

# GPLUS EDUCATION

Date :

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BIOLOGY

## HUMAN HEALTH AND DISEASE

### Single Correct Answer Type

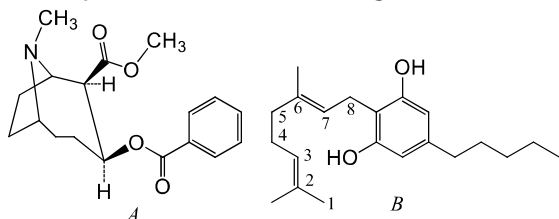
- Cannabis sativa* is the source of  
a) Opium                      b) LSD                      c) Marijuana                      d) cocaine
- Which of the following is a pair of bacterial diseases?  
a) Typhoid and Pneumonia                      b) Malaria and AIDS  
c) Ringworm and AIDS                      d) Cold and Malaria
- Which of the following is a protozoan disease?  
a) Malaria                      b) Amoebiasis                      c) Sleeping sickness                      d) All of these
- Antibody is connected with  
a) Skeletal system                      b) Circulatory system                      c) Immune system                      d) Respiratory system
- Which of the following vaccines are injected to babies at age of  $1\frac{1}{2}$ ,  $2\frac{1}{2}$  and  $3\frac{1}{2}$  months?  
a) DPT-Hib and polio                      b) Polio and BCG  
c) BCG and DPT-Hib                      d) BCG and hepatitis-B
- Interferons protect healthy cells in human from  
a) Viral infection                      b) Bacterial infection                      c) Fungal infection                      d) Protozoan infection
- During an allergic reaction, the binding of antigens to IgE antibodies initiates a response, in which chemicals cause the dilation of blood vessels and a host of other physiological changes. Such chemicals are  
a) Interferons                      b) Hormones                      c) Histamines                      d) acetylamine
- Colostrum provides the infant with  
a) Autoimmunity                      b) Passive immunity                      c) Active immunity                      d) Innate immunity
- Which class of antibodies is abundant in body secretion  
a) IgM                      b) IgA                      c) IgG                      d) IgE
- Which of the following cells are related with inflammatory reactions and immediate hypersensitivity?  
a) Mast cells                      b) Plasma cells                      c) Both (a) and (b)                      d) All of these
- ELISA is used to detect viruses, where the key reagent is  
a) DNA probe                      b) RNA Aase  
c) Alkaline phosphatase                      d) Catalase
- Which of the following health disorder includes symptoms of fever, chills, cough, headache, gray or bluish lips and finger's nails?  
a) Filariasis                      b) Typhoid                      c) Pneumonia                      d) Malaria
- What is the main lymphoid organ where all blood cells including lymphocytes are produced?  
a) Bone marrow                      b) Tonsils                      c) Liver                      d) Spleen
- The tendency of the body to manifest a characteristic and unpleasant withdrawal syndrome on abrupt discontinuation of regular dose of drugs/alcohol is called  
a) Depression                      b) Dependence                      c) Abnormalty                      d) All of these
- Regarding common cold consider the following statements  
I. Rhinovirus is responsible for common cold which infects the nasal epithelium and respiratory passage but not the lungs

II. The symptoms of common cold included nasal congestion and discharge, sore throat, gruffness, cough, headache and tiredness

Which of the statement given above is/are correct?

- a) Only I                      b) Only II                      c) I and II                      d) None of these
16. Mast cells have important role in the development of  
a) Allergens                      b) Allergy                      c) Inflammation                      d) Both (b) and (c)
17. Which of the following is related to humoral immunity?  
a) T-lymphocyte                      b) B- lymphocyte                      c) I- lymphocyte                      d) P- lymphocyte
18. Note the following words.  
I. Skin                      II. Phagocytes  
III. B-cells                      IV. Inflammation  
V. Antibodies                      VI. T-cells  
VII. Fever                      VIII. Antimicrobial proteins  
IX. NK-cells                      X. Secretions
- Identify the factors involved in second line of defence.  
a) II, IV, VII and IX                      b) II, III, V and IX                      c) IV, VI, VIII and X                      d) III, V, VII and VIII
19. BCG vaccine is used against  
a) TB                      b) Leprosy                      c) Food poisoning                      d) None of these
20. Allergens are  
a) Infectious and increased secretion of IgE                      b) Non-infectious and increased secretion of IgE  
c) Infectious and increased secretion of IgG                      d) Non-infectious and increased secretion of IgM
21. Smoking results in ...A... build up in the blood and reduce ...B... delivery to the tissue.  
Here A and B refers to  
a) A-carbon dioxide; B-carbon monoxide                      b) A-carbon dioxide; B-oxygen  
c) A-carbon monoxide; B-oxygen                      d) A-oxygen; B-carbon monoxide
22. What is true about T-lymphocytes in mammals?  
a) They scavenge damaged cells and cellular debris  
b) These are produced in thyroid  
c) There are three main types-cytotoxic T-cells, helper T-cells and suppressor T-cells  
d) These originate in lymphoid tissues
23. The thymus is a lobed organ located near the ...A... and beneath the ...B... . The most appropriate combination for A and B is  
a) A-heart; B-breast bone                      b) A-liver; B-ribs  
c) A-heart; B-ribs                      d) A-intestine; B-ribs
24. Exotoxins are related with  
a) Tetanus                      b) Diphtheria                      c) Cancer                      d) Both (a) and (b)
25. Bacterium, which is concerned with pertussis is  
a) *Bordetella pertussis*                      b) *Bacillus*  
c) *Diplococcus*                      d) *Mycobacterium tuberculosis*
26. *Entamoeba histolytica* causes  
a) Malaria                      b) Amoebiasis                      c) Typhoid                      d) Filariasis
27. Consider the following statements  
I. Neural system and endocrine system influences our immune system  
II. Immune system maintains our health  
Which of the statement (s) given above is/are correct?  
a) Only I                      b) Only II                      c) I and II                      d) None of these
28. Electrocardiograph was developed by  
a) Hans Berger                      b) Willem Kolff                      c) Willen Einthoven                      d) Wilhelm Roentgen
29. Which of the given sets include lymphatic organs?

- a) Thymus, lymph nodes and spleen  
 b) Liver, spleen and thymus  
 c) Tonsils, Peyer's patches and liver  
 d) Thymus, liver and tonsils
30. Secondary metabolite is  
 a) Sugar  
 b) Glucose  
 c) Antibiotics  
 d) All of these
31. Identify the molecules *A* and *B* given below and select the right option giving their use and source



	Molecule	Use	Source
a)	A-Morphine	Sedative and pain-killer	Latex of poppy plant
b)	B-Cannabinoid	Product of marijuana	Atropa belladonna
c)	C-Heroin	Produces hallucinations	Cannabis sativa
d)	D-Cocaine	Accelerates the transport of dopamine	Erythroxylum coca

32. By recombinant DNA technology, vaccines have been produced on large scale, *e.g.*, hepatitis-B vaccine is produced from yeast  
 The above paragraph is  
 a) True  
 b) False  
 c) Sometimes (a) and sometimes (b)  
 d) Neither (a) nor (b)
33. What is injected into the patient's body the determining the cause of allergy?  
 a) Pure allergen to which the patient is allergic  
 b) IgG  
 c) IgE  
 d) Steroids
34. 'Tunnel vision' is associated with.  
 a) Alcoholism  
 b) Smoking  
 c) Drug addiction  
 d) epilepsy
35. Which of the following is not a part of secondary lymphatic system?  
 a) Spleen  
 b) Lymph nodes  
 c) Tonsils  
 d) Thymus

36. Which of the following toxic substances is responsible for the high malarial fever?  
a) Haemoglobin                      b) Haemocyanin                      c) Haemozoin                      d) Haemoriden
37. Bambykol or gyplure is a  
a) Drug                                  b) Hormone                                  c) Antibiotic                                  d) pheromone
38. A chemical substance produced by a microorganism for inhibiting the growth of another is  
a) Antibody                                  b) Antibiotic                                  c) Aflatoxin                                  d) Antiallergic
39. Carcinoma refers to  
a) Malignant tumour of the colon  
b) Benign tumour of the connective tissue  
c) Malignant tumour of the connective tissue  
d) Malignant tumour of the skin or mucous membrane
40. Who among the following is recognized as the father of immunology?  
a) Robert Koch                      b) Ferdinand Kohn                      c) Edward Jenner                      d) Louis Pasteur
41. Heroin is a  
a) Diacetyl morphine                      b) Morphine                                  c) Hemp                                  d) Stimulant
42. Monoclonal antibodies are used for  
a) Immune suppression for kidney transplantation  
b) Growth induction  
c) Suppression of symptoms of rabies  
d) Treatment of breast cancer
43. Non-specific host defence that exists prior to the exposure to an antigen is called  
a) Acquired immunity                      b) Passive immunity                      c) Innate immunity                      d) Active immunity
44. Cancer of the internal organs is detected by  
a) Radiography                                  b) Computed tomography  
c) Magnetic resonance imaging                      d) All of the above
45. Full form PMNL is  
a) Poly Morpho-nuclear Leukocytes  
b) Para Morpho-nuclear Lymphocytes  
c) Penta Morpho-nuclear Leukocytes  
d) Poly Morpho-nuclear Lymphocytes
46. A doctor advises a patient to include yellow fruits, carrots and butter in his diet. What deficiency disease do you think the patient is suffering from?  
a) Night blindness                                  b) Colour blindness  
c) Kwashiorkor diseases                                  d) Marasmus disease
47. Which one of the following is correctly matched?  
a) Body louse - Typhoid                                  b) House fly - Yellow fever  
c) *Anopheles* - Malaria                                  d) *Aedes* - Plague
48. To which type of barriers under innate immunity?  
Saliva in the mouth and the tears from the eyes belongs?  
a) Cytokine barriers                                  b) Cellular barriers  
c) Physiological barriers                                  d) physical barriers
49. After drinking alcohol, a person walks clumsily because, the alcohol affects his  
a) Cerebellum                                  b) Cerebrum  
c) Medulla oblongata                                  d) Spinal cord
50. An uncontrolled division or proliferation of cells without any differentiation is called  
a) Cancer                                  b) AIDS                                  c) Filariasis                                  d) None of these
51. AIDS virus is also known as  
a) HIV                                  b) HTLV-III                                  c) LAV                                  d) All of these
52. Opioids are the drugs, which bind to specific opioid receptors present in our



- appear in MRI may be
- b) Scapula and clavicle
  - d) Tendons and ligaments
- Following statements
- is a microorganism, such as a virus
- body and interfere with the normal

I. complete physical health

II. mental health

III. social health

Which of the statements given above are correct?

