SỞ GIÁO DỤC VÀ ĐÀO TẠO HÀ NỘI
TRƯỜNG THPT NGUYỄN QUỐC TRINH

ĐỀ CHÍNH THỨC
(Đề thi có 04 trang)

KIỂM TRA CUỐI KÌ 2–KHỐI 10
NĂM HỌC 2023-2024
Môn kiểm tra: TIẾNG ANH
Thời gian làm bài: 50 phút không kể thời gian phát đề

Mã đề: 101

Họ tên học sinh:……………………………..Lớp:………
Số báo danh:…………………………………………..

Mark the letter A, B, C, or D to indicate the word whose underlined part differs from the three in pronunciation in each of the following questions.

Question 1. A. sc<u>i</u>entist   B. fertil<u>i</u>zer   C. env<u>i</u>ronment   D. ed<u>i</u>tor

Question 2. A. cul<u>t</u>ure   B. s<u>t</u>udent   C. dis<u>t</u>ance   D. mis<u>t</u>ake

Mark the letter A, B, C, or D on your answer sheet to indicate the word which differs from the other three in the position of the primary stress in each of the following questions.

Question 3. A. disappointed   B. relaxation   C. preservation   D. ecotourism

Question 4. A. offer   B. perform   C. prefer   D. maintain

Mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the following questions.

Question 5. I asked him _____, but he said nothing.
   A. the matter was what
   B. what was the matter
   C. what's the matter was
   D. what the matter was

Question 6. If I had time, I _____ to the beach with you this weekend.
   A. will go   B. would go   C. go   D. had gone

Question 7. If the weather _____ nice, I'll have a picnic in the park.
   A. were   B. are   C. is   D. was

Question 8. There's been a _____in Germany and a village was completely destroyed.
   A. flood   B. shower   C. drizzle   D. smog

Question 9. The_____of biological diversity is being promoted by millions of supporters worldwide.
   A. preservative   B. preserve   C. preservation   D. preserved

Read the following advertisement/ announcement and mark the letter A, B, C, or D on your answer sheet to indicate the correct option that best fits each of the numbered blanks.

GIVE YOURSELF A COFFEE BREAK!

THINK BETTER!
   Stop working **(10)**_____ a while and take a cheerful cup of coffee. Your mind is clearer and solutions are nearer to you.

WORK BETTER!
   Get ready for your work with **(11)** _____ fragrant cup of coffee. **Its** gentle stimulation is your cue for better work.

FEEL BETTER!
   Stop getting tired with the kind of black or brown liquid **known as** coffee. As long as you take it, your boredom and **(12)** _____ will be gone.

Question 10. A. for   B. of   C. at   D. with

Question 11. A. the   B. an   C. no article   D. a

Question 12. A. disappointed   B. disappointedly   C. disappoint   D. disappointment

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School Announcement

School Assembly
There will be a school assembly in the **(13)** _____ on Monday, January 22nd at 9:00 AM. The assembly

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will cover important topics for the upcoming semester.

Science Fair

Our annual Science Fair will **(14)** _____ on Friday, February 16th. Students are encouraged to start preparing their projects.

Health and Safety

As always, we remind everyone to follow health and safety guidelines. **(15)** _____ you are ill, contact your class monitor or your homeroom teacher immediately.

Question 13. A. auditorium   B. classroom   C. gymnasium   D. stadium

Question 14. A. be holding   B. hold   C. be held   D. have held

Question 15. A. Should   B. Were   C. If   D. Had

Mark the letter A, B, C, or D on your answer sheet to indicate the correct arrangement of the sentences to make a meaningful paragraph/letter in each of the following questions.

Question 16.

a. First, doing housework helps children develop some important life skills such as doing the laundry, cleaning the house or taking care of others.

b. They will certainly need those skills in their lives later, when they start their own families.

c. I think children should do housework for a number of reasons.

d. Second, children can learn to take responsibility when they do housework. They know that they have to do something even though they don't like to do it.

e. So doing housework is really good for children and I believe that they should do it.

   A. c-e-a-b-d   B. e-c-a-b-d   C. c-a-b-d-e   D. e-a-c-b-d

Question 17.

a. Yesterday, Aunt Eva took me to some places of interest – the Statue of Liberty, the Brooklyn Bridge, and Central Park.

b. Tomorrow we are going to watch a show at the theater Broadway.

c. The weather here is so great. It's sunny and hot every day.

d. Dear Mom and Dad, I'm having a great time here in New York.

e. Wish you were here, Love Ami.

   A. d-a-c-b-e   B. a-e-d-b-c   C. d-b-a-e-c   D. b-a-c-e-d

Read the following passage and mark the letter A, B, C, or D on your answer sheet to indicate the correct word or phrase that best fits each of the numbered blanks.

The primary aim of ecotourism is to educate the traveler and bring him or her closer to nature. Participants are given the chance to visit parts of the world **(18)** _____ are untouched by human intervention and to engage in conservation work and various other kinds of environmental projects. Visitors benefit by gaining an appreciation of natural habitats and an **(19)** _____ into the impact of human beings on the environment. Local communities gain financially but also in **(20)** _____ ways, since not only monuments but other buildings as well, such as bridges or windmills, are restored in order to attract more visitors.

(21) _____, there are also disadvantages to this type of tourism. There have been cases in which tourism has been allowed to develop with no control or limits. As a result, **(22)** _____ cultures have been affected or even threatened by foreign lifestyles. Many people today support that our approach to the development of ecotourism has to be reconsidered. It is essential that this type of tourism be environmentally, socially, and culturally friendly.

Question 18. A. why   B. that   C. who   D. when

Question 19. A. insight   B. access   C. advent   D. intent

Question 20. A. one   B. every   C. another   D. other

Question 21. A. Therefore   B. Although   C. However   D. Moreover

Question 22. A. exotic   B. indigenous   C. primary   D. peculiar

Mark the letter A, B, C, or D on your answer sheet to indicate the correct option that best fits each of the numbered blanks

Disposing of the garbage we produce every day is a major problem in cities around the world. In the United States, over 160 million tons of garbage are produced every year. Ten percent is recycled, ten percent is burned, and the rest is put in landfills. But **(23)** _____ is becoming more difficult.

A city **(24)** _____ in an unusual way is Machida, in Tokyo, Japan. They have developed a totally new approach to garbage disposal. The key to the operation is public cooperation. Families must divide **(25)** _____ into six categories:

1) Garbage that **(26)** _____ (that is, combustible garbage), such as kitchen and garden trash.
2) Noncombustible garbage, such as small electrical appliances, plastic tools and plastic toys.
3) Products that are poisonous or that cause pollution, such as batteries and fluorescent lights.
4) Bottles and glass containers that can be recycled.
5) Metal containers that can be recycled.
6) Large item, such as furniture and bicycles.

The items in categories 1 to 5 are collected **(27)** _____. (Large items are collected upon request). Then the garbage is taken to a center that looks like a clean new office building or hospital. Inside the center, special equipment is used to sort and process the garbage. Almost everything can be reused: garden or kitchen trash becomes fertilizer; combustible garbage is burned to produce electricity; metal containers and bottles are recycled; and old furniture, clothing, and other useful items are cleaned, repaired, and resold cheaply or given away. The work provides employment for handicapped persons and gives them a chance **(28)** _____. Nowadays, officials from cities around the world visit Machida to see whether they can use some of these ideas and techniques to solve their own garbage disposal problems.

Question 23. A. for finding new landfills   **B.** find land for new landfills
         C. finding land for new landfills   **D.** new landfills to finding
Question 24. A. has solved this problem   **B.** where has solved this problem
         C. that has solved this problem   **D.** to have solved this problem
Question 25. A. her garbage   **B.** their garbage   **C.** its garbage   **D.** our garbage
Question 26. A. can burned be easily   **B.** can be easily burned
         C. easily can burned be   **D.** can be burn easily
Question 27. A. in different days   **B.** about different days
         C. at different days   **D.** on different days
Question 28. A. of learn new skills   **B.** learning new skills
         C. to learn new skills.   **D.** to learning new skill

Read the following passage and mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the questions from 29 to 33.

Have you ever felt that there aren't enough hours in the day? These days we have to do our jobs, look after our homes, save energy to help the environment, and do exercise to stay healthy! Like many of us, Alex Gadsden never had enough time. He **ran** a business and a home and needed to lose weight. So he decided to do something about it. He invented the cycle washer. The 29-year-old now starts each day with a 45-minute cycle ride. He not only feels healthier but he saves on his energy bills and does the washing too.

He said, "It gives the user a good workout. I've only used it for two weeks but I've already noticed a difference." "I tend to get up at around six-thirty now and get straight on the cycle washer. I keep **it** in the garden, so it's nice to get out in the fresh air. Afterwards, I feel full of energy. Then I generally have breakfast and a shower and I really feel ready to start the day." The green washing machine uses 25 litres of water a wash, and takes enough clothes to fill a carrier bag. He normally cycles for 25 minutes to wash the clothes, and then for another 20 minutes to dry them. And it doesn't use any electricity, of course. Mr Gadsden, the boss of a cleaning company, believes his machine could become very popular. With an invention which cleans your clothes, keeps you fit and reduces your electricity bill, he may well be right.

Question 29. What is the passage mainly about?
    A. Ways to do the washing properly   **B.** A fascinating invention
    C. Cycling makes you healthier   **D.** The importance of daily exercise
Question 30. The word "**ran**" in paragraph 1 is closest in meaning to_____.
    A. changed   **B.** managed   **C.** allowed   **D.** moved
Question 31. According to paragraph 1, what does Alex Gadsden achieve with the invention of the cycle washer?
    A. He helps his wife with the washing-up.
    B. He puts on weight.

C. His electricity bills are reduced.

D. He becomes more involved in recycling.

Question 32. The word "**it**" in paragraph 2 refers to_____.

    A. difference   **B.** the fresh air   **C.** the cycle washer   **D.** workout

Question 33. Which of the following is NOT true, according to the passage?

    A. Alex's machine isn't effective in terms of cleaning the clothes.

    B. Alex Gadsden is positive about the success of the cycle washer.

    C. It doesn't require any electricity to run the cycle washer.

    D. The cycle washer can help you to remain strong and healthy.

Read the following passage and mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the questions from 34 to 40.

    Tourism will always have an impact on the places visited. Sometimes the impact is good, but often **it** is negative. For example, if lots of people visit one place, then this can **damage** the environment. The question is - how can we minimize the problems without preventing people from travelling and visiting places?

    The main aim of ecotourism is to reduce the negative impact that tourism has on the environment and local people. The idea is to encourage tourists to think about what they do when they visit a place.

    It's great to talk about protecting the environment, but how do you actually do this? There are a number of key points. Tourists shouldn't drop litter, they should stay on the paths, they shouldn't interfere with wildlife and they should respect local customs and traditions.

    Some people see ecotourism as a contradiction. They say that any tourism needs infrastructure - roads, airports and hotels. The more tourists that visit a place, the more of these are needed and, by building more of these, you can't *avoid* damaging the environment.

    But, of course, things aren't so black and white. Living in a place of natural beauty doesn't mean that you shouldn't benefit from things like better roads. As long as the improvements benefit the local people and not just the tourists, and the local communities are consulted on plans and changes, then is there really a problem?

    In 2002 the United Nations celebrated the "International Year of Ecotourism". Over the past twenty years, more and more people have started taking eco-holidays. In countries such as Ecuador, Nepal, Costa Rica and Kenya, ecotourism represents a significant proportion of the tourist industry.

Question 34. What is the main idea of the passage?

    A. A brief introduction about ecotourism   **B.** Some Dos for ecotourists

    C. Benefits and drawbacks of ecotourism   **D.** Some Don'ts for ecotourists

Question 35. In paragraph 1, the word "**it**" refers to ____.

    A. tourism   **B.** damage   **C.** impact   **D.** environment

Question 36. According to the passage, what does the ecotourism aim at?

    A. preventing tourists from travelling   **B.** stopping ecotourism altogether

    C. reducing the tourism problems   **D.** finding a new form of tourism

Question 37. According to the passage, which of the following is not mentioned as an activity to protect the environment?

    A. not interfering with wildlife   **B.** not hunting animals for food

    C. respecting local customs and traditions   **D.** not littering

Question 38. In paragraph 4, the word "*avoid*" is closest in meaning to ____.

    A. protest   **B.** prevent   **C.** present   **D.** pretend

Question 39. Which of the following is TRUE about the author's opinion?

    A. Tourists are consulted about the plans to build new infrastructure.

    B. New infrastructure could be accepted as long as it also helps local people.

    C. Governments are consulted about the plans to build new infrastructure

    D. Building extra infrastructure in ecotourism areas must be prohibited.

Question 40. In paragraph 1, the word "*damage*" is closest in meaning to ____.

    A. prevent   **B.** protect   **C.** reduce   **D.** destroy

------ *THE END* ------

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TRƯỜNG THPT NGUYỄN QUỐC TRINH

ĐỀ CHÍNH THỨC
(Đề thi có 04 trang)

KIỂM TRA CUỐI KÌ 2–KHỐI 10
NĂM HỌC 2023-2024
Môn kiểm tra: TIẾNG ANH
Thời gian làm bài: 50 phút không kể thời gian phát đề

Mã đề: 102

Họ tên học sinh:………………………………..Lớp:………
Số báo danh: ....

Mark the letter A, B, C, or D to indicate the word whose underlined part differs from the three in pronunciation in each of the following questions.

Question 1.   A. pollution   B. problem   C. coral   D. ecology
Question 2.   A. campfire   B. manage   C. nature   D. balance

Mark the letter A, B, C, or D on your answer sheet to indicate the word which differs from the other three in the position of the primary stress in each of the following questions.

Question 3.   A. consequence   B. influence   C. detergent   D. scientist
Question 4.   A. discover   B. damage   C. consider   D. preserve

Mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the following questions.

Question 5. If you call me this time tomorrow, I _____ walking in the park.
   A. was   B. am   C. were   D. will be
Question 6. She said that she _____ him the previous day.
   A. will visit   B. would visit   C. had visited   D. has visited
Question 7. If I were you, I _____ not buy that dress because it was too expensive.
   A. will   B. should   C. can   D. would
Question 8. The government is introducing strict new rules on the dumping of _____ by industry.
   A. emissions   B. exhaust fumes   C. toxic waste   D. pesticides
Question 9. There are more than 20_____ working on the water treatment project.
   A. researcher   B. researchers   C. researches   D. research

Read the following passage and mark the letter A, B, C or D on your answer sheet to choose the word or phrase that best fits each other numbered blanks.

GIVE YOURSELF A COFFEE BREAK!

THINK BETTER!
Stop working (**10**)_____ a while and take a cheerful cup of coffee. Your mind is clearer and solutions are nearer to you.

WORK BETTER!
Get ready for your work with (**11**) _____ fragrant cup of coffee. **Its** gentle stimulation is your cue for better work.

FEEL BETTER!
Stop getting tired with the kind of black or brown liquid **known as** coffee. As long as you take it, your boredom and (**12**) _____ will be gone.

Question 10. A. for   B. with   C. of   D. at
Question 11. A. an   B. the   C. a   D. no article
Question 12. A. disappointed   B. disappointedly   C. disappointment   D. disappoint

ANNOUNCEMENT OF THE TEAM BUILDING EVENT

The school Young Pioneer Manager would like to announce
     All pioneers are (**13**)_____ present by 5:30 on Dec 29.
     No mobile devices. Just put on the organization's (**14**)_____
     (**15**)_____ parents have any questions,   please contact the Manager at 0356.211.439 for further information.

Question 13.	A. going to	B. due to	C. had to be	D. required to be
Question 14.	A. participant	B. event	C. member	D. uniform
Question 15.	A. Do	B. Had	C. Should	D. Were

Mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the following questions.

Question 16.

a. I am writing to apply for a volunteer position at the head office. I heard the announcement about this position on radio last Sunday.

b. I am available for an interview on any weekday from 8.00 am to 11.00 am. If my application is successful, I can start on 15ᵗʰ January 2022.

c. I am interested in the job duties at the head office. I want to help you welcome guests and visitors to the office and receive and sort donations.

d. Yours faithfully,

e. I look forward to hearing from you.

f. Dear Sir or Madam,

    A. e-b-a-c-f-d   **B.** f-a-c-b- e-d   **C.** b-c-d-e-a-f   **D.** e-c- f-d-b-a

Question 17.

a. Firstly, we should clean up all areas regularly. For example, we can organise clean-up activities at weekends.

b. There are three things we can do to improve the environment in our school.

c. Secondly, we ought to set up more rubbish bins. For instance, we can put more rubbish bins in the school gate, in front of each building, or in the playground.

d. In conclusion, we can improve the environment in our school in many ways and even small actions can make a big difference.

e. Finally , we should plant more trees. To give an example, we can encourage students to plant trees or flowers in our school because this reduces CO2 and makes the air clean.

    A. e-b-a-d-c   **B.** e-a-d-b-c   **C.** b-a-c-e-d   **D.** e-b-a-c-d

Read the following passage and mark the letter A, B, C or D on your answer sheet to choose the word or phrase that best fits each other numbered blanks.

WATER: OUR MOST PRECIOUS RESOURCE

There are **(18)**_____ people around the world who do not have enough water for their daily needs. And as the world's population increases, so does the demand for water. Today, nearly 20% of the world's population live in areas **(19)**_____ there isn't sufficient fresh water. Not only that, but 25% live in developing countries that suffer from frequent water **(20)**_____. They lack the systems necessary to carry the water from the rivers to where it would be used.

If there is not enough clean water to drink, people will drink water of poor quality. This can increase the risk of **(21)**_____ diseases such as cholera and dysentery. Water is a precious resource, but in countries with with anticipated above-average rainfall, like the UK or Holland, it is often taken for granted.

(22)_____, with anticipated increase in global temperatures in years to come, we should all learn to be less wasteful.

Question 18.	A. much	B. a little	C. many	D. another
Question 19.	A. when	B. where	C. whose	D. that
Question 20.	A. qualities	B. problems	C. shortages	D. threats
Question 21.	A. conducting	B. contracting	C. containing	D. concluding
Question 22.	A. For example	B. Besides	C. Therefore	D. However

Read the following passage and mark the letter A, B, C or D on your answer sheet to choose the word or phrase that best fits each other numbered blanks.

I joined the Volunteer Club **(23)**_____. **(24)**_____. Since then, it has organised various volunteering activities for all students to participate.

One of the most popular activities of our club is selling handmade items to raise money for the local orphanage and homeless old people. Last year, we also raised over one hundred million VND to help people in flooded areas. The money was used to buy warm clothes, blankets, food, and (25)_____. Our club welcomes different types of donations: clothes, picture books, unused notebooks, and (26)_____. At the end of each month, we take the donations to the community centre. (27)_____ also organises afterschool games for the children at the orphanage and concerts for the old people at the centre. In addition, it offers other volunteering activities, such as helping at a food bank or delivering free meals to poor families.

Volunteering has helped me gain life experiences and (28)_____. When I see suffering and hardships, I feel thankful for what I have. What is more, these activities provide opportunities for me to meet other teenagers with similar interests and help me build essential life skills.

Question 23. A. started secondary school   B. starting secondary school
         C. when I started secondary school   D. to start secondary school

Question 24. A. The club was formed fifteen years ago
         B. Which was formed fifteen years ago
         C. That was formed fifteen years ago
         D. This was formed fifteen years ago

Question 25. A. clean water   B. cleaning water   C. cleaned water   D. water

Question 26. A. other unwanted   B. items other
         C. items want   D. other unwanted items

Question 27. A. Their club   B. Your club   C. Our club   D. My club

Question 28. A. find our sense of purpose in life   B. finding my sense of purpose in life
         C. find my sense of purpose in life   D. to find my sense of purpose in life

Read the following passage and mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the questions from 29 to 33.

Blues is a kind of slow sad music with strong rhythms. It was developed by African-American musicians in the American South. Early blues often took the form of a story about the unkind treatment experienced by African Americans. Many **elements** of the blues have grown from the music of Africa and religious music.

The blues started at the end of the 19th century and the first blues sheet music appeared at the beginning of the 20th century. Since then, **it** has developed into many styles such as country blues and urban blues. Several decades later. electric blues with electrical equipment replaced traditional blues. At the same time, the blues also reached a wider audience, especially white listeners. A mixture of blues styles and rock music, called blues rock appeared in the 60s and 70s of the last century.

Question 29. Which of the following is NOT mentioned in the text?
     A. The blues was influenced by the music of Africa and religious music.
     B. In the 1960s, the blues reached a wider audience, including listeners in the Western Europe.
     C. Different styles of blues appeared, known as country blues and urban blues.
     D. Early blues songs told sad stories.

Question 30. The word "**elements**" in paragraph 1 is closest in meaning to _____.
     A. sheets   B. forms   C. parts   D. roles

Question 31. According to paragraph 1, the blues is a type of slow, sad music created by_____.
     A. African Americans who experienced unkind treatment
     B. musicians in the American South
     C. African Americans who like African and religious music
     D. African-American musicians in the southern United States

Question 32. The word "**it**" in paragraph 2 refers to_____.
     A. the first blues sheet music   B. the end of the 19th century
     C. the beginning of the 20th century   D. the blues

Question 33. What is the text mainly about?
     A. The meaning of the blues.
     B. Different styles of the blues.
     C. The start and development of the blues.

D. The start of the blues

Read the following passage and mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the questions from 34 to 40.

Nepal has made important progress over the past few years to promote equality, but the country still has one of the highest rates of child marriage in the world. 41% of Nepalese girls are married before the age of 18. Poverty is both a cause and consequence of child marriage in Nepal. Girls from the wealthiest families marry 2 years later than **those** from the poorest, who are seen as an economic burden, and who drop out of school and earn little money.

Food insecurity plays an important role too. Nepalese families that do not have enough food to eat are more likely to marry their daughters at a young age to decrease the financial **burden**. One study shows that 91% of people who had secure access to food married over the age of 19.

Dowry is also common practice in many communities. Parents marry their daughters as soon as possible because the money they have to pay to the groom's family is higher if their daughter is older. Since 2010, the legal age of marriage is 20 for both men and women, or 18 with parental consent, according to the Nepalese Country Code.

The law states that punishment for child marriage is **imprisonment** for up to three years and a fine of up to 10,000 rupees (£102). But reports suggest that this law is rarely applied. There has been quite a lot of progress in Nepal over the past 3 years with a clear government commitment to ending child marriage and civil society cooperation. The Ministry of Women, Children and Social Welfare is currently developing Nepal's first national strategy on child marriage in collaboration with UNICEF Nepal and Girls Not Brides Nepal. However, the post-earthquake and post-fuel crisis environment has meant progress is slow and the national strategy has been delayed.

(Adapted from *http://www.girlsnotbrides.org/*)

Question 34. It can be inferred from the passage _____.
    A. The government is not doing much to put an end to child marriage
    B. Nepal had the highest overall prevalence of child marriage in the world
    C. Families want to marry their daughters soon to earn money
    D. The recent earthquake was negative for the eradication of child marriage

Question 35. Which of the following best serves as the title for the passage?
    A. Nepal's strategies to child protection programming.
    B. One type of child abuse in Nepal: Child Marriage.
    C. Nepal Government in an attempt to reduce social inequality.
    D. Child marriage - A completely tractable problem in Nepal.

