(Part 1) From the given words, please choose one to name each part of the human body. (10%)  

Questions 1-5:

1. A. abdomen  
   B. thigh  
   C. cheek  
   D. hip  
   E. waist

(Part 2) Please choose one word to fill in each blank. (20%)  

Questions 6-15:

6. With the outbreak of swine flu, how to control this highly contagious disease has become a major _____ for people around the world.  
   (A. harm  B. doubt  C. obstacle  D. concern)

7. Tooth _____ is the most common disease of humanity.  
   (A. floss  B. decay  C. paste  D. brush)

8. Survival in the desert has always depended on the _____ of water.  
   (A. capability  B. intensity  C. availability  D. density)

9. X-rays are able to pass through objects and thus make _____ details that are otherwise impossible to observe.  
   (A. vague  B. visible  C. obscure  D. hidden)

10. Coronary heart disease (CHD) is another non-infectious disease which can be _____ by changes in our lifestyle.  
    (A. promoted  B. increased  C. prevented  D. raised)

11. When a bacterium becomes too large, it splits in half and forms two new bacteria, _____ its own cell wall and protoplasm.  
    (A. each has  B. with each  C. has each  D. each with)

12. Chemistry is the science of substances _____ the science of energy.  
    (A. is physics  B. or physics  C. how physics  D. and physics is)
13. Earthworms occur _____ adequate moisture and food and the necessary soil conditions are found.
   (A. and       B. but       C. however       D. wherever)

14. Authorities have found that the addition of antibiotics to livestock fodder _____ humans immune to the
drugs.
   (A. be making  B. can be made  C. can make  D. make)

15. _____ that the formation of the sun, the planets, and other stars began with the condensation of an
   interstellar gas cloud.
   (A. Believing  B. To believe  C. The belief  D. It is believed)

(Part 3) Please choose one definition closest to the meaning of the underlined word. (20%)

Questions 16-25:

16. Gems are usually cut to bring out their natural luster and to remove any flaws.
   (A. germs  B. samples  C. flakes  D. defects)

17. Compound microscopes have two separate lenses or sets of lenses.
   (A. split  B. equal  C. detachable  D. distinct)

18. Proper exercise plays a significant role in the rehabilitation of patients with various back ailments.
   (A. operation  B. recovery  C. casting  D. relaxation)

19. The revolutionary pathway that led to photosynthetic bacteria is different from the one that resulted in
green plants.
   (A. course  B. headway  C. mutation  D. rigor)

20. Biomedical research may soon discover a way to extend human life.
   (A. improve  B. duplicate  C. change  D. lengthen)

21. A fly’s wings are so thin that the veins show through.
   (A. bones  B. blood vessels  C. ligaments  D. shoulder muscles)

22. Security officials say that computer crime is easy to accomplish and hard to detect.
   (A. explain  B. plan  C. uncover  D. ignore)

23. Biologists have ascertained that specialized cells convert chemical energy into mechanical energy.
   (A. determined  B. argued  C. pretended  D. hypothesized)

24. In mathematics the term “solid” describes a geometric figure with three dimensions.
   (A. angle  B. shape  C. triangle  D. equation)

25. Life in the forest is a constant battle for survival.
   (A. flight  B. struggle  C. option  D. process)
(Part 4) From the given words, please choose one to fill in each blank. (30%)

Questions 26-30:

A. swollen  B. hurt  C. plenty  D. fever  E. upset

Doctor: Jane, you’re back again! What seems to be the trouble?
Jane : Well, I woke up this morning with a terrible headache. I had an __26__ stomach, too. My whole body feels hot, and my muscles __27__. Oh, and I’m starting to get a sore throat.
Doctor: Well, your forehead feels really warm. You probably have a __28__. Let me see your throat …. Ah-hah. It’s all red and __29__. I think you’ve got another case of the flu. I want you to take two aspirin four times a day, drink a lot of juice and get __30__ of rest, OK?

Questions 31-35:

A. recognized  B. produce  C. distinguish  D. develops  E. ignores

The most puzzling questions in immunology is “How does the body know what is a foreign substance?” We all have thousands of different molecules and cells inside our bodies, yet our immune system usually __31__ anything which belongs to our own body. In other words, our immune system can __32__ “self” from “non-self”. We now know that this ability __33__ in fetal life, that is, when a baby is still a fetus in its mother’s womb. Any molecule which meets the immune system during fetal life will be __34__ as “self” throughout the person’s life. The person will never __35__ an immune response against that particular molecule, unless something goes wrong with his immune system.

