

**SAINIK SCHOOL GOPALGANJ**  
**ASSIGNMENTS**  
**BIOLOGY (044)**

**Chapter 08: Human Health and Disease**

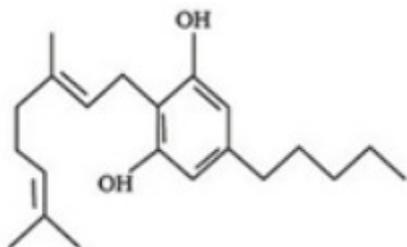
**Class: XII**

***General Instructions***

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1. All questions are compulsory.
  2. Question 1 to 10 is multiple choice questions.
  3. Question 11 to 15 is short answer questions.
  4. Question 16 to 20 is long answer questions
- .....

1. If you suspect major deficiency of antibodies in a person, to which of the following would you look for confirmatory evidence?
  - A. Serum globulins
  - B. Fibrinogen in plasma
  - C. Serum albumin
  - D. haemocytes
2. Which of the following immunoglobulins does constitute the largest percentage in human milk?
  - A. IgM
  - B. IgA
  - C. IgD
  - D. IgE
3. Antivenom injections contain preformed antibodies while polio drops that are administered into the body contain
  - A. Attenuated pathogens
  - B. Activated pathogens
  - C. Gamma globulin
  - D. Harvested antibodies
4. In higher vertebrates, the immune system can distinguish between its own cells and foreign cells. If this property is lost due to genetic abnormalities, and it attacks its own cells, then it leads to
  - A. Activated immunity
  - B. Graft rejection
  - C. Autoimmune disease
  - D. None of the above
5. Asthma may be attributed to
  - A. Inflammation of the trachea
  - B. Accumulation of fluid in lungs
  - C. Bacterial infection of lungs
  - D. Allergic reaction of the mast cells in the lungs

6. Which of the following sets of diseases are caused by bacteria?
- Tetanus and mumps
  - Herpes and influenza
  - Typhoid and smallpox
  - Cholera and tetanus
7. Which of the following disease is caused by a protozoan?
- Influenza
  - Cancer
  - Syphilis
  - Babesiosis
8. Grafted kidneys may be rejected in a patient due to
- Cell mediated immune response
  - Passive immune response
  - Innate immune response
  - Humoral immune response
9. The active form of *Entamoeba histolytica* feed upon
- Only blood
  - Erythrocytes, mucosa and submucosa of colon
  - Mucosa and submucosa of colon only
  - Food in intestine
10. The cell-mediated immunity inside the human body is carried out by
- Thrombocytes
  - erythrocytes
  - T-lymphocytes
  - B-lymphocytes
11. List the preventive barriers that protect the body against microbial bacteria entering the gut through the food consumed. Name the immunity type observed in this case.
12. How is active immunity different from passive immunity?
13. Answer the following questions on the outline structure of a drug shown below:
- Name the group of drugs this structure represents.
  - List the modes of consumption of this drug
  - Which organ of the body is affected by the consumption of this drug?



Q14. What is cancer? What causes a normal cell to turn cancerous? How is it different from a normal cell?

15. Which pathogenic virus would mutate faster, one with DNA or RNA? Why?

Q16. How to detect cancer? What are a few approaches to treat cancer?

Q17. Explain why excessive dosage and abusive usage of drugs such as amphetamines, LSD and barbiturates used to treat mental illness, are considered harmful? What are the major effects of the usage of drugs in humans?

Q18. What is a recombinant DNA vaccine? List two such vaccines. State their advantages.

Q19. What is malaria? List out the symptoms of malaria? Draw a labeled diagram of life cycle of malarial parasite.

Q20. State the principle of vaccination. How can vaccines be used to prevent microbial infections? Write the name of the entity from which the hepatitis B vaccine is synthesized.