

## CBSE NCERT Based Chapter wise Questions (2025-2026)

## Class-XII

**Subject: Biology**

**Total : 9 Marks (expected) [MCQ-1 Mark, AR-1 Mark, SA-3, CBQ-4 Marks]**

**Chapter Name : *Human Health and Diseases* (Chap : 7)**

## Level - 2

### Multiple Choice Questions:

**[1 Marks MCQ]**

- 1.** A person likely to develop tetanus is immunised by administering—
- (A) preformed antibodies                      (B) wide spectrum antibodies  
(C) weakened germs                          (D) dead germs

**[Hints : Acquired immunity]**

2. The term health is defined in many ways. The most accurate definition would be
  - (A) Health is the state of body and mind in a balanced condition
  - (B) Health is the reflection of a healthy mind
  - (C) Health is the state of complete physical, mental and social well being
  - (D) Health is the symbol of physical prosperity
3. The sporozoites that cause infection when a female *Anopheles* mosquito bites a person, are formed in
  - (A) liver of the person
  - (B) RBCs of mosquito
  - (C) salivary glands of mosquito
  - (D) gut of mosquito

**[Hints : Malarial infection]**

4. In malignant tumours, cells proliferate, grow rapidly and move to other parts of the body to form new tumours. This stage of the disease is called
- (A) metagenesis      (B) metastasis      (C) mitosis      (D) meiosis

**[Hints : Spread of cancer]**

5. B-lymphocytes are associated with
- (A) Humoral immunity (B) Inflammatory response
- (C) Cell mediated immunity (D) Phagocytosis
6. Transplantation of tissues/organs often fails due to rejection of such tissues/organs by the recipient. Which type of immune response is responsible for each rejections?
- (A) Autoimmune response (B) Humoral immune response
- (C) Physiological immune response (D) Cell mediated immune response

**[Hints : Graft rejection]**

7. Which of the following antibodies form innate immunity?
- (A) IgE                      (B) IgD                      (C) IgM                      (D) IgG
8. Tobacco consumption is known to stimulate secretion of adrenaline and nor-adrenaline. The component causing this could be \_\_\_\_\_
- (A) nicotine                  (B) tannic acid                  (C) curamin                  (D) catechin

**[Hints : Drug addition]**

**Assertion Reason Type Questions:****[1 Marks ARQ]**

**Directions:** The following two questions consist of two statements – Assertion and Reason (R). Answer these questions by selecting the appropriate option given below :

A : Both A and R are true, and R is the correct explanation of A.

B : Both A and R are true, and R is not the correct explanation of A.

C : A is true but R is false

D : A is false but R is true.

9. **A:** Interferons are glycoproteins produced by virally infected cells.

**R:** Interferons stimulate inflammation at the site of injury.

**[Hints : Protection against viral infection]**

10. **A:** Dope test is a blood test used to know whether a person taking part in a competition used any drug.

**R:** A drunken person usually feels tense and talks less.

**[Hints : Alcohol abuse]**

11. **A:** Mast cells in the body release excess amounts of inflammatory chemicals, which cause allergic reactions.

**R:** Allergens in the environment, on reaching the human body, stimulate mast cells in some individuals.

**[Hints : Causes of allergic response]**

12. **A:** Second infection of the same pathogen is quickly eliminated.

**R:** Preformed memory B and T-cells elicit a slow response on pathogens.

13. **A:** Immunisation is done by successful delivery of vaccines.

**R:** Vaccines are microbial preparations used to induce protective immunity.

**[Hints : passive immunity, vaccination principle]**

14. **A:** Proto-oncogenes are cellular genes required for normal growth.

**R:** Under certain conditions, they lead to oncogenic transformation of the cell.

**[Hints : Oncogenes ]**

**Short Answer Type Questions:****[3 Marks SAQ]**

15. Why does a doctor administer tetanus antitoxin and not a tetanus vaccine to a child injured in an accident with a bleeding wound?

**[Hints : Speed of action of the antitoxin]**

16. Explain the relationship between B-lymphocytes and T-lymphocytes in developing an immune response.

17. Why is tobacco smoking associated with rise in blood pressure and emphysema? Explain.

**[Hints : Nicotine; release of CO]**

18. What would happen to the immune system if thymus gland is removed from the body of a person?

**[Hints : Differentiation of immature lymphocytes]**

19. How are autoimmune diseases different from immunodeficiency diseases? Give two examples of each.

20. What are withdrawal symptoms? List any four such symptoms.

**[Hints : Drug abuse]**

21. (a) Name the causative agents of pneumonia and common cold.  
 (b) How do these differ in their symptoms?  
 (c) Mention two symptoms common to both.
22. (a) It is generally observed that children who had suffered from chicken pox in their childhood may not contract the same disease in their adulthood. Explain the basis of such an immunity in an individual.  
 (b) It is said that vaccines are must for a healthy society. Explain.