Question 36. The word "**those**" in paragraph 2 refers to _____.
    A. families   **B.** rates   **C.** girls   **D.** years

Question 37. According to the last paragraph, how many years will a rule-breaker spend in jail?
    A. A rule-breaker will spend about two years in jail.
    B. A rule-breaker will spend up to thirty-six months in jail.
    C. A rule-breaker will spend exactly three years in jail.
    D. A rule-breaker will spend over three years in jail.

Question 38. The word "**burden**" in paragraph 3 is closest in meaning to _____.
    A. potency   **B.** cargo   **C.** load   **D.** issue

Question 39. The word "**imprisonment**" in the last paragraph could be best replaced by _____.
    A. accusation   **B.** detention   **C.** punishment   **D.** arrest

Question 40. According to paragraph 2, in Nepal, girls from needy families _____.
    A. have to get married earlier than those are from rich families
    B. can get married two years later than those are from poor families
    C. play an important role in bolstering their household finances
    D. are forced to drop out of school because their parents have no money

------ *THE END* ------

SỞ GIÁO DỤC VÀ ĐÀO TẠO HÀ NỘI
TRƯỜNG THPT NGUYỄN QUỐC TRINH

ĐỀ CHÍNH THỨC
(Đề thi có 04 trang)

KIỂM TRA CUỐI KÌ 2–KHỐI 10
NĂM HỌC 2023-2024
Môn kiểm tra: TIẾNG ANH
Thời gian làm bài: 50 phút không kể thời gian phát đề

Mã đề: 103

Họ tên học sinh:…………………………………….Lớp:………
Số báo danh:…………………………………………………..

Mark the letter A, B, C, or D to indicate the word whose underlined part differs from the three in pronunciation in each of the following questions.

Question 1. A. cul<u>t</u>ure   B. s<u>t</u>udent   C. dis<u>t</u>ance   D. mis<u>t</u>ake

Question 2. A. sc<u>i</u>entist   B. fertil<u>i</u>zer   C. ed<u>i</u>tor   D. env<u>i</u>ronment

Mark the letter A, B, C, or D on your answer sheet to indicate the word which differs from the other three in the position of the primary stress in each of the following questions.

Question 3. A. offer   B. prefer   C. perform   D. maintain

Question 4. A. relaxation   B. ecotourism   C. disappointed   D. preservation

Mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the following questions.

Question 5. The_____of biological diversity is being promoted by millions of supporters worldwide.
    A. preserve   B. preservative   C. preservation   D. preserved

Question 6. There's been a _____in Germany and a village was completely destroyed.
    A. drizzle   B. smog   C. flood   D. shower

Question 7. If I had time, I _____ to the beach with you this weekend.
    A. will go   B. had gone   C. go   D. would go

Question 8. I asked him _____, but he said nothing.
    A. the matter was what   B. what the matter was
    C. what's the matter was   D. what was the matter

Question 9. If the weather _____ nice, I'll have a picnic in the park.
    A. were   B. is   C. are   D. was

Read the following advertisement/ announcement and mark the letter A, B, C, or D on your answer sheet to indicate the correct option that best fits each of the numbered blanks.

GIVE YOURSELF A COFFEE BREAK!

THINK BETTER!
    Stop working **(10)**_____ a while and take a cheerful cup of coffee. Your mind is clearer and solutions are nearer to you.

WORK BETTER!
    Get ready for your work with **(11)** _____ fragrant cup of coffee. **Its** gentle stimulation is your cue for better work.

FEEL BETTER!
    Stop getting tired with the kind of black or brown liquid **known as** coffee. As long as you take it, your boredom and **(12)** _____ will be gone.

Question 10. A. of   B. at   C. with   D. for

Question 11. A. no article   B. the   C. an   D. a

Question 12. A. disappoint   B. disappointment   C. disappointed   D. disappointedly

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School Announcement

School Assembly
There will be a school assembly in the **(13)** _____ on Monday, January 22nd at 9:00 AM. The assembly

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will cover important topics for the upcoming semester.
Science Fair
Our annual Science Fair will **(14)** _____ on Friday, February 16th. Students are encouraged to start preparing their projects.
Health and Safety
As always, we remind everyone to follow health and safety guidelines. **(15)** _____ you are ill, contact your class monitor or your homeroom teacher immediately.

Question 13. **A.** stadium	**B.** auditorium	**C.** classroom	**D.** gymnasium
Question 14. **A.** have held	**B.** hold	**C.** be held	**D.** be holding
Question 15. **A.** If	**B.** Had	**C.** Should	**D.** Were

Mark the letter A, B, C, or D on your answer sheet to indicate the correct arrangement of the sentences to make a meaningful paragraph/letter in each of the following questions.

Question 16.
a. First, doing housework helps children develop some important life skills such as doing the laundry, cleaning the house or taking care of others.
b. They will certainly need those skills in their lives later, when they start their own families.
c. I think children should do housework for a number of reasons.
d. Second, children can learn to take responsibility when they do housework. They know that they have to do something even though they don't like to do it.
e. So doing housework is really good for children and I believe that they should do it.

    A. c-e-a-b-d   **B.** e-a-c-b-d   **C.** c-a-b-d-e   **D.** e-c-a-b-d

Question 17.
a. Yesterday, Aunt Eva took me to some places of interest – the Statue of Liberty, the Brooklyn Bridge, and Central Park.
b. Tomorrow we are going to watch a show at the theater Broadway.
c. The weather here is so great. It's sunny and hot every day.
d. Dear Mom and Dad, I'm having a great time here in New York.
e. Wish you were here, Love Ami.

    A. a-e-d-b-c   **B.** d-b-a-e-c   **C.** d-a-c-b-e   **D.** b-a-c-e-d

Read the following passage and mark the letter A, B, C, or D on your answer sheet to indicate the correct word or phrase that best fits each of the numbered blanks.

The primary aim of ecotourism is to educate the traveler and bring him or her closer to nature. Participants are given the chance to visit parts of the world **(18)** _____ are untouched by human intervention and to engage in conservation work and various other kinds of environmental projects. Visitors benefit by gaining an appreciation of natural habitats and an **(19)** _____ into the impact of human beings on the environment. Local communities gain financially but also in **(20)** _____ ways, since not only monuments but other buildings as well, such as bridges or windmills, are restored in order to attract more visitors.

(21) _____, there are also disadvantages to this type of tourism. There have been cases in which tourism has been allowed to develop with no control or limits. As a result, **(22)** _____ cultures have been affected or even threatened by foreign lifestyles. Many people today support that our approach to the development of ecotourism has to be reconsidered. It is essential that this type of tourism be environmentally, socially, and culturally friendly.

Question 18. **A.** why	**B.** when	**C.** that	**D.** who
Question 19. **A.** insight	**B.** advent	**C.** access	**D.** intent
Question 20. **A.** every	**B.** another	**C.** other	**D.** one
Question 21. **A.** Moreover	**B.** Therefore	**C.** However	**D.** Although
Question 22. **A.** peculiar	**B.** primary	**C.** indigenous	**D.** exotic

Mark the letter A, B, C, or D on your answer sheet to indicate the correct option that best fits each of the numbered blanks

Disposing of the garbage we produce every day is a major problem in cities around the world. In the United States, over 160 million tons of garbage are produced every year. Ten percent is recycled, ten percent is burned, and the rest is put in landfills. But **(23)** _____ is becoming more difficult.

A city **(24)** _____ in an unusual way is Machida, in Tokyo, Japan. They have developed a totally new approach to garbage disposal. The key to the operation is public cooperation. Families must divide **(25)** _____ into six categories:

1) Garbage that **(26)** _____ (that is, combustible garbage), such as kitchen and garden trash.
2) Noncombustible garbage, such as small electrical appliances, plastic tools and plastic toys.
3) Products that are poisonous or that cause pollution, such as batteries and fluorescent lights.
4) Bottles and glass containers that can be recycled.
5) Metal containers that can be recycled.
6) Large item, such as furniture and bicycles.

The items in categories 1 to 5 are collected **(27)** _____. (Large items are collected upon request). Then the garbage is taken to a center that looks like a clean new office building or hospital. Inside the center, special equipment is used to sort and process the garbage. Almost everything can be reused: garden or kitchen trash becomes fertilizer; combustible garbage is burned to produce electricity; metal containers and bottles are recycled; and old furniture, clothing, and other useful items are cleaned, repaired, and resold cheaply or given away. The work provides employment for handicapped persons and gives them a chance **(28)** _____. Nowadays, officials from cities around the world visit Machida to see whether they can use some of these ideas and techniques to solve their own garbage disposal problems.

Question 23. A. for finding new landfills   B. finding land for new landfills
                 C. find land for new landfills   D. new landfills to finding
Question 24. A. that has solved this problem   B. where has solved this problem
                 C. has solved this problem   D. to have solved this problem
Question 25. A. their garbage   B. her garbage   C. its garbage   D. our garbage
Question 26. A. can be burn easily   B. can burned be easily
                 C. easily can burned be   D. can be easily burned
Question 27. A. on different days   B. at different days
                 C. in different days   D. about different days
Question 28. A. to learn new skills.   B. learning new skills
                 C. of learn new skills   D. to learning new skill

Read the following passage and mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the questions from 29 to 33.

Have you ever felt that there aren't enough hours in the day? These days we have to do our jobs, look after our homes, save energy to help the environment, and do exercise to stay healthy! Like many of us, Alex Gadsden never had enough time. He **ran** a business and a home and needed to lose weight. So he decided to do something about it. He invented the cycle washer. The 29-year-old now starts each day with a 45-minute cycle ride. He not only feels healthier but he saves on his energy bills and does the washing too.

He said, "It gives the user a good workout. I've only used it for two weeks but I've already noticed a difference." "I tend to get up at around six-thirty now and get straight on the cycle washer. I keep **it** in the garden, so it's nice to get out in the fresh air. Afterwards, I feel full of energy. Then I generally have breakfast and a shower and I really feel ready to start the day." The green washing machine uses 25 litres of water a wash, and takes enough clothes to fill a carrier bag. He normally cycles for 25 minutes to wash the clothes, and then for another 20 minutes to dry them. And it doesn't use any electricity, of course. Mr Gadsden, the boss of a cleaning company, believes his machine could become very popular. With an invention which cleans your clothes, keeps you fit and reduces your electricity bill, he may well be right.

Question 29. What is the passage mainly about?
   A. Cycling makes you healthier   B. A fascinating invention
   C. The importance of daily exercise   D. Ways to do the washing properly
Question 30. The word "**ran**" in paragraph 1 is closest in meaning to_____.
   A. allowed   B. moved   C. managed   D. changed
Question 31. According to paragraph 1, what does Alex Gadsden achieve with the invention of the cycle washer?
   A. He puts on weight.
   B. He helps his wife with the washing-up.

C. He becomes more involved in recycling.

D. His electricity bills are reduced.

Question 32. The word "**it**" in paragraph 2 refers to_____.

    A. workout   **B.** the fresh air   **C.** the cycle washer   **D.** difference

Question 33. Which of the following is NOT true, according to the passage?

    A. The cycle washer can help you to remain strong and healthy.

    B. It doesn't require any electricity to run the cycle washer.

    C. Alex Gadsden is positive about the success of the cycle washer.

    D. Alex's machine isn't effective in terms of cleaning the clothes.

Read the following passage and mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the questions from 34 to 40.

    Tourism will always have an impact on the places visited. Sometimes the impact is good, but often **it** is negative. For example, if lots of people visit one place, then this can **damage** the environment. The question is - how can we minimize the problems without preventing people from travelling and visiting places?

    The main aim of ecotourism is to reduce the negative impact that tourism has on the environment and local people. The idea is to encourage tourists to think about what they do when they visit a place.

    It's great to talk about protecting the environment, but how do you actually do this? There are a number of key points. Tourists shouldn't drop litter, they should stay on the paths, they shouldn't interfere with wildlife and they should respect local customs and traditions.

    Some people see ecotourism as a contradiction. They say that any tourism needs infrastructure - roads, airports and hotels. The more tourists that visit a place, the more of these are needed and, by building more of these, you can't *avoid* damaging the environment.

    But, of course, things aren't so black and white. Living in a place of natural beauty doesn't mean that you shouldn't benefit from things like better roads. As long as the improvements benefit the local people and not just the tourists, and the local communities are consulted on plans and changes, then is there really a problem?

    In 2002 the United Nations celebrated the "International Year of Ecotourism". Over the past twenty years, more and more people have started taking eco-holidays. In countries such as Ecuador, Nepal, Costa Rica and Kenya, ecotourism represents a significant proportion of the tourist industry.

Question 34. What is the main idea of the passage?

    A. Some Dos for ecotourists   **B.** Benefits and drawbacks of ecotourism

    C. Some Don'ts for ecotourists   **D.** A brief introduction about ecotourism

Question 35. In paragraph 1, the word "**it**" refers to _____.

    A. damage   **B.** tourism   **C.** impact   **D.** environment

Question 36. According to the passage, what does the ecotourism aim at?

    A. finding a new form of tourism   **B.** preventing tourists from travelling

    C. stopping ecotourism altogether   **D.** reducing the tourism problems

Question 37. According to the passage, which of the following is not mentioned as an activity to protect the environment?

    A. not interfering with wildlife   **B.** respecting local customs and traditions

    C. not littering   **D.** not hunting animals for food

Question 38. In paragraph 4, the word "*avoid*" is closest in meaning to _____.

    A. prevent   **B.** pretend   **C.** protest   **D.** present

Question 39. Which of the following is **TRUE** about the author's opinion?

    A. Governments are consulted about the plans to build new infrastructure

    B. New infrastructure could be accepted as long as it also helps local people.

    C. Building extra infrastructure in ecotourism areas must be prohibited.

    D. Tourists are consulted about the plans to build new infrastructure.

Question 40. In paragraph 1, the word "*damage*" is closest in meaning to _____.

    A. protect   **B.** prevent   **C.** reduce   **D.** destroy

------ *THE END* ------

SỞ GIÁO DỤC VÀ ĐÀO TẠO HÀ NỘI
TRƯỜNG THPT NGUYỄN QUỐC TRINH

ĐỀ CHÍNH THỨC
(Đề thi có 04 trang)

KIỂM TRA CUỐI KÌ 2–KHỐI 10
NĂM HỌC 2023-2024
Môn kiểm tra: TIẾNG ANH
Thời gian làm bài: 50 phút không kể thời gian phát đề

Mã đề: 104

Họ tên học sinh:………………………………………..Lớp:………
Số báo danh: ....

Mark the letter A, B, C, or D to indicate the word whose underlined part differs from the three in pronunciation in each of the following questions.

Question 1.   A. ec<u>o</u>logy   B. c<u>o</u>ral   C. p<u>o</u>llution   D. pr<u>o</u>blem
Question 2.   A. n<u>a</u>ture   B. m<u>a</u>nage   C. b<u>a</u>lance   D. c<u>a</u>mpfire

Mark the letter A, B, C, or D on your answer sheet to indicate the word which differs from the other three in the position of the primary stress in each of the following questions.

Question 3.   A. consequence   B. detergent   C. influence   D. scientist
Question 4.   A. damage   B. preserve   C. discover   D. consider

Mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the following questions.

Question 5. If I were you, I _____ not buy that dress because it was too expensive.
    A. would   B. can   C. should   D. will
Question 6. There are more than 20_____working on the water treatment project.
    A. researcher   B. researchers   C. researches   D. research
Question 7. If you call me this time tomorrow, I _____ walking in the park.
    A. will be   B. were   C. am   D. was
Question 8. The government is introducing strict new rules on the dumping of _____by industry.
    A. toxic waste   B. exhaust fumes   C. pesticides   D. emissions
Question 9. She said that she _____ him the previous day.
    A. would visit   B. had visited   C. will visit   D. has visited

Read the following passage and mark the letter A, B, C or D on your answer sheet to choose the word or phrase that best fits each other numbered blanks.

GIVE YOURSELF A COFFEE BREAK!

THINK BETTER!
    Stop working **(10)**_____ a while and take a cheerful cup of coffee. Your mind is clearer and solutions are nearer to you.

WORK BETTER!
    Get ready for your work with **(11)** _____ fragrant cup of coffee. **Its** gentle stimulation is your cue for better work.

FEEL BETTER!
    Stop getting tired with the kind of black or brown liquid **known as** coffee. As long as you take it, your boredom and **(12)** _____ will be gone.

Question 10. A. with   **B.** for   **C.** of   **D.** at
Question 11. A. the   **B.** a   **C.** no article   **D.** an
Question 12. A. disappointment   **B.** disappoint   **C.** disappointed   **D.** disappointedly

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ANNOUNCEMENT OF THE TEAM BUILDING EVENT

The school Young Pioneer Manager would like to announce
    All pioneers are **(13)**_____ present by 5:30 on Dec 29.
    No mobile devices. Just put on the organization's **(14)**_____
    (15)_____ parents have any questions,   please contact the Manager at 0356.211.439 for further information.

Question 13. **A.** required to be **B.** had to be **C.** due to **D.** going to
Question 14. **A.** uniform **B.** participant **C.** member **D.** event
Question 15. **A.** Were **B.** Should **C.** Had **D.** Do

Mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the following questions.
Question 16.
a. Firstly, we should clean up all areas regularly. For example, we can organise clean-up activities at weekends.
b. There are three things we can do to improve the environment in our school.
c. Secondly, we ought to set up more rubbish bins. For instance, we can put more rubbish bins in the school gate, in front of each building, or in the playground.
d. In conclusion, we can improve the environment in our school in many ways and even small actions can make a big difference.
e. Finally , we should plant more trees. To give an example, we can encourage students to plant trees or flowers in our school because this reduces CO2 and makes the air clean.
   A. e-a-d-b-c   **B.** e-b-a-d-c   **C.** b-a-c-e-d   **D.** e-b-a-c-d
Question 17.
a. I am writing to apply for a volunteer position at the head office. I heard the announcement about this position on radio last Sunday.
b. I am available for an interview on any weekday from 8.00 am to 11.00 am. If my application is successful, I can start on 15th January 2022.
c. I am interested in the job duties at the head office. I want to help you welcome guests and visitors to the office and receive and sort donations.
d. Yours faithfully,
e. I look forward to hearing from you.
f. Dear Sir or Madam,
   A. f-a-c-b- e-d   **B.** b-c-d-e-a-f   **C.** e-b-a-c-f-d   **D.** e-c- f-d-b-a

Read the following passage and mark the letter A, B, C or D on your answer sheet to choose the word or phrase that best fits each other numbered blanks.
WATER: OUR MOST PRECIOUS RESOURCE
There are **(18)**_____ people around the world who do not have enough water for their daily needs. And as the world's population increases, so does the demand for water. Today, nearly 20% of the world's population live in areas **(19)**_____ there isn't sufficient fresh water. Not only that, but 25% live in developing countries that suffer from frequent water **(20)**_____. They lack the systems necessary to carry the water from the rivers to where it would be used.
If there is not enough clean water to drink, people will drink water of poor quality. This can increase the risk of **(21)**_____ diseases such as cholera and dysentery. Water is a precious resource, but in countries with with anticipated above-average rainfall, like the UK or Holland, it is often taken for granted.
(22)_____, with anticipated increase in global temperatures in years to come, we should all learn to be less wasteful.

Question 18. **A.** much   **B.** another   **C.** a little   **D.** many
Question 19. **A.** where   **B.** that   **C.** whose   **D.** when
Question 20. **A.** problems   **B.** threats   **C.** shortages   **D.** qualities
Question 21. **A.** concluding   **B.** contracting   **C.** conducting   **D.** containing
Question 22. **A.** Besides   **B.** Therefore   **C.** However   **D.** For example

Read the following passage and mark the letter A, B, C or D on your answer sheet to choose the word or phrase that best fits each other numbered blanks.
     I joined the Volunteer Club **(23)**_____. **(24)**_____. Since then, it has organised various volunteering activities for all students to participate.

One of the most popular activities of our club is selling handmade items to raise money for the local orphanage and homeless old people. Last year, we also raised over one hundred million VND to help people in flooded areas. The money was used to buy warm clothes, blankets, food, and (25)_____. Our club welcomes different types of donations: clothes, picture books, unused notebooks, and (26)_____. At the end of each month, we take the donations to the community centre. (27)_____ also organises afterschool games for the children at the orphanage and concerts for the old people at the centre. In addition, it offers other volunteering activities, such as helping at a food bank or delivering free meals to poor families.

Volunteering has helped me gain life experiences and (28)_____. When I see suffering and hardships, I feel thankful for what I have. What is more, these activities provide opportunities for me to meet other teenagers with similar interests and help me build essential life skills.

Question 23. A. when I started secondary school   **B.** starting secondary school
       C. to start secondary school   **D.** started secondary school

Question 24. A. This was formed fifteen years ago
       B. That was formed fifteen years ago
       C. Which was formed fifteen years ago
       D. The club was formed fifteen years ago

Question 25. A. water   **B.** cleaned water   **C.** clean water   **D.** cleaning water

Question 26. A. other unwanted   **B.** items want
       C. items other   **D.** other unwanted items

Question 27. A. Your club   **B.** Our club   **C.** Their club   **D.** My club

Question 28. A. find my sense of purpose in life   **B.** to find my sense of purpose in life
       C. finding my sense of purpose in life   **D.** find our sense of purpose in life

Read the following passage and mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the questions from 29 to 33.

Blues is a kind of slow sad music with strong rhythms. It was developed by African-American musicians in the American South. Early blues often took the form of a story about the unkind treatment experienced by African Americans. Many **elements** of the blues have grown from the music of Africa and religious music.

The blues started at the end of the 19th century and the first blues sheet music appeared at the beginning of the 20th century. Since then, **it** has developed into many styles such as country blues and urban blues. Several decades later, electric blues with electrical equipment replaced traditional blues. At the same time, the blues also reached a wider audience, especially white listeners. A mixture of blues styles and rock music, called blues rock appeared in the 60s and 70s of the last century.

Question 29. Which of the following is NOT mentioned in the text?
    A. Different styles of blues appeared, known as country blues and urban blues.
    B. Early blues songs told sad stories.
    C. The blues was influenced by the music of Africa and religious music.
    D. In the 1960s, the blues reached a wider audience, including listeners in the Western Europe.

Question 30. The word **"elements"** in paragraph 1 is closest in meaning to _____.
    A. forms   **B.** sheets   **C.** roles   **D.** parts

Question 31. According to paragraph 1, the blues is a type of slow, sad music created by_____.
    A. musicians in the American South
    B. African Americans who experienced unkind treatment
    C. African-American musicians in the southern United States
    D. African Americans who like African and religious music

Question 32. The word **"it"** in paragraph 2 refers to_____.
    A. the end of the 19th century   **B.** the first blues sheet music
    C. the beginning of the 20th century   **D.** the blues

Question 33. What is the text mainly about?
    A. The start of the blues
    B. The start and development of the blues.
    C. Different styles of the blues.

