



INDIAN SCHOOL DARSAIT

DEPARTMENT OF BIOLOGY



Subject : Biology

Topic : Human Health and
Diseases

Date of worksheet : 9-6-2017

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Date of Submission : _____

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Class & Division : XII A &
B

Roll Number : __

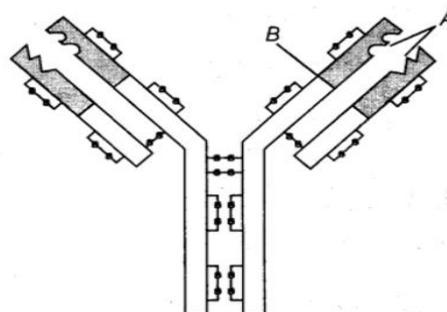
S.No.	Questions	Marks
1	What causes swelling of lower limbs in patients suffering from filariasis? (CBSE Delhi 2008)	1
2	Name the two types of cells in which the HIV multiplies after gaining entry into human body, (CBSE AI 2008)	1
3	How do neutrophils act as a cellular barrier to pathogens in humans? (CBSE AI 2008)	1
4	What role do macrophages play in providing immunity to humans. ? (CBSE AI 2008)	1
5	Give the scientific name of the pathogen causing malignant malaria. (CBSE Foreign 2008)	1
6	High fever, loss of appetite, stomach pain and constipation are some of the symptoms seen in a patient. How would the doctor confirm that the patient is suffering from typhoid and not amoebiasis? (CBSE Foreign 2008)	1
7	Some allergens trigger sneezing and wheezing in human being. What causes this type of response by the body? (CBSE Delhi 2009)	1
8	How does colostrum provide initial protection against disease to new born infants? Give one reason. (CBSE Delhi 2009)	1
9	What type of virus causes AIDS? Name its genetic material? (CBSE AI 2009)	1
10	Name the type of cells, the AIDS virus enters into after getting in the human body. (CBSE AI 2009)	1
11	Where are mucosal associated lymphoid tissues present in the human body and why? (CBSE AI 2009)	1
12	A boy of ten years had chicken pox. He is not expected to have the same disease for the rest of life. Mention how it is possible? (CBSE AI 2009)	1

- 13 What is it that prevent a child to suffer from a disease he / she is vaccinated against? Give one reason. (CBSE Delhi 2010) 1
- 14 How does malaria differ from chikungunya with reference to their vectors? (CBSE AI 2010, Delhi 2008) 1
- 15 Malaria , typhoid, pneumonia and amoebiasis are some of the human infectious diseases. Which one of these are transmitted through mechanical carriers.(CBSE Foreign 2010) 1
- 16 When does human body elicit an anamnestic response? (CBSE Delhi 2011, CBSE AI 2013) 1
- 17 How does smoking tobacco in human lead to oxygen deficiency in their body? (CSBE Delhi 2012) 1
- 18 State two different roles of spleen in the human body? (CBSE AI 2012) 1
- 19 How do interferons protect us? (CBSE AI 2012) 1
- 20 Why do pollen grains of some flower trigger sneezing in some people? (CBSE Foreign 2012) 1
- 21 Mention the useful as well as the harmful drug obtained from the latex of poppy plant. (CBSE Delhi 2013) 1
- 22 State the function of mast cells in allergy response. (CBSE Foreign 2013) 1
- 23 Name any two types of cell that act as ‘cellular barrier’ to provide innate immunity in humans. (CBSE Delhi 2014) 1
- 24 Name the two intermediate hosts on which the human liver fluke depends to complete its life cycle so as to facilitate parasitisation of its primary host? (CBSE Delhi 2014) 1
- 25 Why is secondary immune response more Intense than the primary immune response in humans? (CBSE AI 2014) 1
- 26 Why is Gambusia introduced into drains and ponds? (CBSE AI 2014) 1
- 27 How does haemozoin affect the human body when released in blood during malarial infection? (CBSE Foreign 2014) 1
- 28 What is an autoimmune disease? Give an example. (CBSE Foreign 2014) 1
- 29 In what way is monocyte a cellular barrier with reference to immunity? (CBSE Delhi 2015) 1

