

# RASHTRIYA MILITARY SCHOOL BENGALURU

## CHAPTER-WISE TEST CH 8 HUMAN HEALTH AND DISEASES

### Class 12 - Biology

Time Allowed: 3 hours

Maximum Marks: 70

#### General Instructions:

1. All questions are compulsory.
2. The question paper has five sections and 33 questions. All questions are compulsory.
3. Section–A has 16 questions of 1 mark each; Section–B has 5 questions of 2 marks each; Section– C has 7 questions of 3 marks each; Section– D has 2 case-based questions of 4 marks each; and Section–E has 3 questions of 5 marks each.
4. There is no overall choice. However, internal choices have been provided in some questions. A student has to attempt only one of the alternatives in such questions.
5. Wherever necessary, neat and properly labeled diagrams should be drawn.

#### Section A

1. Marijuana, hashish, charas, and Ganga are a group of drugs collectively called: [1]  
a) Coke  
b) Opioids  
c) Crack  
d) Cannabinoids
2. Withdrawal syndrome like anxiety, shakiness, nausea, and sweating due to: [1]  
a) If the excessive dose of drugs or alcohol is taken.  
b) If a regular dose of drugs or alcohol is taken for a long time.  
c) If a regular dose of drug or alcohol is abruptly discontinued.  
d) If water is not mixed in alcohol and drug.
3. AIDS is caused by Human immunodeficiency virus (HIV) which is a member of a group of virus called: [1]  
a) Retrovirus  
b) Mono virus  
c) Miso virus  
d) Micro virus
4. Development of a vaccine is difficult for AIDS because HIV gene: [1]  
a) Integrates into large number of host genes  
b) Integrates its genome into that of helper T cells  
c) Undergoes reverse transcriptase  
d) Undergoes mutation at rapid
5. The disease-causing microorganisms are called: [1]  
a) Fungi  
b) Microbes  
c) Pathogen  
d) Allotropes
6. Which of the following drug are a very effective sedative and painkiller? [1]  
a) Heroine  
b) Morphine

- c) Coke  
d) Alcohol
7. Addiction is a psychological attachment to certain effects such as: [1]  
 a) None of these  
 b) Euphoria and a temporary feeling of well beings  
 c) Hydrophobia and a temporary feeling of well beings  
 d) Euphoria and permanent feeling of well beings
8. AIDS is caused by HIV. Among the following, which one is not a mode of transmission of HIV? [1]  
 a) Shaking hands with infected persons  
 b) Sexual contact with infected persons  
 c) Transfusion of contaminated blood  
 d) Sharing the infected needles
9. The organisms which cause diseases in plants and animals are called: [1]  
 a) Vectors  
 b) Insects  
 c) Worms  
 d) Pathogens
10. ELISA is: [1]  
 a) Enzyme linked Immunity sex assay  
 b) Enzyme-linked immunosorbent assay  
 c) Enzyme-linked ions assay  
 d) Enzyme linked inductive assay
11. The principle of vaccination is based on the property of: [1]  
 i. Specificity  
 ii. Diversity  
 iii. Memory  
 iv. Discrimination between **self** and **non-self**  
 a) only iii  
 b) ii and iii  
 c) iv and i  
 d) i and ii
12. The sporozoites that cause infection when a female Anopheles mosquito bites a person, are formed in: [1]  
 a) RBCs of mosquito  
 b) salivary glands of mosquito  
 c) liver of the person  
 d) gut of mosquito
13. **Assertion:** Dope test is used to estimate the level of blood alcohol by analyzing the breath of persons drinking alcohol. [1]  
**Reason:** A drunken person usually feels tense and less talkative.  
 a) Assertion and reason both are wrong.  
 b) Assertion and reason both are true but reason is not correct explanation of assertion.  
 c) Assertion is correct statement but reason is wrong statement.  
 d) Assertion is true but reason is wrong.
14. **Assertion:** Cancerous cells just continue to divide giving rise to masses of cells called tumors. [1]  
**Reason:** Cancer cells appear to have lost property of contact inhibition.  
 a) Assertion and reason both are correct statements and reason is correct explanation  
 b) Assertion and reason both are correct statements but reason is not correct

for assertion.

explanation for assertion.

c) Assertion is correct statement but reason is wrong statement.

d) Assertion is wrong statement but reason is correct statement.