D. The meaning of the blues.

Read the following passage and mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the questions from 34 to 40.

Nepal has made important progress over the past few years to promote equality, but the country still has one of the highest rates of child marriage in the world. 41% of Nepalese girls are married before the age of 18. Poverty is both a cause and consequence of child marriage in Nepal. Girls from the wealthiest families marry 2 years later than **those** from the poorest, who are seen as an economic burden, and who drop out of school and earn little money.

Food insecurity plays an important role too. Nepalese families that do not have enough food to eat are more likely to marry their daughters at a young age to decrease the financial **burden**. One study shows that 91% of people who had secure access to food married over the age of 19.

Dowry is also common practice in many communities. Parents marry their daughters as soon as possible because the money they have to pay to the groom's family is higher if their daughter is older. Since 2010, the legal age of marriage is 20 for both men and women, or 18 with parental consent, according to the Nepalese Country Code.

The law states that punishment for child marriage is **imprisonment** for up to three years and a fine of up to 10,000 rupees (£102). But reports suggest that this law is rarely applied. There has been quite a lot of progress in Nepal over the past 3 years with a clear government commitment to ending child marriage and civil society cooperation. The Ministry of Women, Children and Social Welfare is currently developing Nepal's first national strategy on child marriage in collaboration with UNICEF Nepal and Girls Not Brides Nepal. However, the post-earthquake and post-fuel crisis environment has meant progress is slow and the national strategy has been delayed.

(Adapted from *http://www.girlsnotbrides.org/*)

Question 34. It can be inferred from the passage _____.
  A. The recent earthquake was negative for the eradication of child marriage
  B. Nepal had the highest overall prevalence of child marriage in the world
  C. The government is not doing much to put an end to child marriage
  D. Families want to marry their daughters soon to earn money

Question 35. Which of the following best serves as the title for the passage?
  A. Child marriage - A completely tractable problem in Nepal.
  B. One type of child abuse in Nepal: Child Marriage.
  C. Nepal's strategies to child protection programming.
  D. Nepal Government in an attempt to reduce social inequality.

Question 36. The word "**those**" in paragraph 2 refers to _____.
  A. families   **B.** rates   **C.** girls   **D.** years

Question 37. According to the last paragraph, how many years will a rule-breaker spend in jail?
  A. A rule-breaker will spend over three years in jail.
  B. A rule-breaker will spend about two years in jail.
  C. A rule-breaker will spend up to thirty-six months in jail.
  D. A rule-breaker will spend exactly three years in jail.

Question 38. The word "**burden**" in paragraph 3 is closest in meaning to _____.
  A. cargo   **B.** potency   **C.** load   **D.** issue

Question 39. The word "**imprisonment**" in the last paragraph could be best replaced by _____.
  A. punishment   **B.** detention   **C.** arrest   **D.** accusation

Question 40. According to paragraph 2, in Nepal, girls from needy families _____.
  A. play an important role in bolstering their household finances
  B. are forced to drop out of school because their parents have no money
  C. have to get married earlier than those are from rich families
  D. can get married two years later than those are from poor families

------ *THE END* ------

SỞ GIÁO DỤC VÀ ĐÀO TẠO HÀ NỘI
TRƯỜNG THPT NGUYỄN QUỐC TRINH

ĐỀ CHÍNH THỨC
(Đề thi có 04 trang)

KIỂM TRA CUỐI KÌ 2–KHỐI 10
NĂM HỌC 2023-2024
Môn kiểm tra: TIẾNG ANH
Thời gian làm bài: 50 phút không kể thời gian phát đề

Mã đề: 105

Họ tên học sinh:…………………………………..Lớp:………
Số báo danh:...

Mark the letter A, B, C, or D to indicate the word whose underlined part differs from the three in pronunciation in each of the following questions.
Question 1. A. cul̲ture   B. s̲tudent   C. di̲stance   D. mis̲take
Question 2. A. environment   B. edi̲tor   C. fertili̲zer   D. sci̲entist
Mark the letter A, B, C, or D on your answer sheet to indicate the word which differs from the other three in the position of the primary stress in each of the following questions.
Question 3. A. ecotourism   B. preservation   C. disappointed   D. relaxation
Question 4. A. prefer   B. perform   C. offer   D. maintain
Mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the following questions.
Question 5. I asked him _____, but he said nothing.
   A. the matter was what   B. what's the matter was
   C. what the matter was   D. what was the matter
Question 6. If the weather _____ nice, I'll have a picnic in the park.
   A. were   B. are   C. is   D. was
Question 7. The_____of biological diversity is being promoted by millions of supporters worldwide.
   A. preserve   B. preservative   C. preservation   D. preserved
Question 8. There's been a _____ in Germany and a village was completely destroyed.
   A. smog   B. flood   C. drizzle   D. shower
Question 9. If I had time, I _____ to the beach with you this weekend.
   A. will go   B. go   C. had gone   D. would go
Read the following advertisement/ announcement and mark the letter A, B, C, or D on your answer sheet to indicate the correct option that best fits each of the numbered blanks.

GIVE YOURSELF A COFFEE BREAK!
THINK BETTER!
   Stop working **(10)**_____ a while and take a cheerful cup of coffee. Your mind is clearer and solutions are nearer to you.
WORK BETTER!
   Get ready for your work with **(11)** _____ fragrant cup of coffee. **Its** gentle stimulation is your cue for better work.
FEEL BETTER!
   Stop getting tired with the kind of black or brown liquid **known as** coffee. As long as you take it, your boredom and **(12)** _____ will be gone.

Question 10. A. for   B. at   C. with   D. of
Question 11. A. a   B. no article   C. an   D. the
Question 12. A. disappointed   B. disappointedly   C. disappointment   D. disappoint

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School Announcement
School Assembly
There will be a school assembly in the **(13)**_____ on Monday, January 22nd at 9:00 AM. The assembly

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will cover important topics for the upcoming semester.
Science Fair
Our annual Science Fair will **(14)** _____ on Friday, February 16th. Students are encouraged to start preparing their projects.
Health and Safety
As always, we remind everyone to follow health and safety guidelines. **(15)** _____ you are ill, contact your class monitor or your homeroom teacher immediately.

Question 13. A. auditorium	B. gymnasium	C. classroom	D. stadium
Question 14. A. be held	B. hold	C. have held	D. be holding
Question 15. A. If	B. Were	C. Should	D. Had

Mark the letter A, B, C, or D on your answer sheet to indicate the correct arrangement of the sentences to make a meaningful paragraph/letter in each of the following questions.

Question 16.
a. First, doing housework helps children develop some important life skills such as doing the laundry, cleaning the house or taking care of others.
b. They will certainly need those skills in their lives later, when they start their own families.
c. I think children should do housework for a number of reasons.
d. Second, children can learn to take responsibility when they do housework. They know that they have to do something even though they don't like to do it.
e. So doing housework is really good for children and I believe that they should do it.

    A. e-c-a-b-d   **B.** c-a-b-d-e   **C.** c-e-a-b-d   **D.** e-a-c-b-d

Question 17.
a. Yesterday, Aunt Eva took me to some places of interest – the Statue of Liberty, the Brooklyn Bridge, and Central Park.
b. Tomorrow we are going to watch a show at the theater Broadway.
c. The weather here is so great. It's sunny and hot every day.
d. Dear Mom and Dad, I'm having a great time here in New York.
e. Wish you were here, Love Ami.

    A. d-b-a-e-c   **B.** b-a-c-e-d   **C.** a-e-d-b-c   **D.** d-a-c-b-e

Read the following passage and mark the letter A, B, C, or D on your answer sheet to indicate the correct word or phrase that best fits each of the numbered blanks.

The primary aim of ecotourism is to educate the traveler and bring him or her closer to nature. Participants are given the chance to visit parts of the world **(18)** _____ are untouched by human intervention and to engage in conservation work and various other kinds of environmental projects. Visitors benefit by gaining an appreciation of natural habitats and an **(19)** _____ into the impact of human beings on the environment. Local communities gain financially but also in **(20)** _____ ways, since not only monuments but other buildings as well, such as bridges or windmills, are restored in order to attract more visitors.

(21) _____, there are also disadvantages to this type of tourism. There have been cases in which tourism has been allowed to develop with no control or limits. As a result, **(22)** _____ cultures have been affected or even threatened by foreign lifestyles. Many people today support that our approach to the development of ecotourism has to be reconsidered. It is essential that this type of tourism be environmentally, socially, and culturally friendly.

Question 18. A. why	B. that	C. when	D. who
Question 19. A. access	B. advent	C. insight	D. intent
Question 20. A. another	B. every	C. other	D. one
Question 21. A. Although	B. However	C. Moreover	D. Therefore
Question 22. A. exotic	B. peculiar	C. indigenous	D. primary

Mark the letter A, B, C, or D on your answer sheet to indicate the correct option that best fits each of the numbered blanks

Disposing of the garbage we produce every day is a major problem in cities around the world. In the United States, over 160 million tons of garbage are produced every year. Ten percent is recycled, ten percent is burned, and the rest is put in landfills. But **(23)** _____ is becoming more difficult.

A city **(24)** _____ in an unusual way is Machida, in Tokyo, Japan. They have developed a totally new approach to garbage disposal. The key to the operation is public cooperation. Families must divide **(25)** _____ into six categories:

1) Garbage that **(26)** _____ (that is, combustible garbage), such as kitchen and garden trash.
2) Noncombustible garbage, such as small electrical appliances, plastic tools and plastic toys.
3) Products that are poisonous or that cause pollution, such as batteries and fluorescent lights.
4) Bottles and glass containers that can be recycled.
5) Metal containers that can be recycled.
6) Large item, such as furniture and bicycles.

The items in categories 1 to 5 are collected **(27)** _____. (Large items are collected upon request). Then the garbage is taken to a center that looks like a clean new office building or hospital. Inside the center, special equipment is used to sort and process the garbage. Almost everything can be reused: garden or kitchen trash becomes fertilizer; combustible garbage is burned to produce electricity; metal containers and bottles are recycled; and old furniture, clothing, and other useful items are cleaned, repaired, and resold cheaply or given away. The work provides employment for handicapped persons and gives them a chance **(28)** _____. Nowadays, officials from cities around the world visit Machida to see whether they can use some of these ideas and techniques to solve their own garbage disposal problems.

Question 23. A. find land for new landfills
C. finding land for new landfills
B. new landfills to finding
D. for finding new landfills

Question 24. A. to have solved this problem
C. that has solved this problem
B. where has solved this problem
D. has solved this problem

Question 25. A. its garbage   B. her garbage   C. their garbage   D. our garbage

Question 26. A. easily can burned be
C. can burned be easily
B. can be easily burned
D. can be burn easily

Question 27. A. in different days
C. at different days
B. on different days
D. about different days

Question 28. A. to learning new skill
C. learning new skills
B. of learn new skills
D. to learn new skills.

Read the following passage and mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the questions from 29 to 33.

Have you ever felt that there aren't enough hours in the day? These days we have to do our jobs, look after our homes, save energy to help the environment, and do exercise to stay healthy! Like many of us, Alex Gadsden never had enough time. He **ran** a business and a home and needed to lose weight. So he decided to do something about it. He invented the cycle washer. The 29-year-old now starts each day with a 45-minute cycle ride. He not only feels healthier but he saves on his energy bills and does the washing too.

He said, "It gives the user a good workout. I've only used it for two weeks but I've already noticed a difference." "I tend to get up at around six-thirty now and get straight on the cycle washer. I keep **it** in the garden, so it's nice to get out in the fresh air. Afterwards, I feel full of energy. Then I generally have breakfast and a shower and I really feel ready to start the day." The green washing machine uses 25 litres of water a wash, and takes enough clothes to fill a carrier bag. He normally cycles for 25 minutes to wash the clothes, and then for another 20 minutes to dry them. And it doesn't use any electricity, of course. Mr Gadsden, the boss of a cleaning company, believes his machine could become very popular. With an invention which cleans your clothes, keeps you fit and reduces your electricity bill, he may well be right.

Question 29. What is the passage mainly about?
A. The importance of daily exercise
C. Ways to do the washing properly
B. Cycling makes you healthier
D. A fascinating invention

Question 30. The word "**ran**" in paragraph 1 is closest in meaning to_____.
A. changed   B. managed   C. allowed   D. moved

Question 31. According to paragraph 1, what does Alex Gadsden achieve with the invention of the cycle washer?
A. He becomes more involved in recycling.
B. He puts on weight.

C. He helps his wife with the washing-up.

D. His electricity bills are reduced.

Question 32. The word "**it**" in paragraph 2 refers to_____.

    A. the cycle washer   **B.** workout   **C.** difference   **D.** the fresh air

Question 33. Which of the following is NOT true, according to the passage?

    A. It doesn't require any electricity to run the cycle washer.

    B. The cycle washer can help you to remain strong and healthy.

    C. Alex Gadsden is positive about the success of the cycle washer.

    D. Alex's machine isn't effective in terms of cleaning the clothes.

Read the following passage and mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the questions from 34 to 40.

    Tourism will always have an impact on the places visited. Sometimes the impact is good, but often **it** is negative. For example, if lots of people visit one place, then this can **damage** the environment. The question is - how can we minimize the problems without preventing people from travelling and visiting places?

    The main aim of ecotourism is to reduce the negative impact that tourism has on the environment and local people. The idea is to encourage tourists to think about what they do when they visit a place.

    It's great to talk about protecting the environment, but how do you actually do this? There are a number of key points. Tourists shouldn't drop litter, they should stay on the paths, they shouldn't interfere with wildlife and they should respect local customs and traditions.

    Some people see ecotourism as a contradiction. They say that any tourism needs infrastructure - roads, airports and hotels. The more tourists that visit a place, the more of these are needed and, by building more of these, you can't ***avoid*** damaging the environment.

    But, of course, things aren't so black and white. Living in a place of natural beauty doesn't mean that you shouldn't benefit from things like better roads. As long as the improvements benefit the local people and not just the tourists, and the local communities are consulted on plans and changes, then is there really a problem?

    In 2002 the United Nations celebrated the "International Year of Ecotourism". Over the past twenty years, more and more people have started taking eco-holidays. In countries such as Ecuador, Nepal, Costa Rica and Kenya, ecotourism represents a significant proportion of the tourist industry.

Question 34. What is the main idea of the passage?

    A. Benefits and drawbacks of ecotourism   **B.** Some Don'ts for ecotourists

    C. A brief introduction about ecotourism   **D.** Some Dos for ecotourists

Question 35. In paragraph 1, the word "**it**" refers to ____.

    A. tourism   **B.** impact   **C.** damage   **D.** environment

Question 36. According to the passage, what does the ecotourism aim at?

    A. stopping ecotourism altogether   **B.** reducing the tourism problems

    C. finding a new form of tourism   **D.** preventing tourists from travelling

Question 37. According to the passage, which of the following is not mentioned as an activity to protect the environment?

    A. respecting local customs and traditions   **B.** not littering

    C. not interfering with wildlife   **D.** not hunting animals for food

Question 38. In paragraph 4, the word "***avoid***" is closest in meaning to ____.

    A. present   **B.** pretend   **C.** protest   **D.** prevent

Question 39. Which of the following is **TRUE** about the author's opinion?

    A. New infrastructure could be accepted as long as it also helps local people.

    B. Building extra infrastructure in ecotourism areas must be prohibited.

    C. Governments are consulted about the plans to build new infrastructure

    D. Tourists are consulted about the plans to build new infrastructure.

Question 40. In paragraph 1, the word "***damage***" is closest in meaning to ____.

    A. reduce   **B.** destroy   **C.** prevent   **D.** protect

------ *THE END* ------

SỞ GIÁO DỤC VÀ ĐÀO TẠO HÀ NỘI
TRƯỜNG THPT NGUYỄN QUỐC TRINH

ĐỀ CHÍNH THỨC
(Đề thi có 04 trang)

KIỂM TRA CUỐI KÌ 2–KHỐI 10
NĂM HỌC 2023-2024
Môn kiểm tra: TIẾNG ANH
Thời gian làm bài: 50 phút không kể thời gian phát đề

Mã đề: 106

Họ tên học sinh:………………………………..Lớp:………
Số báo danh: ....

Mark the letter A, B, C, or D to indicate the word whose underlined part differs from the three in pronunciation in each of the following questions.

Question 1.   **A.** c<u>a</u>mpfire   **B.** b<u>a</u>lance   **C.** n<u>a</u>ture   **D.** m<u>a</u>nage
Question 2.   **A.** pr<u>o</u>blem   **B.** c<u>o</u>ral   **C.** p<u>o</u>llution   **D.** ec<u>o</u>logy

Mark the letter A, B, C, or D on your answer sheet to indicate the word which differs from the other three in the position of the primary stress in each of the following questions.

Question 3.   **A.** preserve   **B.** damage   **C.** consider   **D.** discover
Question 4.   **A.** consequence   **B.** influence   **C.** detergent   **D.** scientist

Mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the following questions.

Question 5. She said that she _____ him the previous day.
    A. had visited   **B.** would visit   **C.** has visited   **D.** will visit
Question 6. The government is introducing strict new rules on the dumping of _____ by industry.
    A. exhaust fumes   **B.** pesticides   **C.** emissions   **D.** toxic waste
Question 7. There are more than 20_____working on the water treatment project.
    A. researchers   **B.** researches   **C.** research   **D.** researcher
Question 8. If I were you, I _____ not buy that dress because it was too expensive.
    A. will   **B.** should   **C.** can   **D.** would
Question 9. If you call me this time tomorrow, I _____ walking in the park.
    A. was   **B.** am   **C.** were   **D.** will be

Read the following passage and mark the letter A, B, C or D on your answer sheet to choose the word or phrase that best fits each other numbered blanks.

GIVE YOURSELF A COFFEE BREAK!

THINK BETTER!
    Stop working **(10)**_____ a while and take a cheerful cup of coffee. Your mind is clearer and solutions are nearer to you.
WORK BETTER!
    Get ready for your work with **(11)** _____ fragrant cup of coffee. **Its** gentle stimulation is your cue for better work.
FEEL BETTER!
    Stop getting tired with the kind of black or brown liquid **known as** coffee. As long as you take it, your boredom and **(12)** _____will be gone.

Question 10. **A.** of   **B.** with   **C.** for   **D.** at
Question 11. **A.** the   **B.** a   **C.** no article   **D.** an
Question 12. **A.** disappointment   **B.** disappointed   **C.** disappointedly   **D.** disappoint

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ANNOUNCEMENT OF THE TEAM BUILDING EVENT
The school Young Pioneer Manager would like to announce
    All pioneers are **(13)**_____ present by 5:30 on Dec 29.
    No mobile devices. Just put on the organization's **(14)**_____
    (15)_____ parents have any questions,   please contact the Manager at 0356.211.439 for further information.

Question 13.	A. going to	B. required to be	C. had to be	D. due to
Question 14.	A. participant	B. member	C. event	D. uniform
Question 15.	A. Were	B. Had	C. Do	D. Should

Mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the following questions.

Question 16.

a. Firstly, we should clean up all areas regularly. For example, we can organise clean-up activities at weekends.

b. There are three things we can do to improve the environment in our school.

c. Secondly, we ought to set up more rubbish bins. For instance, we can put more rubbish bins in the school gate, in front of each building, or in the playground.

d. In conclusion, we can improve the environment in our school in many ways and even small actions can make a big difference.

e. Finally , we should plant more trees. To give an example, we can encourage students to plant trees or flowers in our school because this reduces CO2 and makes the air clean.

    A. e-a-d-b-c   **B.** e-b-a-c-d   **C.** b-a-c-e-d   **D.** e-b-a-d-c

Question 17.

a. I am writing to apply for a volunteer position at the head office. I heard the announcement about this position on radio last Sunday.

b. I am available for an interview on any weekday from 8.00 am to 11.00 am. If my application is successful, I can start on 15th January 2022.

c. I am interested in the job duties at the head office. I want to help you welcome guests and visitors to the office and receive and sort donations.

d. Yours faithfully,

e. I look forward to hearing from you.

f. Dear Sir or Madam,

    A. e-c- f-d-b-a   **B.** f-a-c-b- e-d   **C.** e-b-a-c-f-d   **D.** b-c-d-e-a-f

Read the following passage and mark the letter A, B, C or D on your answer sheet to choose the word or phrase that best fits each other numbered blanks.

WATER: OUR MOST PRECIOUS RESOURCE

There are **(18)**_____ people around the world who do not have enough water for their daily needs. And as the world's population increases, so does the demand for water. Today, nearly 20% of the world's population live in areas **(19)**_____ there isn't sufficient fresh water. Not only that, but 25% live in developing countries that suffer from frequent water **(20)**_____. They lack the systems necessary to carry the water from the rivers to where it would be used.

If there is not enough clean water to drink, people will drink water of poor quality. This can increase the risk of **(21)**_____ diseases such as cholera and dysentery. Water is a precious resource, but in countries with with anticipated above-average rainfall, like the UK or Holland, it is often taken for granted.

(22)_____, with anticipated increase in global temperatures in years to come, we should all learn to be less wasteful.

Question 18.	A. another	B. much	C. a little	D. many
Question 19.	A. where	B. whose	C. when	D. that
Question 20.	A. qualities	B. problems	C. threats	D. shortages
Question 21.	A. concluding	B. contracting	C. containing	D. conducting
Question 22.	A. However	B. Therefore	C. For example	D. Besides

Read the following passage and mark the letter A, B, C or D on your answer sheet to choose the word or phrase that best fits each other numbered blanks.

    I joined the Volunteer Club **(23)**_____. **(24)**_____. Since then, it has organised various volunteering activities for all students to participate.

One of the most popular activities of our club is selling handmade items to raise money for the local orphanage and homeless old people. Last year, we also raised over one hundred million VND to help people in flooded areas. The money was used to buy warm clothes, blankets, food, and (25)_____. Our club welcomes different types of donations: clothes, picture books, unused notebooks, and (26)_____. At the end of each month, we take the donations to the community centre. (27)_____ also organises afterschool games for the children at the orphanage and concerts for the old people at the centre. In addition, it offers other volunteering activities, such as helping at a food bank or delivering free meals to poor families.

Volunteering has helped me gain life experiences and (28)_____. When I see suffering and hardships, I feel thankful for what I have. What is more, these activities provide opportunities for me to meet other teenagers with similar interests and help me build essential life skills.

Question 23. A. when I started secondary school   **B.** started secondary school
       C. starting secondary school   **D.** to start secondary school

Question 24. A. That was formed fifteen years ago
       B. This was formed fifteen years ago
       C. The club was formed fifteen years ago
       D. Which was formed fifteen years ago

Question 25. A. cleaning water   **B.** water   **C.** clean water   **D.** cleaned water

Question 26. A. items other   **B.** other unwanted items
       C. other unwanted   **D.** items want

Question 27. A. My club   **B.** Your club   **C.** Their club   **D.** Our club

Question 28. A. find our sense of purpose in life   **B.** finding my sense of purpose in life
       C. find my sense of purpose in life   **D.** to find my sense of purpose in life

Read the following passage and mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the questions from 29 to 33.