- 30 How do cytokine barriers help in evading viral infections? (CBSE Delhi 2015) 1
- 31 Indiscriminate diagnostic practices using X-rays, etc should be avoided. Give one reason. (CBSE Delhi 2015) 1
- 32 Retroviruses have no DNA. However, the DNA of the infected host cell does possess viral DNA. How is it possible? (CBSE AI 2015) 1
- 33 Suggest a method to ensure an anamnestic response in humans. (CBSE Delhi 2017) 1
- 34 Why is using tobacco in any form injurious to thee health? Explain. (CBSE Delhi 2008) 2
- 35 Why do sportsperson often fall victim to cocaine addiction? (CBSE AI 2008) 2
- 36 List four reasons to justify ban on intake of cannabinoids by sportsperson. (CBSE AI 2008) 2
- 37 Due to undue pressure, a group of adolescents started using opioids intra-venously. What are the serious problems they might face in future? (CBSE Foreign 2008) 2
- 38 Name the blank spaces A,B,C and D in the table given below. (CBSE Foreign 2008) 2

Name of the drug	Plant source	Organ system affected
A	Poppy plant	B
Marijuana	C	D

- 39 How do normal cells get transformed into cancerous neoplastic cells? Mention the difference between viral oncogenes and cellular oncogenes. (CBSE Foreign 2008) 2
- 40 Explain the response initiated when a dose of vaccine is introduced into the human body. (CBSE Delhi 2009) 2
- 41 i)What does the below diagram illustrate?
ii)Name the parts labelled A and B.
iii)Name the type of cells that produce this molecule. (CBSE Delhi 2009) 2



- 42 List the specific symptoms of typhoid. Name its causative agent. (CBSE AI 2009) 2
- 43 Name one plant and the addictive drug extracted from its latex. How does this drug affect the human body? (CBSE AI 2009) 2
- 44 How does spleen act as lymphoid organ? Explain. (CBSE Foreign 2009) 2
- 45 What is colostrum? Why is it important to be given to the newborn infants? (CBSE Delhi 2009, Foreign 2009) 2
- 46 i) Explain the property that prevents normal cells from becoming cancerous. 2
 ii) All normal cells have inherent characteristic of becoming cancerous. Explain (CBSE Foreign 2009)
- 47 The barriers in the innate immunity are given in the following table. Identify A, B, C and D. (CBSE Delhi 2010) 2

Types of barrier	Barriers
Physical	Skin, A
Physiological	B, in the eye
C	Interferon
Cellular	WBC, D

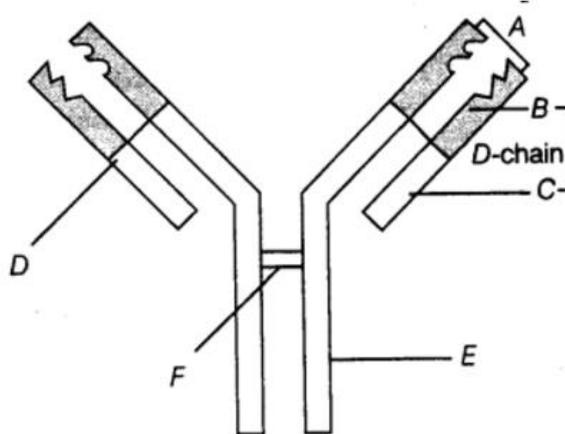
- 48 Name the host and the site, where the following occur in the life cycle of a malarial parasite 2
 i) Formation of gametocytes
 ii) Fusion of gametocytes. (CBSE Delhi 2010)
- 49 State the effect of carcinogens on human body. Name the carcinogenic ionizing and non-ionising radiations. Mention their carcinogenic effect. (CBSE AI 2010) 2
- 50 How do macrophages in the human body act as HIV factory? (CBSE AI 2010) 2
- 51 Why do normal cells do not show cancerous growth? (CBSE AI 2010) 2
- 52 i) How does a vaccine affect immunity? 2
 ii) How can we get immunization against tetanus? (CBSE AI 2010)
- 53 Why does a doctor administer tetanus antitoxin and not a tetanus vaccine to a child injured in a roadside accident with bleeding wound? (CBSE AI 2010) 2
- 54 Define the term health. Mention any two ways of maintaining it. (CBSE AI 2010) 2