15. **Assertion (A):** A person who has received a cut and is bleeding needs to be given anti-tetanus treatment. [1]

**Reason (R):** Anti-tetanus injection provides immunity by producing antibodies for tetanus.

a) Both A and R are true and R is the correct explanation of A.

b) Both A and R are true but R is not the correct explanation of A.

c) A is true but R is false.

d) A is false but R is true.

16. **Assertion (A):** Tetanus can be diagnosed by Mantoux test. [1]

**Reason (R):** In Mantoux test, the dye gives colour to tetanospasmin.

a) Both A and R are true and R is the correct explanation of A.

b) Both A and R are true but R is not the correct explanation of A.

c) A is true but R is false.

d) A is false but R is true

### Section B

17. What would happen to immune system, if thymus gland is removed from the body of a person? [2]

OR

Explain, giving two reasons, how immune response by **vaccine** is different from that by **antitoxin** in humans.

18. Ringworm is one of the most common infectious fungal disease in humans. Name any **two** genera of fungi which cause ringworm and state any of its **two** symptoms. [2]

19. How do neutrophils act as a cellular barrier to pathogens in humans? [2]

20. Mention the two types of acquired immune responses present in our body. Give one major role of each. [2]

21. Explain the role of **B** and **T** lymphocytes in providing immunity to humans. [2]

### Section C

22. What are the early warning signs a parent and a doctor should take note to prevent drug dependence. [3]

23. Prevention is better than cure is an apt slogan to safeguard adolescents from drug abuse. List any 6 steps that could be taken in this regard. [3]

24. How is a cancerous cell different from a normal cell? [3]

OR

Differentiate between vaccination and immunization. Describe the two types of vaccines with suitable examples?

25. Name the cells that act as HIV factory in humans when infected by HIV. Explain the events that occur in the infected cell. [3]

26. a. Why do doctors have to carry out many tests for selecting a person to be a suitable donor for someone who is going for an organ transplant and not take the organ from just anybody? Explain by giving reason. [3]

b. Name the drug a patient who has undergone a successful organ transplant, has to take all his/her life.

27. What are the various public health measures, which you would suggest as safeguard against infectious diseases? [3]

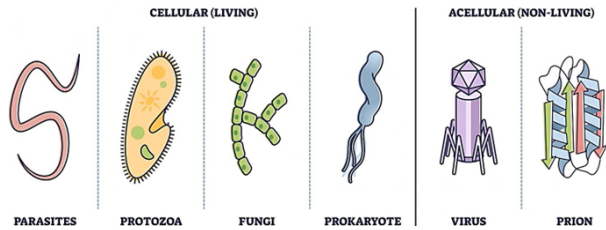
28. For an organ transplant, it is an advantage to have an identical twin. Why? [3]

### Section D

29. **Read the text carefully and answer the questions:** [4]

The pathogen of a disease depends on RBCs of human for growth and reproduction. The person with this pathogen suffers with chill and high fever.

## TYPES OF PATHOGENS



- (i) Identify the disease.
- (ii) Name the pathogen.
- (iii) What is the cause of fever?
- (iv) Represent the life cycle of the pathogen diagrammatically.

30. **Read the text carefully and answer the questions:**

[4]

Siddharth is a chain smoker, he got into this habit in early adolescent due to peer pressure and gradually got addicted in this habit. It is now 20 yrs., he is into the habit of smoking since few months he is experiencing pain in chest, shortness of breathing, wheezing and chronic cough with phlegm.

He sought advice of medical practitioner who diagnosed him with lung cancer.

- (i) Enumerate the two properties of cancer cells.
- (ii) How is lung cancer diagnosed?
- (iii) What do you mean by carcinogen? Give some examples.
- (iv) Differentiate between two different types of tumours.

### Section E

31. Write a short note on Memory cells.

[5]

OR

In your view what motivates youngsters to take to alcohol or drugs and how can this be avoided?

32. A youth in his twenties met with an accident and succumbed to the injuries. His parents agreed to donate his organs. List any two essential clinical steps to be undertaken before any organ transplant. Why is the transplant rejected sometimes? What views would you share with your health club members to promote organ donation?

[5]

OR

What are recombinant DNA vaccines? Give two examples of such vaccines. Discuss their advantages.

33. Write down the functions of lymphatic system.

[5]

OR

Write the events that take place when a vaccine for any disease is introduced into the human body.