

科目：英文

適用：歷史系二、三 / 土木系二 / 應光系三

考生注意：

1. 請依次序作答，答案必須劃記在答案卡上，否則不予計分。
2. 限用 2B 鉛筆作答；試題須隨卷繳回。

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I. Vocabulary: Choose the best answer to complete the sentence. (40%, 2% each)

1. Since the young child had a _____ red birthmark on her stomach, the mother could easily identify her child.
(A) wondering (B) contributing (C) distinctive (D) despondent
2. Nurses are showing Mr. Simpson how the heart monitor _____ to his skin so that he can do it himself at home.
(A) triggers (B) endures (C) visualizes (D) attaches
3. Dr. Jones provided the patient with a likely _____ for what might happen if he refused to have the surgery.
(A) scenario (B) sphere (C) insight (D) attachment
4. After the surgery, Marcia's doctors declare her completely cured and well. She felt as if she were about to start a whole new _____ in her life.
(A) chapter (B) trauma (C) sphere (D) forehead
5. It was too noisy to understand his expression, but it was _____ he was talking to her.
(A) gazing (B) obvious (C) entertaining (D) mental
6. The lecture gave me a valuable _____ into the author's way of thinking.
(A) insight (B) brain (C) adrenaline (D) talent
7. One part of your brain that processes emotions is the _____ and it is swelling a bit during puberty and adolescence.
(A) oxytocin (B) serotonin (C) dopamine (D) amygdala
8. The scientist tried to justify _____ events that were previously unexplainable.
(A) fear (B) paranormal (C) cheerful (D) regretful
9. _____ is the length of time during which a person can concentrate on a subject or idea.
(A) Biofeedback (B) Emergence (C) Attention span (D) Bits and bytes
10. The earlier an _____ child gets treatment, the better the chances of success.
(A) honest (B) autistic (C) functional (D) preoccupied

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11. A police officer's job is to ____ a crime scene, collect evidence and deduce information obtained from the case to catch the criminal.
(A) harness (B) determine (C) cooperate (D) investigate
12. A ____ number of college students choose to enter workforce after graduation because of the current economic situation.
(A) considerable (B) restrict (C) sufficient (D) valid
13. A recent study shows that there is a strong ____ between high frequency of Instagram use and narcissism.
(A) definition (B) correlation (C) self-promotion (D) obsession
14. To raise ____ for a project through the Internet is a common way now.
(A) evidence (B) autism (C) funds (D) regime
15. ____ that your idea does work, there is no guarantee the project will be approved by the committee.
(A) Guessed (B) Guarded (C) Graded (D) Granted
16. When the roller coaster was ten feet away from the side of the fake mountain, a door ____ opened to let the cars pass through.
(A) automatically (B) violated (C) distortedly (D) regulatory
17. Academic conferences are wonderful occasions not only for learning but also for ____ with people who work in a similar field of interest.
(A) obtaining (B) networking (C) flattering (D) snooping
18. It often seems that whenever there is a ____ shift, there is a change of policy.
(A) insomnia (B) resume (C) regime (D) autism
19. Despite the popular saying, "Money is the root of all evil," money is simply a tool, which is ____ neither good nor evil.
(A) inherently (B) narcissistically (C) ceaselessly (D) approximately
20. Our mistakes are a ____ reminder that we are human beings and to err is our second nature.
(A) flattering (B) hence (C) considerable (D) constant

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II. Grammar: Fill in the blank with the correct answer. (15%, 3% each)

21. The professor encouraged his students to be more _____ in class because discussion is important to understanding each other's ideas.
(A) communication (B) communicate (C) communicative (D) communicatively
22. Once you have introduced your topic, please _____ your goals for us.
(A) definition (B) define (C) definable (D) undefined
23. The _____ of the university bus system is to transport students quickly.
(A) functions (B) functioning (C) function (D) functional
24. A big _____ of classic cars is scheduled to be held this Saturday in the parking lot of the football stadium.
(A) exposition (B) exposure (C) expose (D) exposed
25. We have to change the meeting from the _____ scheduled time to later this afternoon.
(A) regular (B) regulates (C) regularly (D) regulation

III. Reading Comprehension: Read and select the best answer for each question. (45%, 3% each)

Reading 1

The 1995 movie *Babe* starred a very cute pig that talked, had friends, and dreamed of winning a sheep-herding contest. If you don't think twice about eating pork or bacon after seeing that film, then you have no heart. Babe is a 92-minute argument for vegetarianism, and it is powerful. Its human star, James Cromwell, became a vegetarian during the making of the film. He explained his decision in an interview with *TakePart*, an online magazine: "I think the character I played had an ability to see animals as sentient beings, with as much a destiny and a drive and aspiration as he had."