- a) I and II                      b) I and III                      c) II and III                      d) I, II and III
69. *Yersinia pestis* is responsible for  
a) Syphilis                      b) Whooping cough                      c) Plague                      d) Leprosy
70. Modern lifestyle is responsible for  
a) Lowering of immunity                      b) More sensitivity of allergens  
c) Both (a) and (b)                      d) None of the above
71. Products from plants like *Datura* sp. are  
a) Hallucinogen                      b) Stimulants                      c) Sedatives                      d) Pain killers
72. The 'Christmas disease' patient lacks antihaemophilic  
a) Homogentisic acid oxidase                      b) Factor-VIII  
c) Factor-XI                      d) Factor-IX
73. Acquired immunity is due to  
a) Physiological and inflammatory barriers                      b) Lymphocytes  
c) Erythrocytes                      d) NK-cells
74. The human immune system consists of  
a) Lymphoid organs                      b) Immune cells                      c) Antibodies                      d) All of these
75. AIDS day is  
a) 1 May                      b) 1 December                      c) 1 June                      d) 1 January
76. IgA, IgM, IgE and IgG are the example of  
a) Antigen                      b) Antibody                      c) Haemoglobin                      d) Lymphocytes
77. A new born baby who receives IgA from its mother's milk develops  
a) Naturally acquired active immunity  
b) Artificially acquired active immunity  
c) Naturally acquired passive immunity  
d) Artificially acquired passive immunity
78. The virus that causes Acquired Immune Deficiency Syndrome (AIDS) parasitizes in  
a) B-cells                      b) Cytotoxic cells                      c) Helper T-cells                      d) Lymph nodes
79. Antigen binding site in an antibody is found between  
a) Two light chains  
b) Two heavy chains  
c) One heavy and one light chain  
d) Either between two light chains or between one heavy and one light chain depending upon the nature of antigen
80. The flower tops, leaves and the resin of *Cannabis sativa* are used to produce  
a) Marijuana                      b) Hashish                      c) Charas                      d) All of these
81. Chagas disease is caused by  
a) *Trypanosoma gambiense*                      b) *Plasmodium* sp.  
c) *Trypanosome cruzi*                      d) *Treponema pallidum*
82. Dipsomania is  
a) A type of depression                      b) Insanity due to psychosis  
c) Severe addiction to alcohol                      d) Tendency to take much water
83. Cells obtained from cancerous tumours are known as  
a) Hybridomas                      b) Myelomas                      c) Lymphocytes                      d) Monoclonal cells
84. Consider the following statements

I. Opioids are the drugs, which bind to opioid receptors in the central nervous system and gastrointestinal tract

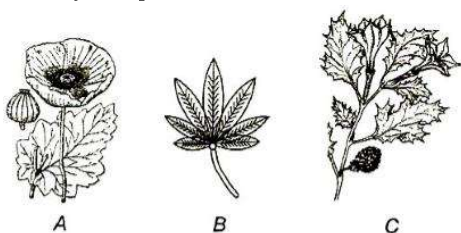
II. Heroin is a white, odourless, bitter, crystalline compound

III. Heroin is commonly called smack

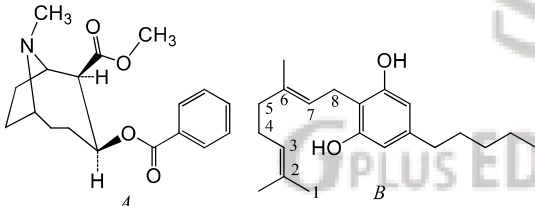
Which of the statements given above are correct?

- a) I and II                      b) I and III                      c) II and III                      d) I, II and III
85. Which of the following elements is important to maintain structure of immunoglobulin?  
a) P                      b) Fe                      c) S                      d) Ca
86. In the cell mediated immuno response, T-lymphocytes divide and secrete  
a) antigens                      b) Plasmogens                      c) Collagens                      d) cytokines
87. The smallest known agents of infectious diseases are  
a) Viruses                      b) Mycoplasma                      c) Viroids                      d) Actinomycetes
88. The group of disease carried by insects is  
a) Typhoid, jaundice, dysentery                      b) Mumps, measles, smallpox  
c) Scrabies, ringworm, scarlet fever                      d) Malaria, filaria, yellow fever
89. The study of body's defence mechanism against pathogens and toxic molecules is known as  
a) Immunity                      b) Immunology                      c) Defence                      d) Prevention
90. Which one of the following is useful in identifying the different strains of a causal microbe of an infectious disease?  
a) Colchicines                      b) *Agrobacterium*  
c) Complementary DNA                      d) Crystal violet
91. Which one of the following correctly matches a Sexually Transmitted Disease (STD) with its pathogen?  
a) AIDS \_\_\_\_\_ *Bacillus anthracis*                      b) Syphilis \_\_\_\_\_ *Treponema pallidum*  
c) Urethritis \_\_\_\_\_ *Entamoeba gingivalis*                      d) Gonorrhoea \_\_\_\_\_ *Leishmania donovani*
92. When a person dies after stung by bee followed by the administration of penicillin, death may be due to  
a) Prophylactic shock                      b) Anaphylactic shock                      c) Autoimmunity                      d) Sedation
93. Passive immunity can be obtained through  
a) Antigen                      b) Vaccines                      c) Antibiotics                      d) Antibodies
94. Which one of the following statements is correct?  
a) Patients, who had undergone surgery are given cannabinoids to relieve pain  
b) Benign tumours show the property of metastasis  
c) Heroin accelerates body functions  
d) Malignant tumours may exhibit metastasis
95. Which of the following statements best describes the role of reverse transcriptase?  
a) Synthesis of RNA from genomic RNA                      b) Synthesis of DNA from genomic RNA  
c) Synthesis of DNA from genomic RNA                      d) Synthesis of mRNA from genomic DNA
96. Eradication of smallpox has been possible due to the following facts except  
a) Use of highly effective vaccine                      b) Immunization programs  
c) Elimination of animal reservoir                      d) International cooperation
97. The AIDS test is known as  
a) ELISA                      b) Australian antigen                      c) HIV test                      d) None of these
98. Just as *Xenopsylla* is to *Yersinia pestis*, so is  
a) *Glossina palpalis* to *Wuchereria bancrofti*                      b) *Culex* to *Plasmodium falciparum*  
c) *Homo sapiens* to *Taenia solium*                      d) *Phlebotomus* to *Leishmania donovani*
99. AIDS was first reported in  
a) 1981                      b) 1980                      c) 1982                      d) 1983
100. Humoral immune system defends against viruses and bacteria is present in  
a) Blood                      b) Lymph                      c) Both (a) and (b)                      d) None of these
101. Black-foot disease is caused due to groundwater contaminated with excess of

- a) Nitrate                      b) Fluoride                      c) Arsenic                      d) Sulphur
102. Select the correct statement from the set given below  
 I. Growing number of people are taking LSD and other drugs like barbiturates and amphetamines  
 II. Several plants, fruits and seed having hallucinogenic properties have been used in folk-medicine  
 Which of the statements given above is/are correct?  
 a) Only I                      b) Only II                      c) I and II                      d) None of these
103. Tobacco consumption is known to stimulate the secretion of adrenaline and nor-adrenaline. The component causing this could be  
 a) Nicotine                      b) Tannic acid                      c) Curaimin                      d) Heamozoin
104. Alcoholism may leads to  
 a) Skin cancer                      b) Liver cirrhosis                      c) Viral disease                      d) Eye infections
105. Triple antigen vaccine is not used for  
 a) Typhoid                      b) Tetanus                      c) Diphtheria                      d) pertussis
106. SCID is caused by defective gene coding for the enzyme called  
 a) Adenosine transaminase                      b) Guanosine transaminase  
 c) Adenosine deaminase                      d) Guanosine deaminase
107. Charas and ganja generally taken by  
 a) Inhalation                      b) Oral ingestion                      c) Both (a) and (b)                      d) Injection
108. Rat, carries rat fleas, which are the causal organism of  
 a) Typhus fever                      b) Tick fever                      c) Bubonic plague                      d) Yellow fever
109. Amoebiasis is prevented by  
 a) Eating balanced food                      b) Eating washed fruits  
 c) Using mosquito coil                      d) Drinking boiled water
110. Morphine is  
 a) A very effective sedative and pain-killer  
 b) Very useful in patients who have undergone surgery  
 c) both (a) and (b)  
 d) Stimulant
111. The effect of hydrogen sulphide on man leads to which of the following diseases?  
 a) Paralysis                      b) Blindness                      c) Sterility                      d) None of these
112. Vaccination protects a person from disease because it  
 a) Helps in RBC production                      b) Produces antibodies  
 c) Helps in digestion                      d) Correct body function
113. Addiction to alcohol causes  
 a) Cirrhosis                      b) Epilepsy                      c) Neurosis                      d) psychosis
114. HIV/AIDS is a contagious disease which is caused by  
 a) Virus                      b) Bacteria                      c) Fungal                      d) Protozoa
115. Antibody molecule has  
 a) Four polypeptide chains                      b) Five polypeptide chains  
 c) Six polypeptide chains                      d) Seven polypeptide chains
116. Identify the pictures A, B and C



- a) A-Opium poppy, B-*Cannabis sativa*, C-*Datura*                      b) A-*Cannabis sativa*, B-Opium poppy, C-*Datura*

