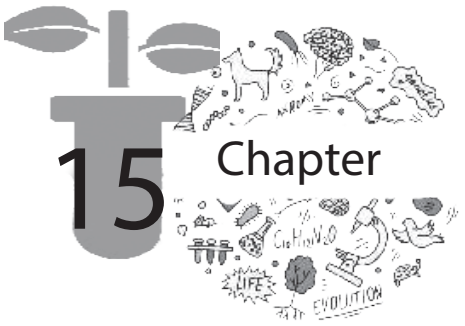


15 Chapter Human Health and Diseases

MULTIPLE CHOICE QUESTIONS

1. Among the following, identify the infectious diseases.
(I) Cancer (II) Influenza
(III) Allergy (IV) Smallpox
(a) (I) and (II) (b) (II) and (III)
(c) (III) and (IV) (d) (II) and (IV)

2. Assertion: Diseases are characterized by the appearance of various signs and symptoms.

Reason: Disease always adversely affects only one organ or system.
(a) Both assertion and reason are true and reason is the correct explanation of assertion.
(b) Both assertion and reason are true but reason is not the correct explanation of assertion
(c) Assertion is true but reason is false.
(d) Both assertion and reason are false.

3. Assertion: AIDS is an infectious disease.

Reason: AIDS can be easily transmitted from one person to another.
(a) Both assertion and reason are true and reason is the correct explanation of assertion.
(b) Both assertion and reason are true but reason is not the correct explanation of assertion.
(c) Assertion is true but reason is false.
(d) Both assertion and reason are false.

4. The 'good humor' hypothesis of health was disproved by the
(a) discovery of blood circulation
(b) discovery of compound microscope
(c) demonstration of normal body temperature in persons with blackbile
(d) both (a) and (c)

5. The term health can be defined as
(a) the state of body and mind in a balanced condition
(b) the reflection of a smiling face
(c) a state of complete physical, mental and social well-being
(d) the symbol of economic prosperity

6. After diagnosis by a psychiatrist, an apparently healthy person was said to be unhealthy because the patient was
(a) inefficient at his work
(b) not prosperous economically
(c) not interested in sports
(d) showing behavioural and social maladjustment

7. Choose the incorrect statement about health.
(a) Health can simply be defined as absence of disease.
(b) Healthy people are more efficient at work.
(c) Health increases productivity.
(d) Health reduces infant and maternal mortality.

8. Choose the correct statements about diseases.
(I) Disease adversely affects the functioning of one or more organs.
(II) A disease is characterized by the appearance of various signs and symptoms.
(III) AIDS is a fatal non-infectious disease.
(IV) Cancer is an infectious disease.
(a) (I) and (II) (b) (II) and (III)
(c) (III) and (IV) (d) (I) and (IV)

9. Diseases which are easily transmitted from one person to another are called
(a) non-infectious diseases

(b) genetic diseases
(c) infectious diseases
(d) none of these

10. Match Column-I with Column-II and choose the correct option from the codes given below.
Column-I Column-II

	Column I		**Column II**
(A)	Health	(1)	AIDS
(B)	Genetic disorders	(2)	Physical, mental and social well-being
(C)	Infectious disease	(3)	Cancer
(D)	Noninfectious disease	(4)	Inherited from parents from birth

Select the correct option.

	A	B	C	D
(a)	2	4	3	1
(b)	2	4	1	3
(c)	3	2	4	1
(d)	1	3	2	4

Topic 1 Common Diseases in Humans

11. The malignant malaria is caused by
(a) *Plasmodium vivax*
(b) *Plasmodium falciparum*
(c) *Plasmodium malaria*
(d) None of these

12. *Plasmodium* enters the human body as
(a) Gametocyte (b) Haemozoin
(c) Sporozoite (d) None of these

13. Haemozoin is a toxin released from
(a) *Streptococcus* infected cells
(b) *Plasmodium* infected cells
(c) *Homophilus* infected cells
(d) None of these

14. The infectious stage of *plasmodium*, i.e., sporozoites are formed in
(a) RBCs of mosquito
(b) liver of the infected man
(c) gut of mosquito
(d) salivary glands of mosquito

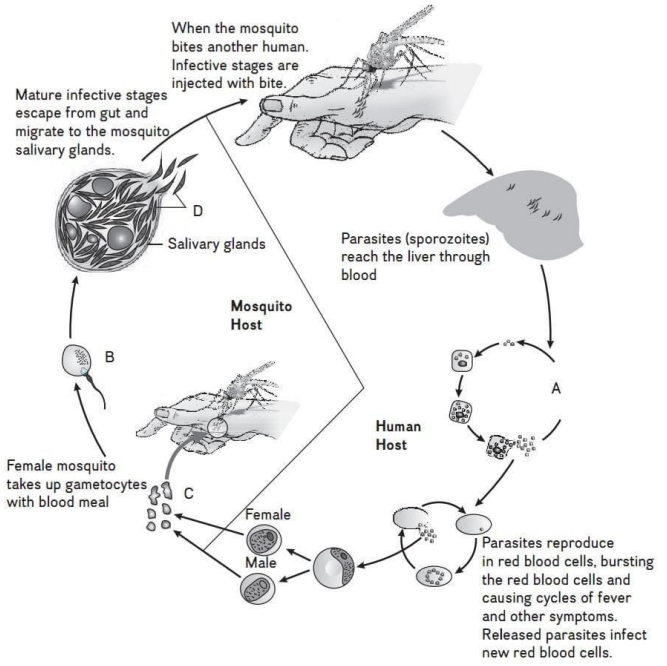
15. How many hosts are required by the malarial parasite to complete its life cycle?
(a) One
(b) Two
(c) Three
(d) One or two according to environmental conditions

16. The person suffering from sickle cell anaemia is
(a) less prone to typhoid
(b) less prone to malaria
(c) more prone to typhoid
(d) more prone to malaria

17. *Entamoeba histolytica* is a protozoan parasite which infects
(a) stomach (b) small intestine
(c) large intestine (d) liver

18. The active form of *Entamoeba histolytica* feeds upon
(a) mucosa and submucosa of colon only
(b) food in intestine
(c) blood only
(d) erythrocytes, mucosa and submucosa of colon

19. Refer to the given figure showing stages in the life cycle of use *plasmodium*. In the figure, which type of reproduction is occurring at stages A and B respectively. Also, identify C and D in the figure.



