

CHAPTER - 2

HEALTH: THE ULTIMATE TREASURE

I. VERY SHORT ANSWER TYPE [2 MARKS]

1. Define health as per WHO (T. Bk. Q. 1)

Ans "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."

2. Distinguish signs from symptoms with one example each (T. Bk. Q. 2)

Ans Signs: Changes in the body that can be seen or measured by others. Eg: Fever.

Symptoms: Problems experienced only by the patient and cannot be seen by others. Eg: Headache.

3. What is innate immunity? Name any one barrier. (T. Bk. Q. 3)

Ans Innate immunity is the fast, first line of defense that you are born with. It does not need practice and acts the same way against many germs.
Barriers: Tough outer cover that blocks germs.

4. What is active artificial immunity? Give one example (T. Bk. Q. 4)

Ans It is a type of immunity where you receive a vaccine (weakened / killed germs) allowing the body to safely learn how to defend itself against the disease.
Eg: Polio vaccine.

5. Why don't antibiotics cure the common cold? (T. Bk. Q. 5)

Ans Antibiotics do not cure Viral illnesses or protozoal diseases. Those require antiviral medicines or antiprotozoal drugs, respectively.

6. Define antibiotic resistance. (T. Bk. Q. 6)

Ans Antibiotic resistance is the ability of bacteria to survive and multiply despite being exposed to a medicine that once killed them or stopped their growth.

II SHORT ANSWER TYPE (3 MARKS)

1. List any three components of a healthy lifestyle. (T. Bk. Q. 1)

Ans * Balanced diet - Eating nutritious food to provide the body with essential energy and health.

* Daily Movement - Doing regular physical activity or exercise to keep the body fit and strong.

* Sleep - Getting enough rest to allow the body and mind to recover and recharge.

2. Name three innate barriers - One Physical, one Chemical, and one biological. (T. Bk. Q. 2)

Ans Physical barrier: Mucus in nose and throat traps dust and microbes.

Chemical barrier: Stomach acid kills many swallowed germs.

Biological barrier: Good microbes (normal flora) on skin and in gut compete with harmful germs and keep them in check.

3. Give three ways vaccination benefits the community. (T. Bk. Q. 4)

Ans * Reduces Disease Spread : Helps protect the community by actively minimizing the spread of infections.

* Safeguards all ages : Acts as an effective tool to protect everyone, from infants to older adults, against serious illness.

* Shields The Community : Getting vaccinated protects the individual and helps shield the people around them.

4. Mention three measures to prevent food and water-borne diseases. (T. Bk. Q 6)

Ans Food-borne diseases like food poisoning, diarrhoea, dysentery etc. are preventable by providing clean, fresh food or use of properly cooked food or hygienic handling of food to avoid any microbial contamination.

Water-borne diseases like Cholera, typhoid, amoebiasis, ascariasis etc. are preventable by providing safe drinking water or use of boiled water or treatment of water to kill any microbial contamination.

III. Long Answer Type [5 Marks]

1. Summarise human, agricultural, Environmental and healthcare pathways that spread antibiotic resistance in society. (T. Bk. Q 4)

Ans a) Human use : Taking antibiotics for viral illnesses (colds, flu) using the wrong drug / dose, stopping early or self-medicating leaves behind survivors bacteria that are resistant.

b) Agricultural use: (Animals & crops)

Antibiotics used in livestock and poultry in aquaculture and sometimes on crops can select resistant bacteria in animals and on plants.

c) Environmental Pathways (water, soil, waste)

Sewage from homes and hospitals contains resistant bacteria and residual antibiotics that can select for more resistance.

Improper disposal of medicines (flushing pills) and industrial effluents from pharmaceutical production add to the problem.

Resistant bacteria persist in rivers, lakes and soil and can return to humans via drinking water, irrigation, or recreational water use.

d) Healthcare settings (clinics and hospitals)

Many antibiotics are used; Patients are vulnerable; Lines, catheters, and ventilators breach normal barriers.