



### 3 - The effects of temperature on biological elements show the ..... .

- a. stability of energy production in the body
- b. flexibility of the biological functions in the body
- c. limited range of temperature for the survival of organisms
- d. amount and type of biological elements

### 4 - The particular sequence of amino acids ..... the protein structure.

- a. inhibits                      b. transmits                      c. degenerates                      d. determines

### 5 - Protein denaturation is the result of ..... .

- a. changes in temperature                      b. biological malfunction of the body
- c. stability of body temperature                      d. energy balance in the body

## Passage 2

Bio-hacking is the process of manipulating your brain and body to optimize performance. Its methods reach beyond the area of traditional medicine and include a wider range of practices. Some people do more common things like Vipassana meditation, intermittent fasting, consuming high doses of daily supplements and tracking sleep. Others may get into stranger techniques such as stem cell injections, bathing in infrared light, cryotherapy, neuro feedback and wading in virtual float tanks. The goal of bio-hacking also differs among supporters but, for the most part, is typically to improve health to the highest achievable levels. This means being as smart and as strong as possible, for as long as possible. According to gerontologist, *Aubrey de Grey*, people will live to be 1000 years old and the first person who will live to be 1000 years is actually already born. He supports this claim based on his current research on repairing different types of cellular and molecular damage that is associated with aging. For him, and others with similar views, aging is not so much a health problem but more of an engineering one.

### 6 - Which of the following is NOT mentioned as a form of common bio-hacking?

- a. Taking large amounts of supplements
- b. Avoiding eating at periodic intervals
- c. Having routine Sauna bathing
- d. Keeping a record of one's sleep

**7 - People mostly engage in bio-hacking for ..... .**

- a. manipulating others' brain                      b. restoration of one's health  
c. engineering life problems                      d. prevention of molecular balance

**8 - It is stated in the passage that supporters of bio-hacking have ..... opinions about its objectives.**

- a. different                      b. damaging                      c. flexible                      d. similar

**9 - Gerontologists like *de Grey* are attempting to extend the average lifespan by ..... .**

- a. deliberately abandoning bio-hacking                      b. delaying the mental performance  
c. ignoring the engineering problems                      d. fixing damaged cells and molecules

**10 - The main point of this text is that ..... .**

- a. bio-hacking is unbelievably dangerous  
b. people will finally live up to age 1000  
c. manipulating brain and body has serious consequences  
d. bio-hacking may lead to health optimization

**Passage 3**

Recent research highlights the prevalence of mental health problems more than previously supposed in elderly populations without dementia. Intermittent forgetfulness is normal, but persistent depression, anxiety, memory loss, or other cognitive issues can indicate something more serious. We don't exactly know whether such disorders increase or decrease with age. By estimation, %20 of people aged 55 years or older experience anxiety, severe cognitive impairment, and mood disorders (e.g., depression or bipolar disorder). In extreme cases, these may lead to suicide. Reportedly, men above 85 years of age have a suicide rate of 45.23 per 100,000, compared to an overall rate of 11.01 per 100,000 for all ages.

As for mood disorders, depression is the most prevalent among older adults, sometimes leading to impairments in physical, mental and social functioning. Depressive disorders often adversely affect the course of aging and complicate the treatment of other chronic diseases. Older adults with depression visit the doctor and emergency room more often, use more medication, incur higher outpatient charges, and stay longer in hospital.

Although the rate of older adults with depression tends to increase with age, depression is not a normal part of growing older; rather, in %80 of cases, it is a treatable condition. Unfortunately, depression is a widely under-recognized condition, and is often untreated or undertreated among older adults.

**11 - According to the passage, it is natural for the elderly populations without dementia to suffer from ..... .**

- a. depression or bipolar disorder                      b. severe cognitive impairment
- c. discontinuous fall of memory                      d. persistent memory loss

**12 - According to a report, ..... commit suicide roughly four times more than that of the general population of the same gender.**

- a. men and women                      b. men aged above 85 years
- c. people aged above 55 years                      d. the elderly without dementia

**13 - According to the author, the most ..... condition which negatively affects body, mind, and relations with others is the mood disorder.**

- a. negligible                      b. underrated                      c. trivial                      d. prevalent

**14 - Based on the text, old adults with depressive disorder would ..... .**

- a. experience complicated chronic diseases
- b. have a desirable course of aging
- c. rarely be admitted as an outpatient
- d. hardly suffer impaired social performance

**15. The text considers depression as one of the ..... discomforts.**

- a. largely subsiding                      b. previously treated
- c. easily curable                      d. age-related

#### Passage 4

Influenza pandemics are similar to major natural disasters: we know there will be another one, but we ignore both time and magnitude. Earthquakes in Tokyo or San Francisco last from seconds to a couple of minutes but pandemics spread around the world in many waves over months or years. An influenza pandemic may be a thousand times more deadly than even the deadliest tsunami.