- c) A-*Datura*, B-Opium poppy, C-*Cannabis sativa*      d) A-Opium poppy, B-*Datura*, C-*Cannabis sativa*
117. Morphine, obtained from opium, is  
a) Latex      b) Pome      c) Alkaloid      d) tannin
118. The chemical used in 'National Malaria Eradication Programme' is  
a) 2, 4-D      b) BHC      c) DDT      d) Pyrethroid
119. Benign tumours  
I. remain confined to their original location and do not spread to other parts  
II. cause little damage  
Which of the statements given above is/are correct?  
a) Only I      b) Only II      c) I and II      d) None of the above
120. *Entamoeba histolytica* is a parasite of  
a) Large intestine      b) Liver      c) Lungs      d) Kidney
121. Common examples of allergens are  
a) Dust      b) Pollen grains      c) Animal dander      d) All of these
122. Smack is chemically a ...A... which is white and odourless and crystalline in nature. This is obtained by ...B... Here A and B refers to  
a) A-diacetyl morphine; B-acetylation of morphine      b) A-morphine; B-acetylation of hashish  
c) A-stimulant; B-acetylation of morphine      d) A-hallucinogen; B-acetylation of hashish
123. The pathogen *Mircosporum* responsible for ringworm disease in humans belongs to  
a) Virus      b) Bacteria      c) Fungi      d) Protozoa
124. The genes concerned with the production of cancer are called  
a) Cancer genes      b) Carcinogenes      c) Carcinomas      d) Oncogenes
125. The given below figures show  

- a) A-Cannabinoid; B-Morphine      b) A-Morphine; B-Cannabinoid  
c) A-Morphine; B-Quinine      d) A-Quinine; B-Cannabinoid
126. Who stated that human population grows gemoretrically?  
a) Malthus      b) Darwin      c) Cannon      d) Lamarck
127. Cyclosporin and endosporins are the drugs that are used as  
a) Anti retroviral drugs      b) Immuno-suppressants  
c) Immuno-modulators      d) Immuno-vaccines
128. Emphysema is a  
a) Cardio vascular disease      b) Pulmonary disease  
c) Neural disease      d) renal disease
129. Alpha-interferons  
a) Activate the immune system  
b) Help in destroying the tumour  
c) Both (a) and (b)  
d) None of the above
130. Which technique uses the body's water molecules as the bases for its images?  
a) Sonography      b) MRI  
c) Radioactive traces      d) Thermography
131. Antigen binding site of immunoglobulin is  
a) Variable region of heavy chain      b) Variable region of light chain

- c) Constant region of light chain                      d) Variable region of both heavy and light chain
132. Amoebiasis infection occurs by ingesting cysts with food and drinks  
a) True    b) False  
c) Sometimes (a) and sometimes (b)                      d) Neither (a) nor (b)
133. The synthetic drugs structurally similar to adrenaline are  
a) Amphetamines    b) Barbiturates  
c) Hallucinogens    d) Nicotinic derivatives
134. Antibody production is controlled by  
a) B-lymphocytes                      b) T-lymphocytes                      c) Both (a) and (b)                      d) Interferon
135. Cannabinoids are obtained from  
a) Inflorescence of the plant *Cannabis sativa*  
b) Fruits of the plant *Papaver somniferum*  
c) Latex of the plant *Cannabis sativa*  
d) Plant *Papaver somniferum* inflorescence
136. A substance that causes an allergic reaction is called  
a) Allergen                      b) Pollen                      c) Foreign substance                      d) Dander
137. The polypeptide chains present in gamma immunoglobulin are  
a) 2                      b) 4                      c) 6                      d) 8
138. Kala-azar is caused by  
a) *Trypanosoma cruzi*    b) *Leishmania donovani*  
c) *Trypanosoma brucei*    d) *Trypanosoma gambiense*
139. Graft transplantation to save certain patients fails due to the rejection of such organs by the patient. Which type of immune response is responsible for such type of rejection?  
a) Cell-mediated immune response                      b) Humoral immune response  
c) Both (a) and (b)                      d) Innate immune response
140. Which of the following is used in diagnosis of epilepsy?  
a) X-ray radiography    b) Digital Subtraction Angiography(DSA)  
c) Sonography    d) Positron Emission Tomography(PET)
141. The disease 'Oriental sore' is caused by  
a) Bacteria                      b) Virus                      c) Protozoa                      d) Fungus
142. ELISA test is used for detection of  
a) Antibodies                      b) Viral disease                      c) AIDS                      d) All of these
143. Except skin, other physical barriers which also help to prevent the entry of the microorganisms are  
I. mucus coating of the epithelium lining the respiratory  
II. gastrointestinal tracts  
III. urogenital tracts  
Choose the correct option  
a) I and II                      b) I and III                      c) II and III                      d) I, II and III
144. Cocaine is commonly called as  
a) Coke                      b) Crack                      c) Both (a) and (b)                      d) Smack
145. Ability of the body to fight against the disease causing organisms is called  
a) Vulnerability                      b) Susceptibility                      c) Irritability                      d) Immunity
146. In a standard ECG, which one of the following alphabets is the correct representation of the respective activity of human heart?  
a) R-repolarization of ventricles    b) S-start of systole  
c) T-end of diastole    d) P-depolarization of the atria
147. Damage to thymus in a child may lead to  
a) Loss of cell-mediated immunity  
b) A reduction in the haemoglobin content in blood



- c) A reduction in the amount of plasma proteins  
d) Loss of antibody-mediated immunity
148. Purpose of tubectomy is to prevent  
a) Fertilization  
b) Coitus  
c) Egg formation  
d) Embryonic development
149. Antibodies in our body are complex  
a) Lipoproteins  
b) Steroids  
c) Prostaglandins  
d) Glycoproteins
150. What is the name of complex formed at the time of action of T-cells?  
a) HLA  
b) STD antigen complex  
c) HLA antigen complex  
d) MHC antigen complex
151. Proliferation of cancer cells is not limited because of  
a) Differing surface proteins  
b) Differing cholesterol level  
c) Deficiency of steroids  
d) Aberrant chromosomal complement
152. Snack is generally taken by  
a) Snorting  
b) Injection  
c) Both (a) and (b)  
d) None of these
153. Which of the following is a matching pair of a drug and its category?  
a) Amphetamines - Stimulant  
b) Lysergic acid diethyl amide - Narcotic  
c) Heroin - Psychotropice  
d) Benzodiazepine - Pain Killer
154. The drugs, which are commonly abused are  
a) Opioids  
b) Cannabinoids  
c) Coca alkaloids  
d) All of these
155. Consider the following statements  
I. Secondary lymphoid organs includes lymph nodes, spleen and small masses of lymph tissue such as Peyer's patches, appendix and tonsils  
II. The secondary lymphoid organs all the site of lymphocyte maturation and they efficiently trap antigens for exposure to T and B-cells  
Which of the statements given above is/are correct?  
a) Only I  
b) Only II  
c) I and II  
d) None of these
156. Who among the following is recognized as the Father of Medicine?  
a) Robert Koch  
b) Hippocrates  
c) Louis Pasteur  
d) Edward Jenner
157. Which of the following organs is not involved in the elicitation of immune response?  
a) Brain  
b) Lymph nodes  
c) Spleen  
d) Thymus
158. The term 'Vaccine' was introduced by  
a) Jenner  
b) Koch  
c) Pasteur  
d) Jointly by Koch and Pasteur
159. Tuberculosis is caused by  
a) *Mycobacterium* sp.  
b) *Aspergillus* sp.  
c) *Clostridium* sp.  
d) *Vibrio* sp.
160. Main source of amoebic dysentery is  
a) Contaminated food and water  
b) Water and food contaminated by the faecal matter  
c) Water and food contaminated by urine  
d) Water and food contaminated by polluted air
161. *Mycobacterium leprae* causes  
a) Tuberculosis  
b) Leprosy  
c) AIDS  
d) Tetanus
162. Excessive doses of drugs may lead to coma and death due to  
a) Respiratory failure  
b) Heart failure  
c) Cerebral hemorrhage  
d) All of these
163. All stages of the *Plasmodium* get digested in stomach of female *Anopheles* except  
a) Sporozoite  
b) Gametocyte  
c) Erythrocyte  
d) None of these
164. Hodgkins disease is  
a) Cancer of the lymphoid tissue  
b) Cancer of the mammary gland



- c) cancer of the WBC  
 165. The interferons are  
 a) Antibacterial drug  
 c) Antibiotic drugs  
 166. Food poisoning is caused by  
 a) *Nitrosomonas*                      b) *Lactobacillus*                      c) *Escherichia coil*                      d) None of these  
 167. Choose the true statements  
 I. Innate immunity is accomplished by providing different types of barriers  
 II. Acquired immunity is present from the birth and is inherited from parents  
 III. Sweat, tears, acid in the stomach and saliva prevent microbial growth  
**Codes**
- |          |       |      |
|----------|-------|------|
| I        | II    | III  |
| a) True  | False | True |
| c) False | False | True |
- |          |      |       |
|----------|------|-------|
| b) True  | True | False |
| d) False | True | False |
168. Immunoglobulins are made up of  
 a) Two polypeptide chains  
 c) Three amino acids only  
 b) Four polypeptide chains  
 d) Five nucleotides  
 169. AIDS is not diagnosed by  
 a) Enzyme Linked Immuno Sorbant Assay test  
 b) WIDAL test  
 c) RIA  
 d) Both (b) and (c)  
 170. The protein  $\alpha - 1$  antitrypsin is used to treat which of the following disease?  
 a) Cancer  
 c) Alzheimer's disease  
 b) Rheumatoid arthritis  
 d) Emphysema  
 171. The immune system is made of  
 a) Humoral system  
 c) Humoral and fibrous system  
 b) Humoral and cell mediated system  
 d) Antigen induced antibodies  
 172. An autoimmune disease is  
 a) AIDS                      b) Haemophilia                      c) Allergy                      d) Myasthenia gravis  
 173. AIDS is the condition where  
 a) The patients immune system is completely destroyed  
 b) The patient succumbs to various infect, has wasting and develops symptoms such as fever, diarrhoea and weight loss  
 c) Both (a) and (b)  
 d) Virus multiply in T-cytotoxic cells  
 174. Which of the following is correct for immuno-modulators?  
 a) They always suppress immune system  
 c) They always stimulate immune system  
 b) They never suppress immune system  
 d) Specific immuno-modulators stimulate the immuno-response of immune system, whereas some other immuno-modulators inhibit it  
 175. The disease filarial is transmitted by  
 a) Tse-tse fly                      b) Sand fly                      c) *Culex*                      d) *Anopheles*  
 176. The immune system plays a major role in  
 a) Allergic reactions  
 c) Organ transplantation  
 b) Auto-immune diseases  
 d) All of these  
 177. What is HLA?  
 a) Group of proteins  
 c) Group of genes  
 b) Group of chromosomes  
 d) Group of polypeptides