Blues is a kind of slow sad music with strong rhythms. It was developed by African-American musicians in the American South. Early blues often took the form of a story about the unkind treatment experienced by African Americans. Many **elements** of the blues have grown from the music of Africa and religious music.

The blues started at the end of the 19th century and the first blues sheet music appeared at the beginning of the 20th century. Since then, **it** has developed into many styles such as country blues and urban blues. Several decades later. electric blues with electrical equipment replaced traditional blues. At the same time, the blues also reached a wider audience, especially white listeners. A mixture of blues styles and rock music, called blues rock appeared in the 60s and 70s of the last century.

Question 29. Which of the following is NOT mentioned in the text?
    A. Different styles of blues appeared, known as country blues and urban blues.
    B. Early blues songs told sad stories.
    C. The blues was influenced by the music of Africa and religious music.
    D. In the 1960s, the blues reached a wider audience, including listeners in the Western Europe.

Question 30. The word **"elements"** in paragraph 1 is closest in meaning to _____.
    A. parts   **B.** roles   **C.** forms   **D.** sheets

Question 31. According to paragraph 1, the blues is a type of slow, sad music created by_____.
    A. musicians in the American South
    B. African Americans who like African and religious music
    C. African-American musicians in the southern United States
    D. African Americans who experienced unkind treatment

Question 32. The word **"it"** in paragraph 2 refers to_____.
    A. the end of the 19th century   **B.** the beginning of the 20th century
    C. the first blues sheet music   **D.** the blues

Question 33. What is the text mainly about?
    A. The meaning of the blues.
    B. The start and development of the blues.
    C. Different styles of the blues.

D. The start of the blues

Read the following passage and mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the questions from 34 to 40.

Nepal has made important progress over the past few years to promote equality, but the country still has one of the highest rates of child marriage in the world. 41% of Nepalese girls are married before the age of 18. Poverty is both a cause and consequence of child marriage in Nepal. Girls from the wealthiest families marry 2 years later than **those** from the poorest, who are seen as an economic burden, and who drop out of school and earn little money.

Food insecurity plays an important role too. Nepalese families that do not have enough food to eat are more likely to marry their daughters at a young age to decrease the financial **burden**. One study shows that 91% of people who had secure access to food married over the age of 19.

Dowry is also common practice in many communities. Parents marry their daughters as soon as possible because the money they have to pay to the groom's family is higher if their daughter is older. Since 2010, the legal age of marriage is 20 for both men and women, or 18 with parental consent, according to the Nepalese Country Code.

The law states that punishment for child marriage is **imprisonment** for up to three years and a fine of up to 10,000 rupees (£102). But reports suggest that this law is rarely applied. There has been quite a lot of progress in Nepal over the past 3 years with a clear government commitment to ending child marriage and civil society cooperation. The Ministry of Women, Children and Social Welfare is currently developing Nepal's first national strategy on child marriage in collaboration with UNICEF Nepal and Girls Not Brides Nepal. However, the post-earthquake and post-fuel crisis environment has meant progress is slow and the national strategy has been delayed.

(Adapted from *http://www.girlsnotbrides.org/*)

Question 34. It can be inferred from the passage _____.
  A. Nepal had the highest overall prevalence of child marriage in the world
  B. The recent earthquake was negative for the eradication of child marriage
  C. The government is not doing much to put an end to child marriage
  D. Families want to marry their daughters soon to earn money

Question 35. Which of the following best serves as the title for the passage?
  A. Nepal's strategies to child protection programming.
  B. One type of child abuse in Nepal: Child Marriage.
  C. Nepal Government in an attempt to reduce social inequality.
  D. Child marriage - A completely tractable problem in Nepal.

Question 36. The word "**those**" in paragraph 2 refers to _____.
  A. girls   **B.** years   **C.** families   **D.** rates

Question 37. According to the last paragraph, how many years will a rule-breaker spend in jail?
  A. A rule-breaker will spend up to thirty-six months in jail.
  B. A rule-breaker will spend about two years in jail.
  C. A rule-breaker will spend over three years in jail.
  D. A rule-breaker will spend exactly three years in jail.

Question 38. The word "**burden**" in paragraph 3 is closest in meaning to _____.
  A. cargo   **B.** load   **C.** issue   **D.** potency

Question 39. The word "**imprisonment**" in the last paragraph could be best replaced by _____.
  A. accusation   **B.** punishment   **C.** detention   **D.** arrest

Question 40. According to paragraph 2, in Nepal, girls from needy families _____.
  A. have to get married earlier than those are from rich families
  B. play an important role in bolstering their household finances
  C. are forced to drop out of school because their parents have no money
  D. can get married two years later than those are from poor families

------ *THE END* ------

SỞ GIÁO DỤC VÀ ĐÀO TẠO HÀ NỘI
TRƯỜNG THPT NGUYỄN QUỐC TRINH

ĐỀ CHÍNH THỨC
(Đề thi có 04 trang)

KIỂM TRA CUỐI KÌ 2–KHỐI 10
NĂM HỌC 2023-2024
Môn kiểm tra: TIẾNG ANH
Thời gian làm bài: 50 phút không kể thời gian phát đề

Mã đề: 107

Họ tên học sinh:………………………………..Lớp:………
Số báo danh:...

Mark the letter A, B, C, or D to indicate the word whose underlined part differs from the three in pronunciation in each of the following questions.

Question 1. A. sc<u>i</u>entist   B. fertil<u>i</u>zer   C. env<u>i</u>ronment   D. ed<u>i</u>tor

Question 2. A. cul<u>t</u>ure   B. s<u>t</u>udent   C. dis<u>t</u>ance   D. mis<u>t</u>ake

Mark the letter A, B, C, or D on your answer sheet to indicate the word which differs from the other three in the position of the primary stress in each of the following questions.

Question 3. A. relaxation   B. preservation   C. disappointed   D. ecotourism

Question 4. A. perform   B. maintain   C. offer   D. prefer

Mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the following questions.

Question 5. There's been a _____ in Germany and a village was completely destroyed.
   A. drizzle   B. shower   C. smog   D. flood

Question 6. If I had time, I _____ to the beach with you this weekend.
   A. would go   B. go   C. had gone   D. will go

Question 7. If the weather _____ nice, I'll have a picnic in the park.
   A. is   B. are   C. were   D. was

Question 8. The_____of biological diversity is being promoted by millions of supporters worldwide.
   A. preservative   B. preserve   C. preserved   D. preservation

Question 9. I asked him _____, but he said nothing.
   A. what the matter was   B. what's the matter was
   C. the matter was what   D. what was the matter

Read the following advertisement/ announcement and mark the letter A, B, C, or D on your answer sheet to indicate the correct option that best fits each of the numbered blanks.

GIVE YOURSELF A COFFEE BREAK!
THINK BETTER!
   Stop working **(10)**_____ a while and take a cheerful cup of coffee. Your mind is clearer and solutions are nearer to you.
WORK BETTER!
   Get ready for your work with **(11)** _____ fragrant cup of coffee. **Its** gentle stimulation is your cue for better work.
FEEL BETTER!
   Stop getting tired with the kind of black or brown liquid **known as** coffee. As long as you take it, your boredom and **(12)** _____ will be gone.

Question 10. A. of   B. at   C. with   D. for
Question 11. A. the   B. no article   C. an   D. a
Question 12. A. disappointed   B. disappointment   C. disappoint   D. disappointedly

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School Announcement
School Assembly
There will be a school assembly in the **(13)** _____ on Monday, January 22nd at 9:00 AM. The assembly

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will cover important topics for the upcoming semester.

Science Fair

Our annual Science Fair will **(14)** _____ on Friday, February 16th. Students are encouraged to start preparing their projects.

Health and Safety

As always, we remind everyone to follow health and safety guidelines. **(15)** _____ you are ill, contact your class monitor or your homeroom teacher immediately.

Question 13. A. stadium	B. gymnasium	C. auditorium	D. classroom
Question 14. A. be held	B. have held	C. hold	D. be holding
Question 15. A. Had	B. Should	C. If	D. Were

Mark the letter A, B, C, or D on your answer sheet to indicate the correct arrangement of the sentences to make a meaningful paragraph/letter in each of the following questions.

Question 16.

a. First, doing housework helps children develop some important life skills such as doing the laundry, cleaning the house or taking care of others.

b. They will certainly need those skills in their lives later, when they start their own families.

c. I think children should do housework for a number of reasons.

d. Second, children can learn to take responsibility when they do housework. They know that they have to do something even though they don't like to do it.

e. So doing housework is really good for children and I believe that they should do it.

    A. e-a-c-b-d   **B.** c-e-a-b-d   **C.** c-a-b-d-e   **D.** e-c-a-b-d

Question 17.

a. Yesterday, Aunt Eva took me to some places of interest – the Statue of Liberty, the Brooklyn Bridge, and Central Park.

b. Tomorrow we are going to watch a show at the theater Broadway.

c. The weather here is so great. It's sunny and hot every day.

d. Dear Mom and Dad, I'm having a great time here in New York.

e. Wish you were here, Love Ami.

    A. d-a-c-b-e   **B.** a-e-d-b-c   **C.** b-a-c-e-d   **D.** d-b-a-e-c

Read the following passage and mark the letter A, B, C, or D on your answer sheet to indicate the correct word or phrase that best fits each of the numbered blanks.

The primary aim of ecotourism is to educate the traveler and bring him or her closer to nature. Participants are given the chance to visit parts of the world **(18)** _____ are untouched by human intervention and to engage in conservation work and various other kinds of environmental projects. Visitors benefit by gaining an appreciation of natural habitats and an **(19)** _____ into the impact of human beings on the environment. Local communities gain financially but also in **(20)** _____ ways, since not only monuments but other buildings as well, such as bridges or windmills, are restored in order to attract more visitors.

(21) _____, there are also disadvantages to this type of tourism. There have been cases in which tourism has been allowed to develop with no control or limits. As a result, **(22)** _____ cultures have been affected or even threatened by foreign lifestyles. Many people today support that our approach to the development of ecotourism has to be reconsidered. It is essential that this type of tourism be environmentally, socially, and culturally friendly.

Question 18. A. why	B. who	C. that	D. when
Question 19. A. intent	B. insight	C. advent	D. access
Question 20. A. one	B. every	C. another	D. other
Question 21. A. Moreover	B. However	C. Although	D. Therefore
Question 22. A. exotic	B. primary	C. indigenous	D. peculiar

Mark the letter A, B, C, or D on your answer sheet to indicate the correct option that best fits each of the numbered blanks

Disposing of the garbage we produce every day is a major problem in cities around the world. In the United States, over 160 million tons of garbage are produced every year. Ten percent is recycled, ten percent is burned, and the rest is put in landfills. But **(23)** _____ is becoming more difficult.

A city **(24)** _____ in an unusual way is Machida, in Tokyo, Japan. They have developed a totally new approach to garbage disposal. The key to the operation is public cooperation. Families must divide **(25)** _____ into six categories:

1) Garbage that **(26)** _____ (that is, combustible garbage), such as kitchen and garden trash.
2) Noncombustible garbage, such as small electrical appliances, plastic tools and plastic toys.
3) Products that are poisonous or that cause pollution, such as batteries and fluorescent lights.
4) Bottles and glass containers that can be recycled.
5) Metal containers that can be recycled.
6) Large item, such as furniture and bicycles.

The items in categories 1 to 5 are collected **(27)** _____. (Large items are collected upon request). Then the garbage is taken to a center that looks like a clean new office building or hospital. Inside the center, special equipment is used to sort and process the garbage. Almost everything can be reused: garden or kitchen trash becomes fertilizer; combustible garbage is burned to produce electricity; metal containers and bottles are recycled; and old furniture, clothing, and other useful items are cleaned, repaired, and resold cheaply or given away. The work provides employment for handicapped persons and gives them a chance **(28)** _____. Nowadays, officials from cities around the world visit Machida to see whether they can use some of these ideas and techniques to solve their own garbage disposal problems.

Question 23. A. new landfills to finding   B. finding land for new landfills
     C. for finding new landfills   D. find land for new landfills

Question 24. A. has solved this problem   B. that has solved this problem
     C. to have solved this problem   D. where has solved this problem

Question 25. A. its garbage   B. our garbage   C. her garbage   D. their garbage

Question 26. A. easily can burned be   B. can be easily burned
     C. can burned be easily   D. can be burn easily

Question 27. A. in different days   B. at different days
     C. on different days   D. about different days

Question 28. A. to learn new skills.   B. of learn new skills
     C. learning new skills   D. to learning new skill

Read the following passage and mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the questions from 29 to 33.

Have you ever felt that there aren't enough hours in the day? These days we have to do our jobs, look after our homes, save energy to help the environment, and do exercise to stay healthy! Like many of us, Alex Gadsden never had enough time. He **ran** a business and a home and needed to lose weight. So he decided to do something about it. He invented the cycle washer. The 29-year-old now starts each day with a 45-minute cycle ride. He not only feels healthier but he saves on his energy bills and does the washing too.

He said, "It gives the user a good workout. I've only used it for two weeks but I've already noticed a difference." "I tend to get up at around six-thirty now and get straight on the cycle washer. I keep **it** in the garden, so it's nice to get out in the fresh air. Afterwards, I feel full of energy. Then I generally have breakfast and a shower and I really feel ready to start the day." The green washing machine uses 25 litres of water a wash, and takes enough clothes to fill a carrier bag. He normally cycles for 25 minutes to wash the clothes, and then for another 20 minutes to dry them. And it doesn't use any electricity, of course. Mr Gadsden, the boss of a cleaning company, believes his machine could become very popular. With an invention which cleans your clothes, keeps you fit and reduces your electricity bill, he may well be right.

Question 29. What is the passage mainly about?
     A. The importance of daily exercise   B. Cycling makes you healthier
     C. Ways to do the washing properly   D. A fascinating invention

Question 30. The word "**ran**" in paragraph 1 is closest in meaning to_____.
     A. moved   B. allowed   C. changed   D. managed

Question 31. According to paragraph 1, what does Alex Gadsden achieve with the invention of the cycle washer?
     A. He puts on weight.
     B. His electricity bills are reduced.

C. He becomes more involved in recycling.

D. He helps his wife with the washing-up.

Question 32. The word "**it**" in paragraph 2 refers to_____.

    A. workout   **B.** the cycle washer   **C.** difference   **D.** the fresh air

Question 33. Which of the following is NOT true, according to the passage?

    A. It doesn't require any electricity to run the cycle washer.

    B. Alex Gadsden is positive about the success of the cycle washer.

    C. Alex's machine isn't effective in terms of cleaning the clothes.

    D. The cycle washer can help you to remain strong and healthy.

Read the following passage and mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the questions from 34 to 40.

    Tourism will always have an impact on the places visited. Sometimes the impact is good, but often **it** is negative. For example, if lots of people visit one place, then this can **damage** the environment. The question is - how can we minimize the problems without preventing people from travelling and visiting places?

    The main aim of ecotourism is to reduce the negative impact that tourism has on the environment and local people. The idea is to encourage tourists to think about what they do when they visit a place.

    It's great to talk about protecting the environment, but how do you actually do this? There are a number of key points. Tourists shouldn't drop litter, they should stay on the paths, they shouldn't interfere with wildlife and they should respect local customs and traditions.

    Some people see ecotourism as a contradiction. They say that any tourism needs infrastructure - roads, airports and hotels. The more tourists that visit a place, the more of these are needed and, by building more of these, you can't *avoid* damaging the environment.

    But, of course, things aren't so black and white. Living in a place of natural beauty doesn't mean that you shouldn't benefit from things like better roads. As long as the improvements benefit the local people and not just the tourists, and the local communities are consulted on plans and changes, then is there really a problem?

    In 2002 the United Nations celebrated the "International Year of Ecotourism". Over the past twenty years, more and more people have started taking eco-holidays. In countries such as Ecuador, Nepal, Costa Rica and Kenya, ecotourism represents a significant proportion of the tourist industry.

Question 34. What is the main idea of the passage?

    A. Some Don'ts for ecotourists   **B.** A brief introduction about ecotourism

    C. Some Dos for ecotourists   **D.** Benefits and drawbacks of ecotoursim

Question 35. In paragraph 1, the word "**it**" refers to _____.

    A. tourism   **B.** environment   **C.** impact   **D.** damage

Question 36. According to the passage, what does the ecotourism aim at?

    A. finding a new form of tourism   **B.** preventing tourists from travelling

    C. reducing the tourism problems   **D.** stopping ecotourism altogether

Question 37. According to the passage, which of the following is not mentioned as an activity to protect the environment?

    A. not hunting animals for food   **B.** not littering

    C. respecting local customs and traditions   **D.** not interfering with wildlife

Question 38. In paragraph 4, the word "*avoid*" is closest in meaning to _____.

    A. present   **B.** pretend   **C.** protest   **D.** prevent

Question 39. Which of the following is **TRUE** about the author's opinion?

    A. New infrastructure could be accepted as long as it also helps local people.

    B. Tourists are consulted about the plans to build new infrastructure.

    C. Building extra infrastructure in ecotourism areas must be prohibited.

    D. Governments are consulted about the plans to build new infrastructure

Question 40. In paragraph 1, the word "*damage*" is closest in meaning to _____.

    A. protect   **B.** reduce   **C.** destroy   **D.** prevent

------ *THE END* ------

SỞ GIÁO DỤC VÀ ĐÀO TẠO HÀ NỘI
TRƯỜNG THPT NGUYỄN QUỐC TRINH

ĐỀ CHÍNH THỨC
(Đề thi có 04 trang)

KIỂM TRA CUỐI KÌ 2–KHỐI 10
NĂM HỌC 2023-2024
Môn kiểm tra: TIẾNG ANH
Thời gian làm bài: 50 phút không kể thời gian phát đề

Mã đề: 108

Họ tên học sinh:………………………………..Lớp:………
Số báo danh:..

Mark the letter A, B, C, or D to indicate the word whose underlined part differs from the three in pronunciation in each of the following questions.

Question 1. **A.** ec**o**logy   **B.** p**o**llution   **C.** pr**o**blem   **D.** c**o**ral

Question 2. **A.** m**a**nage   **B.** n**a**ture   **C.** b**a**lance   **D.** c**a**mpfire

Mark the letter A, B, C, or D on your answer sheet to indicate the word which differs from the other three in the position of the primary stress in each of the following questions.

Question 3. **A.** detergent   **B.** scientist   **C.** consequence   **D.** influence

Question 4. **A.** damage   **B.** discover   **C.** consider   **D.** preserve

Mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the following questions.

Question 5. If you call me this time tomorrow, I _____ walking in the park.
    A. will be   **B.** am   **C.** were   **D.** was

Question 6. There are more than 20_____working on the water treatment project.
    A. researches   **B.** research   **C.** researcher   **D.** researchers

Question 7. If I were you, I _____ not buy that dress because it was too expensive.
    A. will   **B.** would   **C.** can   **D.** should

Question 8. The government is introducing strict new rules on the dumping of _____ by industry.
    A. emissions   **B.** toxic waste   **C.** pesticides   **D.** exhaust fumes

Question 9. She said that she _____ him the previous day.
    A. had visited   **B.** would visit   **C.** has visited   **D.** will visit

Read the following passage and mark the letter A, B, C or D on your answer sheet to choose the word or phrase that best fits each other numbered blanks.

GIVE YOURSELF A COFFEE BREAK!

THINK BETTER!
    Stop working **(10)**_____ a while and take a cheerful cup of coffee. Your mind is clearer and solutions are nearer to you.

WORK BETTER!
    Get ready for your work with **(11)** _____ fragrant cup of coffee. **Its** gentle stimulation is your cue for better work.

FEEL BETTER!
    Stop getting tired with the kind of black or brown liquid **known as** coffee. As long as you take it, your boredom and **(12)** _____will be gone.

Question 10. **A.** of   **B.** with   **C.** for   **D.** at
Question 11. **A.** the   **B.** a   **C.** no article   **D.** an
Question 12. A. disappointment   **B.** disappoint   **C.** disappointedly   **D.** disappointed

ANNOUNCEMENT OF THE TEAM BUILDING EVENT
The school Young Pioneer Manager would like to announce
    All pioneers are **(13)**_____ present by 5:30 on Dec 29.
    No mobile devices. Just put on the organization's **(14)**_____
    (15)_____ parents have any questions,   please contact the Manager at 0356.211.439 for further information.

Question 13. **A.** had to be   **B.** due to   **C.** required to be   **D.** going to
Question 14. **A.** uniform   **B.** event   **C.** participant   **D.** member
Question 15. **A.** Do   **B.** Had   **C.** Should   **D.** Were

Mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the following questions.

Question 16.
a. I am writing to apply for a volunteer position at the head office. I heard the announcement about this position on radio last Sunday.
b. I am available for an interview on any weekday from 8.00 am to 11.00 am. If my application is successful, I can start on 15ᵗʰ January 2022.
c. I am interested in the job duties at the head office. I want to help you welcome guests and visitors to the office and receive and sort donations.
d. Yours faithfully,
e. I look forward to hearing from you.
f. Dear Sir or Madam,

    A. b-c-d-e-a-f   **B.** f-a-c-b- e-d   **C.** e-b-a-c-f-d   **D.** e-c- f-d-b-a

Question 17.
a. Firstly, we should clean up all areas regularly. For example, we can organise clean-up activities at weekends.
b. There are three things we can do to improve the environment in our school.
c. Secondly, we ought to set up more rubbish bins. For instance, we can put more rubbish bins in the school gate, in front of each building, or in the playground.
d. In conclusion, we can improve the environment in our school in many ways and even small actions can make a big difference.
e. Finally , we should plant more trees. To give an example, we can encourage students to plant trees or flowers in our school because this reduces CO2 and makes the air clean.

    A. e-a-d-b-c   **B.** e-b-a-c-d   **C.** e-b-a-d-c   **D.** b-a-c-e-d

Read the following passage and mark the letter A, B, C or D on your answer sheet to choose the word or phrase that best fits each other numbered blanks.

WATER: OUR MOST PRECIOUS RESOURCE

There are **(18)**_____ people around the world who do not have enough water for their daily needs. And as the world's population increases, so does the demand for water. Today, nearly 20% of the world's population live in areas **(19)**_____ there isn't sufficient fresh water. Not only that, but 25% live in developing countries that suffer from frequent water **(20)**_____ . They lack the systems necessary to carry the water from the rivers to where it would be used.

If there is not enough clean water to drink, people will drink water of poor quality. This can increase the risk of **(21)**_____ diseases such as cholera and dysentery. Water is a precious resource, but in countries with with anticipated above-average rainfall, like the UK or Holland, it is often taken for granted.

(22)_____, with anticipated increase in global temperatures in years to come, we should all learn to be less wasteful.