55 Name the opioid drug and its source plant. How does the drug affect the human body? (CBSE AI 2010) 2

56 Identify A,B, C and D in the following table (CBSE Foreign 2010) 2

Name of the human disease	Name of the causal bacterial virus	Specific organ or its part affected
Typhoid	<i>Salmonella typhi</i>	A
Common cold	B	C
Pneumonia	<i>Streptococcus pneumoniae</i>	D

57 Identify A, D, E and F in the diagram of antibody molecule given below: (CBSE Delhi 2011) 2



58 Write the scientific names of the causal organisms of elephantiasis and ringworm in humans. Mention the body parts affected by them. (CBSE Delhi 2011) 2

59 Name the two types of immune systems in a human body. Why are cell mediated and humoral immunities so called? (CBSE Delhi 2011) 2

60 List any two emergent circumstances, when a medical doctor would recommend injection of a pre-formed antibody into the body of a patient and why? (CBSE Delhi 2011) 2

61 Why is tobacco smoking associated with rise in blood pressure and emphysema (oxygen deficiency in the body)? Explain. (CBSE AI 2011) 2

62 How is allergic reaction caused by an allergen? Name the drug that can reduce the symptoms of allergy? (CBSE AI 2011) 2

- 63 a) Highlight the role of thymus as a lymphoid organ. 2
 b) Name the cells that are released from the above mentioned gland. Mention how they help in immunity. (CBSE Delhi 2012)
- 64 Name of parasite the causes filariasis in humans. Mention its two diagnostic symptoms. How is this transmitted to others? (CBSE Delhi 2012) 2
- 65 (a) Name the Protozoan parasite that causes amoebic dysentery in humans. 2
 (b) Mention two diagnostic symptoms of the disease.
 (c) How is this disease transmitted to others? (CBSE Delhi 2012, 2009)
- 66 Name the plant source of the drug popularly called smack. How does it affect the body of the abuser? (CBSE Delhi 2012) 2
- 67 Name the two special types of lymphocytes in humans. How do they differ in their roles in immune response? (CBSE AI 2012) 2
- 68 (a) Name the group of viruses responsible for causing AIDS in humans. Why are these viruses so named? 2
 (b) List any two ways of transmission of HIV infection in humans, other than sexual contact. (CBSE AI 2012)
- 69 Why is antibody represented as H_2L_2 ? (CBSE Foreign 2012) 2
- 70 Name the different types of cell providing cellular barrier responsible for innate immunity in humans. (CBSE Foreign 2012) 2
- 71 A patient showed symptoms of sustained high fever, stomach pain and constipation, but no blood clot in stools. Name the disease and its pathogen. Write the diagnostic test for the disease. How does the disease get transmitted? (CBSE Delhi 2013) 2
- 72 How does a vaccine for a particular disease immunize the human against that disease? (CBSE Delhi 2013) 2
- 73 Why is a person with cuts and bruises following an accident administered tetanus antitoxin? Give reasons. (CBSE AI 2013) 2
- 74 Differentiate between active and passive immunity. (CBSE Delhi 2014) 2
- 75 Name an allergen and write the response of human body when exposed to it. (CBSE Delhi 2014) 2
- 76 Write the scientific name of the source plant of the drugs- marijuana and hashish and mention their effect on human body. (CBSE Delhi 2014) 2
- 77 List the symptoms of ascariasis. How does a healthy person acquire this infection? (CBSE AI 2014) 2