178. *Aloe vera* cures cough and cold by  
 a) Leaf juice with opium  
 b) Leaf juice mixed with oil  
 c) Juice of roasted leaves taken with honey  
 d) Salad of leaves
179. Active immunity may be produced by  
 a) Contacting a disease  
 b) Readymade antibodies  
 c) Both (a) and (b)  
 d) Receiving gamma globulin infection
180. If the person shows the production of interferons in his body, chances are that he is suffering from  
 a) Anthrax  
 b) Malaria  
 c) Measles  
 d) Tetanus
181. Which of these is based on magnetic resonance?  
 a) EEG  
 b) CT scanning  
 c) NMR scanning  
 d) PET scanning
182. With regard to the transmission of the Human Immunodeficiency Virus (HIV), Which one of the following statements is not correct?  
 a) The chances of transmission from female to male are twice as likely as from male to female  
 b) The chances of transmission are more if a person suffers from other sexually transmitted infections  
 c) An infected mother can transmit the infection to her baby during pregnancy at child birth and by breast feeding  
 d) The risk of contracting infection from transfusion of infected blood is much higher than an exposure to contaminate needle
183. Amniocentesis is used for determining  
 a) Heart disease  
 b) brain disease  
 c) Hereditary disease of the embryo  
 d) All of the above
184. In the given flow chart, the replication of retrovirus in a host cell is shown. Observe it carefully and fill up the blank A, B and C
- ```

  graph TD
    A["(A)  
↓ Virus infects normal cell"] --> B1["Viral RNA is introduced  
in host cell"]
    B1 --> B2["B"]
    B2 --> C1["Viral RNA incorporates  
in host genome"]
    C1 --> C2["C"]
    C2 --> D["New viruses are produced"]
  
```
- a) A-Retrovirus, B-Viral DNA is produced, C-New viral RNA is produced  
 b) A-Transcriptase, B-Bacterial RNA is produced, C-New viral DNA is produced by the infected cell  
 c) A-Reverse transcriptase, B-Viral DNA is produced, C-New viral RNA is produced by the infected cell  
 d) A-Reverse transcriptase, B-Viral DNA is produced, C-New viral DNA is produced by the infected cell
185. Most important component of oral contraceptive is  
 a) LH  
 b) GH  
 c) Thyroxine  
 d) progesterone
186. Which of the following normally confined to their original location and do not spread to other parts of the body?  
 a) Malignant tumour  
 b) Metastasis  
 c) Benign tumour  
 d) cancer
187. Protein deficiency leads to  
 a) Kwashiorkor  
 b) Marasmus  
 c) Cretinism  
 d) Both (a) and (b)
188. In AIDS, the system which show failure is  
 a) Digestive system  
 b) Respiratory system  
 c) Defence system  
 d) Sensory system
189. Cannabinoid are the group of chemicals, which interact with cannabinoid receptors present principally in

- a) Brain                      b) Neuron                      c) Nephron                      d) Dendron
190. Histamines or other, inflammation producing substances are formed by  
a) Macrophages                      b) Interferons                      c) Mast cells                      d) Collagen tissue
191. Which group of three of the following five statements (I-V) contains is correct regarding beri beri?  
I. A crippling disease prevalent among the native population of sub-Sahara Africa.  
II. A deficiency disease caused by lack of thiamine (vitamin-B<sub>1</sub>).  
III. A nutritional disorder in infants and young children when the diet is persistantly deficient in essential protein.  
IV. Occurs in those countries where the staple diet is polished rice.  
V. The symptoms are pain from neuritis, paralysis, muscle wasting, progressive oedema, mental deterioration and finally heart failure.  
a) I, II and IV                      b) II, III and V                      c) I,III and V                      d) II, IV and V
192. Which of the following diseases is caused due to allergic reaction?  
a) Leprosy                      b) Typhoid                      c) Asthma                      d) Tetanus
193. Which of the following is a pair of viral diseases?  
a) Ringworm, AIDS                      b) Common cold, AIDS  
c) Dysentery, common cold                      d) Typhoid, tuberculosis
194. 'Lock jaw' is another name of  
a) Malaria                      b) Kala-azar                      c) Tetanus                      d) Diphtheria
195. Choose the wrong statement regarding AIDS.  
a) AIDS is an immunodeficiency disease  
b) It is caused by the retrovirus HIV  
c) HIV selectively infects and kills B-lymphocytes  
d) Retroviruses have RNA genomes that replicate *via* DNA intermediate
196. Osteomalacia is a deficiency disease of  
a) Infants due to protein energy malnutrition                      b) adults due to protein energy malnutrition  
c) Adults due to vitamin-D deficiency                      d) Infants due to vitamin-K deficiency
197. Study the following sentences.  
I. The cells of malignant tumours divide erratically.  
II. They are malignant tumours of epithelial cells.  
III. They are malignant tumours of organs that originate from mesoderm.  
IV. These tumours are found in organs such as spleen and lymph nodes.  
Which of the above are true for angiosarcoma?  
a) I and II                      b) II and IV                      c) I and III                      d) II and III
198. Spleen is a storage site for  
a) Erythrocytes                      b) Basophils                      c) Platelets                      d) Neutrophils
199. Tobacco contains  
a) Nicotine                      b) Amphetamines                      c) Carbon monoxide                      d) Both (a) and (c)
200. The best HLA(Human Leucocyte Antigen) match for transplants in order of preference is  
a) Parent>sibling>twin>unrelated donor                      b) Sibling> twin> Parent> unrelated donor  
c) twin> unrelated donor> parent> sibling                      d) Twin> sibling> Parent> unrelated donor
201. Quinine is obtained from  
a) Bark of *Cinchona*                      b) Root if *Cinchona*                      c) Wood of *Cinchona*                      d) Leaves of *Cinchona*
202. Antigen binds to antibody. The binding is result of  
a) Electrostatic interactions                      b) Covalent bonds  
c) Disulphide bridges                      d) Amide formation
203. The process of introduction of weakened inactivated pathogen into human body is called  
a) Immunization                      b) Vaccination                      c) Attenuation                      d) None of these
204. Female infanticide is commonly reported from

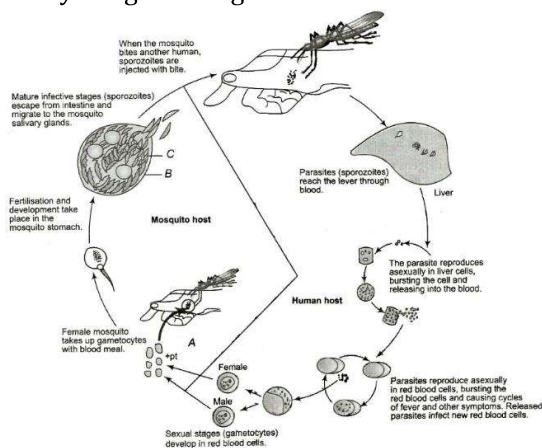
- a) Usalampatti                      b) Madurai                      c) Kanyakumari                      d) Rajasthan
205. Which of the following disease is caused by the member of retrovirus group?  
a) Cancer                      b) AIDS                      c) Dengue                      d) Common cold
206. The term 'antibiotic' was coined by  
a) Selman Waksman                      b) Alexander Fleming                      c) Edward Jenner                      d) Louis Pasteur
207. All of the following are examples of mucosa associated lymphoid tissue except  
a) Appendix                      b) Peyer's patches                      c) Tonsils                      d) Liver
208. Give the name of two helminthes, which causes ascariasis and filariasis respectively  
a) *Ascaris* and *Wuchereria*                      b) *Wuchereria* and *Ascaris*  
c) Roundworm and Flatworm                      d) *Plasmodium* and *Wuchereria*
209. Sir Godfery Hounsfield developed the diagnostic technique of  
a) CT scanning                      b) MRI                      c) Endoscopy                      d) Bronchoscopy
210. Hypersensitivity to an allergen is due to  
a) Aberrant function of immune system                      b) Food habits  
c) Increase in humidity                      d) Increase in temperature
211. The following table shows certain diseases, their causative organisms and symptoms

| Diseases       | Causative Organisms | Symptoms                          |
|----------------|---------------------|-----------------------------------|
| I. Filariasis  | <i>A</i>            | Inflammation                      |
| II. Typhoid    | <i>B</i>            | High fever<br>stomach pain        |
| III. <i>C</i>  | Rhinoviruses        | Nasal congestion<br>and discharge |
| IV. Ascariasis | <i>Ascaris</i>      | <i>D</i>                          |

The correct option regarding *A*, *B*, *C* and *D* is

- a) *A-Wuchereria*, *B-Salmonella typhi*, *C-Common cold*, *D-Internal bleeding, fever, anaemia*  
b) *A-Salmonella typhi*, *B-Ascaris*, *C-Typhoid*, *D-Stomach pain headache*  
c) *A-Ascaris*, *B-Entamoeba histolytica*, *C-Pneumonia*, *D-Constipation, fever*  
d) *A-Entamoeba histolytica*, *B-Salmonella typhi*, *C-Common cold*, *D-Nasal discharge, high fever*
212. Which part of the brain is affected first in a drunk person?  
a) Cerebrum                      b) Olfactory lobe                      c) Cerebellum                      d) Medulla oblongata
213. African sleeping sickness is caused by  
a) *Trypanosoma*                      b) *Leishmania*                      c) *Latimeria*                      d) *Plasmodium*
214. Cocaine, an alkaloid is obtained from the leaves of  
a) *Erythroxylon coca*                      b) *Ephedra* sp.  
c) *Digitalis purpurea*                      d) *Papaver somniferum*
215. Fungi belonging to genera *Mircoporum*, *Trichophyton* and *Epidermophyton* are responsible for  
a) Ringworm                      b) Skin allergy                      c) Amoebiasis                      d) Measles
216. A localized inflammatory response appears at the site of infection causes redness, swelling, pain and heat due to certain chemicals, they are  
a) Histamine and prostaglandins                      b) Cerumen and mucus  
c) Histamine and cerumen                      d) Prostaglandins and cerumen
217. A drug called morphine is obtained from  
a) *Rauwolfia serpentina*                      b) *Cannabis sativa*  
c) *Cajanus cajan*                      d) *Papaver somniferum*

