

# Practice Questions of Class 12 Biology Human Health and Disease **Answers at the Bottom**

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## Ch-8 Human Health and Disease

1. Pathogenic bacterium that cause typhoid fever in human being is
  1. Streptococcus typhi
  2. Salmonella feverish
  3. Salmonella typhi
  4. Streptococcus pneumonia
2. Antigen binding site in an antibody is found between
  1. Either between two light chains or between one heavy and one light chain depending upon the nature of antigen
  2. Two heavy chains
  3. One heavy and one light chain
  4. Two light chains
3. Addiction is a psychological attachment to certain effects such as
  1. None of these
  2. Euphoria and temporary feeling of well beings
  3. Hydrophobia and temporary feeling of well beings
  4. Euphoria and permanent feeling of well beings
4. AIDS can be transmitted by
  1. Hugging
  2. Handshake
  3. Courtship
  4. Blood transfusion
5. Marijuana, hashish, charas and ganja are known for their effects on
  1. Digestive system of the body
  2. Cardiovascular system of the body
  3. Reproductive system of the body
  4. Respiratory system of the body
6. Which form of *E. histolytica* serves for transmission of the parasite?
7. All normal cells have inherent characteristics of becoming cancerous. Explain.
8. Name the two types of cells in which the HIV multiplies after gaining entry into the human body.
9. Name the disease against which DPT vaccine develops immunity.
10. What happens in lymphoid organs with respect to immunity?
11. Mention the useful as well as the harmful drug obtained from the latex of poppy plant.

12. Expand the following terms:
1. MALT
  2. CMI
  3. AIDS
  4. NACO
  5. HIV
13. Write a short note on vaccination.
14. How HIV multiplies in the host body?
15. Define the term addiction. Name some drugs which are normally used as medicines but are often abused.

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### Answer

1.
  - c. Salmonella typhi, **Explanation:** Typhoid fever in human being is caused by Salmonella typhi. The pathogen enters to small intestine through food and contaminated water and migrates to other organs through blood.
2.
  - a. One heavy and one light chain, **Explanation:** The antigen-binding (Fab) fragment is a region on an antibody that binds to antigens. It is composed of one constant and one variable domain of each of the heavy and the light chain.
3.
  - b. Euphoria and temporary feeling of well beings, **Explanation:** Because natural pleasures in our lives are necessary for survival, the limbic system creates an appetite that drives you to seek out those things. Euphoria is an affective state in which a person experiences pleasure or excitement and intense feelings of well-being and happiness. Certain drugs, many of which are addictive, can cause euphoria, which at least partially motivates their recreational use.
4.
  - d. Blood transfusion, **Explanation:** AIDS can be transmitted from infected person to healthy person through blood transfusion. The most common way of transmission of AIDS is during sexual intercourse with multiple partners without protection.
5.
  - b. Cardiovascular system of the body, **Explanation:** The cardiovascular system consists of the heart, blood vessels, and the approximately 5 liters of blood that the blood vessels transport. Marijuana, Hashsh, Charas and Ganja are generally taken by inhalation and oral ingestion. They cause their effects on cardiovascular system of the body.
6. Tetranucleate cyst
7. All normal cells have cellular oncogenes (c-onc) or proto oncogenes when activated under certain conditions, can lead to oncogenic transformation of cells.

8. Macrophages and Helper T-lymphocytes
9. Diphtheria, Pertussis (whooping cough) and tetanus.
10. The maturation and proliferation of lymphocytes.
11. – Morphine is useful drug.  
– Heroin is harmful drug.
12.
  1. MALT – Mucosal associated lymphoid tissue
  2. CMI – Cell Mediated Immunity
  3. AIDS – Acquired Immuno Deficiency Syndrome
  4. NACO – National AIDS control Organisation
  5. HIV – Human Immuno Deficiency Virus.
13. **Vaccination:** Vaccination is a technique to develop immunity without inducing actual infection. It is based on the property of ‘memory’ of the immune system. Weakened (attenuated) or dead pathogens are injected into a person to be immunized against that pathogen’s active form. The pathogen administered through a vaccine is unable to cause the disease but is sufficient to stimulate the formation of antibodies by activating the host’s immune system that recognizes the antigens. Thus, a vaccinated person develops immunity against the pathogen without contracting the disease. The vaccines also generate memory- B and T-cells that recognize the pathogen quickly on subsequent exposure and massively produce antibodies quickly thus dominating over the pathogen. This method comes under active immunization.
14. HIV enters into macrophages and its RNA replicates with the hosts cell DNA, so the infected cells produce virus particles and finally act as HIV factory. Now HIV enters into T-lymphocytes to replicate and thus there is a decrease in number of Helper T-cells.
15. Addiction is a psychological attachment to certain effects – such as euphoria and a temporary feeling of well-being associated with drugs and alcohol. Barbiturates, amphetamines, benzodiazepines and LSD (Lysergic acid diethyl amides) are normally used as medicines to help patients cope with mental illnesses are often abused.