Here's the problem, though: it's just a movie. Pigs can't talk. And while no one can prove it, it's a safe bet that they don't dream of winning contests, either. The moral arguments against eating meat are like Babe; they have an emotional appeal, but they cannot stand up to objective scrutiny. In fact, including meat in your diet is both morally acceptable and necessary for your health.

The most powerful weapon vegetarians have is the undeniable cruelty of the meat industry. There is no excuse for making a living thing suffer unnecessarily. And there is no doubt that pigs, cows, chickens, and other animals that we eat do, in fact, suffer. In factory farms, millions of animals receive abuse that would be

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rightly condemned (and in many places, be made illegal) if suffered by a family pet. These animals live short, miserable lives in tiny cages without ever seeing daylight, just because it is cost-effective. This is criminal.

Concern about animal cruelty is an excellent reason not to buy meat that comes from factory farms. Yet it is not a logical reason to give up meat altogether, since meat can be, and is, produced humanely. Those who object to the methods of industrial agriculture can try a farmers' market, or look for labels that read "organic," "free-range," or "cruelty-free." Granted, these labels are not always accurate; verifying them requires some research on the shopper's part. A growing number of websites, such as *EthicalFarms.org* and *CrueltyFreeEating.com*, aim to help consumers with that.

What about the idea that it is wrong to take a life, any life, in order to eat? Death is sad, but tell that to Mother Nature. Besides a few species of bacteria that eat minerals, all animals' diets depend on the deaths of other living things. Humans are no exception. According to the Harvard School of Public Health, people need forty-six to fifty-six grams of protein every day. With protein, of which our muscles and organs are mainly composed, quality counts as much as quantity. Animal products have high-quality protein, meaning they contain all the amino acids (the "building blocks" of protein) essential for our health. No vegetable does. Meat, along with dairy and eggs, is also high in vitamin B12, which is **integral** to healthy brain function and the production of blood. It is not found in any plant.

If you still doubt the importance of animal products to good nutrition, read *The Vegetarian Myth* by Lierre Keith. Ms. Keith was a strict vegetarian for twenty years and remains passionate about animal welfare. In her 2009 book, she describes long-term health problems that she eventually concluded were due to her diet. After studying the evolutionary roots of our need for animal products, and despite her deep reluctance to take life, she became an advocate of ethical meat-eating. As she puts it, "life isn't possible without death."

That is true, by the way, even of a vegetarian diet. Aren't plants living things, too? The usual objection to this line of reasoning—echoing James Cromwell—is that sentience makes the difference. But in nature there is no clear line between sentient and non-sentient. Scientists have found that plants can distinguish relatives from strangers; they "cry out" in response to stress by releasing a certain gas; and they grow faster when classical music is played to them. Apparently, there is no way for humans—or other animals—to avoid eating feeling beings.

It is admirable to care about the lives and the suffering of animals. However, to abandon meat-eating out of guilt is to take emotion too far, at the expense of our own health. If the title character of Babe was a normal pig, he was an omnivore, as we humans are. He ate leaves, grains, insects, and worms. He could experience pain, much like we do, and that's reason enough to treat him in a kinder way than

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the typical factory farm would. But he also killed in order to live, just like we do. We must eat meat responsibly, but we must eat meat.

26. What is the main idea of the passage?
 - (A) How to become a vegetarian.
 - (B) How to avoid eating meat.
 - (C) A healthy diet includes taking sufficient vitamins.
 - (D) Eating meat is necessary.

27. According to the passage, which might not be a choice if you feel the cruelty of the meat industry?
 - (A) Free-range products.
 - (B) Organic products.
 - (C) Factory farms.
 - (D) Farmer's market.

28. What does "scrutiny" mean in paragraph 2?
 - (A) logic
 - (B) examination
 - (C) estate
 - (D) a hope

29. According to the author, which are the two things in meat that are important for our health?
 - (A) Amino acids & minerals.
 - (B) Organic & nutrition.
 - (C) Dairy & eggs.
 - (D) High-quality protein & vitamin B12.