218. Scientists were able to pinpoint the location of colour processing centers in the visual cortex of the brain by means of  
 a) PET                                      b) NMR                                      c) CT-scan                                      d) X-ray
219. Interferon –  $\beta$  is also termed as  
 a) Immune interferon                                      b) Fibroblast interferon  
 c) Leucocyte interferon                                      d) Anti-immune interferon
220. The disease caused by virus, which is 42 nm in size and contains double stranded DNA is  
 a) Hepatitis-A                                      b) AIDS                                      c) Hepatitis-B                                      d) Leprosy
221. Smoking causes  
 a) Heart disease                                      b) Gastric ulcer                                      c) Bronchitis                                      d) All of these
222. A person is suffering from frequent episodes of nasal discharge, nasal congestion, reddening of eyes and watery eyes. These are the symptoms of  
 a) Cyanosis                                      b) Bronchitis  
 c) Rhinitis                                      d) Bronchial carcinoma
223. Which of the following is a viral disease?  
 a) Typhoid                                      b) Polio                                      c) TB                                      d) Leprosy
224. Immunodeficiency makes a person highly susceptible to infection. It is caused by  
 a) Lack of B-cells                                      b) Lack of T-cells                                      c) Both (a) and (b)                                      d) None of the above
225. The causative agent of filaria is  
 a) *Wuchereria bancrofti*  
 b) *Leishmania donovani*  
 c) *Plasmodium vivax*  
 d) *Trypanosoma gambiensi*
226. Chemical carcinogens present in smoke have been identified as a major cause of  
 a) Lung cancer                                      b) Liver cancer                                      c) Oral cancer                                      d) None of these
227. The cancer of the epithelial cells is called  
 a) Leukaemia                                      b) Lipoma                                      c) Sarcoma                                      d) Carcinoma
228. Cell-mediated immunity is responsible for  
 a) Graft rejection                                      b) Passive immunity                                      c) Organ surgery                                      d) Innate immunity
229. Physiological barrier which prevents entry of microorganism in our body is/are  
 a) Acid in the stomach                                      b) Saliva in the mouth                                      c) Tears from eyes                                      d) All of these
230. Antiviral substances, produced by many vertebrates in response to viral infections for resisting the multiplication of viruses as known as  
 a) Viroid                                      b) Interferon                                      c) Antivirin                                      d) Antigen
231. Study the given diagram and name the labelled A, B and C



- a) A-Gametocytes, B-Salivary glands, C-Sporozoites  
 b) A-Sporozoites, B-Salivary glands, C-Gametocytes

- c) A-Salivary glands, B-Sporozoites, C-Gametocytes  
d) A-Salivary glands, B-Gametocytes, C-Sporozoites
232. Who developed vaccine against smallpox?  
a) Lousi Pasteur  
b) Selman Waksman  
c) Edward Jenner  
d) Alexander Flemming
233. The main reason, why antibiotics could not solve all the problems of bacterial disease, is  
a) Inactivation of antibiotics by bacterial enzyme  
b) Decreased efficiency of the immune system  
c) The development of mutant strains resistant to antibiotics  
d) Insensitivity of the individual following long exposure to antibiotics
234. ELISA assay  
a) Use complement mediated cells lysis  
b) User a radiolabelled second antibody  
c) Involves addition of substrate which is converted into coloured end product  
d) Requires red blood cells
235. Cross sectional image of internal body structure can be obtained by using which medical technique?  
a) ECG - Electro Cardio Graph  
b) EEG - Electro Encephalo Graph  
c) CAT - Computerized Axial Tomography  
d) PET - Positron Emission Tomography
236. Communicable disease means  
a) The disease transmitted from man to man  
b) The disease caused by biological agents  
c) Both (a) and (b)  
d) Present from birth or inherited
237. The infectious form (after entering into human blood) of malarial parasite migrate to the  
a) Erythrocytes of human  
b) Liver cells of human  
c) Stomach of mosquito  
d) Salivary gland of mosquito
238. *Entamoeba histolytica* is a  
a) Viral parasite  
b) Bacterial parasite  
c) Protozoan parasite  
d) Fungal parasite
239. Virus-infected cells secrete proteins called  
a) Enzyme  
b) Interferon  
c) Hormone  
d) Antibody
240. World health organization has started a number of programmes to prevent spreading of HIV infection  
Few such steps include  
I. ensuring use of disposable needles and syringes  
II. free distribution of condoms  
III. advocating safe sex  
IV. controlling drug abuse  
Which of the steps given above are correct?  
a) I and II  
b) III and IV  
c) II, III and IV  
d) I, II, III and IV
241. Colostrum  
a) Can be synthesized by the new born baby  
b) Is a natural source of antibodies that secreted from the breast for the first few days after birth  
c) Contain primarily fat  
d) Is a enzyme involved in stimulating lactation
242. Large group of lymphoid tissue in respiratory, digestive and urogenital tract are collectively called  
a) MALT  
b) Peyer's patches  
c) Mucosa lymph nodes  
d)  $\alpha$ -globulins
243. Select the true statement  
I. AIDS has no cure, prevention is the best option  
II. During HIV infection, the person suffers from fever, weight loss and diarrhoea  
III. HIV is a retrovirus, which means its genetic material is DNA  
a) I and II  
b) I and III  
c) II and III  
d) None of these
244. Diacetyl morphine is commonly known as



- a) Morphine                      b) *Cannabis*                      c) heroin                      d) cocaine
245. Reasons for alcohol abuse in adolescents are  
 I. social pressure  
 II. curiosity and need for adventure, excitement and experiment  
 III. to escape from stress, depression and frustration  
 IV. to overcome hardships of daily life  
 Which of the statements given above are correct?  
 a) I, II and III                      b) I, III and IV                      c) II, III and IV                      d) I, II, III and IV
246. A disease which can easily transmit from one person to another is called  
 a) Non-infectious disease                      b) Infectious disease  
 c) Viral disease                      d) Bacterial disease
247. The name of Mary Mallon is related with the disease  
 a) Typhoid                      b) Pneumonia                      c) Dengue                      d) AIDS
248. The organ related with immunity is  
 a) Liver                      b) Parathyroid                      c) Thymus                      d) Pineal
249. Tiny lesions of multiple sclerosis on brain and spinal tissue can be observed by  
 a) Magnetic resonance imaging                      b) Position emission tomography  
 c) X-rays radiography                      d) Digital subtraction angiography
250. Genetic material found in Human Immunodeficiency Virus(HIV) is  
 a) Double stranded RNA                      b) Single stranded RNA  
 c) Double stranded DNA                      d) Single stranded DNA
251. A major benefit of breast feeding for the new born infant is  
 a) Low lactose content                      b) The high casein content  
 c) Passive immunity                      d) *E. coli* factor
252. The uncontrolled proliferation of cancerous cells produces masses of cells, called  
 a) Tumour                      b) Multiplication                      c) Protooncomass                      d) None of the above
253. Characters of acquired immunity are  
 a) Specificity                      b) Difference between self and non- self  
 c) Retains memory                      d) All of the above
254. A damaging immune response by the body to a substance is called  
 a) Immunity                      b) Allergy                      c) Passive immunity                      d) None of these
255. T-lymphocyte is produced in  
 a) Bone marrow                      b) Spleen                      c) Pancreas                      d) Thymus
256. Ginseng is an important drug of  
 a) America                      b) Egypt                      c) India                      d) Chain
257. An antibody is a  
 a) White corpuscle, which attacks invading bacteria  
 b) Molecule that specifically inactivate an antigen  
 c) Component of the blood  
 d) Secretion of mammalian erythrocyte
258. Blood circulation was discovered by  
 a) William Harvey                      b) Hippocrates                      c) Karl Landsteiner                      d) Paul Ehrlich
259. Cancerous cells spread through  
 a) Lymph                      b) Blood  
 c) Secondary growths of malignant tumour                      d) All of the above
260. Consider the following statements  
 I. People should get vaccination to avoid infection  
 II. Vaccination is available against polio, cholera, typhoid, tuberculosis and many other disease  
 III. Eradication of vectors are necessary in diseases like malaria and filariasis



IV. Dengue and chikengunya, both are spread by *Culex* mosquitoes

Which of the statements given above are correct?

- a) I, II and III                      b) I, II and IV                      c) I, III and IV                      d) III and IV

261. Vaccines, when introduced into the body, stimulates the production of

- a) Antigen                      b) Antibody                      c) Natural killer cells                      d) Macrophage

262. Benign tumour is the one, which

- a) Shows metastasis                      b) Is differentiated and capsulated  
c) Is undifferentiated and noncapsulated                      d) Is differentiated and noncapsulated

263. Antibodies are

- a) Lipids                      b) Carbohydrates                      c) Immunoglobulins                      d) Antiviral particles

264. Cancer causing viruses are called

- a) Oncogenic viruses                      b) Retroviruses                      c) Adenoviruses                      d) Poxviruses

265. Drugs that cause malformations in embryo during pregnancy are called

- a) Tranquilizer                      b) Teratogens                      c) Alcoholic beverages                      d) Nicotine

266. Consider the statements given below regarding contraception and answer as directed thereafter

I. Medical Termination of Pregnancy (MTP) during first trimester is generally safe.

II. Generally, chances of conception are nil until mother breast-feeds the infant upto two year.

III. Intrauterine devices like copper-T are effective contraceptives.

IV. Contraception pills may be taken upto one week after coitus to prevent conception.

Which two of the above statements are correct?

- a) II, III                      b) III, IV                      c) I, III                      d) I, II

267. Use of anti-histamines and steroids give a quick relief form

- a) Allergy                      b) Nausea                      c) Cough                      d) Headache

268. In recent years, which disease of digestive system in Indian has received great attention and against that active vaccination is being done even in schools?