	A	B	C	D
A)	Asexual	Sexual	Gametocytes	Sporozoites
B)	Sexual	Asexual	Gametocytes	Sporozoites
C)	Asexual	Sexual	Sporozoites	Gametocytes
D)	Asexual	Sexual	Gametocytes	Ookinete

20. Match Column-I (Diseases) with Column-II (causative agents) and choose the correct option from the codes given below.

	Column I		**Column II**
(A)	Typhoid	(1)	*Entamoeba histolytica*
(B)	Malaria	(2)	*Salmonella typhi*
(C)	Amoebiasis	(3)	Rhino viruses
(D)	Common cold	(4)	*Plasmodium vivax*

Codes:

	A	B	C	D
(a)	2	4	1	3
(b)	4	3	2	1
(c)	1	2	4	3
(d)	3	1	2	4

21. Choose the correct statements about amoebiasis.
(I) It is caused by the infection of *Entamoeba histolytica*.
(II) Its symptoms include loose motion, abdominal pain and cramps, stools with excess mucous and blood clots.
(III) Houseflies act as mechanical carriers for the parasite.
(IV) The main sources of its infection are drinking water and food contaminated by the fecal matter.
(a) (I) and (II) (b) (II) and (III)
(c) (I), (III) and (IV) (d) All of these

22. Diseases can be caused by the infection of
(a) bacteria (b) viruses
(c) helminths (d) all of these

23. The disease-causing organisms in plants and animals are called
(a) vectors (b) pathogens
(c) insects (d) worms

24. The pathogens can affect our body by
(a) interfering with normal vital activities
(b) resulting in morphological damage
(c) resulting in functional damage
(d) all of these

25. Most of the parasites are considered as
(a) vectors (b) pathogens
(c) worms (d) none of these

26. Production of digestive juices in the stomach in excessive amount results in
(a) ulcers (b) cirrhosis
(c) jaundice (d) diarrhoea

27. The inflammation of pancreas is
(a) pancreatitis (b) jaundice
(c) ulcer (d) none of these

28. Match Column-I with Column-II and choose the correct option from the codes given below.

	Column I		**Column II**
(A)	Lactose intolerance	(1)	Excessive passage of loose & watery feces
(B)	Crohn disease	(2)	Disability to synthesize lactase enzyme

(C)	Diarrhoea	(3)	Inflammation of pancreas
(D)	Pancreatitis	(4)	Inflammation of small intestine

Codes:

	A	B	C	D
(a)	4	2	3	1
(b)	2	4	1	3
(c)	1	3	4	2
(d)	3	1	2	4

29. The pathogens that enter the gut can
(a) survive in the stomach at low pH
(b) resist the various digestive enzymes
(c) survive only at high temperature
(d) both (a) and (b)

30. In human beings, typhoid fever is caused by the infection of
(a) *Salmonella typhi*
(b) *E. coli*
(c) *Plasmodium vivax* `
(d) *Entamoeba histolytica*

31. *Salmonella typhi* infects
(a) large intestine (b) stomach
(c) small intestine (d) liver

32. The pathogen of typhoid fever enters in the body through
(a) contaminated food
(b) contaminated water
(c) inhaling of air droplets released by diseased person
(d) both (a) and (b)

33. The symptoms of typhoid include
(a) high fever (b) stomach pain
(c) loss of appetite (d) all of these

34. The typhoid can be diagnosed by
(a) ELISA (b) PCR
(c) Widal test (d) ESR

35. Identify the correct pair representing the causative agent of typhoid fever and the confirmatory test for typhoid.
(a) *Plasmodium vivax*/UTI test
(b) *Streptococcus pneumoniae*/Widal test
(c) *Salmonella typhi*/Anthrone test
(d) *Salmonella typhi*/Widal test

36. The causative agents of pneumonia in humans is/are
(a) *Streptococcus pneumoniae*
(b) *Haemophilus influenzae*
(c) *Bacillus anthracis*
(d) Both (a) and (b)

37. In pneumonia, which part of respiratory system is affected?
(a) Alveoli
(b) Nose
(c) Respiratory passage
(d) All of these

38. The group of symptoms that is indicative of pneumonia
(a) constipation, abdominal pain, cramps, blood clots.
(b) difficulty in respiration, fever, chills, cough, headache.
C) nasal congestion and discharge, cough, constipation, headache.
(d) high fever, weakness, stomach pain, loss of appetite, constipation.

39. Among the following which one is not a bacterial disease?
(a) Dysentery (b) Plague
(c) Diphtheria (d) Common cold

40. Which of the following sets of diseases is caused by bacteria?
(a) Tetanus and mumps
(b) Herpes and influenza
(c) Cholera and tetanus
(d) Typhoid and small pox

41. Choose the incorrect statement from the following.
(a) In severe cases of typhoid, intestinal perforation and death may occur.

(b) Typhoid fever could be confirmed by Widal test.
(c) *Streptococcus pneumoniae* infects respiratory passage.
(d) Dysentery and plague are bacterial diseases.

42. Rhino viruses cause
(a) pneumonia (b) plague
(c) common cold (d) typhoid

43. Rhino viruses infect
(a) nose (b) respiratory passage
(c) lungs (d) both (a) and (b)

44. Which one is not a symptom of common cold in humans?
(a) Nasal congestion
(b) Sore throat
(c) Headache
(d) Grey to bluish colour of lips

45. Match Column-I (diseases) with Column-II (causative agent) and choose the correct option from the codes given below.

	Column I		**Column II**
(A)	Typhoid	(1)	*Streptococcus pneumoniae*
(B)	Pneumonia	(2)	*Rhino viruses*
(C)	Common cold	(3)	*Salmonella typhi*
		(4)	*Haemophilus influenzae*

Codes:

	A	B	C
(a)	3	1,4	2
(b)	3	1,2	4
(c)	2	3	1,4
(d)	1	4	2,3

46. Ascaris, which causes ascariasis is an/a
(a) intestinal parasite (b) stomach parasite
(c) liver parasite (d) none of these

47. The symptoms of ascariasis include
(a) internal bleeding (b) anemia
(c) muscular pain (d) all of these

48. In which disease does mosquito transmitted pathogen cause chronic inflammation of lymphatic vessels?
(a) Elephantiasis (b) Ascariasis
(c) Ringworm disease (d) Amoebiasis

49. Refer to the given figure.

Which disease is shown in the figure?
(a) Amoebiasis (b) Filariasis
(c) Elephantiasis (d) Both (b) and (c)

50. Among the following which does not cause ringworm disease in humans?
(a) *Microsporum*
(b) *Macrosporum*
(c) *Epidermophyton*
(d) *Trichophyton*

51. Appearance of dry, scaly lesions on various parts of the body is symptom of which infectious disease?
(a) Filaria (b) Ascariasis
(c) Ringworm (d) None of these

52. Match the pathogens given in Column-I to the body organs to which they affect in Column-II. Choose the correct answer from the codes given below.