- 78 How are morphine and heroin related? Mention the effect each one of them has on the human body? (CBSE AI 2014) 2
- 79 What is 'withdrawal syndrome'? list any two symptoms it is characterized by. (CBSE Foreign 2014) 2
- 80 Name the causative organism of the disease amoebiasis. List three symptoms of the disease. (CBSE Delhi 2016) 2
- 81 Mention one application for each of the following
 a)Passive immunization b)Antihistamine
 c)Colostrum d)Cytokinin –barrier (CBSE AI 2017) 2
- 82 Name the type of immunity the colostrum provides to a newborn baby. Write giving an example where this type of immunity should be provided to a person. (CBSE AI 2017) 2
- 83 Name the group of cells the HIV enters after getting into the human body. What happens in these cells and what are these cells subsequently referred as? Name the next group of cells the HIV attacks from here. (CBSE AI 2017) 2
- 84 i)List any two situations, when a medical doctor would recommend injection of pre-formed antibodies into the body of a patient. Name this kind of immunization and mention its advantages.
 ii)Name the kind of immunity attained when instead of antibodies weakened antigens are introduced into the body. (CBSE Delhi 2008) 3
- 85 (a) Name the infective stages of Plasmodium which Anopheles mosquito takes in along the blood meal from an infected person.
 (b) Why does the infection cause fever in humans?
 (c) Give a flow chart of the part of life cycle of this parasite passed in the insect. (CBSE Foreign, AI 2008) 3
- 86 Give the scientific name of the parasite that causes malignant malaria in humans. At what stage does this parasite enter the human body? Trace its life cycle in human body. (CBSE Delhi 2009, AI 2012) 3
- 87 A person is suffering from ascariasis. Mention the pathogen causing the disease and organs of the body affected. Write three symptoms and one mode of transmission of the disease. (CBSE AI 2009) 3
- 88 How is innate immunity different form the immunity that you acquire through vaccines? Describe any two ways by which innate immunity can be accomplished. (CBSE Foreign 2009, AI 2008) 3
- 89 A person is suffering from amoebiasis. Mention the pathogen that causes it and one organ of the body that get affected. Give three symptoms and one mode of its transmission. (CBSE AI 2008, 2009) 3

90 i) Why do the symptoms of malaria not appear immediately after the entry of sporozoites into the human body when bitten by female anophelous mosquito? Explain. 3
 ii) Give the scientific name of the malarial parasite that causes malignant malaria in humans. (CBSE AI 2009)

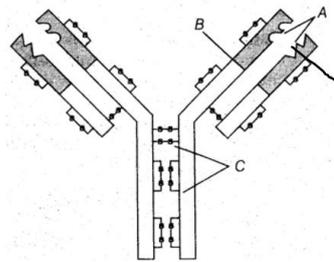
91 Trace the life cycle of Plasmodium in humans from the stage of entry until it is picked up by the female anopheles. (CBSE Delhi 2008, AI 2010) 3

92 (a) All human beings have cellular oncogenes but only a few suffer from cancer diseases. Give reason. 3
 (b) How is malignant tumor different from benign tumor? (CBSE Foreign 2010)

93 Mention the name of the causal organism, symptoms and the mode of transmission of the disease amoebiasis. (CBSE AI 2010) 3

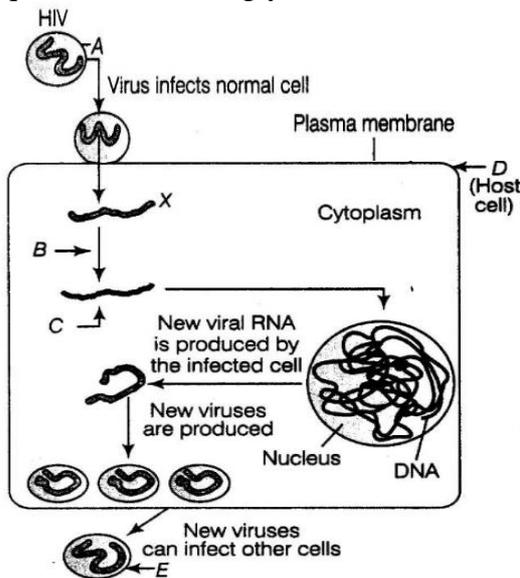
94 An antibody is represented by H₂L₂. Explain. (CBSE Delhi 2009,2010) 3