Question 18. **A.** many   **B.** much   **C.** another   **D.** a little
Question 19. **A.** that   **B.** whose   **C.** where   **D.** when
Question 20. **A.** threats   **B.** qualities   **C.** problems   **D.** shortages
Question 21. **A.** conducting   **B.** contracting   **C.** containing   **D.** concluding
Question 22. **A.** For example   **B.** However   **C.** Therefore   **D.** Besides

Read the following passage and mark the letter A, B, C or D on your answer sheet to choose the word or phrase that best fits each other numbered blanks.

    I joined the Volunteer Club **(23)**_____. **(24)**_____. Since then, it has organised various volunteering activities for all students to participate.

One of the most popular activities of our club is selling handmade items to raise money for the local orphanage and homeless old people. Last year, we also raised over one hundred million VND to help people in flooded areas. The money was used to buy warm clothes, blankets, food, and **(25)**_____. Our club welcomes different types of donations: clothes, picture books, unused notebooks, and **(26)**_____. At the end of each month, we take the donations to the community centre. **(27)**_____ also organises afterschool games for the children at the orphanage and concerts for the old people at the centre. In addition, it offers other volunteering activities, such as helping at a food bank or delivering free meals to poor families.

Volunteering has helped me gain life experiences and **(28)**_____. When I see suffering and hardships, I feel thankful for what I have. What is more, these activities provide opportunities for me to meet other teenagers with similar interests and help me build essential life skills.

Question 23. A. started secondary school   **B.** when I started secondary school
         C. starting secondary school   **D.** to start secondary school

Question 24. A. The club was formed fifteen years ago
         B. Which was formed fifteen years ago
         C. This was formed fifteen years ago
         D. That was formed fifteen years ago

Question 25. A. water   **B.** cleaned water   **C.** cleaning water   **D.** clean water

Question 26. A. other unwanted items   **B.** other unwanted
         C. items other   **D.** items want

Question 27. A. My club   **B.** Their club   **C.** Our club   **D.** Your club

Question 28. A. find our sense of purpose in life   **B.** to find my sense of purpose in life
         C. find my sense of purpose in life   **D.** finding my sense of purpose in life

Read the following passage and mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the questions from 29 to 33.

Blues is a kind of slow sad music with strong rhythms. It was developed by African-American musicians in the American South. Early blues often took the form of a story about the unkind treatment experienced by African Americans. Many **elements** of the blues have grown from the music of Africa and religious music.

The blues started at the end of the 19th century and the first blues sheet music appeared at the beginning of the 20th century. Since then, **it** has developed into many styles such as country blues and urban blues. Several decades later. electric blues with electrical equipment replaced traditional blues. At the same time, the blues also reached a wider audience, especially white listeners. A mixture of blues styles and rock music, called blues rock appeared in the 60s and 70s of the last century.

Question 29. Which of the following is NOT mentioned in the text?
     A. Different styles of blues appeared, known as country blues and urban blues.
     B. In the 1960s, the blues reached a wider audience, including listeners in the Western Europe.
     C. Early blues songs told sad stories.
     D. The blues was influenced by the music of Africa and religious music.

Question 30. The word "**elements**" in paragraph 1 is closest in meaning to _____.
     A. roles   **B.** forms   **C.** parts   **D.** sheets

Question 31. According to paragraph 1, the blues is a type of slow, sad music created by_____.
     A. African Americans who like African and religious music
     B. African-American musicians in the southern United States
     C. African Americans who experienced unkind treatment
     D. musicians in the American South

Question 32. The word "**it**" in paragraph 2 refers to_____.
     A. the end of the 19th century   **B.** the blues
     C. the beginning of the 20th century   **D.** the first blues sheet music

Question 33. What is the text mainly about?
     A. The meaning of the blues.
     B. Different styles of the blues.
     C. The start and development of the blues.

D. The start of the blues

Read the following passage and mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the questions from 34 to 40.

Nepal has made important progress over the past few years to promote equality, but the country still has one of the highest rates of child marriage in the world. 41% of Nepalese girls are married before the age of 18. Poverty is both a cause and consequence of child marriage in Nepal. Girls from the wealthiest families marry 2 years later than **those** from the poorest, who are seen as an economic burden, and who drop out of school and earn little money.

Food insecurity plays an important role too. Nepalese families that do not have enough food to eat are more likely to marry their daughters at a young age to decrease the financial **burden**. One study shows that 91% of people who had secure access to food married over the age of 19.

Dowry is also common practice in many communities. Parents marry their daughters as soon as possible because the money they have to pay to the groom's family is higher if their daughter is older. Since 2010, the legal age of marriage is 20 for both men and women, or 18 with parental consent, according to the Nepalese Country Code.

The law states that punishment for child marriage is **imprisonment** for up to three years and a fine of up to 10,000 rupees (£102). But reports suggest that this law is rarely applied. There has been quite a lot of progress in Nepal over the past 3 years with a clear government commitment to ending child marriage and civil society cooperation. The Ministry of Women, Children and Social Welfare is currently developing Nepal's first national strategy on child marriage in collaboration with UNICEF Nepal and Girls Not Brides Nepal. However, the post-earthquake and post-fuel crisis environment has meant progress is slow and the national strategy has been delayed.

(Adapted from *http://www.girlsnotbrides.org/*)

Question 34. It can be inferred from the passage _____.
  A. The government is not doing much to put an end to child marriage
  B. Nepal had the highest overall prevalence of child marriage in the world
  C. The recent earthquake was negative for the eradication of child marriage
  D. Families want to marry their daughters soon to earn money

Question 35. Which of the following best serves as the title for the passage?
  A. Nepal Government in an attempt to reduce social inequality.
  B. One type of child abuse in Nepal: Child Marriage.
  C. Child marriage - A completely tractable problem in Nepal.
  D. Nepal's strategies to child protection programming.

Question 36. The word "**those**" in paragraph 2 refers to _____.
  A. rates   **B.** families   **C.** years   **D.** girls

Question 37. According to the last paragraph, how many years will a rule-breaker spend in jail?
  A. A rule-breaker will spend up to thirty-six months in jail.
  B. A rule-breaker will spend exactly three years in jail.
  C. A rule-breaker will spend about two years in jail.
  D. A rule-breaker will spend over three years in jail.

Question 38. The word "**burden**" in paragraph 3 is closest in meaning to _____.
  A. load   **B.** issue   **C.** cargo   **D.** potency

Question 39. The word "**imprisonment**" in the last paragraph could be best replaced by _____.
  A. detention   **B.** arrest   **C.** accusation   **D.** punishment

Question 40. According to paragraph 2, in Nepal, girls from needy families _____.
  A. can get married two years later than those are from poor families
  B. have to get married earlier than those are from rich families
  C. are forced to drop out of school because their parents have no money
  D. play an important role in bolstering their household finances

------ *THE END* ------

SỞ GIÁO DỤC VÀ ĐÀO TẠO HÀ NỘI
TRƯỜNG THPT NGUYỄN QUỐC TRINH

ĐỀ KIỂM TRA CHÍNH THỨC
(Đề kiểm tra có 03 trang)

ĐỀ KIỂM TRA CUỐI HỌC KÌ II
NĂM HỌC 2023 – 2024
MÔN: TOÁN 10
Thời gian làm bài: 90 phút (không kể thời gian phát đề)

Họ, tên học sinh: ....

Số báo danh: ....

Mã đề: 101

PHẦN I. (3,0 điểm) Câu trắc nghiệm nhiều phương án lựa chọn. Học sinh trả lời từ câu 1 đến câu 12. Mỗi câu hỏi, học sinh chỉ chọn một phương án.

Câu 1. Một công việc có 2 công đoạn được thực hiện liên tiếp nhau. Công đoạn 1 có a cách thực hiện. Công đoạn 2 có b cách thực hiện. Số cách thực hiện công việc trên là

A. $a.b(a+b)$.   B. $a+b$.   C. $a.b$.   D. a^b.

Câu 2. Biết rằng một số điện thoại di động của Việt Nam gồm 10 chữ số. Hỏi có tối đa bao nhiêu số điện thoại có đầu số là 0363 ở Việt Nam?

A. 10^9 B. 10^7 C. 10^{10} D. 10^6

Câu 3. Có 5 bạn nam và 3 bạn nữ. Có bao nhiêu cách xếp các bạn vào một hàng ngang?

A. $5!+3!$.   B. $5!.3!$.   C. 15.   D. $8!$.

Câu 4. Cho hai đường thẳng $d_1 : 2x+3y+15=0$ và $d_2 : x-2y-3=0$. Khẳng định nào sau đây đúng?

A. d_1 và d_2 cắt nhau nhưng không vuông góc với nhau.

B. d_1 và d_2 vuông góc với nhau.

C. d_1 và d_2 trùng nhau.

D. d_1 và d_2 song song với nhau.

Câu 5. Đường tròn (C) tâm $I(4;3)$ và tiếp xúc với đường thẳng $\Delta : 3x-4y+5=0$ có phương trình là

A. $(x-4)^2+(y-3)^2=1$.   B. $(x+4)^2+(y+3)^2=1$.

C. $(x-4)^2+(y+3)^2=5$.   D. $(x-4)^2+(y-3)^2=5$.

Câu 6. Tọa độ giao điểm của hai đường thẳng $7x-3y+16=0$ và $x+10=0$ là

A. $(-10;18)$.   B. $(10;18)$.   C. $(-10;-18)$.   D. $(10;-18)$.

Câu 7. Trong mặt phẳng Oxy, cho Elip có phương trình $(E): \dfrac{x^2}{9}+\dfrac{y^2}{4}=1$. Tiêu cự F_1F_2 có độ dài là

A. $2\sqrt{5}$.   B. 4.   C. 6.   D. 9.

Câu 8. Trong mặt phẳng Oxy, phương trình nào sau đây là phương trình đường tròn?

A. $x^2+y^2-6x+y-11=0$.   B. $2x^2+y^2-4x-6y-4=0$.

C. $x^2+y^2-4x+2y+7=0$.   D. $x^2+y^2+2x-2xy-5=0$.

Câu 9. Dạng khai triển của biểu thức $(2x-y)^4$ là

A. $16x^4+32x^3y-24x^2y^2+8xy^3-y^4$.   B. $16x^4-32x^3y-24x^2y^2-8xy^3-y^4$.

C. $16x^4+32x^3y+24x^2y^2+8xy^3+y^4$.   D. $16x^4-32x^3y+24x^2y^2-8xy^3+y^4$.

Câu 10. Phương trình chính tắc của Elip đi qua điểm $A(0;1)$ và một tiêu điểm $F_1(-2,0)$ là

A. $\dfrac{x^2}{5}+\dfrac{y^2}{1}=1$.
B. $\dfrac{x^2}{5}+\dfrac{y^2}{4}=1$.
C. $\dfrac{x^2}{4}+\dfrac{y^2}{1}=1$.
D. $\dfrac{x^2}{1}+\dfrac{y^2}{5}=1$.

Câu 11. Số các tổ hợp chập k của n phần tử được tính bằng công thức

A. $C_n^k=\dfrac{n!}{(n-k)!k!}\ (1\le k\le n)$.
B. $C_n^k=\dfrac{n!}{(n-k)!k!}\ (0\le k\le n)$.

C. $C_n^k=\dfrac{n!}{(n-k)!}\ (0\le k\le n)$.
D. $C_n^k=\dfrac{n!}{(n-k)!}\ (1\le k\le n)$.

Câu 12. Một hộp đựng 50 viên bi gồm 10 viên bi trắng, 25 viên bi đỏ, 15 viên bi xanh. Có bao nhiêu cách chọn 5 viên bi trong hộp đó mà không có viên bi nào màu xanh?

A. C_{50}^5.
B. C_{35}^5.
C. $C_{50}^5-C_{15}^5$.
D. $C_{10}^5+C_{25}^5$.

PHẦN II. (4,0 điểm) Câu trắc nghiệm đúng sai. Học sinh trả lời từ câu 1 đến câu 4. Trong mỗi ý a), b), c), d) ở mỗi câu, học sinh chọn đúng hoặc sai.

Câu 1. Cho hypebol $\dfrac{x^2}{40}-\dfrac{y^2}{9}=1$ (H).

a) Khoảng cách từ điểm $M\in(H)$ đến tiêu điểm F_1 nhỏ nhất bằng 4.

b) Tiêu cự của hypebol bằng 14.

c) Tiêu điểm của hypebol là $F_1(0;-7),F_2(0;7)$.

d) Điểm $A\left(\sqrt{40};3\right)\in(H)$.

Câu 2. Cho các chữ số 1; 2; 3; 4; 5; 6; 7. Từ các chữ số đã cho lập các số tự nhiên.

a) Có thể lập được 5040 số có bảy chữ số khác nhau.

b) Có thể lập được 480 số có bốn chữ số khác nhau và phải có mặt chữ số 2.

c) Có thể lập được 45 số là số chẵn có năm chữ số khác nhau.

d) Có thể lập được 49 số nhỏ hơn 100.

Câu 3. Trong mặt phẳng toạ độ Oxy, cho đường tròn (C) : $(x+2)^2+(y-1)^2=25$ và đường thẳng $\Delta:3x-y+1=0$.

a) Phương trình tiếp tuyến d của đường tròn (C) tại điểm $M(2;4)$ là: $4x+3y+5=0$.

b) Đường tròn (C) có tâm $I(2;-1)$.

c) Đường thẳng Δ cắt đường tròn (C) tại hai điểm phân biệt.

d) Khoảng cách từ điểm $A(-3;2)$ đến đường thẳng Δ bằng $\sqrt{10}$.

Câu 4. Trong khai triển nhị thức Niu-tơn của $(2x+y)^5$.

a) Hệ số của các số hạng không chứa y trong khai triển là 1.

b) Có 5 số hạng trong khai triển của biểu thức trên.

c) Hệ số của x^2y^3 trong khai triển là 40.

d) Số hạng thứ 3 trong khai triển là $80x^3y^2$.

PHẦN III. (3,0 điểm) Trắc nghiệm lựa chọn câu trả lời ngắn. Học sinh trả lời từ câu 1 đến câu 6

Câu 1. Cho: $S = C_{2019}^1.3^{2018}.2 - C_{2019}^2.3^{2017}.2^2 + C_{2019}^3.3^{2016}.2^3 - ... - C_{2019}^{2018}.3^1.2^{2018} + C_{2019}^{2019}.2^{2019} = a^{2019} + b^{2019}$

Tính tổng (a + b)?

Câu 2. Cho đường thẳng $d_1 : x + 2y - 7 = 0$ và $d_2 : 2x - 4y + 9 = 0$. Tính cosin của góc tạo bởi giữa hai đường thẳng đã cho?

Câu 3. Một công viên được thiết kế dạng hình elip có độ dài trục lớn AA' = 90m, độ dài trục bé bằng BB' = 60m. Người ta muốn trồng hoa trong một hình chữ nhật nội tiếp elip, phần còn lại sẽ trồng cỏ (*như hình vẽ*). Diện tích trồng hoa lớn nhất bằng bao nhiêu m^2 ?
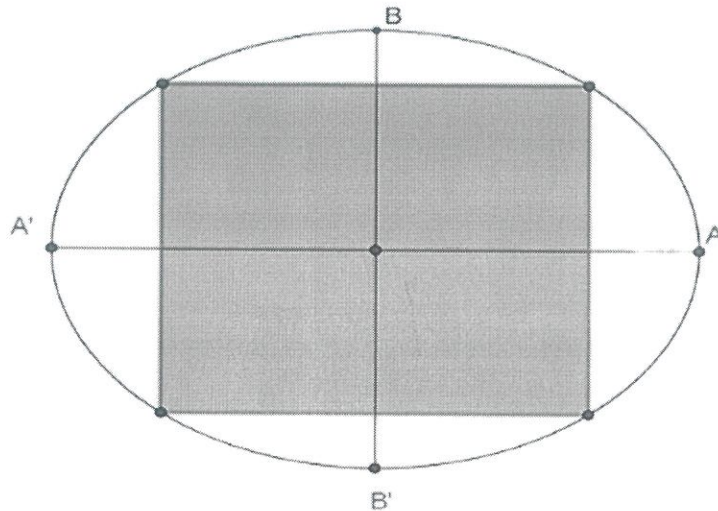
Câu 4. Có 4 học sinh nam và 4 học sinh nữ cần xếp ngồi vào một hàng ghế dọc. Hỏi có mấy cách xếp sao cho học sinh nam và nữ ngồi xen kẽ?

Câu 5. Giả sử từ tỉnh A đến tỉnh B có thể đi bằng các phương tiện: ô tô, tàu hỏa, tàu thủy hoặc máy bay. Mỗi ngày có 9 chuyến ô tô, 5 chuyến tàu hỏa, 3 chuyến tàu thủy và 2 chuyến máy bay. Hỏi có bao nhiêu cách đi từ tỉnh A đến tỉnh B ?

Câu 6. Đội văn nghệ của nhà trường gồm 4 học sinh lớp 12A, 3 học sinh lớp 12B và 2 học sinh lớp 12C. Chọn ngẫu nhiên 5 học sinh từ đội văn nghệ để biểu diễn trong lễ bế giảng. Hỏi có bao nhiêu cách chọn đội văn nghệ sao cho lớp nào cũng có học sinh được chọn?

----HẾT---

SỞ GIÁO DỤC VÀ ĐÀO TẠO HÀ NỘI
TRƯỜNG THPT NGUYỄN QUỐC TRINH

ĐỀ KIỂM TRA CHÍNH THỨC
(Đề kiểm tra có 03 trang)

ĐỀ KIỂM TRA CUỐI HỌC KÌ II
NĂM HỌC 2023 – 2024
MÔN: TOÁN 10
Thời gian làm bài: 90 phút (không kể thời gian phát đề)

Họ, tên học sinh:...

Số báo danh: ....

Mã đề: 102

PHẦN I. (3,0 điểm) Câu trắc nghiệm nhiều phương án lựa chọn. Học sinh trả lời từ câu 1 đến câu 12. Mỗi câu hỏi, học sinh chỉ chọn một phương án.

Câu 1. Trong mặt phẳng Oxy, phương trình nào sau đây là phương trình đường tròn?

A. $x^2 + 2y^2 - x - 6y - 4 = 0$.

B. $x^2 + y^2 - x + y + 4 = 0$.

C. $x^2 + y^2 - 8x + 6y - 1 = 0$.

D. $x^2 + y^2 + 2x - 2xy - 8 = 0$.

Câu 2. Dạng khai triển của biểu thức $(3x - y)^4$ là

A. $81x^4 + 108x^3y - 54x^2y^2 - 12xy^3 + y^4$.

B. $81x^4 + 108x^3y + 54x^2y^2 + 12xy^3 + y^4$.

C. $81x^4 - 108x^3y + 54x^2y^2 - 12xy^3 + y^4$.

D. $81x^4 - 108x^3y - 54x^2y^2 - 12xy^3 - y^4$.

Câu 3. Biết rằng một số điện thoại di động của Việt Nam gồm 10 chữ số. Hỏi có tối đa bao nhiêu số điện thoại có đầu số là 033 ở Việt Nam?

A. 10^8
B. 10^{10}
C. 10^9
D. 10^7

Câu 4. Cho hai đường thẳng $d_1 : 2x + y + 15 = 0$ và $d_2 : x - 2y - 3 = 0$. Khẳng định nào sau đây đúng?

A. d_1 và d_2 cắt nhau nhưng không vuông góc với nhau.

B. d_1 và d_2 song song với nhau.

C. d_1 và d_2 vuông góc với nhau.

D. d_1 và d_2 trùng nhau.

Câu 5. Một hộp đựng 50 viên bi gồm 10 viên bi trắng, 25 viên bi đỏ, 15 viên bi xanh. Có bao nhiêu cách chọn 5 viên bi trong hộp đó mà không có viên bi nào màu trắng?

A. $C_{50}^5 - C_{10}^5$.
B. C_{50}^5.
C. $C_{25}^5 + C_{15}^5$.
D. C_{40}^5.

Câu 6. Trong mặt phẳng Oxy, cho Elip có phương trình $(E): \dfrac{x^2}{25} + \dfrac{y^2}{9} = 1$. Tiêu cự F_1F_2 có độ dài là

A. 8.
B. 10.
C. 6.
D. 50.

Câu 7. Có 5 bạn nam và 5 bạn nữ. Có bao nhiêu cách xếp các bạn vào một hàng ngang?

A. 25.
B. 5!.5!.
C. 10!.
D. 5! + 5!.

Câu 8. Số các chỉnh hợp chập k của n phần tử được tính bằng công thức

A. $A_n^k = \dfrac{n!}{(n-k)!k!} \ (0 \le k \le n)$.

B. $A_n^k = \dfrac{n!}{(n-k)!} \ (0 \le k \le n)$.

C. $A_n^k = \dfrac{n!}{(n-k)!} \ (1 \le k \le n)$.

D. $A_n^k = \dfrac{n!}{(n-k)!k!} \ (1 \le k \le n)$.

Câu 9. Phương trình chính tắc của Elip đi qua điểm $A(0;5)$ và một tiêu điểm $F_1(-2,0)$ là

A. $\dfrac{x^2}{5}+\dfrac{y^2}{2}=1$.   **B.** $\dfrac{x^2}{27}+\dfrac{y^2}{25}=1$.   **C.** $\dfrac{x^2}{29}+\dfrac{y^2}{25}=1$.   **D.** $\dfrac{x^2}{25}+\dfrac{y^2}{4}=1$.

Câu 10. Tọa độ giao điểm của hai đường thẳng $\Delta_1: x-y+2=0$ và $\Delta_2: y+3=0$ là

A. $(-5;-3)$.   **B.** $(-5;3)$.   **C.** Không có giao điểm.   **D.** $(5;3)$.

Câu 11. Đường tròn (C) tâm $I(-2;1)$ và tiếp xúc với đườngthẳng $\Delta: 3x-4y+5=0$ có phương trình là

A. $(x-2)^2+(y+1)^2=1$.   **B.** $(x+2)^2+(y-1)^2=1$.

C. $(x-2)^2+(y+1)^2=5$.   **D.** $(x+2)^2+(y-1)^2=5$.

Câu 12. Một công việc có thể được thực hiện theo hai phương án khác nhau. Phương án một có a cách thực hiện. Phương án hai có b cách thực hiện. Số cách thực hiện công việc trên là

A. a^b.   **B.** $a.b$.   **C.** $a+b$.   **D.** $a.b(a+b)$.

PHẦN II. (*4,0 điểm*) **Câu trắc nghiệm đúng sai. Học sinh trả lời từ câu 1 đến câu 4. Trong mỗi ý a), b), c), d) ở mỗi câu, học sinh chọn đúng hoặc sai.**

Câu 1. Cho các chữ số 2; 3; 4; 5; 6; 7; 8. Từ các chữ số đã cho lập các số tự nhiên.

   a) Có thể lập được 1080 số là số lẻ có năm chữ số khác nhau.

   b) Có thể lập được 56 số nhỏ hơn 100.

   c) Có thể lập được 480 số có bốn chữ số khác nhau và và phải có mặt chữ số 5.

   d) Có thể lập được 4320 số có bảy chữ số khác nhau.