- a) Poliomyelitis                      b) hepatitis                      c) Jaundice                      d) Enterocolitis

269. A condition that occurs when the immune system mistakenly attacks and destroys healthy body tissue is called

- a) Auto-immunity                      b) Immunization                      c) Allergy                      d) Immunodeficiency

270. The primary function of the lymphoid system is

- a) Circulatory of nutrients  
b) Transport of hormones  
c) Production, maintenance and distribution of lymphocytes  
d) Production, maintenance and distribution of plasma

271. Cell division or mitosis is normal process in a living cell, but sudden and abnormal mitosis in an organ will frequently result in

- a) Zygote                      b) Cancer                      c) New organ                      d) Gastrula

272. Surgical removal of thymus of a new born shall result in the failure to produce

- a) Basophils                      b) Neutrophils                      c) B-lymphocyte                      d) T-lymphocyte

273. Broad spectrum antibiotic

- a) Acts on all bacteria and virus                      b) Is effective in very small amount  
c) Acts on both pathogen and host                      d) Acts on a variety of pathogenic microorganisms

274. If a person shows production of interferons in his body, the chances are that he got an infection of

- a) Malaria                      b) Measles                      c) Typhoid                      d) Tetanus

275. The organism, which causes pneumonia in human beings is

- a) Atrichous                      b) Monotrichous                      c) Amphitrichous                      d) peritrichous

276. If you suspect major deficiency of antibodies in a person, to which of the following would you look for confirmatory evidence?

- a) Serum albumins                      b) Serum globulins

- c) Fibrinogen in the plasma  
277. The immunoglobulin abundant in colostrums is  
a) IgG                                      b) IgM                                      c) IgD                                      d) IgA
278. Cocaine is the native to  
a) North America                      b) South America                      c) India                                      d) China
279. Globulins contained in human blood plasma are primarily involved in  
a) Defence mechanisms of body                                      b) Osmotic balance of body fluids  
c) Oxygen transport in the blood                                      d) Clotting of blood
280. The person showing unpredictable moods, outbursts of emotions, quarrelsome behaviour and conflicts with others is suffering from  
a) Schizophrenia                                      b) Borderline personality disorder(BPD)  
c) Mood disorders                                      d) Addictive disorders
281. Identify the wrong statements  
I. The tumour of haematopoietic cells is called leukaemia.  
II. Cancer arising from the epithelial tissues of internal organs and glands is referred as melanoma.  
III. Sarcoma is a type of cancer where bone and cartilages are involved.  
IV. Only benign tumours are called as true cancer or neoplasm.  
a) I and II only                      b) II and III only                      c) II and IV only                      d) I and III only
282. Harmful effect of cigarette smoking is  
a) Baldness                      b) Yellowing of eyes                      c) Lung cancer                      d) None of these
283. Cell mediated immunity is mainly a function of  
a) B-cells                      b) T-cells                      c) Macrophages                      d) Interferons
284. Which of the following diseases is caused due to helminth infection?  
a) Ascariasis                      b) Wuchereriasis                      c) Both (a) and (b)                      d) None of these
285. Infective stage of *Plasmodium* for men is  
a) Merozoites                      b) Ookinetes                      c) Sporozoites                      d) None of these
286. Infection of pneumonia occurs due to  
a) Droplets released from an infected person                      b) Released droplets inhaled by healthy person  
c) Sharing contaminated objects such as glasses and utensils with an infected person                      d) All of the above
287. Those who take drugs intravenously develop a risk of  
a) AIDS                      b) Hepatitis-B                      c) Both (a) and (b)                      d) Malaria
288. Disease caused by deficiency of vitamin-C is  
a) beri beri                      b) Scurvy                      c) Pellagra                      d) Night blindness
289. Humoral immunity is mediated by  
a) B-cells                      b) T-cells                      c) Macrophages                      d) Monocytes
290. Minamata disease is caused due to presence of .....in water.  
a) Cadmium                      b) Lead                      c) Arsenic                      d) Mercury
291. Both sickle cell anaemia and Huntington's chorea are  
a) Bacteria-related diseases                      b) Congenital disorders  
c) Pollutant-induced disorders                      d) Virus-related diseases
292. Rabies is caused by  
a) Virus                      b) Bacteria                      c) Protozoa                      d) All of these
293. Some diseases are transmitted through contaminated articles. The method is called  
a) Vehicle transmission                      b) Vector transmission  
c) Air borne method                      d) Fomite borne method
294. Disease associated with secretion of toxin is  
a) Tetanus                      b) Tuberculosis                      c) Food poisoning                      d) AIDS
295. The spleen

- I. is a large bean-shaped organ  
 II. mainly contains lymphocytes and phagocytes  
 III. acts as a filter of the blood by trapping blood-borne microorganisms  
 Which of the statements given above are correct?

a) I and II                      b) I and III                      c) II and III                      d) I, II and III

296. Necessary steps for achieving good health are

- I. awareness about disease  
 II. vaccination  
 III. proper disposal of wastes  
 IV. maintenance of hygienic food and water resources  
 V. Water resources

The correct combination having necessary steps is

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

297. Tumour viruses or cancer causing viruses called ...A... have ...B... . Here A and B refers to

- a) A-oncogenic bacteria; B-bacterial oncogenes  
 b) A-oncogenic viruses, B-viral oncogenes  
 c) A-oncogenic protozoan; B-protozoan oncogenes  
 d) None of the above

298. Hybridomas are the fusion product of

- a) Normal antibody producing cell with myeloma  
 b) Abnormal antibody producing cell with myeloma  
 c) Sex cells with myeloma  
 d) Bone cells with myeloma

299. Which one of the following is a stimulant?

a) LSD                      b) Cocaine                      c) Opium                      d) Heroin

300. Resistance against pathogens is due to

a) Antibodies                      b) RBCs                      c) Haemoglobin                      d) None of these

301. Primary lymphoid organs among the following are

a) Bone marrow                      b) Thymus                      c) Both (a) and (b)                      d) Thyroid of thymus

302. Widal test is used for the diagnosis of

a) Malaria                      b) Pneumonia                      c) Tuberculosis                      d) Typhoid

303. An insect bite may result in inflammation of that spot. That is triggered by the alarm chemicals such as

- a) Histamine and dopamine                      b) Histamine and kinins  
 c) Interferons and opsonin                      d) Interferons and histones

304. Defect in amino acid metabolism may result in

a) Albinism                      b) Porphyria                      c) Wilson's disease                      d) Phenylketonuria

305. The pathogen of typhoid is directly transmitted through

a) Urine                      b) Water                      c) Blood                      d) Hormone

306. The Philadelphia chromosome is found in the patients suffering from

a) Albinism                      b) Hepatitis                      c) Insomnia                      d) Leukaemia

307. Which of the following disorders can be regarded as madness?

a) Psychosis                      b) Epilepsy                      c) Insomnia                      d) Parkinsonism

308. Nicotine intake stimulates the ...A... to release ...B... and ...C... into blood circulation. This lead to increase in ...D... and an increase ...E... .

Here A and E refers to

- a) A-adrenal gland, B-adrenaline, C-nor-adrenaline, D-blood pressure, E-heart rate  
 b) A-thyroid gland, B-thyroxine, C-parathyroxine, D-blood pressure, E-heart rate  
 c) A-adrenal gland, B-thyroxine, C-nor-adrenaline, D-blood pressure, E-heart rate  
 d) A-gonads, B-adrenaline, C-nor-adrenaline, D-blood pressure, E-heart rate

309. Allergy involves

- a) IgE                                      b) IgG                                      c) IgA                                      d) IgM

310. Which of the following body systems is responsible for allergic reaction?

- a) Lymph                                      b) Immune                                      c) Circulatory                                      d) All of these

311. The process of removal and replacement of the damaged tissues or organs like heart, eye, liver, kidney with healthy ones from a donor is called as

- a) Transplantation                                      b) Repair and replacement  
c) Replacement therapy                                      d) Transformation

312. Which of the following is the correct matching of a disease with its causative organism and mode of infection?

| Diseases         | Causative Organisms             | Modes of Infection                              |
|------------------|---------------------------------|-------------------------------------------------|
| a) Pneumonia     | <i>Streptococcus pneumoniae</i> | Droplet infection                               |
| b) Typhoid       | <i>Salmonella typhi</i>         | With inspired air                               |
| c) Malaria       | <i>Plasmodium vivax</i>         | Bite of infected male <i>Anopheles</i> mosquito |
| d) Elephantiasis | <i>Wuchereria bancrofti</i>     | With contaminated food and water                |

313. Secondary lymphoid organs include

- a) Spleen                                      b) Tonsils                                      c) Both (a) and (b)                                      d) None of these

314. In which of the following, optical fibres are used?

- a) Sonography                                      b) Endoscopy                                      c) MRI                                      d) CT-scan

315. Electron beam therapy is a kind of radiation therapy to treat

- a) Enlarged prostate gland                                      b) Gall bladder stones by breaking them  
c) Certain types of cancer                                      d) Kidney stones

316. Antivenom is used for the treatment of snake bite. The treatment of snake bite by antivenom is an example of

- a) Passive immunisation                                      b) Active immunization  
c) Autoimmunization                                      d) Innate immunization

317. Rhinovirus causes

- a) Common cold                                      b) Malaria                                      c) AIDS                                      d) Pneumonia

318. Which of the following protozoans attack gums in man?

- a) *Entamoeba gingivalis*                                      b) *Trichomonas*                                      c) *Giardia*                                      d) All of these