	Column I		Column II
(A)	*Ascaris*	(1)	Lymphatic vessels of lower limbs
(B)	*Wuchereria*	(2)	Intestine

(C)	*Trichopyton*	(3)	Skin, scalp and nails
(D)	*Streptococcus pneumoniae*	(4)	Lungs

Codes:

	A	B	C	D
(a)	2	1	3	4
(b)	1	2	4	3
(c)	3	2	1	4
(d)	4	3	2	1

53. Ringworms are generally acquired from
(a) soil (b) infected towels
(c) infected combs (d) all of these

54. Match Column-I with Column-II and choose the correct option from the codes given below.

	Column I		**Column II**
(A)	*Entamoeba histolytica*	(1)	Sporozoa
(B)	*Plasmodium vivax*	(2)	Rhizopoda
(C)	*Ascaris lumbricoides*	(3)	Deuteromycetes
(D)	*Trichophyton rubrum*	(4)	Nematoda

Codes:

	A	B	C	D
(a)	2	1	4	3
(b)	1	2	3	4
(c)	4	3	2	1
(d)	3	4	1	2

55. *Trichophyton* feeds on
(a) goblins of blood (b) keratin of skin
(c) cellulose of leaves (d) none of these

56. Choose the incorrect statement from the following.
(a) *Wuchereria bancrofti* causes chronic inflammation of the lymphatic vessels.
(b) The pathogens of filaria are transmitted to a healthy person through houseflies.
(c) *Trichophyton* is responsible for ringworm.
(d) Common cold is a viral disease.

57. Read the following statements carefully and choose the option that correctly identifies the true statements.
(I) Many infectious diseases can be prevented and controlled by maintaining personal and public hygiene
(II) Proper disposal of waste and excreta is particularly essential for the air-borne diseases.
(III) Malaria can be prevented by eliminating its vector and their breeding places.
(IV) Chikungunya is a vector-borne disease.
(a) (I), (II) and (III) (b) (II), (III) and (IV)
(c) (IV), (II) and (I) (d) (I), (III) and (IV)

58. The most important measure to control malaria and filariasis is to control or eliminate the
(a) vectors
(b) breeding places of vectors
(c) causal organism
(d) both (a) and (b)

59. Match Column-I with Column-II and choose the correct option from the codes given below

	Column I		**Column II**
(A)	Food-borne disease	(1)	Pneumonia
(B)	Air-borne disease	(2)	Amoebic dysentery
(C)	Vector-borne disease	(3)	Malaria
		(4)	Typhoid

Codes:

	A	B	C
(a)	2,4	1	3
(b)	1,4	2	3
(c)	3	2,4	1
(d)	2	3	4,1

60. Which fish is introduced in ponds that feed on mosquito larva?
(a) Rohu (b) Catla
(c) *Gambusia* (d) None of these

61. The vector that transmits the disease chikungunya is
(a) Housefly (b) Cockroach
(c) *Aedes* mosquito (d) Female *Anopheles*

62. Dengue is transmitted through
(a) female *Anopheles* (b) housefly
(c) *Gambusia* (d) *Aedes* mosquito

63. A deadly disease that has been eradicated from India is
(a) typhoid (b) smallpox
(c) dengue (d) cancer

64. Among the following diseases, for which one is vaccine available?
(a) Polio (b) Pneumonia
(c) Tetanus (d) All of these

65. Match Column-I with Column-II and choose the correct option from the codes given below.

	Column I		**Column II**
(A)	Amoebic dysentery	(1)	Female *Anopheles*
(B)	Dengue	(2)	Housefly
(C)	Malaria	(3)	*Aedes* mosquito

Codes:

	A	B	C
(a)	3	2	1
(b)	2	3	1
(c)	1	2	3
(d)	2	1	3

66. Assertion: Most of the parasites are pathogens.

Reason: Disease causing organisms are called pathogens and hosts as parasite.
(a) Both assertion and reason are true and reason is the correct explanation of assertion.
(b) Both assertion and reason are true but reason is not the correct explanation of assertion.
(c) Assertion is true but reason is false.
(d) Both assertion and reason are false.

67. Assertion: Pneumonia is caused by the infection of *Streptococcus pneumoniae*.

Reason: *Streptococcus pneumoniae* bacteria infect respiratory passage.
(a) Both assertion and reason are true and reason is the correct explanation of assertion.
(b) Both assertion and reason are true but reason is not the correct explanation of assertion.
(c) Assertion is true but reason is false.
(d) Both assertion and reason are false.

68. Assertion: The malarial parasite requires two hosts to complete its lifecycle.

Reason: These two hosts are human and mosquito.
(a) Both assertion and reason are true and reason is the correct explanation of assertion.
(b) Both assertion and reason are true but reason is not the correct explanation of assertion.
(c) Assertion is true but reason is false.
(d) Both assertion and reason are false.

69. Assertion: *Wuchereria bancrofti* affects the blood vessels of the lower limbs.

Reason: This pathogen is transmitted to a healthy person through the bite of male mosquito vectors.
(a) Both assertion and reason are true and reason is the correct explanation of assertion.
(b) Both assertion and reason are true but reason is not the correct explanation of assertion.
(c) Assertion is true but reason is false.
(d) Both assertion and reason are false.

