

8. Diseases

Exercises

1 A. Question

Answer the following question.

What is meant by epidemic diseases?

Answer

The diseases which are spread rapidly to a large number of people simultaneously within a short period of time due to certain changes in weather or sudden contamination of water are called epidemic diseases. Examples: Diarrhoea, Cholera, typhoid, Influenza, conjunctivitis etc.

1 B. Question

Answer the following question.

What is meant by communicable diseases?

Answer

The diseases which are spread or caught due to constant sharing of space from the diseased person. The germs enter from the diseased person to healthy ones through air. Such types of diseases are called communicable diseases. Example: Tuberculosis, Influenza, cough, cold etc.

1 C. Question

Answer the following question.

Why should a person suffering from tuberculosis avoid going to public places?

Answer

Tuberculosis is considered to be the most easily communicable disease. The disease spreads easily through air. The germs enter the air from the spittle of the affected person. So a healthy person gets easily infected. Hence a person suffering from tuberculosis should avoid going to public places.

2. Question

What are the symptoms of the following diseases?

Polio, cholera, tuberculosis, typhoid.

Answer

Symptoms of polio are-

- a) Fever
- b) Throat becomes red
- c) Weakness in muscles of arms and legs
- d) Strain in muscles of back and legs
- e) Muscles become flaccid and cause disability
- f) Growth of muscles is arrested.

Symptoms of cholera are-

- a) Dry skin, sunken eyes.
- b) Dehydration
- c) Muscle cramps
- d) Stomach ache
- e) Severe diarrhea, vomiting

Symptoms of tuberculosis are -

- a) Cough
- b) Low grade fever
- c) Blood in spittle
- d) Pain in chest
- e) Loss of weight
- f) Breathing difficulty.

Symptoms of typhoid are -

- a) Fever last for a definite period.
- b) Rose coloured rashes on chest.
- c) Diarrhoea
- d) Headache

3. Question

What measures can be taken to prevent the following diseases?

Rabies, chickenpox, tuberculosis.

Answer

Preventive measures for rabies:

The wound caused by animal bite should be properly cleaned by flushing soap and water. Required number of anti-rabies vaccine should be given to the patient. Pet animals should be given anti-rabies vaccine.

Preventive measures for chicken pox:

- i. Proper medical treatment
- ii. Care should be taken to isolate patient from other healthy individuals.
- iii. Varicella vaccine should be given to children.

Preventive measures for tuberculosis are:

- i. Taking BCG vaccine
- ii. Isolation of the patient
- iii. Proper medical treatment

4 A. Question

Write notes on the following:

Dehydration

Answer

The excessive loss of water from body due to vomiting, loose motions etc. causing the body to dry is called dehydration. It can prove fatal for young and weak children. ORS is given to the patient to get relief from dehydration. Sugar, salt present in ORS provides energy and water hydrates our body. Later the patient should be properly treated.

4 B. Question

Write notes on the following:

Vaccination

Answer

Vaccination is a preventive measure for prevention of various diseases. There are various vaccines for various diseases which are recommended to give to a person starting from its birth at appropriate age. Some vaccines are given orally like pulse polio and some through injections like DPT, BCG etc. Various vaccination programme are held by Government of India to check the spread of diseases. Vaccines contain weakened germs of specific disease so that when it is injected in our body, our body produce antibodies against them thus protect us from infection of that particular disease in future. Some examples of vaccines are Salk's vaccine for polio, BCG for tuberculosis, Varicella for chicken pox, DPT for diphtheria, tetanus, whooping cough etc.

5 A. Question

What will you do?

A person having cholera is to be given temporary but immediate treatment.

Answer

A person suffering from cholera has severe diarrhoea and vomiting so there is maximum chance of dehydration. So we should immediately give ORAL Rehydration Therapy.

5 B. Question

What will you do?

Your friend has contracted chickenpox.

Answer

I will tell him to take proper medical treatment, take rest. If scabs are falling from blisters I will advice him to isolate himself from others family members and people so that they may not get the chance to suffer from this disease as it is a contagious disease. Utensils, clothes and other things used by him should be washed properly and kept separate. I should tell him to apply neem and turmeric paste on blisters to avoid itching.

5 C. Question

What will you do?

The diet of a person convalescing after typhoid is to be planned.

Answer

A person should be given clean, fresh food prepared at home. We should not give him uncovered, outside food. We should give him healthy, hygienic and nutritious food which are easy to digest. We should give him boiled and filtered water.

5 D. Question

What will you do?

A child in your class is an AIDS patient

Answer

As AIDS is not a contagious disease so I will allow him to play with other children, give a helping hand to him. Ask others also to mix with him properly, play and study with him. We must not shun him.

6 A. Question

Give scientific reasons for:

One should drink boiled water during epidemics.

Answer

During epidemics there is increase in contamination of water. If we boil the water, most of the germs and microbes get killed. If we drink the unboiled water containing the germs we will suffer from many infectious diseases. In order to avoid such epidemic diseases like cholera, typhoid, diarrhea etc we should drink boiled water during epidemics.

