



III. Short Answer Type Questions

Question 1. Give the difference between acute disease and chronic disease.

Answer:

Acute disease	Chronic disease
1. It may last for few days. 2. It does not have major effect on body.	1. It lasts for longer period. 2. It affects the body drastically.

Question 2. State two main causes of disease.

Answer: Two main causes of disease are immediate cause and contributory cause. Immediate cause: This is due to the organisms that enter our body and cause disease. Example, virus, protozoa, bacteria.

Contributory cause: These are the secondary factors which lead these organisms to enter our body. Example, dirty water, unclean surrounding, contaminated food etc.

Question 3. Define vaccine and name two vaccines.

Answer: Vaccine is a chemical /drug given in advance to a body to give immunity against certain diseases.

Vaccines given to children are:

(a) BCG—for tuberculosis prevention

(b) Polio drops—for polio prevention

Question 4. What is antibiotic penicillin? Give its function.

Answer: Penicillin antibiotic blocks the bacterial processes that build the cell wall. Due to this drug, the bacteria is unable to make a protective cell wall and dies easily. It is used to cure the diseases and infections caused by bacteria.

Question 5. Bacteria is a cell, antibiotics can kill these bacteria (cell), Human body is also made of cells how does it affect our body?

Answer: Antibiotics block the biochemical pathway of bacteria by which it makes a protective cell wall around it. Antibiotic does not allow the bacteria to make this cell wall because of which they die. Human body cell don't make any cell wall so antibiotics cannot have any such effect on our body.

Question 6. How does cholera becomes an epidemic in a locality?

Answer: Cholera is an infectious disease that spreads due to unsafe water. It can spread in a locality; if a person suffering from cholera lives in the locality and the excreta of this person, get mixed with the drinking water used by people living nearby. The cholera-causing microbe enters the new hosts through the water they drink and cause disease in them.

Question 7. Name the organs affected due to the following diseases: Malaria, jaundice, Japanese encephalitis, typhoid.

Answer:

1. Malaria: Infects liver and red blood cells

2. Jaundice: Infects the liver.
3. Japanese encephalitis: Infects the brain
4. Typhoid: Infects blood.

Question 8. Why are sick patients advised to take bed rest?

Answer: Doctors advise to take bed rest for sick patients so that they can conserve their energy which can be used for healing of their body organs which were affected due to certain disease.

Question 9. How do we kill microbes that enter our body and cause diseases?

Answer: Microbes can be killed by using medicines. These microbes are of different categories—virus, bacteria, fungi or protozoa. Each of these groups of organisms have some essential biochemical life processes which is peculiar to a particular group and is not shared by others. These pathways are not used by us. By using drugs that blocks the microbial synthesis pathway without affecting us can kill the microbes.

Question 10. What are disease specific means of prevention?

Answer: The disease specific means of prevention are the use of vaccines. The vaccines, are used against tetanus, diphtheria, whooping cough, measles, polio and many others.

Question 11. Why can't we make antiviral medicines/drugs?

Answer: The viruses lie on the border line of living and non-living organisms. The viruses can live, grow and multiply only inside the host body. They cannot be grown or cultured and their biological pathways cannot be affected. Hence, the antiviral medicines/drugs is difficult to make.

Question 12. Write a short note on malaria as a disease, its symptoms and control.

Answer: Malaria is caused by protozoa that lives in blood. This parasite enters our body through a female Anopheles mosquito bite which is the vector, visits water to lay eggs, the protozoa enters our blood stream when female mosquito bites us. This protozoa affects our liver and red blood cells.

Symptoms: Very high fever with periodic shivering, headache and muscular pain. -

Control: Use of quinine drug, keeping the surroundings clean with no stagnant water, use of mosquito repellent creams, nets, can control the spread of this disease.

Question 13. What is AIDS? How does a person get affected with HIV?

Answer: AIDS is Acquired Immuno Deficiency Syndrome, it is caused due to HIV— human immuno deficiency virus. This virus reduces the immunity of human body. Therefore if any microbe enters the body of a person it causes disease killing the person.

The virus is transmitted from infected person to other person by any of the following way:

- (a) Blood transfusion.
- (b) From mother (infected) to baby in the womb.
- (c) From mother's milk to lactating baby.
- (d) By sexual contact.
- (e) Sharing of needle with an infected person.

Question 14. Becoming exposed to or infected with an infectious microbe does not necessarily mean developing noticeable disease. Explain.

Answer: This is because the immune system of our body is normally fighting off microbes. Our body have cells that are specialised in killing infecting microbes. Whenever any microbes or foreign body enters our system, these cells become active and kill the microbes that could cause any damage to the body. These immune cells

manage to kill off the infection and a person does not get disease.

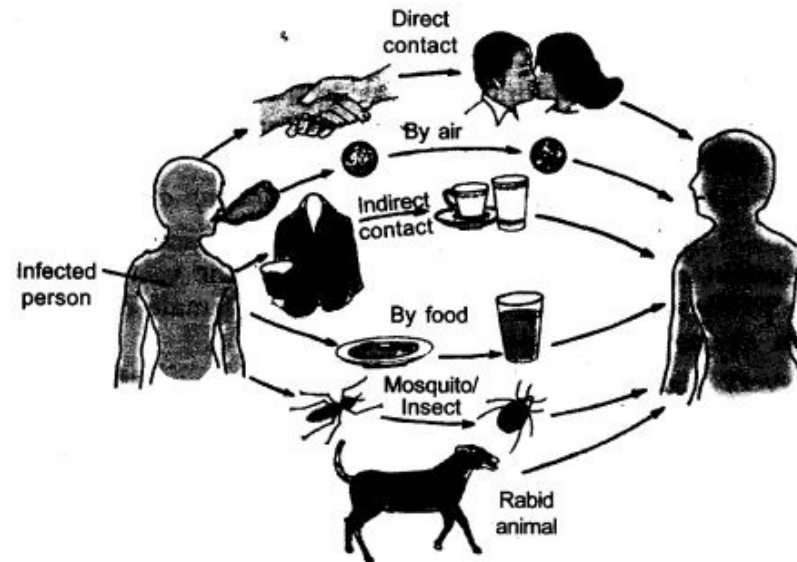
Question 15. What are three limitations for the approach to deal with infectious diseases?

Answer: The three limitations are:

- (1) If someone has a disease, their body functions are damaged and may never recover completely.
- (2) As the treatment will take time, the person suffering from a disease is likely to be bedridden for some time.
- (3) The infectious person can serve as the source from where the infection may spread to other people.

Question 16. Give the common methods of transmission of diseases.

Answer:



The common methods of transmission of diseases are:

- (1) By air - cough, cold, tuberculosis
- (2) By food and water - typhoid, jaundice
- (3) By mosquito bite - malaria
- (4) By rabid animal - rabies
- (5) By direct contact - skin infection, small pox, AIDS
- (6) By indirect contact - typhoid, chickenpox

Question 17. What are the basic conditions for good health?

Answer: The basic conditions for good health are:

- (1) Proper balanced and nutritious diet
- (2) Personal hygiene
- (3) Clean surroundings and clean environment
- (4) Regular rest
- (5) Proper rest
- (6) Good economic status.

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