Câu 2. Trong khai triển nhị thức Niu-tơn của $(x+2y)^5$.

   a) Có 5 số hạng trong khai triển của biểu thức trên.

   b) Hệ số của số hạng không chứa x trong khai triển là 32

   c) Số hạng thứ 3 trong khai triển là $40x^3y^2$

   d) Hệ số của x^4y trong khai triển là 80.

Câu 3. Cho hypebol $\dfrac{x^2}{20}-\dfrac{y^2}{16}=1$ (H).

   a) Khoảng cách từ điểm $A\in(H)$ đến tiêu điểm F_1 nhỏ nhất bằng 2.

   b) Tiêu cự của hypebol bằng 6.

   c) Điểm $M\left(\sqrt{20};4\right)\in(H)$.

   d) Các tiêu điểm của hypebol là $F_1(-6;0), F_2(6;0)$.

Câu 4. Trong mặt phẳng toạ độ Oxy, cho đường tròn $(C): (x-3)^2+(y+2)^2=10$ và đường thẳng $\Delta: 3x-4y-1=0$.

   a) Phương trình tiếp tuyến d của đường tròn (C) tại điểm $A(4;1)$ là: $x+3y+3=0$.

   b) Đường tròn (C) có tâm $I(3;-2)$.

   c) Đường thẳng Δ cắt đường tròn (C) tại hai điểm phân biệt.

   d) Khoảng cách từ điểm $M(3;4)$ đến đường thẳng Δ bằng $\dfrac{8}{5}$.

PHẦN III. (3,0 điểm) Trắc nghiệm lựa chọn câu trả lời ngắn. Học sinh trả lời từ câu 1 đến câu 6

Câu 1. Đội văn nghệ của nhà trường gồm 3 học sinh lớp 10A, 4 học sinh lớp 10B và 3 học sinh lớp 10C. Chọn ngẫu nhiên 5 học sinh từ đội văn nghệ để biểu diễn trong lễ bế giảng. Hỏi có bao nhiêu cách chọn một đội văn nghệ sao cho lớp nào cũng có học sinh được chọn?

Câu 2. Giả sử từ tỉnh A đến tỉnh B có thể đi bằng các phương tiện: ô tô, tàu hỏa, tàu thủy hoặc máy bay. Mỗi ngày có 8 chuyến ô tô, 5 chuyến tàu hỏa, 4 chuyến tàu thủy và 1 chuyến máy bay. Hỏi có bao nhiêu cách đi từ tỉnh A đến tỉnh B?

Câu 3. Cho: $S = C_{2021}^0 . 4^{2021} - C_{2021}^1 . 4^{2010} . 2 + C_{2021}^2 . 4^{2019} . 2^2 - C_{2021}^3 . 4^{2018} . 2^3 - ... + C_{2021}^{2020} . 4^1 . 2^{2020} = a^{2021} + b^{2021}$

Tính tổng (a + b)?

Câu 4. Có 3 học sinh nam và 3 học sinh nữ cần xếp ngồi vào một hàng ghế dọc. Hỏi có mấy cách xếp sao cho nam, nữ ngồi xen kẽ?

Câu 5. Cho đường thẳng $d_1 : x + 3y - 2 = 0$ và $d_2 : x - 3y + 1 = 0$. Tính cosin của góc tạo bởi giữa hai đường thẳng đã cho?

Câu 6. Một công viên có dạng hình elip có độ dài trục lớn bằng $AA' = 100m$, độ dài trục bé bằng $BB' = 70m$ Người ta muốn trồng hoa trong một hình chữ nhật nội tiếp elip, phần còn lại sẽ trồng cỏ (*như hình vẽ*). Diện tích trồng hoa lớn nhất bằng bao nhiêu m^2?

----HẾT---

Mã đề 102   3

SỞ GIÁO DỤC VÀ ĐÀO TẠO HÀ NỘI
TRƯỜNG THPT NGUYỄN QUỐC TRINH

ĐỀ KIỂM TRA CHÍNH THỨC
(Đề kiểm tra có 03 trang)

ĐỀ KIỂM TRA CUỐI HỌC KÌ II
NĂM HỌC 2023 – 2024
MÔN: TOÁN 10
Thời gian làm bài: 90 phút (không kể thời gian phát đề)
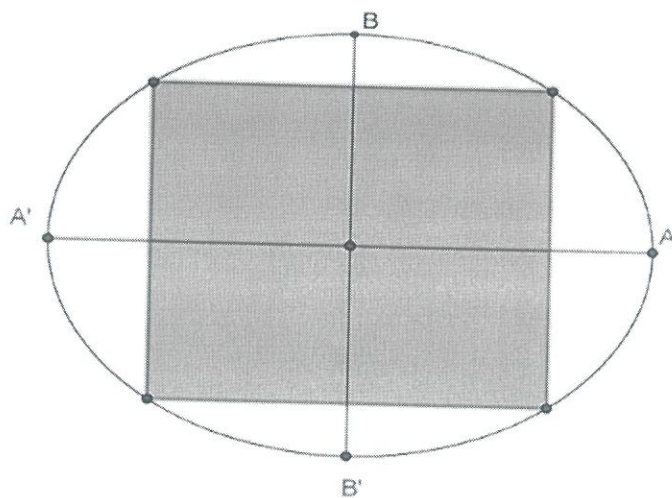
Họ, tên học sinh: ....

Số báo danh: ....

Mã đề: **103**

PHẦN I. (3,0 điểm) Câu trắc nghiệm nhiều phương án lựa chọn. Học sinh trả lời từ câu 1 đến câu 12. Mỗi câu hỏi, học sinh chỉ chọn một phương án.

Câu 1. Tọa độ giao điểm của hai đường thẳng $7x - 3y + 16 = 0$ và $x + 10 = 0$ là

  A. $(10;18)$.   **B.** $(10;-18)$.   **C.** $(-10;18)$.   **D.** $(-10;-18)$.

Câu 2. Số các tổ hợp chập k của n phần tử được tính bằng công thức

  A. $C_n^k = \dfrac{n!}{(n-k)!} \ (0 \le k \le n)$.   **B.** $C_n^k = \dfrac{n!}{(n-k)!} \ (1 \le k \le n)$.

  C. $C_n^k = \dfrac{n!}{(n-k)!k!} \ (0 \le k \le n)$.   **D.** $C_n^k = \dfrac{n!}{(n-k)!k!} \ (1 \le k \le n)$.

Câu 3. Một công việc có 2 công đoạn được thực hiện liên tiếp nhau. Công đoạn 1 có a cách thực hiện. Công đoạn 2 có b cách thực hiện. Số cách thực hiện công việc trên là

  A. $a.b(a+b)$.   **B.** $a.b$.   **C.** $a+b$.   **D.** a^b.

Câu 4. Đường tròn (C) tâm $I(4; 3)$ và tiếp xúc với đường thẳng $\Delta : 3x - 4y + 5 = 0$ có phương trình là

  A. $(x-4)^2 + (y-3)^2 = 1$.   **B.** $(x-4)^2 + (y+3)^2 = 5$.

  C. $(x+4)^2 + (y+3)^2 = 1$.   **D.** $(x-4)^2 + (y-3)^2 = 5$.

Câu 5. Cho hai đường thẳng $d_1 : 2x + 3y + 15 = 0$ và $d_2 : x - 2y - 3 = 0$. Khẳng định nào sau đây đúng?

  A. d_1 và d_2 song song với nhau.

  B. d_1 và d_2 trùng nhau.

  C. d_1 và d_2 vuông góc với nhau.

  D. d_1 và d_2 cắt nhau nhưng không vuông góc với nhau.

Câu 6. Dạng khai triển của biểu thức $(2x - y)^4$ là

  A. $16x^4 + 32x^3y + 24x^2y^2 + 8xy^3 + y^4$.   **B.** $16x^4 + 32x^3y - 24x^2y^2 + 8xy^3 - y^4$.

  C. $16x^4 - 32x^3y + 24x^2y^2 - 8xy^3 + y^4$.   **D.** $16x^4 - 32x^3y - 24x^2y^2 - 8xy^3 - y^4$.

Câu 7. Trong mặt phẳng Oxy, phương trình nào sau đây là phương trình đường tròn?

  A. $x^2 + y^2 + 2x - 2xy - 5 = 0$.   **B.** $x^2 + y^2 - 4x + 2y + 7 = 0$.

  C. $2x^2 + y^2 - 4x - 6y - 4 = 0$.   **D.** $x^2 + y^2 - 6x + y - 11 = 0$.

Câu 8. Biết rằng một số điện thoại di động của Việt Nam gồm 10 chữ số. Hỏi có tối đa bao nhiêu số điện thoại có đầu số là 0363 ở Việt Nam?

  A. 10^9 **B.** 10^6 **C.** 10^7 **D.** 10^{10}

Câu 9. Có 5 bạn nam và 3 bạn nữ. Có bao nhiêu cách xếp các bạn vào một hàng ngang?

    A. $8!$.   **B.** $5!.3!$.   **C.** $5!+3!$.   **D.** 15.

Câu 10. Một hộp đựng 50 viên bi gồm 10 viên bi trắng, 25 viên bi đỏ, 15 viên bi xanh. Có bao nhiêu cách chọn 5 viên bi trong hộp đó mà không có viên bi nào màu xanh?

    A. C_{50}^5.   **B.** $C_{50}^5 - C_{15}^5$.   **C.** $C_{10}^5 + C_{25}^5$.   **D.** C_{35}^5.

Câu 11. Trong mặt phẳng Oxy, cho Elip có phương trình $(E): \dfrac{x^2}{9} + \dfrac{y^2}{4} = 1$. Tiêu cự F_1F_2 có độ dài là

    A. 4.   **B.** $2\sqrt{5}$.   **C.** 9.   **D.** 6.

Câu 12. Phương trình chính tắc của Elip đi qua điểm $A(0;1)$ và một tiêu điểm $F_1(-2,0)$ là

    A. $\dfrac{x^2}{1} + \dfrac{y^2}{5} = 1$.   **B.** $\dfrac{x^2}{4} + \dfrac{y^2}{1} = 1$.   **C.** $\dfrac{x^2}{5} + \dfrac{y^2}{4} = 1$.   **D.** $\dfrac{x^2}{5} + \dfrac{y^2}{1} = 1$.

PHẦN II. (4,0 điểm) Câu trắc nghiệm đúng sai. Học sinh trả lời từ câu 1 đến câu 4. Trong mỗi ý a), b), c), d) ở mỗi câu, học sinh chọn đúng hoặc sai.

Câu 1. Cho hypebol $\dfrac{x^2}{40} - \dfrac{y^2}{9} = 1$ (H).

    a) Tiêu cự của hypebol bằng 14.

    b) Khoảng cách từ điểm $M \in (H)$ đến tiêu điểm F_1 nhỏ nhất bằng 4.

    c) Điểm $A\left(\sqrt{40};3\right) \in (H)$.

    d) Tiêu điểm của hypebol là $F_1(0;-7), F_2(0;7)$.

Câu 2. Trong mặt phẳng toạ độ Oxy, cho đường tròn $(C): (x+2)^2 + (y-1)^2 = 25$ và đường thẳng $\Delta: 3x - y + 1 = 0$.

    a) Khoảng cách từ điểm $A(-3;2)$ đến đường thẳng Δ bằng $\sqrt{10}$.

    b) Đường tròn (C) có tâm $I(2;-1)$.

    c) Phương trình tiếp tuyến d của đường tròn (C) tại điểm $M(2;4)$ là: $4x + 3y + 5 = 0$.

    d) Đường thẳng Δ cắt đường tròn (C) tại hai điểm phân biệt.

Câu 3. Cho các chữ số $1; 2; 3; 4; 5; 6; 7$. Từ các chữ số đã cho lập các số tự nhiên.

    a) Có thể lập được 480 số có bốn chữ số khác nhau và phải có mặt chữ số 2.

    b) Có thể lập được 49 số nhỏ hơn 100.

    c) Có thể lập được 45 số là số chẵn có năm chữ số khác nhau.

    d) Có thể lập được 5040 số có bảy chữ số khác nhau.

Câu 4. Trong khai triển nhị thức Niu-tơn của $(2x + y)^5$.

    a) Hệ số của số hạng không chứa y trong khai triển là 1.

    b) Hệ số của $x^2 y^3$ trong khai triển là 40.

    c) Số hạng thứ 3 trong khai triển là $80x^3 y^2$.

   **d)** Có 5 số hạng trong khai triển của biểu thức trên.

PHẦN III. (3,0 điểm) Trắc nghiệm lựa chọn câu trả lời ngắn. Học sinh trả lời từ câu 1 đến câu 6

Câu 1. Cho đường thẳng $d_1 : x + 2y - 7 = 0$ và $d_2 : 2x - 4y + 9 = 0$. Tính cosin của góc tạo bởi giữa hai đường thẳng đã cho?

Câu 2. Đội văn nghệ của nhà trường gồm 4 học sinh lớp 12A, 3 học sinh lớp 12B và 2 học sinh lớp 12C. Chọn ngẫu nhiên 5 học sinh từ đội văn nghệ để biểu diễn trong lễ bế giảng. Hỏi có bao nhiêu cách chọn đội văn nghệ sao cho lớp nào cũng có học sinh được chọn?

Câu 3. Giả sử từ tỉnh A đến tỉnh B có thể đi bằng các phương tiện: ô tô, tàu hỏa, tàu thủy hoặc máy bay. Mỗi ngày có 9 chuyến ô tô, 5 chuyến tàu hỏa, 3 chuyến tàu thủy và 2 chuyến máy bay. Hỏi có bao nhiêu cách đi từ tỉnh A đến tỉnh B?

Câu 4. Một công viên được thiết kế dạng hình elip có độ dài trục lớn AA' = 90m, độ dài trục bé bằng BB' = 60m. Người ta muốn trồng hoa trong một hình chữ nhật nội tiếp elip, phần còn lại sẽ trồng cỏ (*như hình vẽ*). Diện tích trồng hoa lớn nhất bằng bao nhiêu m^2?
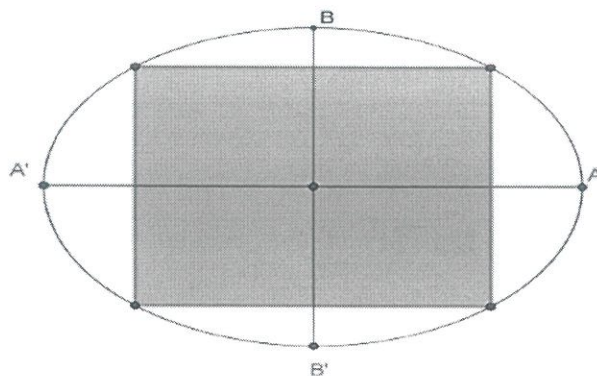
Câu 5. Cho: $S = C_{2019}^1.3^{2018}.2 - C_{2019}^2.3^{2017}.2^2 + C_{2019}^3.3^{2016}.2^3 - ... - C_{2019}^{2018}.3^1.2^{2018} + C_{2019}^{2019}.2^{2019} = a^{2019} + b^{2019}$

Tính tổng (a + b)?

Câu 6. Có 4 học sinh nam và 4 học sinh nữ cần xếp ngồi vào một hàng ghế dọc. Hỏi có bao nhiêu cách xếp sao cho nam, nữ ngồi xen kẽ?

----HẾT---

SỞ GIÁO DỤC VÀ ĐÀO TẠO HÀ NỘI
TRƯỜNG THPT NGUYỄN QUỐC TRINH

ĐỀ KIỂM TRA CHÍNH THỨC
(Đề kiểm tra có 03 trang)

ĐỀ KIỂM TRA CUỐI HỌC KÌ II
NĂM HỌC 2023 – 2024
MÔN: TOÁN 10
Thời gian làm bài: 90 phút (không kể thời gian phát đề)

Họ, tên học sinh:..

Số báo danh: ....

| **Mã đề: 104** |

PHẦN I. (3,0 điểm) Câu trắc nghiệm nhiều phương án lựa chọn. Học sinh trả lời từ câu 1 đến câu 12. Mỗi câu hỏi, học sinh chỉ chọn một phương án.

Câu 1. Cho hai đường thẳng $d_1 : 2x + y + 15 = 0$ và $d_2 : x - 2y - 3 = 0$. Khẳng định nào sau đây đúng?

  A. d_1 và d_2 song song với nhau.

  B. d_1 và d_2 cắt nhau nhưng không vuông góc với nhau.

  C. d_1 và d_2 trùng nhau.

  D. d_1 và d_2 vuông góc với nhau.

Câu 2. Tìm tọa độ giao điểm của hai đường thẳng $\triangle_1 : x - y + 2 = 0$ và $\triangle_2 : y + 3 = 0$ là

  A. $(5;3)$.   **B.** $(-5;-3)$.   **C.** Không có giao điểm.   **D.** $(-5;3)$.

Câu 3. Một hộp đựng 50 viên bi gồm 10 viên bi trắng, 25 viên bi đỏ, 15 viên bi xanh. Có bao nhiêu cách chọn 5 viên bi trong hộp đó mà không có viên bi nào màu trắng?

  A. $C_{25}^5 + C_{15}^5$.   **B.** $C_{50}^5 - C_{10}^5$.   **C.** C_{50}^5.   **D.** C_{40}^5.

Câu 4. Trong mặt phẳng Oxy, cho Elip có phương trình $(E): \dfrac{x^2}{25} + \dfrac{y^2}{9} = 1$. Tiêu cự F_1F_2 có độ dài là

  A. 8.   **B.** 50.   **C.** 6.   **D.** 10.

Câu 5. Trong mặt phẳng Oxy, phương trình nào sau đây là phương trình đường tròn?

  A. $x^2 + y^2 - x + y + 4 = 0$.

  B. $x^2 + y^2 - 8x + 6y - 1 = 0$.

  C. $x^2 + y^2 + 2x - 2xy - 8 = 0$.

  D. $x^2 + 2y^2 - x - 6y - 4 = 0$.

Câu 6. Một công việc có thể được thực hiện theo hai phương án khác nhau. Phương án một có a cách thực hiện. Phương án hai có b cách thực hiện. Số cách thực hiện công việc trên là

  A. $a.b(a+b)$.   **B.** a^b.   **C.** $a+b$.   **D.** $a.b$.

Câu 7. Phương trình chính tắc của Elip đi qua điểm $A(0;5)$ và một tiêu điểm $F_1(-2,0)$ là

  A. $\dfrac{x^2}{27} + \dfrac{y^2}{25} = 1$.   **B.** $\dfrac{x^2}{5} + \dfrac{y^2}{2} = 1$.   **C.** $\dfrac{x^2}{25} + \dfrac{y^2}{4} = 1$.   **D.** $\dfrac{x^2}{29} + \dfrac{y^2}{25} = 1$.

Câu 8. Có 5 bạn nam và 5 bạn nữ. Có bao nhiêu cách xếp các bạn vào một hàng ngang?

  A. 25.   **B.** $5!.5!$.   **C.** $10!$.   **D.** $5! + 5!$.

Câu 9. Đường tròn (C) tâm $I(-2;1)$ và tiếp xúc với đường thẳng $\triangle : 3x - 4y + 5 = 0$ có phương trình là

  A. $(x-2)^2 + (y+1)^2 = 5$.

  B. $(x+2)^2 + (y-1)^2 = 1$.

C. $(x-2)^2+(y+1)^2=1$.

D. $(x+2)^2+(y-1)^2=5$.

Câu 10. Số các chỉnh hợp chập k của n phần tử được tính bằng công thức

A. $A_n^k=\dfrac{n!}{(n-k)!k!}$ $(1\le k\le n)$.

B. $A_n^k=\dfrac{n!}{(n-k)!}$ $(1\le k\le n)$.

C. $A_n^k=\dfrac{n!}{(n-k)!}$ $(0\le k\le n)$.

D. $A_n^k=\dfrac{n!}{(n-k)!k!}$ $(0<k<n)$.

Câu 11. Dạng khai triển của biểu thức $(3x-y)^4$ là

A. $81x^4+108x^3y-54x^2y^2-12xy^3+y^4$.

B. $81x^4-108x^3y+54x^2y^2-12xy^3+y^4$.

C. $81x^4-108x^3y-54x^2y^2-12xy^3-y^4$.

D. $81x^4+108x^3y+54x^2y^2+12xy^3+y^4$.

Câu 12. Biết rằng một số điện thoại di động của Việt Nam gồm 10 chữ số. Hỏi có tối đa bao nhiêu số điện thoại có đầu số là 033 ở Việt Nam?

A. 10^7.

B. 10^8.

C. 10^{10}.

D. 10^9.

PHẦN II. (4,0 điểm) Câu trắc nghiệm đúng sai. Học sinh trả lời từ câu 1 đến câu 4. Trong mỗi ý a), b), c), d) ở mỗi câu, học sinh chọn đúng hoặc sai.

Câu 1. Trong mặt phẳng toạ độ Oxy, cho đường tròn $(C):(x-3)^2+(y+2)^2=10$ và đường thẳng $\Delta:3x-4y-1=0$. Các mệnh đề sau đúng hay sai?

a) Đường thẳng Δ cắt đường tròn (C) tại hai điểm phân biệt.

b) Khoảng cách từ điểm $M(3;4)$ đến đường thẳng Δ bằng $\dfrac{8}{5}$.

c) Phương trình tiếp tuyến d của đường tròn (C) tại điểm $A(4;1)$ là: $x+3y+3=0$.

d) Đường tròn (C) có tâm $I(3;-2)$.

Câu 2. Trong khai triển nhị thức Niu-tơn của $(x+2y)^5$. Các mệnh đề sau đúng hay sai?

a) Có 5 số hạng trong khai triển của biểu thức trên.

b) Số hạng thứ 3 trong khai triển là $40x^3y^2$

c) Hệ số của các số hạng không chứa x trong khai triển là 32

d) Hệ số của x^4y trong khai triển là 80.

Câu 3. Cho các chữ số 2; 3; 4; 5; 6; 7; 8. Từ các chữ số đã cho lập các số tự nhiên. Khi đó, các mệnh đề sau đúng hay sai?

a) Có thể lập được 56 số nhỏ hơn 100.

b) Có thể lập được 4320 số có bảy chữ số khác nhau.

c) Có thể lập được 480 số có bốn chữ số khác nhau và và phải có mặt chữ số 5.

d) Có thể lập được 1080 số là số lẻ có năm chữ số khác nhau.

Câu 4. Cho hypebol $\dfrac{x^2}{20}-\dfrac{y^2}{16}=1$ (H). Các mệnh đề sau đúng hay sai?

**a)** Khoảng cách từ điểm $A\in(H)$ đến tiêu điểm F_1 nhỏ nhất bằng 2.

b) Điểm $M\left(\sqrt{20};4\right) \in (H)$.

c) Các tiêu điểm của hypebol là $F_1(-6;0), F_2(6;0)$.

d) Tiêu cự của hypebol bằng 6.