Topic 2 Immunity

70. The ability of the host to fight against disease causing organism is known as
(a) pathogenicity (b) immunity
(c) immunisation (d) none of these

71. Innate immunity
(a) is non-specific type of defence.
(b) is present at the time of birth.
(c) consists of four types of barriers.
(d) all of these

72. Which type of immunity is present from the birth?
(a) Acquired (b) Innate
(c) Specific (d) None of these

73. Identify the physical barrier of immunity from the following.
(a) Skin on our body
(b) Acid in the stomach
(c) PMNL-neutrophils
(d) Both (a) and (b)

74. Saliva in the mouth is an example of
(a) physical barrier of immunity.
(b) physiological barrier of immunity.
(c) cellular barrier of immunity.
(d) cytokine barrier of immunity.

75. Humans have acquired immune system that produces antibodies to neutralize pathogens. Still innate immune system is present at the time of birth because it
(a) provides passive immunity
(b) is very specific and uses different macrophages
(c) produces memory cells for mounting fast secondary response
(d) has natural killer cells which can phagocytose and destroy microbes

76. A substance produced by a virus infected cell that can protect other cells from further infection is
(a) colostrum (b) serotonin
(c) interferon (d) histamine

77. Interferons, produced by virus-infected cells are
(a) enzymes (b) proteins
(c) lipids (d) none of these

78. Match Column-I with Column-II and choose the correct answer from the codes given below.

	Column I		**Column II**
(A)	Physical barrier	(1)	Acid in the stomach
(B)	Physiological barrier	(2)	Monocytes
(C)	Cellular barrier	(3)	Interferon
(D)	Cytokine barrier	(4)	Mucus coating of the epithelium lining of urogenital tract

Codes:

	A	B	C	D
(a)	4	1	2	3
(b)	1	3	4	2
(c)	2	4	3	1
(d)	3	2	1	4

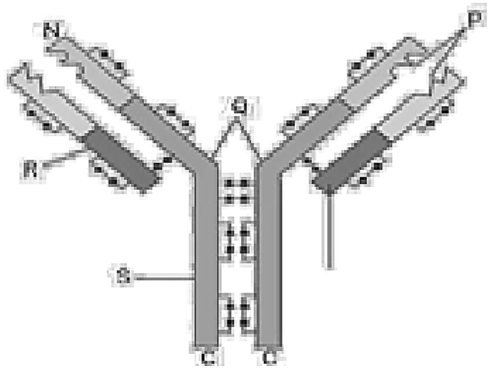
79. The pathogen specific immunity is
(a) innate immunity (b) acquired immunity
(c) physical strength (d) none of these

80. Subsequent encounter with the same pathogen elicits a/an
(a) secondary response
(b) highly intensified response
(c) anamnestic response
(d) all of these

81. Antibodies are produced by
(a) T-lymphocytes (b) B-lymphocytes
(c) monocytes (d) both (a) and (b)

82. An antibody is represented as
(a) H_3L_3 (b) H_1L_1
(c) H_2L_2 (d) None of these

83. Refer to the given figure showing structure of an antibody. In the figure some parts are labelled as P, Q, R and S. Identify the part which binds with antigen.



(a) Q (b) P
(c) R (d) S

84. Which of the following immune responses is responsible for rejection of kidney graft?

(a) Auto-immune response
(b) Humoral immune response
(c) Inflammatory immune response
(d) Cell-mediated immune response

85. Transplantation of tissues/organs fails often due to non-acceptance by the patient's body. Which type of immune response is responsible for such rejections?
(a) Cell-mediated immune response
(b) Humoral immune response
(c) Physiological immune response
(d) Auto immune response

86. Match Column-I with Column-II and choose the correct option from the codes given below.

	Column I		**Column II**
(A)	Innate immunity	(1)	Antibodies
(B)	Acquired immunity	(2)	Non-specific immune response
(C)	Humoral immune response	(3)	T-lymphocytes
(D)	Cellmediated immunity	(4)	Pathogen specific immune response

Codes:

	A	B	C	D
(a)	4	2	3	1
(b)	2	4	1	3
(c)	2	4	3	1
(d)	1	3	4	2

87. Choose the incorrect statement from the following.
(a) Primary immune response is of low intensity.
(b) The primary and secondary immune responses are carried out with the help of B-lymphocytes and T-lymphocytes.
(c) B-cells themselves do not secrete antibodies but help T-cells to produce them.
(d) Antibodies are found in blood, therefore it is called humoral immune response.

88. When a host is exposed to antigens, antibodies are produced in the host body. This type of immunity is called
(a) active immunity (b) passive immunity
(c) innate immunity (d) none of these

89. When readymade antibodies are directly given to protect the body against foreign agents, it is called
(a) cell-mediated immunity
(b) passive immunity
(c) active immunity
(d) innate immunity

90. Colostrum, the yellowish fluid, secreted by mother during the initial days of lactation is very essential to impart immunity to the newborn infants because it contains
(a) natural killer cells (b) monocytes
(c) macrophages (d) immunoglobulin A

91. Consider the following statements and choose the correct statements.
(I) Active immunity is slow and takes time to give its full effective response.
(II) In passive immunity, ready-made antibodies are directly given
(III) Colostrum contains IgE antibodies.
(IV) The foetus also receives some antibodies from its mother.
(a) (I), (II) and (III) (b) (I), (II) and (IV)
(c) (I), (III) and (IV) (d) All of these

92. The principle of immunisation is based on which property of immune system?
(a) Discriminate between self and non-self
(b) Memory
(c) Production of antibodies
(d) All of these

93. Match each disease with its correct type of vaccine.

	Column I		**Column II**
(A)	Tuberculosis	(1)	Harmless virus
(B)	Whooping cough	(2)	Inactivated toxin
(C)	Diphtheria	(3)	Killed bacteria
(D)	Polio	(4)	Harmless bacteria

Codes:

	A	B	C	D
(a)	3	2	4	1
(b)	4	3	2	1
(c)	1	2	4	3
(d)	2	1	3	4

94. In case of snakebites, the injection which is given to the patients, contains
(a) antigens
(b) antigen – antibody complexes
(c) antibodies
(d) enzymes

95. In vaccination, what is introduced in the body?
(a) Antigenic proteins of pathogen
(b) Inactivated pathogen
(c) Weakened pathogen
(d) All of these

96. Vaccine of hepatitis B is produced from
(a) Yeast (b) *Rhizobium*
(c) *Agrobacterium* (d) *Azadirachta*

97. Choose the incorrect statement about vaccination.
(a) In passive immunization, preformed antibodies are injected in the body.
(b) Vaccines can be produced using recombinant DNA technology.
(c) Vaccines generate memory B-cells and T-cells.
(d) Vaccines given in case of snakebite contains preformed antigens.

