

※ 考生請注意：本試題不可使用計算機。請於答案卷(卡)作答，於本試題紙上作答者，不予計分。
The use of electronic devices in this exam is strictly prohibited.

一、綜合測驗 (50 分，單選題，每題 2 分。)

Multiple choice: Write down the question numbers in series on the answer sheet, followed by one best answer of your choice to each question (50%, 2% for each question).

1. _____ theories have been proposed for the creation of the universe.
(A) As many
(B) There are many
(C) Many
(D) That many
2. The mouse, _____ all other rodents, has a head, thorax, abdomen, and tail.
(A) like
(B) liking
(C) which likes
(D) While like
3. One mole of oxygen is _____ than that of hydrogen.
(A) more heavier
(B) so heave
(C) more heavy
(D) much heavier
4. David's score on the test is the highest in the class; _____ last night.
(A) he should study
(B) he should have studied
(C) he must have studied
(D) he must had study
5. Mobile phones are relatively small to laptop computers, _____ have important uses.
(A) both of them
(B) so both
(C) however both
(D) but both
6. The largest meteorite on display is in the United States, _____ over 34 tons.
(A) and it weighs
(B) it weighs
(C) its weight is
(D) which it weighs

7. _____ in summer, the southern Taiwan grows a large variety of vegetables and fruit.
 (A) Although rarely rains
 (B) It rarely rains
 (C) Although it rarely rains
 (D) Despite rarely rains
8. When raindrops fall through the sky, _____ wash a number of impurities from the air.
 (A) helping to
 (B) which help to
 (C) by which they
 (D) they help to
9. Botanists are not sure where the first plant was grown or even _____.
 (A) what plant was
 (B) it was what plant
 (C) what plant was it
 (D) what plant it was
10. Anyone _____ receiving information about the project should write to the secretary.
 (A) interesting in
 (B) interested in
 (C) who is interesting
 (D) who is interested
11. An explosion is a sudden increase in volume _____.
 (A) which rapid burning causes it
 (B) caused by rapid burning
 (C) that causing by rapid burning
 (D) when causes by rapid burning
12. If I _____ the music concert earlier, I could have gotten some tickets for you.
 (A) knew
 (B) had known
 (C) could know
 (D) have knew
13. No profession is more demanding _____.
 (A) as medicine
 (B) like medicine
 (C) than medicine
 (D) over medicine
14. _____ in all parts of the city, motorcycles are the most common transportation tool in Tainan.
 (A) Found
 (B) Been found
 (C) Finding
 (D) Finding them

15. _____ built muscles with excellent sense of smell, the wild bear will eat almost anything.
(A) Their heavy
(B) It is heavily
(C) Heavily
(D) Having heavily
16. No one expected _____.
(A) to disappearing the cancer cells
(B) the cancer cells disappeared
(C) the cancer cells disappearing
(D) the cancer cells to disappear
17. The government warned people _____ contaminated water.
(A) to not drink
(B) not to drink
(C) to not drinking
(D) not to drinking
18. Cigarette smokers often suffer from respiratory diseases, and _____.
(A) so are their family
(B) also their family
(C) so do their family
(D) their family do so
19. Not until a new born mouse opens its eyes _____ its mother to walk around.
(A) it leaves
(B) to leave
(C) leaving
(D) does it leave
20. _____ to develop long-term immunity to flu infections.
(A) It is not possible
(B) It is not being possible
(C) Its not possible
(D) Not possible is
21. Probably _____ little oil left under the earth by the year 2050.
(A) there will have
(B) it will have
(C) there will be
(D) it will be
22. _____ adults, young children find little difficulty in learning foreign languages.
(A) Not like
(B) Unlike
(C) Not alike
(D) Like none

23. _____ history, the progress of science has been an art requiring much skill and imagination.

- (A) As long as the
- (B) Since the
- (C) Throughout
- (D) In addition to

24. The cells have not shown a great response to the drug, _____?

- (A) do they
- (B) have they
- (C) haven't they
- (D) don't they

25. The school is closed today _____ a strong typhoon.

- (A) because of
- (B) because
- (C) from
- (D) owing from

二、閱讀測驗 (10 分，單選題，每題 2 分。)

Reading comprehension: Read the article below and then answer the following questions. Remember, write down the question numbers in series on the answer sheet, followed by one best answer of your choice to each question (10%, 2% for each question).