[Hints : Active immunity; large scale protection offered by vaccination]

23. (a) All humans have cellular oncogenes; but only a few suffer from cancer. Explain why.  
 (b) How is a malignant tumour different from a benign tumour?

[Hints : Role of carcinogens in activating oncogenes, immunity level]

24. A doctor prescribed morphine as a sedative and a pain killer to a person who had undergone surgery. Even after recovery, he craved for the prescribed medicine.  
 (a) what do you conclude about his condition.  
 (b) Briefly explain any two ways he can undertake to overcome the addiction.

[Hints : Drug dependence]

25. (a) Why is taking 'smack' considered as an abuse?  
 (b) Write the chemical name of 'smack' and name its source plant.  
 (c) Syringes and needles, used by the youth for taking the drug, could prove to be fatal. Why?

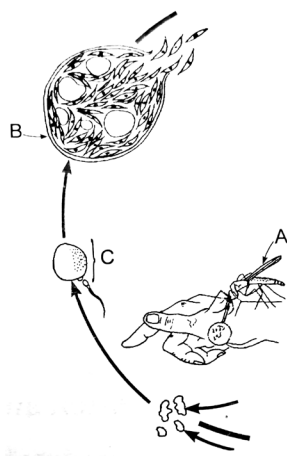
[Hints : Drug dependence; Transmission of AIDS or Hepatitis B]

### Case-Based Questions

26. A team of students are preparing to participate in the interschool sports meet. During a practice session, you find some vial with labels of certain cannabinoids.  
 (a) Will you report to the authorities? Justify your answer.  
 (b) Name a plant from which such chemicals are obtained.  
 (c) Write the effects of these chemicals on the human body.

[Hints : See 'cannabinoids']

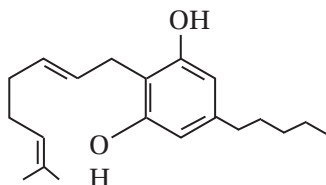
27. Study a part of the life cycle of the malarial parasite given below and answer the questions that follow:



- (a) Mention the roles of 'A' in the life cycle of the malarial parasite.

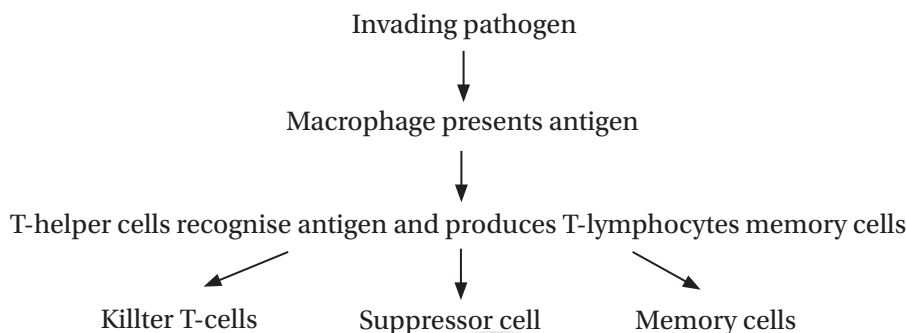
- (b) Name the event 'C' and the organ where this event occurs.  
 (c) Identify the organ 'B' and name the cells being released from it.

28. Study the structure given below and answer the following questions:



- (a) Name the molecule shown above.  
 (b) How are such drugs consumed?  
 (c) Why are such drugs consumed? Name the human organ affected by the consumption of these drugs.

29. Given below is the flow chart for cell mediated immune response.



- (a) Name any two types of cells which act as 'cellular barriers' to provide innate immunity in humans.  
 (b) What is the function of 'memory cells'?  
 (c) How do cytokine barriers provide innate immunity in humans?

## ANSWER

- |        |         |
|--------|---------|
| 1. (A) | 8. (A)  |
| 2. (C) | 9. (C)  |
| 3. (D) | 10. (B) |
| 4. (B) | 11. (A) |
| 5. (A) | 12. (C) |
| 6. (D) | 13. (A) |
| 7. (D) | 14. (B) |