98. The exaggerated response of the immune system to certain antigens in the environment is called
(a) immunisation (b) allergy
(c) vaccination (d) none of these

99. The substances which produce allergy are called
(a) antigens (b) pathogens
(c) allergens (d) antibodies

100. The antibodies produced against allergens are of
(a) IgA type (b) IgE type
(c) IgM type (d) IgG type

101. Match Column-I with Column-II and choose the correct option from the codes given below.

	Column I		**Column II**
(A)	Colostrum	(1)	IgE
(B)	Allergy	(2)	IgA
(C)	Graft rejection	(3)	Passive immunisation
(D)	Preformed antibodies	(4)	Cell-medicated immunity

Codes:

	A	B	C	D
(a)	3	2	4	1
(b)	4	3	2	1
(c)	1	2	4	3
(d)	2	1	4	3

102. Symptoms of allergic reactions include
(a) sneezing (b) watery eyes
(c) running nose (d) all of these

103. The chemical which is released during allergic reaction?
(a) Histamine (b) Serotonin
(c) Steroid (d) Both (a) and (b)

104. Which of the following is not an auto-immune disease?
(a) Psoriasis (b) Rheumatoid arthritis
(c) Alzheimer's disease (d) Vitiligo

105. Which of the following diseases is an auto-immune disorder?
(a) Gout (b) Myasthenia gravis
(c) Arthritis (d) Osteoporosis

106. Rheumatoid arthritis is a/an
(a) infectious disease
(b) genetic disorder
(c) auto-immune disease
(d) non-infectious disease

107. Choose the correct reason(s) for rheumatoid arthritis.
(I) Body attacks self-cells
(II) The ability of immune system to differentiate between self and non-self increases.
(III) The production of antibodies increases.

(IV) Immune system fails to discriminate between self and non-self cells.

(a) (I) and (IV) (b) (II) and (III)
(c) (II) and (IV) (d) (I) and (III)

108. Our immune system is unique because it can
(a) recognise foreign antigens
(b) respond to antigens
(c) remember antigens
(d) all of these

109. The immune system plays an important role in
(a) allergic reactions
(b) auto-immune diseases
(c) organ transplantation
(d) all of these

110. Match Column-I with Column-II and choose the correct option from the codes given below.

	Column I		**Column II**
(A)	Allergy	(1)	Inability to discriminate self cells from nonself- cells
(B)	Autoimmunity	(2)	Introduction of killed/ weakened pathogen
(C)	Active immunisation	(3)	Immune response against allergens
(D)	Passive immunisation	(4)	Introduction of antibodies

Codes

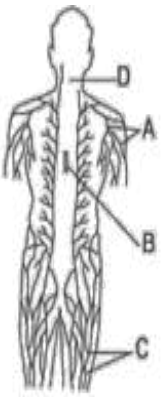
	A	B	C	D
(a)	3	1	2	4
(b)	4	3	2	1
(c)	3	1	4	2
(d)	2	4	3	1

111. Identify the primary lymphoid organ(s).
(a) Bone marrow (b) Thymus
(c) Spleen (d) Both (a) and (b)

112. In primary lymphoid organs,
(a) lymphocytes become mature
(b) lymphocyte interact with antigens
(c) lymphocytes become effector cells
(d) both (a) and (b)

113. Among the following which one is not a lymphoid tissue?
(a) Tonsils (b) Spleen
(c) Thymus (d) Pancreas

114. The figure given below is a diagrammatic representation of lymph nodes. In the figure some parts are labeled as A, B, C and D. Identify the part that serves to trap the antigens.



(a) B (b) A
(c) C (d) D

115. The lymphoid organ where all blood cells including lymphocytes are produced
(a) Spleen (b) Thymus
(c) Bone narrow (d) Payer's patches

116. The lymphoid organ that keeps reducing in size with age is
(a) tonsils (b) bone marrow
(c) thymus (d) spleen

117. Which one is known as the reservoir of erythrocytes?
(a) Spleen (b) Thymus
(c) Lymph nodes (d) None of these

118. The organ(s) that provide(s) microenvironments for the development and maturation of T-lymphocytes is/are
(a) Bone marrow (b) Thymus
(c) Spleen (d) Both (a) and (b)

119. The lymphoid tissue located within the lining of digestive tract is called

(a) lymphatic vessels (b) lymph nodes
(c) MALT (d) none of these

120. MALT constitutes about _____ percent of the lymphoid tissue in human body.
(a) 20% (b) 70%
(c) 10% (d) 50%

121. Match Column-I with Column-II and choose the correct option from the codes given below.

	Column I		**Column II**
(A)	Bone marrow	(1)	Maturation of T-lymphocytes
(B)	Thymus	(2)	Production of blood cells
(C)	Spleen	(3)	Serve to trap antigens
(D)	Lymph Nodes	(4)	Reservoir of erythrocytes

Codes

	A	B	C	D
(a)	1	2	3	4
(b)	2	1	4	3
(c)	4	3	2	1
(d)	3	4	1	2

122. Assertion: The immune response in which antibodies are formed is called humoral immune response.

Reason: Antibodies are found in blood.
(a) Both assertion and reason are true and reason is the correct explanation of assertion.
(b) Both assertion and reason are true but reason is not the correct explanation of assertion.
(c) Assertion is true but reason is false.
(d) Both assertion and reason are false.

123. Assertion: In passive immunization, preformed antibodies are given to the patients.

Reason: Polio vaccine also contains preformed antibodies.
(a) Both assertion and reason are true and reason is the correct explanation of assertion.
(b) Both assertion and reason are true but reason is not the correct explanation of assertion.
(c) Assertion is true but reason is false.
(d) Both assertion and reason are false.

124. Assertion: Bone marrow is a secondary lymphoid organ.

Reason: In secondary lymphoid organs maturation of lymphocytes occur.
(a) Both assertion and reason are true and reason is the correct explanation of assertion.
(b) Both assertion and reason are true but reason is not the correct explanation of assertion.
(c) Assertion is true but reason is false.
(d) Both assertion and reason are false.

