



DPM CLASSES & COMPUTERS

Special for Math's & Science

By - Er. Dharmendra Sir (9584873492,7974073108)

SCIENCE -9 (CH-13- WHY DO WE FALL ILL)

Question 1:

State any two conditions essential for good health.

Answer 1:

The two conditions essential for good health are:

- (i) An individual must have better health facilities and more professionals to deal with health problems.
- (ii) All basic necessary conditions to prevent diseases must be present. For example, proper garbage collection and disposal, clearing of drains, supply of healthy drinking water, etc.

Question 2:

State any two conditions essential for being free of disease.

Answer 2:

The two conditions essential for being free of diseases are:

- (i) Personal hygiene and cleanliness are necessary to stay away from diseases.
- (ii) Individuals should take a balanced diet that contains carbohydrates, fats, proteins, vitamins, fibres, and proper quantity of water.

Question 3:

Are the answers to the above questions necessarily the same or different? Why?

Answer 3:

No. The answers to the above questions may not necessarily be the same. This is because a disease free state is not the same as being healthy. Good health is the ability of an individual to realise his or her full potential. Individuals can have poor health without having any identifiable disease. Also, health is related to society and community, whereas having a disease is about an individual sick person. Hence, the conditions for good health and for being disease free can be same or even different.



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Question 1:

List any three reasons why you would think that you are sick and ought to see a doctor. If only one of these symptoms were present, would you still go to the doctor? Why or why not?

Answer 1:

Symptoms such as a headache, stomach pain, nausea, vomiting, fever, etc., make us feel that we are sick and must visit a doctor. These symptoms basically indicate that there might be a disease, but we cannot predict the kind of disease. Therefore, it becomes necessary to visit a doctor so that the disease can be identified and can be treated with proper medication. However, if only one of these symptoms is present, we usually do not visit a doctor. This is because such symptoms do not have much effect on our general health and ability to work. However, if a person is experiencing these symptoms for quite sometime, then he needs to visit a doctor for proper treatment.

Question 2:

In which of the following case do you think the long-term effects on your health are likely to be most unpleasant?

- If you get jaundice,
- if you get lice,
- If you get acne.

Why?

Answer 2:

Jaundice is a disease that can cause long-term effects on our health. It is a chronic disease that lasts for a long period of time. Jaundice does not spread rapidly, but it develops slowly over a period of time.

Question 1:

Why are we normally advised to take bland and nourishing food when we are sick?

Answer 1:

We are normally advised to consume bland and nourishing food when we are sick so that we can get the nutrients and energy quickly to fight off the foreign disease-causing agents.



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Question 2:

What are the different means by which infectious diseases are spread?

Answer 2:

Diseases can be spread through various means such as air, water, sexual contact, blood, and vector.

- (i) Certain disease-causing micro-organisms are expelled in **air** by coughing, sneezing, talking, etc. These micro-organisms can travel through dust particles or water droplets in air to reach other people. For example, tuberculosis, pneumonia, etc. spread through air.
- (ii) Sometimes causal micro-organisms get mixed with drinking **water** and spread water borne diseases. Cholera for example is water borne disease.
- (iii) **Sexual** act between two people can lead to the transfer of diseases such as syphilis, gonorrhoea, AIDS, etc.
- (iv) Certain diseases such as AIDS can spread via **blood to blood** contact during blood transfusion or pregnancy.
- (v) Certain diseases spread by animals called **vectors**. For example mosquitoes spread malaria.

Question 3:

What precautions can you take in your school to reduce the incidence of infectious diseases?

Answer 3:

Precautions to reduce incidence of infectious diseases are:

- (i) Stay away from the diseased person.
- (ii) Cover your mouth or nose while coughing or sneezing to prevent the spread of disease.
- (iii) Drink safe water.
- (iv) Keep the environment clean to prevent mosquitoes from breeding.

Question 4:

What is immunization?

Answer 4:

Immunization is defined as protection of the body from communicable diseases by administration of some agent that mimics the microbe. This suspension of killed microbes that mimics the disease-causing microbes is known as vaccine.



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Question 5:

What are the immunization programmes available at the nearest health centre in your locality?
Which of these diseases are the major health problems in your area?

Answer 5:

The immunization programmes available at the nearest health centre are DPT (Diphtheria, Pertussis, and Tetanus), polio vaccine, hepatitis B, MMR (Measles, Mumps, and Rubella), jaundice, typhoid, etc.

Of all these diseases, jaundice and typhoid are major health problems.

Question 1:

How many times did you fall ill in the last one year? What were the illnesses?

(a) Think of one change you could make in your habits in order to avoid any of /most of the above illnesses.

(b) Think of one change you would wish for in your surroundings in order to avoid any of/most of the above illnesses.

Answer 1:

This varies from person to person. Some people fall ill several times in a year, while others do not fall ill at all. A person's immune system and hygiene-related habits play a major role in determining the person's health.

Question 2:

A doctor/nurse/health-worker is exposed to more sick people than others in the community.
Find out how she/he avoids getting sick herself/himself.

Answer 2:

The following precautions must be taken by a doctor/ nurse/ health-worker:

- (i) Wearing a mask when in contact with a diseased person.
- (ii) Keeping yourself covered while moving around an infected place.
- (iii) Drinking safe water.
- (iv) Eating healthy and nutritious food.
- (v) Ensuring proper cleanliness and personal hygiene.



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Question 3:

Conduct a survey in your neighbourhood to find out what the three most common diseases are. Suggest three steps that could be taken by your local authorities to bring down the incidence of these diseases.

Answer 3:

Three most common diseases are:

- (i) Tuberculosis
- (ii) Typhoid
- (iii) Jaundice

Steps to be taken to bring down the incidence of these diseases are:

- (i) Proper disposal of sewage.
- (ii) Ensuring supply of safe drinking water.
- (iii) Providing a clean environment and preventing mosquitoes from breeding.

Question 4:

A baby is not able to tell her/his caretakers that she/he is sick. What would help us to find out

- (a) that the baby is sick?
- (b) what is the sickness?

Answer 4:

- (a) The baby is sick can be determined by his/her behavioural changes such as constant crying of baby, improper intake of food, frequent mood changes, etc.
- (b) The sickness is determined by symptoms or indications that can be seen in the baby. The symptoms include vomiting, fever, loose motion, paleness in the body, etc.



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Question 5:

Under which of the following conditions is a person most likely to fall sick?

- (a) when she is recovering from malaria.
 - (b) when she has recovered from malaria and is taking care of someone suffering from chicken-pox.
 - (c) when she is on a four-day fast after recovering from malaria and is taking care of someone suffering from chicken-pox.
- Why?

Answer 5:

(c) A person is more likely to fall sick when she is on a four day fast after recovering from malaria and is taking care of someone who is suffering from chicken pox. This is because she is fasting during recovery, and her immune system is so weak that it is not able to protect its own body from any foreign infection. If she is taking care of someone suffering from chicken pox, then she has more chances of getting infected from chicken pox virus and will get sick again with this disease.

Question 6:

Under which of the following conditions are you most likely to fall sick?

- (a) when you are taking examinations.
 - (b) when you have travelled by bus and train for two days.
 - (c) when your friend is suffering from measles.
- Why?

Answer 6:

(c) You are more likely to fall sick when your friend is suffering from measles. This is because measles is highly contagious and can easily spread through respiration i.e., through air. Thus, if your friend is suffering from measles, stay away from him otherwise you might easily get infected with the disease.