A recent report by 11,258 scientists from around the world warned that the planet Earth is clearly and unequivocally facing a climate emergency. The study showed for the first time that a large group of scientists had formally considered climate change as an “emergency” due to increasing greenhouse gas emissions. The report suggests cutting out fossil fuels in favor of renewable sources of energy. The scientists also advocate for policies that would preserve more intact forests to absorb carbon in order to reduce global warming.

Greta Thunberg, a 16-year-old Swedish girl nominated for the 2019 Nobel Peace Prize, has become one of the most prominent faces in many youth-led demonstrations demanding political changes by world governments. “I want you to listen to the scientists. And then I want you to take real action,” Thunberg said.

The United Nations reported in 2018 that the increase in global temperature was way off course for 1.5°C above pre-industrial levels, an urgent and real crisis for all mankind and biodiversity. A total of 66 nations now have plans to be carbon-neutral by 2050.

In 2019, the United Kingdom and the European Union declared a climate emergency. Moreover, Oxford Dictionaries made “climate emergency” its Word of the Year as a result of raised public awareness. In a sense, climate change makes us more capable of acting together to prevent the worst effects of global warming.

1. The word “emission” in paragraph 1 is closest in meaning to

- (A) permission
- (B) movement
- (C) release
- (D) evolution

2. The word “awareness” in paragraph 4 is closest in meaning to

- (A) well-being
- (B) attention
- (C) condition
- (D) award

3. Which of the following titles best describes Greta Thunberg?

- (A) Scientist
- (B) Politician
- (C) Nobel prize winner
- (D) Climate activist

4. According to this article, what is the most important key to resolve climate emergency?

- (A) United Nations
- (B) Scientist
- (C) Government
- (D) Action

5. Which of the following is not a cause to climate emergency?

- (A) Use of fossil fuels
- (B) Destroyed forests
- (C) Biodiversity
- (D) Greenhouse gases

三、字彙中翻英 (10 分，每題 1 分。)

Translation: Translate the following terms into English (10%, 1% for each question). Write the question numbers in series and your answers on the answer sheet.

- 1. 核醣體
- 2. 染色體
- 3. 血管
- 4. 腎臟
- 5. 卵子
- 6. 頭痛
- 7. 甲醇
- 8. 滲透壓
- 9. 平板電腦
- 10. 濾紙

四、字彙英翻中 (10 分，每題 1 分。)

Translation: Translate the following terms into Chinese (10%, 1% for each question). Write the question numbers in series and your answers on the answer sheet.

- 1. Axon
- 2. Cilium
- 3. Pipette
- 4. Sucrose
- 5. Infant
- 6. $4 \mu\text{m}^3$
- 7. Chemotherapy
- 8. Arteriosclerosis
- 9. Tongue
- 10. Endocytosis

五、文句中翻英 (10 分，每題 2 分)

Translation: Translate the following sentences into English (10%, 2% for each question). Write the question numbers in series and your answers on the answer sheet.

1. 細胞是由細胞核、細胞質、與細胞膜所組成。
2. 近年因肺癌而死亡的人數快速增加。
3. 高血壓是中風的危險因子之一。
4. 皮膚是人體最大的器官。
5. 手術後病人的體重減少了百分之十。

六、文句英翻中 (10 分，每題 2 分)

Translation: Translate the following sentences into Chinese (10%, 2% for each question). Write the question numbers in series and your answers on the answer sheet.

1. Artificial intelligence accurately diagnoses diseases by intensive analyses of highly complex datasets.
2. Two thirds of the cancer cells are killed by the treatment *in vitro*.
3. Elevated number of neutrophils is characteristic of many inflammatory diseases.
4. Mary adds 9 grams of sodium chloride into 1 liter of distilled water to make normal saline.
5. Virtual reality has been adopted to aid the learning of three-dimensional structures of the human body.