Topic 3 AIDS

125. The word AIDS stands for 'Acquired Immuno Deficiency Syndrome', here syndrome means
(a) group of diseases
(b) group of symptoms
(c) group of antigens
(d) none of these

126. HIV is a member of a group of viruses called
(a) rotavirus (b) rhinovirus
(c) retrovirus (d) none of these

127. Which of the following is correct regarding AIDS causative agent HIV?
(a) HIV is an unenveloped retrovirus.
(b) HIV does not escape but attacks the acquired immune response.
(c) HIV is an enveloped virus containing one molecule of single-stranded RNA and one molecule of reverse transcriptase.
(d) HIV is an enveloped virus that contains two identical molecules of single-stranded RNA and two molecules of reverse transcriptase.

128. HIV is not transmitted by
(a) transfusion of contaminated blood
(b) sharing of infected needles
(c) sexual contact with infected persons

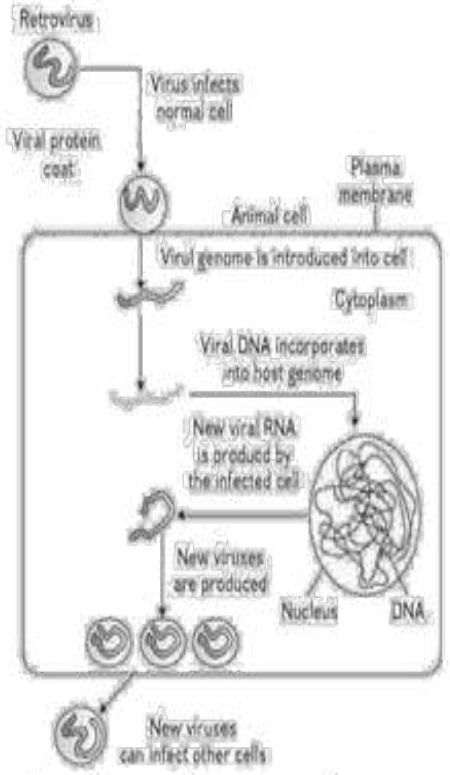
(d) shaking hands with infected person

129. HIV/AIDS spreads through
(a) droplets resulting from cough
(b) body fluids
(c) mere touch
(d) All of these

130. HIV that causes AIDS, first starts destroying
(a) leucocytes (b) helper T-cells
(c) thrombocytes (d) B-lymphocytes

131. AIDS is diagnosed through which technique?
(a) ELISA (b) PCR
(c) PAGE (d) Electrophoresis

132. Refer to the given figure showing replication of retrovirus. How is it different from the replication of other viruses?



(a) Viral DNA is produced from viral RNA by reverse transcriptase.
(b) Viral RNA produces dsRNA by RNA polymerase.
(c) Viral DNA is produced from viral RNA by DNA polymerase.
(d) Viral DNA is produced from host DNA by DNA polymerase.

133. Match Column-I with Column-II and choose the correct option from the codes given below

	Column I		**Column II**
(A)	AIDS	(1)	Retrovirus
(B)	HIV	(2)	Enzyme
(C)	Reverse transcriptase	(3)	Diagnostic technique
(D)	ELISA	(4)	Syndrome

Codes

	A	B	C	D
(a)	4	1	2	3
(b)	1	2	4	3
(c)	3	4	1	2
(d)	2	3	4	1

134. Choose the incorrect statement about AIDS.
(a) AIDS is caused by HIV.
(b) It can be diagnosed using ELISA technique.
(c) HIV destroys B-lymphocytes.
(d) HIV infected people need help and sympathy instead of being shunned by the society.

135. Assertion: AIDS is caused by Human Immuno Deficiency Virus (HIV).

Reason: It is a member of group 'retroviruses'.
(a) Both assertion and reason are true and reason is the correct explanation of assertion.
(b) Both assertion and reason are true but reason is not the correct explanation of assertion.
(c) Assertion is true but reason is false.
(d) Both assertion and reason are false.

136. Assertion: Transmission of HIV infection generally occurs by sexual contact with infected person.

Reason: HIV is not transmitted by the transfusion of contaminated blood and blood products.
(a) Both assertion and reason are true and reason is the correct explanation of assertion.
(b) Both assertion and reason are true but reason is not the correct explanation of assertion.

(c) Assertion is true but reason is false.
(d) Both assertion and reason are false.

137. Assertion: AIDS leads to a progressive decrease in number of helper T-lymphocytes in the infected person.

Reason: HIV virus replicates and produces progeny virus in helper T-lymphocytes which are released in blood.

(a) Both assertion and reason are true and reason is the correct explanation of assertion
(b) Both assertion and reason are true but reason is not the correct explanation of assertion.
(c) Assertion is true but reason is false.
(d) Both assertion and reason are false.

Topic 4 Cancer

138. Cancer cells do not show this property.
(a) Metastasis (b) Growth
(c) Contact inhibition (d) Both (a) and (c)

139. Cancer cells divide continuously and give rise to a mass of cells called
(a) fibroid (b) tumor
(c) oncogene (d) none of these

140. Tumours that remain confined to their original location and cause little damage are
(a) benign (b) malignant
(c) carcinogen (d) none of these

141. Mass of neoplastic cells is called
(a) benign tumor
(b) fibroid
(c) cyst
(d) malignant tumor

142. The cells of malignant tumor
(a) grow very rapidly
(b) invade and damage other normal tissues
(c) show metastasis
(d) all of these

143. Cells sloughed off from malignant tumor move to other parts of the body to form new tumors. This stage of disease is called
(a) teratogenesis (b) metastasis
(c) mitosis (d) metagenesis

144. Match Column-I with Column-II and choose the correct option from the codes given below.

	Column I		**Column II**
(A)	Contact inhibition	(1)	Consists of neoplastic cells
(B)	Benign tumour	(2)	Property of normal cells to inhibit uncontrolled growth of other cells
(C)	Malignant tumour	(3)	Property of cancerous cells to form new tumour at distant sites
(D)	Metastasis	(4)	Remains confined to original location

Codes

	A	B	C	D
(a)	1	3	4	2
(b)	4	2	3	1
(c)	2	4	1	3
(d)	3	1	2	4

145. Choose the incorrect statement about Malignant tumors.
(a) These tumors consist of neoplastic cells.
(b) They show the property of metastasis.
(c) The cells of this tumor have the property of contact inhibition.
(d) The cells of malignant tumor starve the normal cells by competing for vital nutrients.

