

Health and Diseases

EXERCISE [PAGE 13]

Exercise | Q 1 | Page 13

Distinguish between- Infections and non infections diseases.

Solution:

Infectious diseases	Non infectious diseases
1. It can be passed from one person to another.	It cannot be passed from one person to another.
2. It is caused by a pathogen.	It is caused due to internal reasons like metabolic or genetic reasons.
3. They are classified as communicable disease.	They are classified as non communicable disease.
4. eg: diarrhoea, cholera, tuberculosis	eg: diabetes, hypertension, cancer

Exercise | Q 2.1 | Page 13

Identify the odd term.

Malaria, hepatitis, elephantiasis, dengue.

Solution: Hepatitis is the odd one out because it is a type of viral infection while the rest of three are spread through the bite of mosquitoes.

Exercise | Q 2.2 | Page 13

Identify the odd term.

Plague, AIDS, cholera, T.B.

Solution: AIDS is the odd one out because it is a viral disease while the rest of them are bacterial diseases.

Exercise | Q 3.1 | Page 13

Answer in one to two sentence.

Which are various media of spreading the infectious diseases ?

Solution: Infectious diseases can spread through air, water, blood to blood contact and animal vectors.

Exercise | Q 3.2 | Page 13

Answer in one to two sentence.

Give the names of five non-infections diseases other than given in the lesson.

Solution: Non infectious diseases- arthritis, cataract, osteoporosis, multiple sclerosis and Alzheimer's.

Exercise | Q 3.3 | Page 13

Answer in one to two sentence.

Which are the main reasons of diabetes and heart diseases ?

Solution: Reasons of heart diseases include smoking, alcoholism, diabetes, hypertension, obesity, lack of physical exercise, mental stress, anxiety and improper diet.

Reasons of diabetes include obesity, lack of physical exercise, mental stress, improper diet and hereditary.

Exercise | Q 4.1 | Page 13

What can be achieved / can be prevented ?

Drinking boiled and filtered water.

Solution: Boiling and filtration are methods of purifying water which makes it suitable for consumption. Drinking boiled and filtered water can help in prevention of water borne diseases such as typhoid, cholera, etc. Most of the water borne diseases are transmitted through the consumption of contaminated water in some or the other form.

Exercise | Q 4.2 | Page 13

What can be achieved / can be prevented ?

Avoiding smoking and alcoholism.

Solution: Smoking and alcoholism are two of the devils of our health and society. Smoking leads to various kinds of respiratory disorders and hinders the process of respiration. It can lead to diseases such as lung cancer. On the other hand, consumption of alcohol, affects the nervous as well as the digestive system of our body.

Avoiding alcohol and smoking can protect individuals from various diseases and can help in living a healthy and stress free life.

Exercise | Q 4.3 | Page 13

What can be achieved / can be prevented ?

Regular balanced diet and exercise.

Solution: Balanced diet and exercise are key to good health. Both of these in combination helps our systems to function properly, helps maintain a healthy weight, reduces body fat, provides the body with energy, promotes good sleep and makes us feel better about ourselves.

Exercise | Q 4.4 | Page 13

What can be achieved / can be prevented ?

Proper checking of blood before blood donation.

Solution: Proper checking of blood before blood donation is required to check that the blood to be transferred is safe in all respects. There are chances of transfer of infectious diseases from the donor, if he/she is suffering from any such diseases. Another important factor for checking of blood before donation is to check that the donor is not anemic (does not have anemia).

Exercise | Q 5 | Page 13

Read the passage and answer the questions.

Master 'X' is a 3 year old child. He is toiler with his family in a slum. Public toilet is present near his house. His father is drunkard. His mother does not know the importance of balanced diet.

1. Master 'X' can suffer from which different possible diseases in above conditions ?
2. How will you help him and his family in this situation ?
3. Which disease can occur to the father of master 'X' ?

Solution: 1. Since, the house of master X is near the toilet and he lives in a slum area, the chances are that there is less cleanliness in that area. There are chances that he may suffer from diseases like salmonellosis, shigellosis, diarrhoea, trachoma, gastroenteritis, giardiasis, tapeworm infection and threadworm infection.

