



**Please answer all of the following questions in the answer sheet. (Total marks 50)

❖ **Section One: Reading**

A. Read and answer the questions:(10 M.)

The first two decades of this century were dominated by the microbe hunters. These hunters had tracked down one after another of the microbes responsible for the most dreaded scourges of many centuries: tuberculosis, cholera, diphtheria. But there remained some terrible diseases for which no microbe could be incriminated: scurvy, pellagra, rickets, beriberi. Then it was discovered that these diseases were caused by the lack of vitamins, a trace substance in the diet. The diseases could be prevented or cured by consuming foods that contained the vitamins. And so in the decades of the 1920's and 1930's, nutrition became a science and the vitamin hunters replaced the microbe hunters.

In the 1940's and 1950's, biochemists strived to learn why each of the vitamins was essential for health. They discovered that key enzymes in metabolism depend on one or another of the vitamins as coenzymes to perform the chemistry that provides cells with energy for growth and function. Now, these enzyme hunters occupied center stage.

You are aware that the enzyme hunters have been replaced by a new breed of hunters who are tracking genes—the blueprints for each of the enzymes—and are discovering the defective genes that cause inherited diseases—diabetes, cystic fibrosis. These gene hunters, or genetic engineers, use recombinant DNA technology to identify and clone genes and introduce them into bacterial cells and plants to create factories for the massive production of hormones and vaccines for medicine and for better crops for agriculture. Biotechnology has become a multibillion-dollar industry.

In view of the inexorable progress in science, we can expect that the gene hunters will be replaced in the spotlight. When and by whom? Which kind of hunter will dominate the scene in the last decade of our waning century and in the early decades of the next? I wonder whether the hunters who will occupy the spotlight will be neurobiologists who apply the techniques of the enzyme and gene hunters to the functions of the brain; What to call them? The head hunters. I will return to them later.

1. What is the main topic of the passage?

- (A) The microbe hunters
- (B) The potential of genetic engineering
- (C) The progress of modern medical research
- (D) The discovery of enzymes

2. The word "which" in line 3 refers to

- (A) diseases
- (B) microbe
- (C) cholera
- (D) diphtheria

3. The word "incriminated" in line 4 is closest in meaning to

- (A) investigated
- (B) blamed
- (C) eliminated
- (D) produced

4. Which of the following can be cured by a change in diet?

- (A) Tuberculosis
- (B) Cholera
- (C) Cystic fibrosis
- (D) Pellagra

5. How do vitamins influence health?

- (A) They are necessary for some enzymes to function.
- (B) They protect the body from microbes.
- (C) They keep food from spoiling.
- (D) They are broken down by cells to produce energy.

6. In the 3rd paragraph, the author compares cells that have been genetically altered by biotechnicians to

- (A) gardens
- (B) factories
- (C) hunters
- (D) spotlights

7. The word "them" in line 15 refers to

- (A) cells and plants
- (B) hormones
- (C) genes
- (D) gene hunters or genetic engineers

8. It is implied that the most important medical research topic of the future will be

- (A) the functions of the brain
- (B) inherited diseases
- (C) the operation of vitamins
- (D) the structure of genes

9. Which of the following best describes the author's tone in the last paragraph of the passage?

- (A) Critical
- (B) Speculative
- (C) Appreciative
- (D) Emotional

10. With which of the following statements would the author be most likely to agree?

- (A) The focus of medical research will change in the next two decades.
- (B) Medical breakthroughs often depend on luck.
- (C) Medical research throughout the twentieth century has been dominated by microbe hunters.
- (D) Most diseases are caused by defective genes

B. Read the following paragraph and answer the questions.(5 marks)

Costa Rica is a great place to spend a vacation for two reasons. First of all, Costa Rica has an excellent system of national parks where visitors can observe nature. For example, in Tortuguero National Park, visitors can watch sea turtles come ashore to lay their eggs in the sand. Then they can come back several months later to see the new babies crawl down to the sea. In Santa Rosa National Park, visitors can see unusual birds such as toucans and quetzals and exotic animals such as spider monkeys. Second, Costa Rica has many beautiful beaches. For instance, the beaches at Manuel Antonio National Park are among the most beautiful in the world, and the beaches on Canoa and Cocos Islands offer perfect conditions for snorkeling and scuba diving. Indeed, Costa Rica is a wonderful place to go if you love the outdoors.

1. What is the topic sentence?
2. What are the supporting major sentences?
3. What are the supporting minor sentences?
4. What words tell you that these are examples?
5. What is the concluding sentence?

❖ **Section Two:(Structure)**

A. Read and decide if it is a fragment or a sentence. Write F for fragment and S for sentence. (5 marks)

1. Every family that lives in an earthquake area should have an earthquake plan.
2. For example, Californians who live in certain areas.
3. Every family should keep emergency food and water in their house.
4. Also, a radio and a barbecue grill that they can use for cooking.
5. Capital punishment, which is legal killing by the government

B. Underline all independent clauses with a solid line and all dependent clauses with a broken line. Then, write the words simple, compound, or complex to identify each sentence type.(5 M.)

1. Unusual vacations are becoming popular.

2. For example, people go hiking in Nepal or river rafting in Ecuador.
3. Some people spend their vacations learning, and some spend their vacations helping others.
4. A friend of mine studied Spanish during his vacation as his firm is going to send him to Spain to work.
5. A friend of mine likes to help people, so he spent his summer helping to build a school in Bangladesh.

C. Write S if the sentence is simple and C if the sentence is compound. Add commas if necessary. (5 M.)

1. My sisters were afraid of most bugs but they loved to catch fire flies.
2. We usually had to go to bed at nine o'clock but on really warm evenings we could stay up until ten.
3. Between nine and ten o'clock our mother or our father told us to come inside to get ready for bed.
4. Sometimes it was still hot in our small bedroom so our parents let us sleep outside in the backyard.
5. In those days, parents didn't worry about crime and no one locked their front doors at night.

D. Decide whether the underlined words are adjectives or adverbs. Then, write the word each one describes. (5 M.)

1. The sick child sat quietly reading a comic book.
2. I am very shy, so I don't talk easily in front of strangers.
3. The little girl smiled shyly at her new friend.
4. The barking dog disturbed the neighborhood.
5. The loudly barking dog disturbed the whole neighborhood.

❖ **Section Three: (Writing 15 M.)**

A. Read the following paragraph then decide where sentences begin and end in this paragraph. Add punctuation at the end of each sentence, and change the first letter of each new sentence to a capital.

there are many hazards associated with working with chemicals people who work with chemicals are required to know the hazards of the substances in their working area, and learn how to use them safely information on most substances is found on chemical safety data sheets, which are normally provided by the companies that you purchase your chemicals from laboratories should have a collection of safety data sheets for all chemicals found in their laboratory each chemical safety data sheet contains information, in a clear and concise manner, regarding a specific chemical such as physical data, recommended ppe. stability and reactivity, emergency and first aid procedures, health effects, toxicity, handling and storage, ecological information, and disposal considerations chemical safety sheets contain more data and information about the hazardous substance than the label found on the container holding the hazardous substance

B. Write a well-prepared paragraph (100-120 words) about Only One of the following topics:

- Describe a study subject that you know well. Why is that subject special to you?
- What programming languages have you learned this semester? Based on your experience, what advice would you give to someone who wants to learn to learn these programming languages?
- What are the advantages and disadvantages of living in a small town?

****Pay attention to the organization of your ideas, vocabulary, grammar, spelling and punctuation.**

Best of Luck