146. Transformation of normal cells into cancerous neoplastic cells may be induced by
(a) physical agents (b) chemical agents
(c) biological agents (d) all of these

147. The cancer-causing agents are called
(a) carcinogens (b) teratogens
(c) mutagens (d) none of these

148. X-rays lead to neoplastic transformation by causing damage to
(a) enzymes (b) hormones
(c) DNA (d) all of these

149. The genes that cause cancer are called
(a) expressor genes (b) oncogenes
(c) regulatory genes (d) structural genes

150. Match Column-I with Column-II and choose the correct option from the codes given below.

	Column I (Type of Carcinogen)		Column II (Example)
(A)	Physical agent	(1)	Oncogenic virus
(B)	Chemical agent	(2)	UV rays
(C)	Biological agent	(3)	Tobacco
		(4)	Gamma rays

Codes:

	A	B	C
(a)	4,2	3	1
(b)	4,1	2	3
(c)	2	4,3	1
(d)	3	2	4,1

151. Cancer causing viruses are called
(a) retrovirus (b) rhinovirus
(c) oncogenic virus (d) none of these

152. Choose the correct statements about carcinogens.
(I) Carcinogens transform normal cells into cancerous cells.
(II) These carcinogens could be physical, chemical or biological.
(III) Ionizing radiations like UV-rays damage DNA leading to neoplastic transformation.
(IV) Several proto-oncogenes have been identified in neoplastic cells that get activated under certain conditions.
(a) (I) and (III) (b) (I) and (II)
(c) (III) and (IV) (d) all of these

153. Which technique can be used for the detection of cancer of internal organs?
(a) Radiography (b) CT
(c) MRI (d) All of these

154. Computed tomography uses 'A' to generate a three-dimensional image of the internals of an object. Here 'A' is
(a) X-rays (b) γ-rays
(c) α-rays (d) UV rays

155. Match Column-I with Column-II and choose the correct option from the codes given below.

	Column I		Column II
(A)	Biopsy	(1)	Three-dimensional image using X-rays
(B)	Radiograp hy	(2)	Histopathological study
(C)	Computed Tomograp hy	(3)	Use of strong magnetic fields and non-ionising radiations
(D)	MRI	(4)	Use of X-rays

Codes:

	A	B	C	D
(a)	4	2	3	1
(b)	2	4	1	3
(c)	3	1	4	2
(d)	1	3	2	4

156. The common approaches for the treatment of cancer is/are
(a) surgery (b) radiation therapy
(c) immunotherapy (d) all of these

157. Which substance is given to cancer patients to activate their immune system?
(a) Carcinogens (b) Cytokinin
(c) α-interferon (d) None of these

158. Assertion: X-rays and γ-rays are called carcinogens.

Reason: Carcinogens transform normal cells into cancerous neoplastic cells.
(a) Both assertion and reason are true and reason is the correct explanation of assertion.
(b) Both assertion and reason are true but reason is not the correct explanation of assertion.
(c) Assertion is true but reason is false.
(d) Both assertion and reason are false.

159. Assertion: Computed tomography can be used for the early detection of cancer of internal organs.

Reason: Computed tomography uses UV-rays to generate a three-dimensional image of the internals of an object.

(a) Both assertion and reason are true and reason is the correct explanation of assertion.
(b) Both assertion and reason are true but reason is not the correct explanation of assertion.
(c) Assertion is true but reason is false.
(d) Both assertion and reason are false.

160. Assertion: The patients of cancer are given α-interferon.

Reason: α-interferon is a biological response modifier.

(a) Both assertion and reason are true and reason is the correct explanation of assertion.
(b) Both assertion and reason are true but reason is not the correct explanation of assertion.
(c) Assertion is true but reason is false.
(d) Both assertion and reason are false.

Topic 5 | Drug and Alcohol Abuse

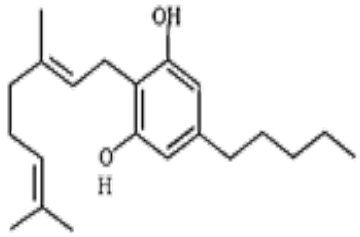
161. Opioid receptors are found in
(a) central nervous system
(b) reproductive system
(c) gastrointestinal tract
(d) both (a) and (c)

162. Heroin is commonly called
(a) smack (b) cocaine
(c) crack (d) none of these

163. Drug called 'Heroin' is synthesised by
(a) methylation of morphine
(b) acetylation of morphine
(c) glycosylation of morphine
(d) nitration of morphine

164. 'Smack' is obtained from the
(a) leaves of *Cannabis sativa*
(b) latex of *Papaver somniferum*
(c) fruits of *Erythroxylum coca*
(d) flowers of Datura

165. Refer to the given chemical structure. It is-



(a) morphine (b) cocaine
(c) cannabinoid (d) none of these

166. Refer to the given figure.

The drug obtained from this plant affects
(a) reproductive system
(b) respiratory system
(c) nervous system
(d) none of these

167. Natural cannabinoids are obtained from the
(a) inflorescence of *Cannabis sativa*
(b) latex of *Cannabis sativa*
(c) fruits of *Cannabis sativa*
(d) leaves of *Cannabis sativa*

168. Cannabinoids are generally taken by
(a) inhalation (b) oral ingestion
(c) snorting (d) both (a) and (b)

169. Cannabinoids affect
(a) cardiovascular system
(b) nervous system
(c) digestive system
(d) none of these

170. Choose the incorrect statement from the following.
(a) Heroin is chemically diacetylmorphine
(b) Cannabinoids interact with cannabinoid receptors present principally in the gut.
(c) Cannabinoids are taken by inhalation and oral ingestion.
(d) Heroin is a depressant.