95 Identify A, B and C in the schematic diagram of an antibody given below and answer the questions. 3



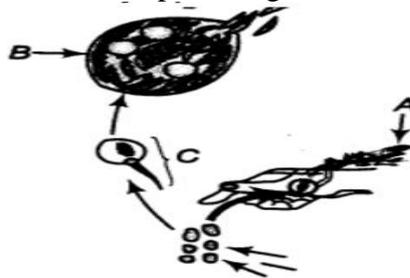
i) Write the chemical nature of an antibody.
 ii) Name the cells that produce antibodies in humans.
 iii) Mention the type of immune response provided by an antibody. (CBSE Delhi 2010)

96 Study the diagram showing replication of HIV in humans and answer the following questions accordingly. 3



- i) Write the chemical nature of the coat.
 - ii) Name the enzyme B acting on X to produce molecule C. Name C.
 - iii) Mention the name of the host cell D the HIV attacks first when it enters into the human body.
 - iv) Name the two different cells the new viruses E subsequently attack.
- (CBSE AI 2011)

- 97 Write the source and the effect on the human body of the following drugs 3
 i)Morphine ii)Cocaine iii)Marijuana (CBSE Delhi 2011)
- 98 How do cellular barriers and cytokine barriers provide innate immunity in humans? 3
 (CBSE Delhi 2011)
- 99 State the functions of primary and secondary lymphoid organs in humans. 3
 (CBSE Delhi 2011)
- 100 i)Name the causative agent of typhoid in humans. 3
 ii)Name the test administered to confirm the disease.
 iii)How does the pathogen gain entry into the human body? Write the diagnostic symptoms and mention the body organ that gets affected in severe cases.
 (CBSE AI 2011)
- 101 i)Name the drug used 3
 a)as an effective sedative and pain killer
 b) for helping patients to cope with mental illness like depression but often misused,
 ii)How does moderate and high dosage of cocaine affect the human body?
 (CBSE Foreign 2011)
- 102 Study a part of the life cycle of malarial parasite given below 3



- i)Mention the roles of A in the life cycle of the malarial parasite.
 - ii)Name the event C and the organ where this event occurs.
 - iii)Identify the organ B and name the cells being released from it. (CBSE Delhi 2012)
- 103 Name the cells HIV attacks first when it gains entry into a human body. How does this virus replicate further to cause immunodeficiency in the body? 3
 (CBSEAI 2010 Delhi 2010, 2013)
- Or
- Trace the events that occur in human body to cause immunodeficiency, when HIV gains entry into the body. (CBSE Foreign 2009, Delhi 2011)