Questions 36-40:

A. access  B. minority  C. transplants  D. poverty  E. influenza

The most important cause of illness and death in the Third World is __36__. One quarter of children die before five. They die from diarrhea, __37__, and even the common cold. The health policy of any country is a social and political issue. This is particularly true in poor countries. Resources are often spent on a rich __38__. In India, 80 percent of people live in small towns and villages but 80 percent of doctors work in the big cities. More than half the population has no __39__ to a doctor. Yet many Indian cities have sophisticated, modern hospitals where doctors perform kidney __40__ and open heart surgery.

(Part 5) Reading comprehension. (20%)

Questions 41-45:

In April 1803, Napoleon Bonaparte negotiated the sale of the Louisiana Territory with the envoys of President Thomas Jefferson. For the fifteen million dollars needed to continue his war in Europe, Napoleon turned the entire Louisiana Territory over to the United States. Neither the French nor the Americans were aware of the vast amount of land the sale involved. It was later discovered to include over eight hundred thousand square miles.
Only a short time before the agreement was reached, Napoleon had acquired Louisiana from Spain with the intention of making Louisiana the center of a great French-American empire. However, when President Jefferson sent word that he was interested in buying New Orleans, Napoleon gave up this dream. The envoys were offered all of Louisiana or nothing, and they gladly took it all. At one stroke of the pen and without even a threat of war, the Louisiana Purchase doubled the size of the United States, pushed back the frontier, and secured the Mississippi River as a highway for Western trade. It was by far the best bargain in American diplomatic history.

41. Why did Napoleon sell Louisiana?
   (A) It was too far from France.
   (B) He was in need of money.
   (C) It was too large to govern.
   (D) He was unable to defend it.

42. The most unusual feature of the sale was that
   (A) it was negotiated in a very short period of time.
   (B) it involved a very valuable piece of land.
   (C) no one really wanted most of the land.
   (D) neither country knew how much land was involved.

43. One of the significant aspects of the Louisiana Purchase was that it
   (A) cost less than had originally been offered.
   (B) resulted from a direct negotiation with France.
   (C) removed all foreign powers from the United States.
   (D) expanded the United States without a war.

44. What did the Louisiana Purchase do for the United States?
   (A) It made the country twice as large.
   (B) It lessened the threat of war with Spain.
   (C) It provided a border on the Pacific Ocean.
   (D) It added 80,000 square miles.

45. Acquisition of the Mississippi River was important to the United States because it
   (A) was a recognizable frontier.
   (B) provided a route for trade with the West.
   (C) expanded American power.
   (D) made New Orleans an international port.

Questions 46-50:

A special research team organized and dispatched from the local medical center performed experiments on the completely blind infants. The test sample included twenty completely blind infants, who lived at home with their mothers or family. The research workers visited the infants and closely observed the developments of their sense and behavior every two weeks.
In most cases, the research workers tested the response of the blind infant to different stimuli common in the family environment. Generally speaking, a normal baby would react with smiles and laughter to tickling, to the voice of a relative, and to hugging from his family. His reactions were swift and fleet. Nevertheless, most of the blind infants, according to the experiments, responded to stimuli impassively. In fact, they were apathetic and indifferent to any sound. But under some special circumstances, some of them were able to react to the sound of their mothers with a smile. Usually, their response was very slow and phlegmatic.

The tests were conducted over a nine month period, and they began when the blind infants were one month old and ended when they were ten months old.

46. The responses of the blind infants to the stimuli
   (A) were the same as the normal infants.
   (B) were different at first but later the same as the normal infants.
   (C) were slower than the normal infants.
   (D) were swift and speedy.

47. Which of the following statements is true?
   (A) A normal baby responded to the stimuli impassively.
   (B) A normal baby’s reaction to the sound was phlegmatic.
   (C) A group of nurses took care of the blind infants at the medical center.
   (D) Some of the blind infants were able to respond to their mother’s voice.

48. The test period for the blind infants was
   (A) one month.
   (B) nine months.
   (C) ten months.
   (D) about a year.

49. How were the experiments conducted?
   (A) The scientists tested them in the medical center.
   (B) The blind infants were visited by research workers every two weeks.
   (C) The blind infants were made to compare with the normal infants.
   (D) Their mothers were invited to tickle them.

50. According to the passage, the blind infants
   (A) reacted with smiles to hugging from their mothers.
   (B) were tested for almost a year.
   (C) lacked in feeling to the sound.
   (D) were happy with their families.