PHẦN III. (3,0 điểm) Trắc nghiệm lựa chọn câu trả lời ngắn. Học sinh trả lời từ câu 1 đến câu 6

Câu 1. Một công viên có dạng hình elip có độ dài trục lớn bằng $AA' = 100m$, độ dài trục bé bằng $BB' = 70m$. Người ta muốn trồng hoa trong một hình chữ nhật nội tiếp elip, phần còn lại sẽ trồng cỏ (*như hình vẽ*). Diện tích trồng hoa lớn nhất bằng bao nhiêu m^2?
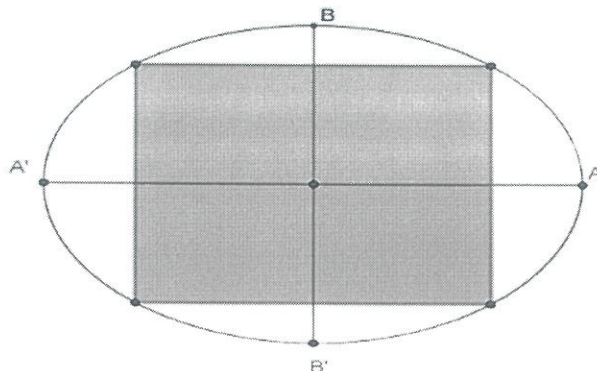
Câu 2. Có 3 nam và 3 nữ cần xếp ngồi vào một hàng ghế dọc. Hỏi có mấy cách xếp sao cho nam, nữ ngồi xen kẽ?

Câu 3. Đội văn nghệ của nhà trường gồm 3 học sinh lớp 10A, 4 học sinh lớp 10B và 3 học sinh lớp 10C. Chọn ngẫu nhiên 5 học sinh từ đội văn nghệ để biểu diễn trong lễ bế giảng. Hỏi có bao nhiêu cách chọn sao cho lớp nào cũng có học sinh được chọn?

Câu 4. Giả sử từ tỉnh A đến tỉnh B có thể đi bằng các phương tiện: ô tô, tàu hỏa, tàu thủy hoặc máy bay. Mỗi ngày có 8 chuyến ô tô, 5 chuyến tàu hỏa, 4 chuyến tàu thủy và 1 chuyến máy bay. Hỏi có bao nhiêu cách đi từ tỉnh A đến tỉnh B?

Câu 5. Cho: $S = C_{2021}^0 . 4^{2021} - C_{2021}^1 . 4^{2010} . 2 + C_{2021}^2 . 4^{2019} . 2^2 - C_{2021}^3 . 4^{2018} . 2^3 - \ldots + C_{2021}^{2020} . 4^1 . 2^{2020} = a^{2021} + b^{2021}$

Tính tổng (a + b)?

Câu 6. Cho đường thẳng $d_1 : x + 3y - 2 = 0$ và $d_2 : x - 3y + 1 = 0$. Tính cosin của góc tạo bởi giữa hai đường thẳng đã cho?

----HẾT---

SỞ GIÁO DỤC VÀ ĐÀO TẠO HÀ NỘI
TRƯỜNG THPT NGUYỄN QUỐC TRINH

ĐỀ KIỂM TRA CHÍNH THỨC
(Đề kiểm tra có 03 trang)

ĐỀ KIỂM TRA CUỐI HỌC KÌ II
NĂM HỌC 2023 – 2024
MÔN: TOÁN 10
Thời gian làm bài: 90 phút (không kể thời gian phát đề)

Họ, tên học sinh: ....
Số báo danh: ....

Mã đề: 105

PHẦN I. (3,0 điểm) Câu trắc nghiệm nhiều phương án lựa chọn. Học sinh trả lời từ câu 1 đến câu 12. Mỗi câu hỏi, học sinh chỉ chọn một phương án.

Câu 1. Trong mặt phẳng Oxy, phương trình nào sau đây là phương trình đường tròn?

A. $x^2 + y^2 - 4x + 2y + 7 = 0$.

B. $2x^2 + y^2 - 4x - 6y - 4 = 0$.

C. $x^2 + y^2 + 2x - 2xy - 5 = 0$.

D. $x^2 + y^2 - 6x + y - 11 = 0$.

Câu 2. Cho hai đường thẳng $d_1 : 2x + 3y + 15 = 0$ và $d_2 : x - 2y - 3 = 0$. Khẳng định nào sau đây đúng?

A. d_1 và d_2 trùng nhau.

B. d_1 và d_2 vuông góc với nhau.

C. d_1 và d_2 cắt nhau nhưng không vuông góc với nhau.

D. d_1 và d_2 song song với nhau.

Câu 3. Một hộp đựng 50 viên bi gồm 10 viên bi trắng, 25 viên bi đỏ, 15 viên bi xanh. Có bao nhiêu cách chọn 5 viên bi trong hộp đó mà không có viên bi nào màu xanh?

A. C_{50}^5.

B. C_{35}^5.

C. $C_{10}^5 + C_{25}^5$.

D. $C_{50}^5 - C_{15}^5$.

Câu 4. Một công việc có 2 công đoạn được thực hiện liên tiếp nhau. Công đoạn 1 có a cách thực hiện. Công đoạn 2 có b cách thực hiện. Số cách thực hiện công việc trên là

A. $a.b$.

B. a^b.

C. $a + b$.

D. $a.b(a + b)$.

Câu 5. Có 5 bạn nam và 3 bạn nữ. Có bao nhiêu cách xếp các bạn vào một hàng ngang?

A. 15.

B. 5!.3!.

C. 5!+3!.

D. 8!.

Câu 6. Dạng khai triển của biểu thức $(2x - y)^4$ là

A. $16x^4 - 32x^3y - 24x^2y^2 - 8xy^3 - y^4$.

B. $16x^4 + 32x^3y + 24x^2y^2 + 8xy^3 + y^4$.

C. $16x^4 + 32x^3y - 24x^2y^2 + 8xy^3 - y^4$.

D. $16x^4 - 32x^3y + 24x^2y^2 - 8xy^3 + y^4$.

Câu 7. Tọa độ giao điểm của hai đường thẳng $7x - 3y + 16 = 0$ và $x + 10 = 0$ là

A. $(10; -18)$.

B. $(10; 18)$.

C. $(-10; 18)$.

D. $(-10; -18)$.

Câu 8. Biết rằng một số điện thoại di động của Việt Nam gồm 10 chữ số. Hỏi có tối đa bao nhiêu số điện thoại có đầu số là 0363 ở Việt Nam?

A. 10^6.

B. 10^7.

C. 10^{10}.

D. 10^9.

Câu 9. Số các tổ hợp chập k của n phần tử được tính bằng công thức

A. $C_n^k = \dfrac{n!}{(n-k)!k!}$ $(1 \le k \le n)$.

B. $C_n^k = \dfrac{n!}{(n-k)!}$ $(1 \le k \le n)$.

C. $C_n^k = \dfrac{n!}{(n-k)!k!} \; (0 \le k \le n)$. **D.** $C_n^k = \dfrac{n!}{(n-k)!} \; (0 \le k \le n)$.

Câu 10. Trong mặt phẳng Oxy, cho Elip có phương trình $(E): \dfrac{x^2}{9} + \dfrac{y^2}{4} = 1$. Tiêu cự F_1F_2 có độ dài là

A. 6. **B.** 9. **C.** 4. **D.** $2\sqrt{5}$.

Câu 11. Phương trình chính tắc của Elip đi qua điểm $A(0;1)$ và một tiêu điểm $F_1(-2,0)$ là

A. $\dfrac{x^2}{1} + \dfrac{y^2}{5} = 1$. **B.** $\dfrac{x^2}{5} + \dfrac{y^2}{1} = 1$. **C.** $\dfrac{x^2}{5} + \dfrac{y^2}{4} = 1$. **D.** $\dfrac{x^2}{4} + \dfrac{y^2}{1} = 1$.

Câu 12. Đường tròn (C) tâm $I(4; 3)$ và tiếp xúc với đường thẳng $\Delta: 3x - 4y + 5 = 0$ có phương trình là

A. $(x-4)^2 + (y-3)^2 = 1$. **B.** $(x-4)^2 + (y+3)^2 = 5$.

C. $(x-4)^2 + (y-3)^2 = 5$. **D.** $(x+4)^2 + (y+3)^2 = 1$.

PHẦN II. (4,0 điểm) Câu trắc nghiệm đúng sai. Học sinh trả lời từ câu 1 đến câu 4. Trong mỗi ý a), b), c), d) ở mỗi câu, học sinh chọn đúng hoặc sai.

Câu 1. Trong khai triển nhị thức Niu-tơn của $(2x + y)^5$.

a) Hệ số của $x^2 y^3$ trong khai triển là 40.

b) Có 5 số hạng trong khai triển của biểu thức trên.

c) Hệ số của số hạng không chứa y trong khai triển là 1.

d) Số hạng thứ 3 trong khai triển là $80x^3 y^2$.

Câu 2. Cho hypebol $\dfrac{x^2}{40} - \dfrac{y^2}{9} = 1 \;\; (H)$.

a) Tiêu điểm của hypebol là $F_1(0;-7), F_2(0;7)$.

b) Khoảng cách từ điểm $M \in (H)$ đến tiêu điểm F_1 nhỏ nhất bằng 4.

c) Điểm $A\left(\sqrt{40};3\right) \in (H)$.

d) Tiêu cự của hypebol bằng 14.

Câu 3. Trong mặt phẳng toạ độ Oxy, cho đường tròn $(C): (x+2)^2 + (y-1)^2 = 25$ và đường thẳng $\Delta: 3x - y + 1 = 0$.

a) Khoảng cách từ điểm $A(-3;2)$ đến đường thẳng Δ bằng $\sqrt{10}$.

b) Đường thẳng Δ cắt đường tròn (C) tại hai điểm phân biệt.

c) Phương trình tiếp tuyến d của đường tròn (C) tại điểm $M(2;4)$ là: $4x + 3y + 5 = 0$.

d) Đường tròn (C) có tâm $I(2;-1)$.

**Câu 4.** Cho các chữ số $1; 2; 3; 4; 5; 6; 7$. Từ các chữ số đã cho lập các số tự nhiên.

a) Có thể lập được 5040 số có bảy chữ số khác nhau.

b) Có thể lập được 49 số nhỏ hơn 100.

c) Có thể lập được 45 số là số chẵn có năm chữ số khác nhau.

d) Có thể lập được 480 số có bốn chữ số khác nhau và phải có mặt chữ số 2.

PHẦN III. (3,0 điểm) Trắc nghiệm lựa chọn câu trả lời ngắn. Học sinh trả lời từ câu 1 đến câu 6

Câu 1. Cho: $S = C_{2019}^1 \cdot 3^{2018} \cdot 2 - C_{2019}^2 \cdot 3^{2017} \cdot 2^2 + C_{2019}^3 \cdot 3^{2016} \cdot 2^3 - ... - C_{2019}^{2018} \cdot 3^1 \cdot 2^{2018} + C_{2019}^{2019} \cdot 2^{2019} = a^{2019} + b^{2019}$

Tính tổng (a + b)?

Câu 2. Một công viên được thiết kế dạng hình elip có độ dài trục lớn AA' = 90m, độ dài trục bé bằng BB' = 60m. Người ta muốn trồng hoa trong một hình chữ nhật nội tiếp elip, phần còn lại sẽ trồng cỏ (như hình vẽ). Diện tích trồng hoa lớn nhất bằng bao nhiêu m^2?
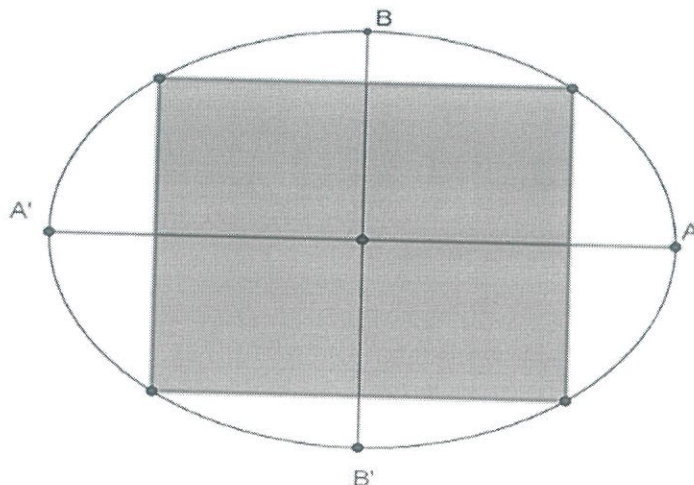
Câu 3. Giả sử từ tỉnh A đến tỉnh B có thể đi bằng các phương tiện: ô tô, tàu hỏa, tàu thủy hoặc máy bay. Mỗi ngày có 9 chuyến ô tô, 5 chuyến tàu hỏa, 3 chuyến tàu thủy và 2 chuyến máy bay. Hỏi có bao nhiêu cách đi từ tỉnh A đến tỉnh B?

Câu 4. Cho đường thẳng $d_1 : x + 2y - 7 = 0$ và $d_2 : 2x - 4y + 9 = 0$. Tính cosin của góc tạo bởi giữa hai đường thẳng đã cho?

Câu 5. Đội văn nghệ của nhà trường gồm 4 học sinh lớp 12A, 3 học sinh lớp 12B và 2 học sinh lớp 12C. Chọn ngẫu nhiên 5 học sinh từ đội văn nghệ để biểu diễn trong lễ bế giảng. Hỏi có bao nhiêu cách chọn đội văn nghệ sao cho lớp nào cũng có học sinh được chọn?

Câu 6. Có 4 học sinh nam và 4 học sinh nữ cần xếp ngồi vào một hàng ghế dọc. Hỏi có mấy cách xếp sao cho nam, nữ ngồi xen kẽ?

----HẾT---

SỞ GIÁO DỤC VÀ ĐÀO TẠO HÀ NỘI
TRƯỜNG THPT NGUYỄN QUỐC TRINH

ĐỀ KIỂM TRA CHÍNH THỨC
(Đề kiểm tra có 03 trang)

ĐỀ KIỂM TRA CUỐI HỌC KÌ II
NĂM HỌC 2023 – 2024
MÔN: TOÁN 10
Thời gian làm bài: 90 phút (không kể thời gian phát đề)

Họ, tên học sinh: ....

Số báo danh: ....

Mã đề: 106

PHẦN I. (3,0 điểm) Câu trắc nghiệm nhiều phương án lựa chọn. Học sinh trả lời từ câu 1 đến câu 12. Mỗi câu hỏi, học sinh chỉ chọn một phương án.

Câu 1. Dạng khai triển của biểu thức $(3x - y)^4$ là

A. $81x^4 + 108x^3 y - 54x^2 y^2 - 12xy^3 + y^4$.

B. $81x^4 - 108x^3 y + 54x^2 y^2 - 12xy^3 + y^4$.

C. $81x^4 + 108x^3 y + 54x^2 y^2 + 12xy^3 + y^4$.

D. $81x^4 - 108x^3 y - 54x^2 y^2 - 12xy^3 - y^4$.

Câu 2. Một công việc có thể được thực hiện theo hai phương án khác nhau. Phương án một có a cách thực hiện. Phương án hai có b cách thực hiện. Số cách thực hiện công việc trên là

A. $a.b$.

B. $a.b(a+b)$.

C. a^b.

D. $a+b$.

Câu 3. Tọa độ giao điểm của hai đường thẳng $\Delta_1 : x - y + 2 = 0$ và $\Delta_2 : y + 3 = 0$ là

A. $(-5; -3)$.

B. $(-5; 3)$.

C. Không có giao điểm.

D. $(5; 3)$.

Câu 4. Cho hai đường thẳng $d_1 : 2x + y + 15 = 0$ và $d_2 : x - 2y - 3 = 0$. Khẳng định nào sau đây đúng?

A. d_1 và d_2 song song với nhau.

B. d_1 và d_2 cắt nhau nhưng không vuông góc với nhau.

C. d_1 và d_2 vuông góc với nhau.

D. d_1 và d_2 trùng nhau.

Câu 5. Đường tròn (C) tâm $I(-2; 1)$ và tiếp xúc với đường thẳng $\Delta : 3x - 4y + 5 = 0$ có phương trình là

A. $(x+2)^2 + (y-1)^2 = 5$.

B. $(x-2)^2 + (y+1)^2 = 5$.

C. $(x-2)^2 + (y+1)^2 = 1$.

D. $(x+2)^2 + (y-1)^2 = 1$.

Câu 6. Phương trình chính tắc của Elip đi qua điểm $A(0; 5)$ và một tiêu điểm $F_1(-2, 0)$ là

A. $\dfrac{x^2}{25} + \dfrac{y^2}{4} = 1$.

B. $\dfrac{x^2}{27} + \dfrac{y^2}{25} = 1$.

C. $\dfrac{x^2}{5} + \dfrac{y^2}{2} = 1$.

D. $\dfrac{x^2}{29} + \dfrac{y^2}{25} = 1$.

Câu 7. Trong mặt phẳng Oxy, phương trình nào sau đây là phương trình đường tròn?

A. $x^2 + y^2 - 8x + 6y - 1 = 0$.

B. $x^2 + y^2 - x + y + 4 = 0$.

C. $x^2 + 2y^2 - x - 6y - 4 = 0$.

D. $x^2 + y^2 + 2x - 2xy - 8 = 0$.

Câu 8. Một hộp đựng 50 viên bi gồm 10 viên bi trắng, 25 viên bi đỏ, 15 viên bi xanh. Có bao nhiêu cách chọn 5 viên bi trong hộp đó mà không có viên bi nào màu trắng?

A. $C_{50}^5 - C_{10}^5$.

B. C_{50}^5.

C. C_{40}^5.

D. $C_{25}^5 + C_{15}^5$.

Câu 9. Trong mặt phẳng Oxy, cho Elip có phương trình $(E): \dfrac{x^2}{25} + \dfrac{y^2}{9} = 1$. Tiêu cự $F_1 F_2$ có độ dài là

A. 10.   **B.** 6.   **C.** 50.   **D.** 8.

Câu 10. Có 5 bạn nam và 5 bạn nữ. Có bao nhiêu cách xếp các bạn vào một hàng ngang?

   A. $5!.5!$.   **B.** $10!$.   **C.** $5!+5!$.   **D.** 25.

Câu 11. Số các chỉnh hợp chập k của n phần tử được tính bằng công thức

   A. $A_n^k = \dfrac{n!}{(n-k)!}\ (0 \le k \le n)$.

   B. $A_n^k = \dfrac{n!}{(n-k)!k!}\ (1 \le k \le n)$.

   C. $A_n^k = \dfrac{n!}{(n-k)!k!}\ (0 \le k \le n)$.

   D. $A_n^k = \dfrac{n!}{(n-k)!}\ (1 \le k \le n)$.

Câu 12. Biết rằng một số điện thoại di động của Việt Nam gồm 10 chữ số. Hỏi có tối đa bao nhiêu số điện thoại có đầu số là 033 ở Việt Nam?

   A. 10^9.   **B.** 10^{10}.   **C.** 10^8.   **D.** 10^7.

PHẦN II. (*4,0 điểm*) Câu trắc nghiệm đúng sai. Học sinh trả lời từ câu 1 đến câu 4. Trong mỗi ý a), b), c), d) ở mỗi câu, học sinh chọn đúng hoặc sai.

Câu 1. Trong khai triển nhị thức Niu-tơn của $(x+2y)^5$.

   a) Hệ số của số hạng không chứa x trong khai triển là 32

   b) Số hạng thứ 3 trong khai triển là $40x^3y^2$

   c) Hệ số của x^4y trong khai triển là 80.

   d) Có 5 số hạng trong khai triển của biểu thức trên.

Câu 2. Trong mặt phẳng toạ độ Oxy, cho đường tròn $(C): (x-3)^2+(y+2)^2=10$ và đường thẳng $\Delta : 3x-4y-1=0$.

   a) Phương trình tiếp tuyến d của đường tròn (C) tại điểm $A(4;1)$ là: $x+3y+3=0$.

   b) Đường thẳng Δ cắt đường tròn (C) tại hai điểm phân biệt.

   c) Khoảng cách từ điểm $M(3;4)$ đến đường thẳng Δ bằng $\dfrac{8}{5}$.

   d) Đường tròn (C) có tâm $I(3;-2)$.

Câu 3. Cho hypebol $\dfrac{x^2}{20} - \dfrac{y^2}{16} = 1$ (H).

   a) Tiêu cự của hypebol bằng 6.

   b) Khoảng cách từ điểm $A \in (H)$ đến tiêu điểm F_1 nhỏ nhất bằng 2.

   c) Điểm $M\left(\sqrt{20};4\right) \in (H)$.

   d) Các tiêu điểm của hypebol là $F_1(-6;0), F_2(6;0)$.

Câu 4. Cho các chữ số 2; 3; 4; 5; 6; 7; 8. Từ các chữ số đã cho lập các số tự nhiên.

   a) Có thể lập được 480 số có bốn chữ số khác nhau và và phải có mặt chữ số 5.

   b) Có thể lập được 4320 số có bảy chữ số khác nhau.

   c) Có thể lập được 56 số nhỏ hơn 100.

   d) Có thể lập được 1080 số là số lẻ có năm chữ số khác nhau.

PHẦN III. (3,0 điểm) Trắc nghiệm lựa chọn câu trả lời ngắn. Học sinh trả lời từ câu 1 đến câu 6

Câu 1. Có 3 học sinh nam và 3 học sinh nữ cần xếp ngồi vào một hàng ghế dọc. Hỏi có mấy cách xếp sao cho nam, nữ ngồi xen kẽ?

Câu 2. Đội văn nghệ của nhà trường gồm 3 học sinh lớp 10A, 4 học sinh lớp 10B và 3 học sinh lớp 10C. Chọn ngẫu nhiên 5 học sinh từ đội văn nghệ để biểu diễn trong lễ bế giảng. Hỏi có bao nhiêu cách chọn sao cho lớp nào cũng có học sinh được chọn?
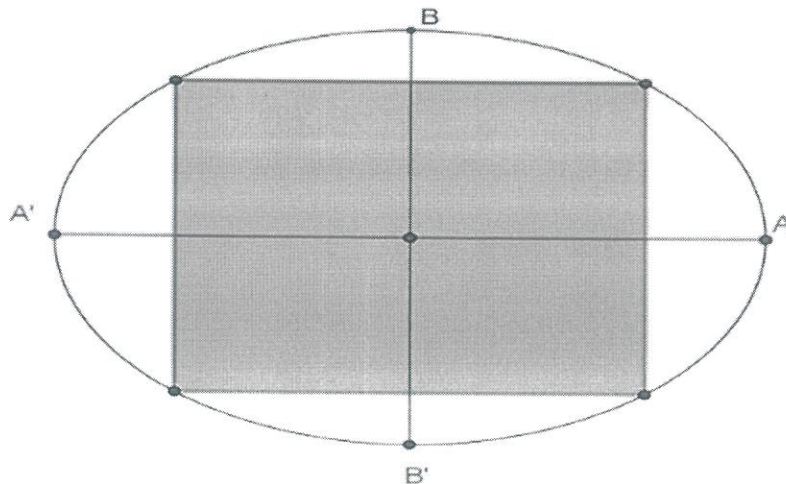
Câu 3. Cho: $S = C_{2021}^0 . 4^{2021} - C_{2021}^1 . 4^{2010} . 2 + C_{2021}^2 . 4^{2019} . 2^2 - C_{2021}^3 . 4^{2018} . 2^3 - ... + C_{2021}^{2020} . 4^1 . 2^{2020} = a^{2021} + b^{2021}$

Tính tổng (a + b)?