319. Heroin is also known by the name of

- a) Hemp                                      b) Smack                                      c) Coke                                      d) Bhang
320. Female *Anopheles* mosquito is a vector of  
a) Filaria                                      b) Malaria                                      c) Typhoid                                      d) AIDS
321. *Wuchereria bancrofti* is  
a) A Platyhelminthes                                      b) Only host in man  
c) Causing blockage of lymphatic vessel                                      d) None of the above
322. The confirmatory test used to diagnose AIDS is  
a) ELISA                                      b) Schick                                      c) WIDAL                                      d) None of these
323. Hepatitis-B is also called  
a) Epidemic jaundice                                      b) Serum jaundice                                      c) Catarrhal jaundice                                      d) None of these
324. Plants with hallucinogenic properties are  
a) *Atropa belladonna*                                      b) *Datura*                                      c) Both (a) and (b)                                      d) *Papaver*
325. Malignant malaria is caused by  
a) *Plasmodium falciparum*                                      b) *Plasmodium ovale*  
c) *Plasmodium vivax*                                      d) *Plasmodium malariae*
326. In ultrasonography  
a) Antigen-antibody interaction occur                                      b) High frequency sound waves are used  
c) Magnetic waves are used                                      d) None of the above
327. Lung cancer is caused by  
a) Tobacco smoke                                      b) X-rays                                      c) UR rays                                      d) Vehicle smoke
328. Which one of the following pairs of diseases are viral as well as transmitted by mosquitoes?  
a) Elephantiasis and dengue                                      b) Malaria and yellow fever  
c) Ringworm and dengue                                      d) Yellow fever and dengue
329. Ringworm is a  
a) Air borne disease                                      b) Infectious disease  
c) Non-infectious disease                                      d) None of these
330. Which of these may cause hypothermia in humans?  
a) Smoking                                      b) LSD                                      c) Dopamine                                      d) Alcohol consumption
331. Transformation of normal cell cancerous cell is induced by  
a) Carcinogens                                      b) UV-rays                                      c) Neoplastic cells                                      d) Mutagens
332. Drugs, that are normally used as medicines to help the patients cope with mental illness are  
a) Barbiturates                                      b) Amphetamines                                      c) Lysergic acid diethyl amides                                      d) All of the above
333. The foetus receives immunoglobulin from their mother, through  
a) Placenta                                      b) Skin                                      c) Mouth                                      d) None of these
334. Measures for personal hygiene include  
I. Intake of clean drinking water  
II. Keeping the body clean  
III. Disinfection of water resources  
Which of the statements given above are correct?  
a) I and II                                      b) I and III                                      c) II and III                                      d) I, II and III
335. Which of the following cells are involved in defence mechanism of the body?  
a) Macrophages                                      b) Neutrophils                                      c) Lymphocytes                                      d) All of these
336. If a certain patient is suspected to be suffering from typhoid. Which diagnostic technique will you recommend for its detection?  
a) ELISA                                      b) WIDAL                                      c) MRI                                      d) CT scan
337. Consider the following statements about biomedical technologies.  
I. During open heart surgery, blood is circulated in the heart-lung machine.  
II. Blockage in coronary arteries is removed by angiography.

III. Computerised Axial Tomography (CAT) shows detailed internal structure as seen in a section of body.

IV. X-ray provides clear and detailed images of organs like prostate glands and lungs.

Which two of the above statements are correct?

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

338. The intermediate host of the parasite that causes Tashkent ulcers is

- a) *Glossina palpalis*                      b) *Phlebotomus argentipes*  
c) *Phlebotomus papatasi*                      d) *Triatoma infestans*

339. The major phagocytic cells are

- a) Antibody                      b) Antigen                      c) Lymphocytes                      d) Macrophages

340. Stomach clear out pathogens with the help of

- a) Secreting HCl                      b) Secreting hormone                      c) Both (a) and (b)                      d) None of these

341. Full form MALT is

- a) Mucosal Associated Lymphoid Tissue                      b) Memory Associated Lymphoid Tissue  
c) Memory Associated Lymphocyte Tissue                      d) Mucosa Associated Lymphocyte Tissue

342. Ishihara chart is used to detect

- a) TB                      b) Eye sight                      c) Colour blindness                      d) diabetes

343. Mast cell is a cell of ...A... of vertebrate animals. Mast cells mediate inflammatory responses such as ...B.....

. Mast cells store a number of different chemical mediators including ...C... and ...D... . Here A to D refers to

- a) A-immune system, B-allergic reactions, C-histamine, D-serotonin                      b) A-bone marrow, B-allergic reactions, C-mucous, D-cerumen  
c) A-thymus, B-allergic reactions, C-histamine, D-cerumen                      d) A-immune system, B-allergic reactions, C-cerumen, D-serotonin

344. HIV is a ...A... , which means it has genes composed of ...B... like all viruses, HIV replicates inside the host cells. Its considered a retrovirus because it uses an enzymes, ...C..., to convert ...D..... into ...E.... . Here A to E refers to

- a) A-retrovirus, B-RNA, C-reverse transcriptase, D-RNA, E-DNA  
b) A-retroviral, B-DNA, C-reverse transcriptase, D-DNA, E-RNA  
c) A-rhinovirus, B-DNA, C-reverse transcriptase, D-DNA, E-RNA  
d) A-adenovirus, B-RNA, C-reverse transcriptase, D-RNA, E-DNA

345. The specific parts of the antibody molecule that binds the antigen are called

- a) Heavy chain  
b) Small chain  
c) Antigen binding site  
d) Antibody bindings side

346. Candom(nirodh) is formed by

- a) Hindustan Liver Ltd                      b) Hindustan Latex Ltd                      c) Both (a) and (b)                      d) None of these

347. Interferon is a type of protein, which is used to cure

- a) Homeostatic disorder                      b) Hepatitis caused by virus  
c) Common cold caused by virus                      d) Both (b) and (c)

348. Chancroid is a sexually transmitted disease caused by

- a) *Treponema*                      b) *Haemphilus*                      c) *Neisseria*                      d) *Chlamydia*

349. Antiviral substances are

- a) Antibiotics                      b) Antibodies                      c) Interferons                      d) Vaccines

350. Which one of the following statements is correct with respect to AIDS?

- a) The HIV can be transmitted through eating food together with an infected person  
b) Drug addicts are least susceptible to HIV infection  
c) AIDS patients are being fully cured cent per cent with proper care and nutrition  
d) The causative HIV retrovirus enters helper T-lymphocytes thus, reducing their numbers

351. An autoimmune disease where the body's own antibodies attack the cells of the thyroid is called



- a) Hyperthyroidism  
c) Grave's disease
- b) Hashimoto's disease  
d) Turner's syndrome
352. A sexually transmitted disease, symptomized by the development of ulcers on the genitals, is caused by the infection of  
a) *Treponema pallidum*  
c) Human Immunodeficiency Virus
- b) *Neisseria gonorrhoeae*  
d) Hepatitis-B virus
353. Smoking addiction is harmful because it produces polycyclic aromatic hydrocarbons, which cause  
a) Reduction in oxygen transport  
c) Cancer
- b) Increase in blood pressure  
d) Retardation of growth of foetus
354. The process, in which antibody comes in contact with antigen and convert them in harmless insoluble matter, is called  
a) Activation  
b) Agglutination  
c) Neutralization  
d) Opsonization
355. Which one of the following diseases is caused by virus?  
a) Cholera  
b) Diphtheria  
c) Measles  
d) Whooping cough
356. In India, there is decline in female population as compared to males, this is because of  
a) Less female reach reproductive age  
b) Number of female children are born less as there is more chance of prenatal death in case of female child  
c) Female infanticide  
d) All of the above
357. Hepatitis is a  
a) Viral diseases  
b) Bacterial diseases  
c) Fungal diseases  
d) Protozoan diseases
358. Nicotine is  
a) An alkaloid  
b) Steroid  
c) Stimulant  
d) Both (a) and (c)
359. Physical carcinogen, e. g., UV-ray, X-ray and  $\gamma$ -rays causes  
a) DNA damage  
b) RNA damage  
c) Both (a) and (b)  
d) Protein damage
360. Critical state of disease is called  
a) Acme  
b) Acromion  
c) Acholin  
d) None of these
361. Who among the following established the scientific basis of vaccination?  
a) Edward Jenner  
b) George Kohler  
c) Louis Pasteur  
d) Von Behring
362. The first antibiotic was discovered by  
a) A Fleming  
b) W Flemming  
c) R Koch  
d) Louis Pasteur
363. Malaria is caused by  
a) *Plasmodium vivax*  
c) *Plasmodium falciparum*
- b) *Plasmodium malariae*  
d) All of these
364. AIDS stands for  
a) Acquired Immuno Deficiency Syndrome  
c) Acquired Immuno Deficiency System
- b) Acquired Immuno Deficiency Sign  
d) Acquired Immuno Deficiency Structure
365. Which of the following is the most sparsely populated satate of India?  
a) Manipur  
b) Rajasthan  
c) Meghalaya  
d) Arunachal Pradesh
366. In ECG, what does T-wave represent?  
a) Diastole of auricles  
c) Systole of ventricles
- b) Diastole of ventricles  
d) Diastole of auricles and ventricles
367. Marriageable age of girl and boys is  
a) 21 and 24  
b) 18 and 21  
c) 15 and 18  
d) 18 and 24
368. Which cell secretes antibody?  
a) Lymphocytes  
b) Monocytes  
c) Eosinophils  
d) Neuterophils
369. Which one of the following diseases causes dry, scaly lesions on skin, nails and scalp?  
a) Ringworm  
b) Skin allergy  
c) Botulism  
d) None of these



