

19.11.2021

## HOMWORK

Q1. AIDS is a preventable disease.  
Give reasons.

Ans:- Diseases that can be avoided under certain ~~in~~ circumstances are known as preventable diseases.

AIDS is a preventable disease because

1. AIDS can be avoided by not sharing needles with anyone.
2. By using condoms.
3. By preventing unprotected sexual contact.

Q2. How does the body defend against invasion?

Ans:- ~~There are 2 ways~~

1. When a pathogen enters the body, it stimulates the immune system of our body.
2. The immune system produces antibodies, which are proteins that fight against the disease causing pathogen.

3. If they are successful, we do not come down with any disease.
4. The immune cells manage to kill off the infection long before it ~~even~~ assumes major proportions.
5. Along with that, components that are secreted by the skin or mucosa such as sweat, saliva, tears, mucus, help provide a basic barrier against invading pathogens.

Q3. Why antibiotics are not effective on viruses?

Ans- 1. The role of antibiotics is that it blocks the  $\downarrow$  bacterial synthesis pathway i.e. cell wall. ~~and therefore,~~

X.2. Since cell wall is not present in viruses, it does not affect ~~its~~ ~~it~~ it.

2. Due to the absence of cell wall in viruses and the

presence of a protein coat called capsid, antibiotics are not effective on it.