Câu 4. Cho đường thẳng $d_1 : x + 3y - 2 = 0$ và $d_2 : x - 3y + 1 = 0$. Tính cosin của góc tạo bởi giữa hai đường thẳng đã cho?

Câu 5. Giả sử từ tỉnh A đến tỉnh B có thể đi bằng các phương tiện: ô tô, tàu hỏa, tàu thủy hoặc máy bay. Mỗi ngày có 8 chuyến ô tô, 5 chuyến tàu hỏa, 4 chuyến tàu thủy và 1 chuyến máy bay. Hỏi có bao nhiêu cách đi từ tỉnh A đến tỉnh B ?

Câu 6. Một công viên được thiết kế dạng hình elip có độ dài trục lớn bằng $AA' = 100m$, độ dài trục bé bằng $BB' = 70m$. Người ta muốn trồng hoa trong một hình chữ nhật nội tiếp elip, phần còn lại sẽ trồng cỏ (*như hình vẽ*). Diện tích trồng hoa lớn nhất bằng bao nhiêu m^2 ?

----HẾT---

SỞ GIÁO DỤC VÀ ĐÀO TẠO HÀ NỘI
TRƯỜNG THPT NGUYỄN QUỐC TRINH

ĐỀ KIỂM TRA CHÍNH THỨC
(Đề kiểm tra có 03 trang)

ĐỀ KIỂM TRA CUỐI HỌC KÌ II
NĂM HỌC 2023 – 2024
MÔN: TOÁN 10
Thời gian làm bài: 90 phút (không kể thời gian phát đề)

Họ, tên học sinh: ....

Số báo danh: ....

Mã đề: 107

PHẦN I. (3,0 điểm) Câu trắc nghiệm nhiều phương án lựa chọn. Học sinh trả lời từ câu 1 đến câu 12. Mỗi câu hỏi, học sinh chỉ chọn một phương án.

Câu 1. Biết rằng một số điện thoại di động của Việt Nam gồm 10 chữ số. Hỏi có tối đa bao nhiêu số điện thoại có đầu số là 0363 ở Việt Nam?

A. 10^9.
B. 10^{10}.
C. 10^6.
D. 10^7.

Câu 2. Trong mặt phẳng Oxy, cho Elip có phương trình $(E): \dfrac{x^2}{9} + \dfrac{y^2}{4} = 1$. Tiêu cự F_1F_2 có độ dài là

A. 6.
B. $2\sqrt{5}$.
C. 9.
D. 4.

Câu 3. Một hộp đựng 50 viên bi gồm 10 viên bi trắng, 25 viên bi đỏ, 15 viên bi xanh. Có bao nhiêu cách chọn 5 viên bi trong hộp đó mà không có viên bi nào màu xanh?

A. C_{50}^5.
B. C_{35}^5.
C. $C_{10}^5 + C_{25}^5$.
D. $C_{50}^5 - C_{15}^5$.

Câu 4. Số các tổ hợp chập k của n phần tử được tính bằng công thức

A. $C_n^k = \dfrac{n!}{(n-k)!k!}$ $(1 \le k \le n)$.
B. $C_n^k = \dfrac{n!}{(n-k)!}$ $(1 \le k \le n)$.

C. $C_n^k = \dfrac{n!}{(n-k)!}$ $(0 \le k \le n)$.
D. $C_n^k = \dfrac{n!}{(n-k)!k!}$ $(0 \le k \le n)$.

Câu 5. Đường tròn (C) tâm $I(4; 3)$ và tiếp xúc với đường thẳng $\Delta : 3x - 4y + 5 = 0$ có phương trình là

A. $(x+4)^2 + (y+3)^2 = 1$.
B. $(x-4)^2 + (y+3)^2 = 5$.

C. $(x-4)^2 + (y-3)^2 = 1$.
D. $(x-4)^2 + (y-3)^2 = 5$.

Câu 6. Có 5 bạn nam và 3 bạn nữ. Có bao nhiêu cách xếp các bạn vào một hàng ngang?

A. 5!.3!.
B. 8!.
C. 5!+3!.
D. 15.

Câu 7. Dạng khai triển của biểu thức $(2x - y)^4$ là

A. $16x^4 - 32x^3y + 24x^2y^2 - 8xy^3 + y^4$.
B. $16x^4 + 32x^3y + 24x^2y^2 + 8xy^3 + y^4$.

C. $16x^4 + 32x^3y - 24x^2y^2 + 8xy^3 - y^4$.
D. $16x^4 - 32x^3y - 24x^2y^2 - 8xy^3 - y^4$.

Câu 8. Một công việc có 2 công đoạn được thực hiện liên tiếp nhau. Công đoạn 1 có a cách thực hiện. Công đoạn 2 có b cách thực hiện. Số cách thực hiện công việc trên là

A. $a.b(a+b)$.
B. $a+b$.
C. a^b.
D. $a.b$.

Câu 9. Trong mặt phẳng Oxy, phương trình nào sau đây là phương trình đường tròn?

A. $x^2 + y^2 - 6x + y - 11 = 0$.
B. $x^2 + y^2 - 4x + 2y + 7 = 0$.

C. $2x^2 + y^2 - 4x - 6y - 4 = 0$.
D. $x^2 + y^2 + 2x - 2xy - 5 = 0$.

Câu 10. Phương trình chính tắc của Elip đi qua điểm $A(0;1)$ và một tiêu điểm $F_1(-2,0)$ là

A. $\dfrac{x^2}{4}+\dfrac{y^2}{1}=1$.
B. $\dfrac{x^2}{1}+\dfrac{y^2}{5}=1$.
C. $\dfrac{x^2}{5}+\dfrac{y^2}{1}=1$.
D. $\dfrac{x^2}{5}+\dfrac{y^2}{4}=1$.

Câu 11. Tọa độ giao điểm của hai đường thẳng $7x-3y+16=0$ và $x+10=0$ là

A. $(10;-18)$.
B. $(-10;18)$.
C. $(10;18)$.
D. $(-10;-18)$.

Câu 12. Cho hai đường thẳng $d_1:2x+3y+15=0$ và $d_2:x-2y-3=0$. Khẳng định nào sau đây đúng?

A. d_1 và d_2 song song với nhau.

B. d_1 và d_2 cắt nhau nhưng không vuông góc với nhau.

C. d_1 và d_2 vuông góc với nhau.

D. d_1 và d_2 trùng nhau.

PHẦN II. (4,0 điểm) Câu trắc nghiệm đúng sai. Học sinh trả lời từ câu 1 đến câu 4. Trong mỗi ý a), b), c), d) ở mỗi câu, học sinh chọn đúng hoặc sai.

Câu 1. Cho hypebol $\dfrac{x^2}{40}-\dfrac{y^2}{9}=1$ (H).

a) Điểm $A\left(\sqrt{40};3\right)\in (H)$.

b) Khoảng cách từ điểm $M\in (H)$ đến tiêu điểm F_1 nhỏ nhất bằng 4.

c) Tiêu điểm của hypebol là $F_1(0;-7),F_2(0;7)$.

d) Tiêu cự của hypebol bằng 14.

Câu 2. Trong khai triển nhị thức Niu-tơn của $(2x+y)^5$.

a) Số hạng thứ 3 trong khai triển là $80x^3y^2$.

b) Hệ số của x^2y^3 trong khai triển là 40.

c) Hệ số của số hạng không chứa y trong khai triển là 1.

d) Có 5 số hạng trong khai triển của biểu thức trên.

Câu 3. Trong mặt phẳng toạ độ Oxy, cho đường tròn $(C):(x+2)^2+(y-1)^2=25$ và đường thẳng $\Delta:3x-y+1=0$.

a) Đường thẳng Δ cắt đường tròn (C) tại hai điểm phân biệt.

b) Phương trình tiếp tuyến d của đường tròn (C) tại điểm $M(2;4)$ là: $4x+3y+5=0$.

c) Đường tròn (C) có tâm $I(2;-1)$.

d) Khoảng cách từ điểm $A(-3;2)$ đến đường thẳng Δ bằng $\sqrt{10}$.

Câu 4. Cho các chữ số $1;2;3;4;5;6;7$. Từ các chữ số đã cho lập các số tự nhiên.

a) Có thể lập được 5040 số có bảy chữ số khác nhau.

b) Có thể lập được 45 số là số chẵn có năm chữ số khác nhau.

c) Có thể lập được 49 số nhỏ hơn 100.

d) Có thể lập được 480 số có bốn chữ số khác nhau và phải có mặt chữ số 2.

PHẦN III. (3,0 điểm) Trắc nghiệm lựa chọn câu trả lời ngắn. Học sinh trả lời từ câu 1 đến câu 6

Câu 1. Đội văn nghệ của nhà trường gồm 4 học sinh lớp 12A, 3 học sinh lớp 12B và 2 học sinh lớp 12C. Chọn ngẫu nhiên 5 học sinh từ đội văn nghệ để biểu diễn trong lễ bế giảng. Hỏi có bao nhiêu cách chọn đội văn nghệ sao cho lớp nào cũng có học sinh được chọn?

Câu 2. Cho đường thẳng $d_1 : x + 2y - 7 = 0$ và $d_2 : 2x - 4y + 9 = 0$. Tính cosin của góc tạo bởi giữa hai đường thẳng đã cho?

Câu 3. Có 4 học sinh nam và 4 học sinh nữ cần xếp ngồi vào một hàng ghế dọc. Hỏi có mấy cách xếp sao cho nam, nữ ngồi xen kẽ?

Câu 4. Giả sử từ tỉnh A đến tỉnh B có thể đi bằng các phương tiện: ô tô, tàu hỏa, tàu thủy hoặc máy bay. Mỗi ngày có 9 chuyến ô tô, 5 chuyến tàu hỏa, 3 chuyến tàu thủy và 2 chuyến máy bay. Hỏi có bao nhiêu cách đi từ tỉnh A đến tỉnh B?

Câu 5. Một công viên được thiết kế dạng hình elip có độ dài trục lớn AA' = $90m$, độ dài trục bé bằng BB' = $60m$. Người ta muốn trồng hoa trong một hình chữ nhật nội tiếp elip, phần còn lại sẽ trồng cỏ (*như hình vẽ*). Diện tích trồng hoa lớn nhất bằng bao nhiêu m^2?
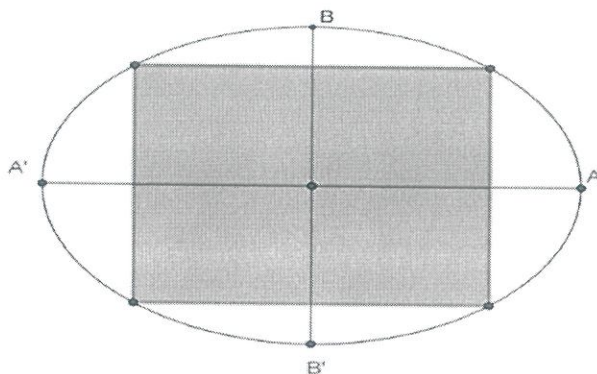
Câu 6. Cho: $S = C_{2019}^1.3^{2018}.2 - C_{2019}^2.3^{2017}.2^2 + C_{2019}^3.3^{2016}.2^3 - ... - C_{2019}^{2018}.3^1.2^{2018} + C_{2019}^{2019}.2^{2019} = a^{2019} + b^{2019}$

Tính tổng (a + b)?

----HẾT---

SỞ GIÁO DỤC VÀ ĐÀO TẠO HÀ NỘI
TRƯỜNG THPT NGUYỄN QUỐC TRINH

ĐỀ KIỂM TRA CHÍNH THỨC
(Đề kiểm tra có 03 trang)

ĐỀ KIỂM TRA CUỐI HỌC KÌ II
NĂM HỌC 2023 – 2024
MÔN: TOÁN 10
Thời gian làm bài: 90 phút (không kể thời gian phát đề)

Họ, tên học sinh: ....

Số báo danh: ....

Mã đề: 108

PHẦN I. (3,0 điểm) Câu trắc nghiệm nhiều phương án lựa chọn. Học sinh trả lời từ câu 1 đến câu 12. Mỗi câu hỏi, học sinh chỉ chọn một phương án.

Câu 1. Một hộp đựng 50 viên bi gồm 10 viên bi trắng, 25 viên bi đỏ, 15 viên bi xanh. Có bao nhiêu cách chọn 5 viên bi trong hộp đó mà không có viên bi nào màu trắng?

A. $C_{50}^5 - C_{10}^5$.

B. C_{40}^5.

C. $C_{25}^5 + C_{15}^5$.

D. C_{50}^5.

Câu 2. Tọa độ giao điểm của hai đường thẳng $\triangle_1 : x - y + 2 = 0$ và $\triangle_2 : y + 3 = 0$ là

A. $(-5;3)$.

B. $(-5;-3)$

C. $(5;3)$.

D. Không có giao điểm.

Câu 3. Biết rằng một số điện thoại di động của Việt Nam gồm 10 chữ số. Hỏi có tối đa bao nhiêu số điện thoại có đầu số là 033 ở Việt Nam?

A. 10^7.

B. 10^9.

C. 10^{10}.

D. 10^8.

Câu 4. Một công việc có thể được thực hiện theo hai phương án khác nhau. Phương án một có a cách thực hiện. Phương án hai có b cách thực hiện. Số cách thực hiện công việc trên là

A. $a + b$.

B. a^b.

C. $a.b$.

D. $a.b(a+b)$.

Câu 5. Có 5 bạn nam và 5 bạn nữ. Có bao nhiêu cách xếp các bạn vào một hàng ngang?

A. 25.

B. 5!.5!.

C. 5! + 5!.

D. 10!.

Câu 6. Số các chỉnh hợp chập k của n phần tử được tính bằng công thức

A. $A_n^k = \dfrac{n!}{(n-k)!k!} \ (0 \le k \le n)$.

B. $A_n^k = \dfrac{n!}{(n-k)!} \ (1 \le k \le n)$.

C. $A_n^k = \dfrac{n!}{(n-k)!k!} \ (1 \le k \le n)$.

D. $A_n^k = \dfrac{n!}{(n-k)!} \ (0 \le k \le n)$.

Câu 7. Trong mặt phẳng Oxy, phương trình nào sau đây là phương trình đường tròn?

A. $x^2 + y^2 - x + y + 4 = 0$.

B. $x^2 + y^2 - 8x + 6y - 1 = 0$.

C. $x^2 + 2y^2 - x - 6y - 4 = 0$.

D. $x^2 + y^2 + 2x - 2xy - 8 = 0$.

Câu 8. Cho hai đường thẳng $d_1 : 2x + y + 15 = 0$ và $d_2 : x - 2y - 3 = 0$. Khẳng định nào sau đây đúng?

A. d_1 và d_2 vuông góc với nhau.

B. d_1 và d_2 trùng nhau.

C. d_1 và d_2 cắt nhau nhưng không vuông góc với nhau.

D. d_1 và d_2 song song với nhau.

Câu 9. Dạng khai triển của biểu thức $(3x - y)^4$ là

A. $81x^4 + 108x^3y + 54x^2y^2 + 12xy^3 + y^4$.

B. $81x^4 - 108x^3y - 54x^2y^2 - 12xy^3 - y^4$.

C. $81x^4 - 108x^3y + 54x^2y^2 - 12xy^3 + y^4$.　　**D.** $81x^4 + 108x^3y - 54x^2y^2 - 12xy^3 + y^4$.

Câu 10. Phương trình chính tắc của Elip đi qua điểm $A(0;5)$ và một tiêu điểm $F_1(-2,0)$ là

A. $\dfrac{x^2}{29} + \dfrac{y^2}{25} = 1$.　　**B.** $\dfrac{x^2}{5} + \dfrac{y^2}{2} = 1$.　　**C.** $\dfrac{x^2}{27} + \dfrac{y^2}{25} = 1$.　　**D.** $\dfrac{x^2}{25} + \dfrac{y^2}{4} = 1$.

Câu 11. Trong mặt phẳng Oxy, cho Elip có phương trình $(E): \dfrac{x^2}{25} + \dfrac{y^2}{9} = 1$. Tiêu cự F_1F_2 có độ dài là

A. 6.　　**B.** 50.　　**C.** 10.　　**D.** 8.

Câu 12. Đường tròn (C) tâm $I(-2; 1)$ và tiếp xúc với đường thẳng $\Delta : 3x - 4y + 5 = 0$ có phương trình là

A. $(x+2)^2 + (y-1)^2 = 5$.　　**B.** $(x+2)^2 + (y-1)^2 = 1$.

C. $(x-2)^2 + (y+1)^2 = 5$.　　**D.** $(x-2)^2 + (y+1)^2 = 1$.

PHẦN II. (4,0 điểm) Câu trắc nghiệm đúng sai. Học sinh trả lời từ câu 1 đến câu 4. Trong mỗi ý a), b), c), d) ở mỗi câu, học sinh chọn đúng hoặc sai.

Câu 1. Cho hypebol $\dfrac{x^2}{20} - \dfrac{y^2}{16} = 1 \quad (H)$.

　a) Các tiêu điểm của hypebol là $F_1(-6;0), F_2(6;0)$.

　b) Khoảng cách từ điểm $A \in (H)$ đến tiêu điểm F_1 nhỏ nhất bằng 2.

　c) Điểm $M\left(\sqrt{20}; 4\right) \in (H)$.

　d) Tiêu cự của hypebol bằng 6.

Câu 2. Trong mặt phẳng toạ độ Oxy, cho đường tròn $(C) : (x-3)^2 + (y+2)^2 = 10$ và đường thẳng $\Delta : 3x - 4y - 1 = 0$.

　a) Khoảng cách từ điểm $M(3;4)$ đến đường thẳng Δ bằng $\dfrac{8}{5}$.

　b) Đường tròn (C) có tâm $I(3;-2)$.

　c) Phương trình tiếp tuyến d của đường tròn (C) tại điểm $A(4;1)$ là: $x + 3y + 3 = 0$.

　d) Đường thẳng Δ cắt đường tròn (C) tại hai điểm phân biệt.

Câu 3. Trong khai triển nhị thức Niu-tơn của $(x + 2y)^5$.

　a) Có 5 số hạng trong khai triển của biểu thức trên.

　b) Số hạng thứ 3 trong khai triển là $40x^3y^2$

　c) Hệ số của x^4y trong khai triển là 80.

　d) Hệ số của số hạng không chứa x trong khai triển là 32.

Câu 4. Cho các chữ số 2; 3; 4; 5; 6; 7; 8. Từ các chữ số đã cho lập các số tự nhiên.

　a) Có thể lập được 1080 số là số lẻ có năm chữ số khác nhau.

　b) Có thể lập được 56 số nhỏ hơn 100.

　c) Có thể lập được 4320 số có bảy chữ số khác nhau.

　d) Có thể lập được 480 số có bốn chữ số khác nhau và và phải có mặt chữ số 5.

PHẦN III. (3,0 điểm) Trắc nghiệm lựa chọn câu trả lời ngắn. Học sinh trả lời từ câu 1 đến câu 6

Câu 1. Cho: $S = C_{2021}^0.4^{2021} - C_{2021}^1.4^{2010}.2 + C_{2021}^2.4^{2019}.2^2 - C_{2021}^3.4^{2018}.2^3 - ... + C_{2021}^{2020}.4^1.2^{2020} = a^{2021} + b^{2021}$
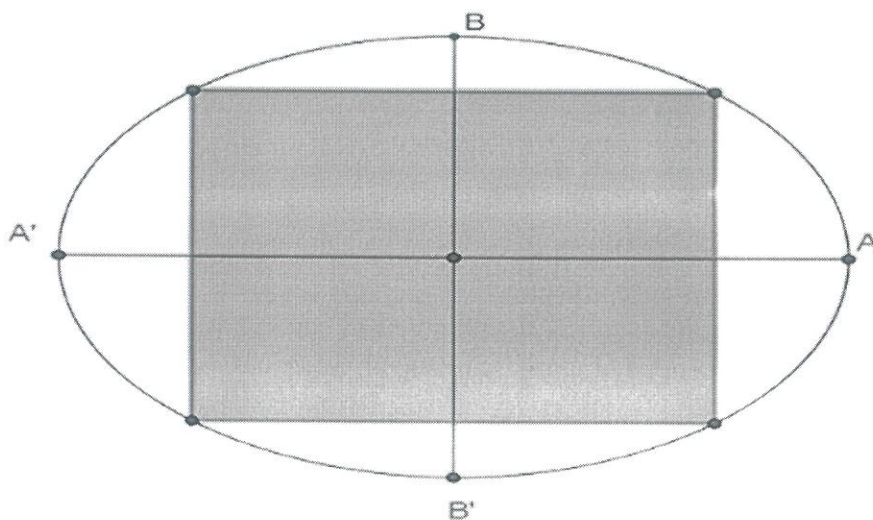
Tính tổng (a + b)?

Câu 2. Giả sử từ tỉnh A đến tỉnh B có thể đi bằng các phương tiện: ô tô, tàu hỏa, tàu thủy hoặc máy bay. Mỗi ngày có 8 chuyến ô tô, 5 chuyến tàu hỏa, 4 chuyến tàu thủy và 1 chuyến máy bay. Hỏi có bao nhiêu cách đi từ tỉnh A đến tỉnh B?

Câu 3. Có 3 học sinh nam và 3 học sinh nữ cần xếp ngồi vào một hàng ghế dọc. Hỏi có bao nhiêu cách xếp sao cho nam, nữ ngồi xen kẽ?

Câu 4. Đội văn nghệ của nhà trường gồm 3 học sinh lớp 10A, 4 học sinh lớp 10B và 3 học sinh lớp 10C. Chọn ngẫu nhiên 5 học sinh từ đội văn nghệ để biểu diễn trong lễ bế giảng. Hỏi có bao nhiêu cách chọn sao cho lớp nào cũng có học sinh được chọn?

Câu 5. Một công viên được thiết kế dạng hình elip có độ dài trục lớn bằng $AA' = 100m$, độ dài trục bé bằng $BB' = 70m$. Người ta muốn trồng hoa trong một hình chữ nhật nội tiếp elip, phần còn lại sẽ trồng cỏ (*như hình vẽ*). Diện tích trồng hoa lớn nhất bằng bao nhiêu m^2?

Câu 6. Cho đường thẳng $d_1 : x + 3y - 2 = 0$ và $d_2 : x - 3y + 1 = 0$. Tính cosin của góc tạo bởi giữa hai đường thẳng đã cho?

----HẾT---