонному предприятию 2) кредитование банками крупных торговых сетей 3) выделение банком кредитной линии для предприятия 4) выделение средств гражданину на приобретение автомобиля

ЗАДАНИЕ 4

Вариант	Задание
1	Используемые в процессе производства станки и промышленное оборудование, производственные здания, сооружения, комплектующие и расходные материалы, технологии относятся к такому фактору производства как 1) капитал 2) рента 3) менеджмент 4) земля
2	Фирма N специализируется на строительстве дачных домиков и ландшафтном дизайне. К капиталу фирмы относятся 1) принципы ландшафтного дизайна 2) дачные участки клиентов 3) офис и оборудование 4) тарифы на строительные услуги
3	Фирма занимается строительством загородных домов. Что относится к капиталу фирмы? 1) закупленные для строительства домов материалы 2) заработная плата сотрудников фирмы 3) чистый доход фирмы 4) арендуемое под офис фирмы помещение
4	Общество с ограниченной ответственностью организовало добычу и разлив артезианской воды. К какому фактору производства можно отнести воду? 1) земля 2) капитал 3) труд 4) предпринимательство

ЗАДАНИЕ 5

Вариант	Задание
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1	<p>Кто является участником(-ами) гражданского процесса?</p> <p>1) следователь 2) присяжные заседатели 3) ответчик 4) потерпевший</p>
2	<p>К организационно-правовым формам предпринимательской деятельности относится</p> <p>1) хозяйственное товарищество 2) политическая партия 3) жилищный кооператив 4) промышленное предприятие</p>
3	<p>Лицо, предъявляющее требование к другому лицу в гражданском процессе, именуется</p> <p>1) ответчиком 2) потерпевшим 3) свидетелем 4) истцом</p>
4	<p>Дела о банкротстве предприятий (фирм) рассматриваются в судебном процессе</p> <p>1) арбитражном 2) уголовном 3) гражданском 4) конституционном</p>

ЗАДАНИЕ 6

Вариант	Задание
1	<p>Что характеризует любое государство как основной элемент политической системы?</p> <p>1) наличие действующих законов 2) верховенство закона 3) господство принципа разделения властей 4) единая государственная идеология</p>
2	<p>Признаком государства, отличающим его от всех других форм объединения людей, является</p> <p>1) наличие системы права 2) наличие общего хозяйства 3) наличие органов управления 4) наличие общих ценностей</p>
3	<p>Государство, политические элиты и лидеры, политические партии относятся к</p> <p>1) источникам власти 2) функциям власти 3) объектам власти 4) субъектам власти</p>
4	<p>Что отличает государство от других институтов политической системы?</p> <p>1) разработка политических программ 2) право сбора общеобязательных платежей (налогов) 3) представление интересов определённых групп 4) объединение людей для совместной деятельности</p>

ЗАДАНИЕ 7

Вариант	Задание
1	<p>Политическая идеология представляет</p> <p>1) нормативный компонент политической системы 2) коммуникативный компонент политической системы 3) организационный компонент политической системы 4) культурный компонент политической системы</p>
2	<p>К источнику власти относится</p>

	1) убеждение 2) насилие 3) поощрение 4) харизма
3	Согласно Конституции Президент РФ 1) назначает и освобождает высшее командование Вооружённых Сил РФ 2) утверждает изменения границ между субъектами РФ 3) назначает на должность и освобождает от должности Генерального прокурора РФ 4) разрабатывает и принимает федеральные законы РФ
4	Политическая власть непосредственно регулирует отношения между 1) предприятиями различных форм собственности 2) служащими различных религиозных конфессий 3) политическими партиями 4) государством и отдельными гражданами

ЗАДАНИЕ 8

Вариант	Задание
1	Как изменится рынок гречневой крупы после аномально жаркого лета? 1) рыночная цена крупы понизится 2) предложение крупы понизится 3) спрос на крупу понизится 4) количество проданной крупы повысится
2	Росту сбережений домохозяйств в первую очередь способствует 1) снижение безработицы 2) увеличение зарплат и пенсий 3) увеличение ставки налога на доходы физических лиц 4) ухудшение качества товаров и услуг
3	Покупка каких товаров является примером рационального поведения потребителя? 1) наиболее популярных 2) чаще всего рекламируемых 3) модных и дорогих 4) хорошего качества по доступным ценам
4	В стране, известной своими пляжными курортами, начались беспорядки и вооруженные столкновения оппозиции с правительственными войсками. Какие изменения возможны в связи с этими событиями на рынке туристических услуг? 1) снижение цен на авиационный бензин и авиаперевозки 2) повышение цен на пляжный отдых в других регионах 3) рост доходов туроператоров, работающих в данном регионе 4) снижение цен на услуги страховых компаний, обслуживающих туристический бизнес