6 B. Question

Give scientific reasons for:

People suffering from communicable diseases should avoid going to public places.

Answer

Communicable diseases easily spread if personal and public cleanliness is not maintained. People suffering from communicable diseases should not urinate, defecate or spit in open because it may lead to spread of varieties of bacteria and virus. They should cover their mouth and nose while sneezing or coughing so that there will be less chance of spread of germs. These diseases spread when a diseased person spread space with others. If a healthy person has low immune power he might get caught by these diseases so it may break into an epidemic. So people suffering from communicable diseases should avoid going to public places.

6 C. Question

Give scientific reasons for:

The wound caused by a dog bite should be flushed clean with soap and water.

Answer

Rabies is caused due to virus which is present in saliva of infected dog. When an infected dog bites it may cause wound, virus along with saliva will enter the blood of bitten person through wound. It may cause infection of virus. So the wound caused by a dog bite should be flushed clean with soap and water to provide protection against rabies.

7. Question

Explain the importance of personal and public cleanliness.

Answer

Communicable and contagious diseases easily spread if personal and public cleanliness is not maintained. Most of the diseases can be prevented by keeping ourselves and our surroundings clean. We should not urinate, defecate or spit in open because it may lead to spread of varieties of bacteria and virus. We should not allow stagnation of water, keep our roads, surroundings and drains clean so that there will be less chance of breeding of flies and mosquitoes which cause varieties of diseases like jaundice, diarrhoea, cholera, typhoid, dengue, malaria etc. If we keep ourselves clean we will have less chance of getting infection. We should cover our mouth and nose while sneezing or coughing so that there will be less chance of spread of germs. In this way both personal and public cleanliness have lot of importance.

Activities

1. Question

Write slogans for the polio eradication campaign.

Answer

Some slogans include-

- a) Do boond zindegi.
- b) Two drops of polio vaccine can eradicate polio from our world.
- c) Spare your child, give them just two drops of polio vaccine.
- d) Now more than ever, stop polio forever.

2. Question

Write slogans related to good health.

Answer

Some slogans are-

- a) Swaach bharat swasth bharat.
- b) A key to good health is good healthy food.
- c) An apple a day keeps a doctor away.

d) A good mind and healthy body have long life.

3. Question

Visit organizations working for people affected by AIDS.

Answer

Some organisations are NACO [National Aids Control Organization], WHO [World Health Organization], NACP [National AIDS Control Programme], NGOs etc.

4. Question

Read the biographies of any two scientists. Write about them in short and show your compositions to your teacher.

Answer

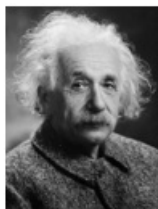
Louis Pasteur: He was a French microbiologist born in 1822. He discovered pasteurization, fermentation process, principle of vaccination etc. He found Germ theory of disease along with Robert Koch. He is regarded as father of microbiology. He discovered vaccine for rabies and anthrax. He show that many microbes spoil beverages like alcohol, beer, milk etc. So he invented a process called pasteurization where liquids like milk is heated to 60-100°C where most microbes get killed and then cooled suddenly. This process prevents the spoilage of liquids like alcohol, milk etc. He founded an institute which bears his name. He has worked a lot on sericulture too.

Jonas Salk- He was an American scientist who discovered vaccine for polio. He was born on October 28 1914 in New-york. He conducted research on polio virus and developed a killed virus vaccine. During his experiment he vaccinated himself, his wife and sons. Then it was approved by National foundation for Infantile paralysis for general use in 1955. Preliminary testing of this vaccine was done in 1952 where the shot was given to children. Later this vaccine was prepared from live virus. He was awarded for his magical discovery against polio virus.

5. Question

Obtain pictures of scientists and display them in your classroom.

Answer



Albert Einstein Louis Pasteur



Robert Koch Jonas Salk



Issac Newton Thomas Alva Edison

6. Question

Much information about AIDS is given in advertisements on radio and TV. Collect such information and make a scrapbook about the topic.

Answer

AIDS stand for Acquired Immuno Deficiency Syndrome. Its causative agent is HIV virus [Human Immuno deficiency Virus]. This virus was discovered in 1986 by Dr. Monteniere and Dr. Gallo. A patient with AIDS loses his immune power so get infected by various disease causing germs. WHO has started worldwide AIDS control programme. NACO was started in India in 1987.

Causes of getting infected by this virus are-

- a) Mother to child during pregnancy.
- b) Contaminated blood transfusion.
- c) Shared injection needles.

Various programmes are organized by Organisations both government and non-profit to make people aware of this virus, how to take preventive measures to avoid this infection.

Some preventive measures include-

- a) Checking of blood for HIV virus before transfusion.
- b) Use of disposable syringes and needles.
- c) A woman should be tested for HIV before getting pregnant.