Influenza is as unpredictable as its pandemics. We know nothing about the pathogenic potential of the next pandemic type. We do not know if the next

pandemic will be caused by the current disease, H5N1, or by another influenza type. We are unaware of how the next pandemic will evolve over time, how rapidly it will spread around the world, and in how many waves. We do not know which age groups are at the highest risk of severe outcomes. We have no idea whether the next pandemic will kill 2,20, or 200 million people.

It is wise to imagine and plan for the worst when facing an unknown threat. As the threat is global, strategies must be global, affecting more than two hundred nations. Dealing with nations and their leaders is like dealing with children in a kindergarten. In this difficult context, the WHO is performing an astonishing job.

**16 - It can be inferred from the passage that ..... .**

- a. the author is certain that preventive programs are well planned
- b. the author is worried about the future possible pandemic
- c. different countries have positive cooperation over influenza pandemic
- d. the next pandemics are easier to control than the previous ones

**17 - The second paragraph mainly deals with ..... .**

- a. the serious outcomes of influenza
- b. pandemics in previous years
- c. the time and magnitude of the next pandemic
- d. lack of information about future pandemics

**18 - According to the passage, WHO ..... .**

- a. has successfully prevented all previous pandemics
- b. has ignored the role to be played by each country
- c. finds it difficult to unite countries in face of pandemics
- d. is certain about successful management of future pandemics

**19 - A pandemic and an earthquake are ..... in duration and intensity.**

- a. predictable      b. different      c. preventable      d. identical

**20 - Which of the following cannot be considered as the author' concerns about the influenza pandemics as a global threat.....**

- a. high fatality rate of pandemics      b. subsiding influences of pandemics
- c. features of next pandemics      d. preventive measures for pandemics

## Part two :Vocabulary

**21 - Some addictive drugs affect the user so ..... that no medication can help them get over the condition.**

- a. harmfully      b. beneficially      c. appropriately      d. advantageously

**22 - The patient's condition was ..... with no sign of improvement. She decided to consult another doctor.**

- a. aggregated      b. alleviated      c. elevated      d. worsened

**23 - The patient suffered from a fatal disease with unusual ..... like rash and acne.**

- a. contributions      b. manifestations      c. applications      d. interruptions

**24 - Many nurses are not satisfied with the new regulations in the hospital; therefore, pressure on the officials is ..... for policy changes.**

- a. emitting      b. exiting      c. rising      d. quitting

**25 - There is an urgent need for suitable and effective public health services for poor people who cannot ..... private health services.**

- a. afford      b. affirm      c. confirm      d. confer

**26-Immunization programs follow important goals of controlling, eliminating, or ..... a disease.**

- a. developing      b. dispersing      c. aggravating      d. eradicating

**27 - A team of professional researchers came up with valuable findings which would have ..... implications for successful treatment of infection.**

- a. profound      b. trivial      c. hazardous      d. minimal

**28 - Modern medicine is characterized by the ..... of new and advanced techniques in professional practice.**

- a. restriction      b. utilization      c. inhibition      d. deterioration

**29 - A patient developing diarrhea tends to have .....**

- a. permanent flow of the blood  
b. bringing up food from stomach  
c. continual emptying of the bowels  
d. unpleasant desire to eat food

**30 - In his statement, the statistician said that the results of their joint study were virtually the same as those of previous .....**

- a. applications      b. investigations      c. contaminations      d. associations

**31- According to climatic predictions, ..... weather conditions in 2050 will be a widespread global threat if preventive measures are not taken.**

- a. advisable      b. promising      c. rewarding      d. adverse

**32- The Covid-19 ..... was first identified in China, and rapidly spread worldwide.**

- a. addiction      b. suspension      c. outbreak      d. outskirts

**33 - The patient was really concerned about her illness, so she ..... followed the promising instruction of her physician.**

- a. reluctantly      b. willingly      c. ignorantly      d. pessimistically

**34 - In the past, surgeons were not able to operate on the liver due to its ..... or sensitiveness to touch.**

- a. vitality      b. affinity      c. frailty      d. maturity

**35 - Without the ..... action of the emergency room staff, the patient with heart attack surely would have died.**

- a. prompt      b. delayed      c. desperate      d. destructive

**36 - Scientists have not reached a complete ..... the cause of the disease. Further investigation is needed to reach a general agreement.**

- a. contribution to      b. scope of      c. consensus on      d. struggle for

**37 - According to WHO, the main ..... of health include the socio-economic environment, the physical environment, and the person's individual characteristics and behaviors.**

- a. determinants      b. deterrents      c. detectors      d. detergents

**38 - When you exercise regularly, you may feel more competent and confident in your body, which in turn ..... your mental wellbeing.**

- a. precedes      b. prevents      c. projects      d. promotes

**39 - Some supplements can.....with medications and cause side effects, so you may want to consult a doctor if you have a medical condition.**

- a. cope      b. converse      c. interact      d. deal

**40 - Although many ..... are developed to relieve headache symptoms, a number of effective and natural treatments also exist.**

- a. aspirations      b. medications      c. intentions      d. emissions