171. Cocaine is obtained from
(a) *Papaver somniferum*
(b) *Cannabis sativa*
(c) *Atropa belladona*
(d) *Erythroxylum coca*

172. Coca alkaloid or cocaine is obtained from
(a) *Datura*
(b) *Papaver somniferum*
(c) *Atropa belladonna*
(d) *Erythroxylum coca*

173. Crack is usually
(a) ingested orally (b) injected
(c) inhaled (d) snorted

174. Refer to the given figure. This plant causes

(a) hallucinations (b) insomnia
(c) depression (d) all of these

175. Among the following which plant does not process hallucinogenic properties?
(a) *Atropa belladonna* (b) *Datura*
(c) *Cannabis sativa* (d) *Erythroxylum coca*

176. Among the following which one is abused by some sportspersons?
(a) Heroin (b) Barbiturates
(c) Cannabinoids (d) Amphetamines

177. Match Column-I with Column-II and choose the correct option from the codes gives below.

	Column I		**Column II**
(A)	Smack	(1)	Hallucination
(B)	Cocaine	(2)	Depressant
(C)	Datura	(3)	Pain killer
(D)	Morphine	(4)	Stimulant

Codes:

	A	B	C	D
(a)	2	4	1	3
(b)	3	2	4	1
(c)	1	3	2	4
(d)	4	1	3	2

178. Morphine is a very effective
(a) sedative (b) pain killer
(c) stimulant (d) both (a) and (b)

179. Which chemical substance of tobacco stimulates adrenal grand to release adrenaline and nor-adrenaline?
(a) Tannic acid (b) Nicotine
(c) Curamin (d) Catechin

180. Whose concentration is increased in blood by smoking?
(a) Carbon dioxide (CO_2)
(b) Oxygen (O_2)
(c) Carbon monoxide (CO)
(d) Water (H_2O)

181. Choose the correct statements.
(I) Tobacco is smoked, chewed or used as a snuff
(II) Tobacco contains nicotine, an alkaloid.
(III) Smoking decreases heart rate.
(IV) Tobacco chewing is associated with increased risk of cancer of the oral cavity.
(a) (I) and (II) (b) (III) and (IV)

(c) (I), (II) and (IV) (d) All of these

182. Among the following which motivates youngsters towards drug and alcohol abuse?
(a) Need for adventure (b) Need for excitement
(c) Experimentation (d) All of these

183. Withdrawal syndrome is characterised by
(a) anxiety (b) shakiness
(c) nausea (d) all of these

184. When drugs are taken intravenously, there are increased chances of having
(a) AIDS (b) Hepatitis B
(c) Polio (d) Both (a) and (b)

185. Match Column-I with Column-II and choose the correct answer from the codes given below.

	Column I		**Column II**
(A)	Adolescence	(1)	Oral cancer
(B)	Addiction	(2)	Abrupt discontinuation of regular close of drug
(C)	Smoking	(3)	Bridge linking childhood and adulthood
(D)	Withdrawal syndrome	(4)	Psychological euphoria associated with drugs

Codes:

	A	B	C	D
(a)	4	2	3	1
(b)	3	4	1	2
(c)	1	3	4	2
(d)	2	1	3	4

186. The side effects of the use of anabolic steroids in females include
(a) masculinisation
(b) increased aggressiveness
(c) depression
(d) all of these

187. The measure(s) useful for the prevention and control of alcohol and drug abuse among adolescents is/are
(a) avoid undue peer pressure
(b) education and counselling
(c) looking for danger sign
(d) all of these

188. Assertion: Cocaine is obtained from coca plant.

Reason: It has a potent stimulating action on central nervous system.
(a) Both assertion and reason are true and reason is the correct explanation of assertion.
(b) Both assertion and reason are true but reason is not the correct explanation of assertion.
(c) Assertion is true but reason is false.
(d) Both assertion and reason are false.

189. Assertion: Withdrawal symdrome is characterised by anxiety, shakiness, nausea and sweating.

Reason: Withdrawal syndrome is not relieved even when use of drugs is resumed again.
(a) Both assertion and reason are true and reason is the correct explanation of assertion.
(b) Both assertion and reason are true but reason is not the correct explanation of assertion.
(c) Assertion is true but reason is false.
(d) Both assertion and reason are false.

190. Assertion: Those who take drugs intravenously are much more likely to acquire AIDS and Hepatitis B.

Reason: The viruses of AIDS and Hepatitis B are transferred from one person to another by sharing of infected needles and syringes.
(a) Both assertion and reason are true and reason is the correct explanation of assertion.
(b) Both assertion and reason are true but reason is not the correct explanation of assertion.
(c) Assertion is true but reason is false.
(d) Both assertion and reason are false.

51. (c)	52. (a)	53. (d)	54. (a)	55. (b)	56. (b)	57. (d)	58. (d)	59. (a)	60. (c)
61. (c)	62. (d)	63. (b)	64. (d)	65. (b)	66. (b)	67. (c)	68. (b)	69. (d)	70. (b)
71. (d)	72. (b)	73. (a)	74. (b)	75. (d)	76. (c)	77. (b)	78. (a)	79. (b)	80. (d)
81. (b)	82. (c)	83. (b)	84. (d)	85. (a)	86. (b)	87. (c)	88. (a)	89. (b)	90. (d)
91. (b)	92. (b)	93. (b)	94. (c)	95. (d)	96. (a)	97. (d)	98. (b)	99. (c)	100. (b)
101. (d)	102. (d)	103. (d)	104. (c)	105. (b)	106. (c)	107. (a)	108. (d)	109. (d)	110. (a)
111. (d)	112. (a)	113. (d)	114. (b)	115. (c)	116. (c)	117. (a)	118. (d)	119. (c)	120. (d)
121. (b)	122. (a)	123. (c)	124. (d)	125. (b)	126. (c)	127. (d)	128. (d)	129. (b)	130. (b)
131. (a)	132. (a)	133. (a)	134. (c)	135. (b)	136. (c)	137. (a)	138. (c)	139. (b)	140. (a)
141. (d)	142. (d)	143. (b)	144. (c)	145. (c)	146. (d)	147. (a)	148. (c)	149. (b)	150. (a)
151. (c)	152. (b)	153. (d)	154. (a)	155. (b)	156. (d)	157. (c)	158. (a)	159. (c)	160. (a)
161. (d)	162. (a)	163. (b)	164. (b)	165. (c)	166. (c)	167. (a)	168. (d)	169. (a)	170. (b)
171. (d)	172. (d)	173. (d)	174. (a)	175. (c)	176. (c)	177. (a)	178. (d)	179. (b)	180. (c)
181. (c)	182. (d)	183. (d)	184. (d)	185. (b)	186. (d)	187. (d)	188. (b)	189. (c)	190. (a)