- 114 Prior to a sports event blood and urine samples of sportspersons are collected for drug tests. 3
 (a) Why there is a need to conduct such tests ?
 (b) Name the drugs the authorities usually look for.
 (c) Write the generic name of two plants from which these drugs are obtained.
 (CBSE Delhi 2016)
- 115 A group of youth were having a 'rave party' in an isolated area and was raided by police. 3
 Packets of 'smack' and syringes with needles were found littered around.
 (a) Why is taking 'smack' considered an abuse ?
 (b) Write the chemical name of 'smack' and the name of its source plant.
 (c) Syringes and needles used by the youth for taking the drug could prove to be very fatal. Why?
 (CBSE Delhi 2017)
- 116 (a) What precaution(s) would you recommend to a patient requiring repeated blood 3
 transfusion ?
 (b) If the advise is not followed by the patient, there is an apprehension that the patient might contract a disease that would destroy the immune system of his/her body. Explain with the help of schematic diagram only how the immune system would get affected and destroyed.
 (CBSE Delhi 2017)
- 117 Show with the help of a flow chart only, the life cycle of malarial parasite in humans. 3
 (CBSE Delhi 2017)
- 118 Name a human disease, its causal organism, symptoms (any three) and vector, spread by 3
 intake of water and food contaminated by human faecal- matter. (CBSE AI 2017)
- 119 a) Why is there a fear amongst the guardians that their adolescent wards may get 3
 trapped in drug/alcohol abuse ?
 (b) Explain 'addiction' and 'dependence' in respect of drug/alcohol abuse in youth.
 (CBSE AI 2017)
- 120 A farmer while working on his farm was bitten by a poisonous snake. The workers in the 3
 farm immediately rushed him to the nearby health centre. The doctor right away gave him an injection to save his life. What did the doctor inject and why ? Explain.
 (CBSE Foreign 2017)
- 121 An active member of an awareness group conducted regular programs to sensitize public 4
 against alcoholism amongst youth as a serious health hazard in his locality. Identify the values this member of the group is trying to propagate amongst the people in his locality.
 (Value Based Question CBSE Delhi 2013)
- 122 Peer pressure plays a negative role in triggering smoking habits in adolescents. As a 4
 school captain list any two activities you would like to organize with the help of senior students of your school and any other two activities you would like your school authorities to organize for the students to tackle this problem. Explain how these activities Will help in doing so.
 (CBSE AI 2015)
- 123 You have attended a birthday party hosted by one of your classmates. You found some 4
 guests at the party sitting in a corner making a lot of noise and consuming 'something'.

After a while one of the boys from the group started screaming, behaving abnormally and sweating profusely. On enquiry you found that the group members were taking drugs.

(a) Would you inform your parents/school authorities ? Yes / No. Give reasons in support of your answer.

(b) Prepare a note to be circulated amongst the schoolmates about the sources and dangers of any two drugs.

(c) Write any two ways that you will suggest to your school principal so as to promote awareness amongst the youth against the use of these drugs.

(CBSE Foreign 2015)

- 124 Your school's athletic team along with the athletic teams from different schools reach the venue two days before the inter district school athletic event was to be held. A day before the competition, a team of officials from an agency arrive and ask for blood and urine samples from all the participating athletes. 4
- (a) Would you support or object to this sample collection ? Provide explanation to your answer.
- (b) Write a note that you would like to read out to your team-mates to explain the purpose of this visit of these officials. (CBSE Foreign 2017)
- 125 A person in your colony has recently been diagnosed with AIDS. People / residents in the colony want him to leave the colony for the fear of spread of AIDS. 5
- i) Write your view on this situation, giving reasons.
- ii) List the possible preventive measures that you would suggest to the residents of your locality in a meeting organized by you so that they understand the situation.
- iii) Write the symptoms and the causative agents of AIDS . (CBE AI 2013)
- 126 i) Name and explain any four lymphoid organs present in humans. 5
- ii) Categorise the named lymphoid organs as primary or secondary lymphoid organs , giving reasons. (CBSE Foreign 2014)
- 127 (a) Cancer is one of the most dreaded diseases. Explain 'Contact inhibition' and 'Metastasis' with respect to the disease. 5
- (b) Name the group of genes that have been identified in normal cells that could lead to cancer. How do these genes cause cancer?
- (c) Name any two techniques that are useful in detecting cancers of internal organs.
- (d) Why are cancer patients often given α -interferon as part of the treatment? (CBSE Delhi 2014)
- 128 Explain the process of replication of a retrovirus after it gains entry into the human body. 5 (CBSE AI 2014)
- 129 (a) Name the types of lymphoid organs lymph nodes and thymus are. Explain the role played by them in causing immune response. 5
- (b) Differentiate between innate immunity and acquired immunity. (CBSE Foreign 2017)