30. What does "integral" mean in paragraph 5?
 - (A) necessary
 - (B) sufficient
 - (C) correct
 - (D) prolonged

31. What is the main point of paragraph 7?
 - (A) There is no way for humans—or other animals—to avoid eating feeling beings.
 - (B) The usual objection to this line of reasoning—echoing James Cromwell—is that sentience makes the difference.
 - (C) Scientists have found that plants can distinguish relatives from strangers.
 - (D) But in nature there is no clear line between sentient and non-sentient.

32. Which of the following is NOT true?
 - (A) Lierre Keith became to support ethical meat-eating.
 - (B) Millions of animals receive nice treatment in factory farms.
 - (C) A few species of bacteria eat minerals on earth.
 - (D) *Babe* is an argument for vegetarianism.

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33. We can infer that the author _____.
- (A) is a meat lover.
 - (B) is a farmer.
 - (C) might have watched the movie *Babe*.
 - (D) likes to cook.

Reading 2

Early mariners had to estimate their location and direction from observing the positions of the sun, moon, stars, and planets (celestial navigation). Unfortunately, during the day, the stars, moon, and planets were not visible, which limited the sailors' control over their course. With the invention of the magnetic compass and the sextant, however, sea travel and exploration became safer and more accessible.

The invention of the compass in the twelfth century was an enormously important addition to navigation technology. It enabled sailors to chart a course and hold the ship steadily on that course no matter what the conditions were at sea. In the early eighteenth century, the sextant emerged to help navigators figure out their *latitude* (their position north or south of the equator). Sailors used the sextant to measure the angle of elevation above the horizon of any celestial body, which told them their north-south position.

Despite these advances, seafaring navigation faced a significant obstacle. Mariners still had to rely on classic methods of **celestial** navigation to determine their *longitude* (their position east or west of a given point). In 1764, John Harrison solved that problem.

The clock had been invented centuries earlier, and the idea that an accurate clock would be a perfect solution for longitude calculation had been known for over 100 years. But the clocks of the day operated on pendulums—swinging appendages that maintained the **consistency** of the timing mechanism. At sea, the rolling and swaying of the ship threw off a clock's pendulum, making accurate timekeeping impossible.

John Harrison assembled a device he called a chronometer, which had internal working parts and so kept accurate London time. To test the device, his son carried it on a ship to Barbados and calculated longitude along the way. The chronometer worked. The secret lay in knowing the precise time of day in London while doing longitude calculations. From that day on, it has been easy to calculate longitude, simply by counting the difference in hours between local time and London time (now referred to as Greenwich Mean Time, or GMT).

For a long time, these devices—the compass, sextant, and chronometer—were the main tools of navigation. In the early 1900s, radio navigation systems were developed to replace them. These systems, however, had two problems. First,

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the complicated geometric calculations they required had to be done manually—there were no computers or even calculators yet. Second, radio signals could get lost in storms. The most significant advancement in navigation occurred when people learned how to send high frequency transmitters into space. Use of this satellite-based system has proven to be extremely accurate. This technology is a key element of today's GPS systems.

Travelers no longer use celestial bodies to chart their course, but, because of satellite technology, we still look to the heavens to find our way across the globe.

34. Modern navigation systems rely on transmitters in space.
(A) True (B) False
35. John Harrison solved the mystery of accurate longitude calculation with his development of radio navigation.
(A) True (B) False
36. Before the compass and sextant were invented, mariners used all of the following to navigate except _____.
(A) the stars (B) the chronometer (C) the coastline (D) the sun and moon
37. The compass and sextant were not quite enough for accurate navigation because _____.
(A) explorers did not know how to use them
(B) the location of the stars was uncharted
(C) they did not account for changes in weather conditions
(D) they did not calculate accurate longitude
38. What does "consistency" mean in paragraph 4?
(A) variation (B) coincidence (C) region (D) revolution
39. What is the main point of the paragraph 6?
(A) It is safer for sailors or expeditions with the invention of compass and sextant.
(B) Sextant is important to figure out the latitude.
(C) The devices and navigation systems are described.
(D) GPS is needed nowadays.
40. After reading the article, "celestial" means?
(A) mortal (B) stable (C) oceanic (D) skyey