2. In this case, the family needs to be made aware about cleanliness in and around their houses. There is a need to explain them the importance of balanced diet for them and

their child. Since, the father is a drunks, he needs counselling and treatment to get rid of the habit of alcoholism.

3. The father of master X is a drunkard which means he might suffer from diseases such as heart diseases, liver cirrhosis, ulcers and gastrointestinal problems, brain damage etc.

Exercise | Q 6.1 | Page 13

Give the preventive measures of following disease.

Dengue

Solution: Dengue is a mosquito borne disease which is transmitted by Aedes mosquitoes which grow in clean and stagnant water. The breeding of this mosquito can be prevented by adopting the following steps:

1. larva-eating fishes should be introduced in ponds
2. collection and storage of water should always be done in closed vessels
3. potted plants should have proper drainage to avoid collection of water in the pots
4. pesticides should be used against mosquitoes as and when required.

Exercise | Q 6.2 | Page 13

Give the preventive measures of following disease.

Cancer

Solution: Preventive measures for cancer:

1. Have a healthy diet
2. Exercise regularly
3. Avoid smoking and alcohol
4. Go for regular health checkups

Exercise | Q 6.3 | Page 13

Give the preventive measures of following disease.

AIDS

Solution: Preventive measures for AIDS are:

1. Avoid sexual contact with unknown persons
2. Screening of blood before transfusion
3. Avoid sharing of needles

Exercise | Q 7.1 | Page 13

Explain the importance.

Balanced diet.

Solution: A balanced diet is a diet containing all nutrients (carbohydrates, fats, proteins, vitamins, etc.) in the right quantities. A balanced diet helps us in various ways:

- provides us with important nutrients required for the growth of body
- helps us to stay fit and free from diseases
- helps in strengthening the immune system
- helps our systems to function properly
- helps maintain a healthy weight
- reduces body fat
- provides the body with energy
- promotes good sleep and makes us feel better about ourselves

Exercise | Q 7.2 | Page 13

Explain the importance.

Physical exercise / Yogasanas.

Solution: Importance of exercise and yogasanas are:

- reduces the risk of heart attack
- helps in managing weight better
- helps in maintaining blood cholesterol level
- lowers the risk of type 2 diabetes and some cancers
- helps in maintaining the blood pressure levels
- helps in attaining stronger bones, muscles and joints and lowers the risk of osteoporosis
- boosts the energy levels, makes you feel relaxed

Exercise | Q 8 | Page 13

Make a list.

A. Viral diseases.

B. Bacterial diseases.

C. Diseases spread through insects.

D. Hereditary diseases.

Solution:

Type of Disease	Example
Viral	Measels, Mumps, Swine flu, Chicken pox

Bacterial	Tuberculosis, Diptheria, Tetanus, Cholera, Typhoid
Insects	Dengue, Malaria, Plague
Hereditary	Diabetes, Hypertension, Cancer

Exercise | Q 9 | Page 13

Write the information on modern diagnostics and treatments of cancer.

Solution: Cancer: Cancer is a non-infectious, deadly disease that results in the uncontrolled growth of the tumor cells or cancer cells. About 20% of the world's total population suffers from cancer.

As technology develops, there are modern ways to diagnose and treat cancer in an efficient way.

Treatments:

- **Radiation therapy** uses high-intensity radiations to kill cancer cells.
- **Chemotherapy** uses chemical drugs.
- **Immunotherapy** activates the body's immune system to fight against cancer cells.
- **Stem cell treatment.**

Diagnostics:

- **Biopsy** where a small tissue is taken and tested.
- **Endoscopy** where a thin camera is inserted into the body organs.
- **Blood tests.**
- **Sputum and bronchial washing analysis** use the sputum or bronchial sections to be analyzed.

Exercise | Q 10 | Page 13

Enlist the names and composition of the medicines present at your home.

Solution: The following medicines are found in our houses:

1. Paracip- Paracetamol/Acetaminophen
2. Digene- Dried Aluminium Hydroxide, Magnesium Aluminium Silicate Hydrate, Magnesium Hydroxide, Simethicone
3. Volini- Diclofenac diethylamine BP, Linseed Oil BP (Oleum Lini), Methyl salicylate,

Menthol IP, Benzyl Alcohol IP.

4. Vomikind- Ondansetron