370. The invasion of cancerous cells from one part of the body to another of body is called  
 a) Contact inhibition      b) Metastasis      c) Benign tumour      d) Tumour
371. Malignant tumours are  
 I. mass of neoplastic cells  
 II. cells that grow very rapidly and damaging the surrounding normal tissue  
 III. cells that show the property of metastasis  
 Which of the statements given above are correct?  
 a) I and II      b) I and III      c) II and III      d) All of these
372. An example of innate immunity is  
 a) PMNL- neutrophils      b) T- lymphocytes  
 c) B-lymphocytes      d)  $T_H$  - cells
373. Lung tuberculosis is caused by  
 a) *Pseudomonas aeruginosa*      b) *Mycobacterium tuberculosis*  
 c) *Streptococcus pneumoniae*      d) *Escherichia coli*
374. Which one of the following is not correctly matched?  
 a) *Glossina palpalis* - Sleeping sickness  
 b) *Culex* - Filariasis  
 c) *Aedes aegypti* - Yellow fever  
 d) *Anopheles culifacies* - Leishmaniasis
375. HIV virus affect..... In AIDS patient.  
 a) Cytotoxic T-cell      b) M-N cell      c) Suppressor cell      d) Helper T-cell
376. A person likely to develop tetanus is immunized by administering  
 a) Dead germs      b) Performed antibodies  
 c) Wide spectrum antibiotics      d) Weakened germs
377. Your immune system helps to protect you against viruses and bacteria that can cause sickness. Which cells are part of the immune system?  
 a) White blood cells      b) Red blood cells      c) Nerve cells      d) None of these
378. Consider the following statements  
 I. The property of metastasis is shown by malignant tumours  
 II. Carcinogens are the agents that causes cancer  
 III. Benign tumour causes little damage to body cells  
 Which of the statements given above are correct?  
 a) I and II      b) I and III      c) II and III      d) I, II and III
379. Gonorrhea is caused by  
 a) *Treponema pallidum*      b) *Entamoeba gingivalis*  
 c) *Mycobacterium leprae*      d) *Neisseria gonorrhoeae*
380. To obtain a standard ECG, a patient is connected to the machine with three electrodes  
 a) One to each wrist and to left ankle      b) One to each ankle and the left wrist  
 c) One to each wrist and to the left chest region      d) One to each ankle and to the left chest region
381. Typhoid is caused by  
 a) Bacteria      b) Virus      c) Protozoa      d) Fungus
382. X-rays are used in  
 a) ECG      b) EEG      c) CT-scan      d) Endoscopy
383. Penicillin was used in  
 a) First world war      b) second world war      c) Both (a) and (b)      d) None of these
384. Side effects of anabolic steroids in females include  
 I. masculinization  
 II. aggressiveness  
 III. mood swings, depression

IV. abnormal menstrual cycle

V. excessive facial and body hair

Choose the correct option

- a) I, II and III                      b) I, II, III and IV                      c) II, III, IV and V                      d) I, II, III, IV and V
385. Amphetamines are the drugs of  
a) Narcotics                      b) Sedatives                      c) Stimulants                      d) hallucinogens
386. Which of the following birth control measure can be considered as the safest?  
a) The rhythm method                      b) The use of physical barriers  
c) Termination of unwanted pregnancy                      d) Sterilization techniques
387. Aspirin is a/an  
a) Antibiotic                      b) Antipyretic                      c) Antiseptic                      d) None of these
388. Flemming, Chain and Florey were awarded the Nobel Prize in 1945 for the discovery of  
a) HIV                      b) CT scan                      c) Penicillin                      d) *Staphylococcus*
389. Heroin is obtained from plant of family  
a) Papaveraceae                      b) Leguminosae                      c) Cruciferae                      d) Liliaceae
390. The combination of surgery, radiotherapy and chemotherapy can help to treat  
a) Cancer                      b) AIDS                      c) both (a) and (b)                      d) None of these
391. Rejection of tissue or graft transplants is brought about mainly by  
a) Cytotoxic T-cells                      b) Suppressor T-cells                      c) B-cells                      d) Macrophages
392. Each antibody has ...A... polypeptide chains, ...B... small chains called ....C... chains and ...D... longer chains called ...E... chains  
The antibody, therefore, is represented as ...F...  
Here A to F refers to  
a) A-four, B-two, C-light, D-two, E-heavy, F-H<sub>2</sub>L<sub>2</sub>  
b) A-six, B-three, C-light, D-three, E-heavy, F-H<sub>3</sub>L<sub>2</sub>  
c) A-two, B-one, C-light, D-one, E-heavy, F-H<sub>1</sub>L<sub>1</sub>  
d) A-five, B-two, C-light, D-three, E-heavy, F-H<sub>2</sub>L<sub>2</sub>
393. Antibodies are produced by  
a) Leucocytes                      b) Lymphocytes                      c) Erythrocytes                      d) None of these
394. The test, which is misused for identification of an unborn baby is  
a) Clotting test                      b) Amniocentesis                      c) Erythroblastosis                      d) aniogram
395. Heroin  
a) Is a depressant                      b) Slows down body functions  
c) As commonly called smack                      d) All of the above
396. Which of the following is used in eye inflammation and for curing night blindness?  
a) *Atropa belladonna*                      b) *Cichorium intybus*  
c) *Eclipta alba*                      d) *Emilia sonchifolia*
397. Transmission of HIV infection from infected mother to her child occurs through  
a) Liver                      b) Placenta                      c) Skin                      d) None of these
398. Metastasis is associated with  
a) Malignant tumours                      b) Benign tumours                      c) Both (a) and (b)                      d) Crown gall tumour
399. Bone marrow is the site for the development and maturation of  
a) B-lymphocyte                      b) T-lymphocyte                      c) Both (a) and (b)                      d) T-helper cells
400. Smack is a drug obtained from the  
a) Latex of *Papaver somniferum*                      b) Leaves of *Cannabis sativa*  
c) Flowers of *Datura*                      d) Fruits of *Erythroxylum coca*
401. Maurer's dots are observed in the erythrocytes of man if these are infected with  
a) *Plasmodium malariae*                      b) *Plasmodium vivax*  
c) *Plasmodium falciparum*                      d) *Plasmodium ovale*

402. The Ig that mediates allergic reaction is  
 a) IgM                                      b) IgG                                      c) IgE                                      d) IgA
403. Antibodies are the glycoproteins which  
 a) Provides localized protection in external secretions against bacteria and viruses  
 b) Involved in allergic and hypersensitivity  
 c) Helps in complement activation  
 d) All of the above
404. Which malaria parasite has longest incubation period?  
 a) *Plasmodium. vivax*              b) *P.falciparum*                      c) *p. malariae*                      d) *p. ovale*
405. Which of the following is a characteristics of antibodies?  
 a) Carbohydrate structure                      b) Composed of heavy and light polypeptide chains  
 c) Three binding sites per antibody monomer              d) All of the above
406. AIDS is caused by  
 a) Virus                                      b) Bacteria                                      c) Protozoa                                      d) Fungi
407. Which one of the following techniques is used for the detection of cancers?  
 a) Magnetic Resonance Imaging (MRI)                      b) Radiography (X-ray)  
 c) Computed Tomography (CT)                      d) All of the above
408. *Plasmodium* is a  
 a) Symbiont                                      b) Parasite                                      c) Saprophyte                                      d) None of these
409. In the immune system, interferons are part of  
 a) Physiological barriers  
 b) Cellular barriers  
 c) Physical barriers  
 d) Cytokine barriers
410. A transplant between individuals of the same species, but with different MHC/HLA alleles is  
 a) Autograft                                      b) Isograft                                      c) Xenograft                                      d) Allograft
411. The function of IgE is  
 a) Mediate in allergic response  
 b) Activation of B-cells  
 c) Protection from inhaled and ingested pathogens  
 d) Stimulation of complement system, passive immunity of foetus
412. The primary and secondary immune responses are carried out with the help of  
 a) Immunoglobulins              b) T-lymphocytes                      c) both (a) and (b)                      d) Lysozymes
413. Opium is extracted from  
 a) *Atropa belladonna*              b) *Papaver somniferum*              c) *Vinca rosea*                      d) *Azadirachta indica*
414. Which of the following causes prostate cancer?  
 a) Chromium                                      b) Cadmium oxide                      c) Vinyl chloride                      d) Aflatoxins
415. *Salmonella* is related with  
 a) Typhoid                                      b) Polio                                      c) TB                                      d) Tetanus
416. Diphtheria is caused by  
 a) Poisons released by living bacterial cells into the host tissues  
 b) Poisons released from dead bacterial cells into the host tissues  
 c) Poisons released by virus into host tissues  
 d) Excessive immune response by the host's body
417. HIV can not be transmitted through the following options except by  
 a) Hugging                                      b) Sharing foods  
 c) Using public toilet                      d) Sharing razor blades
418. Small proteins produced by vertebrate cells naturally in response to viral infections and which inhibit multiplication of viruses are called

- a) Immunoglobulins      b) Interferons      c) Antitoxins      d) Lipoproteins
419. In the metropolitan cities of India, many children are suffering from allergy or asthma. What are the main causes of this problem?
- I. Due to sensitivity to the environment  
 II. Because of the protected environment provided early in life  
 III. Modern-day life style
- a) I and II      b) I and III      c) II and III      d) I, II and III
420. Which one of the following is the correct statement regarding the particular psychotropic drug specified?
- a) Hashish causes alter through perception and hallucinations  
 b) Opium stimulates nervous system and causes hallucinations  
 c) Morphine leads to delusions and disturbed emotions  
 d) Barbiturates cause relaxation and temporary euphoria
421. When the infection occurs in the alveoli (microscopic air sacs in the lungs) they fill the fluid. When the alveoli don't work efficiency, the lungs are less able to extract oxygen from the air. This causes the feeling of being short of breath, which is one of the most common symptoms of pneumonia
- The above paragraph is
- a) True  
 b) False  
 c) Sometimes (a) and sometimes (b)  
 d) Neither (a) nor (b)
422. To confirm ELISA for AIDS, we used
- a) Western blotting      b) Northern blotting      c) Southern blotting      d) Eastern blotting
423. Which is not cancer?
- a) Leukaemia      b) Trachoma      c) Carcinoma      d) Sarcoma
424. DTP vaccine is given for
- a) Tetanus, polio, plague      b) Diphtheria, whooping cough and leprosy  
 c) Diphtheria, pneumonia, tetanus      d) Diphtheria, whooping cough, tetanus
425. Sickle cell anaemia has not been eliminated from the African population because
- a) It is controlled by recessive genes      b) It is not a fatal disease  
 c) It provides immunity against malaria      d) It is controlled by dominant genes
426. Thymus is the site for the development and maturation of
- a) T-lymphocyte      b) B-lymphocyte      c) Both (a) and (b)      d) Antibodies
427. A person is injected with globulin against hepatitis. This is
- a) Artificially acquired passive immunity      b) Artificially acquired active immunity  
 c) Naturally acquired active immunity      d) Naturally acquired passive immunity
428. An alkaloid called 'Reserpine' is extracted from
- a) Leaves of ashwagandha      b) Roots of sarpagandha  
 c) Leaves of sarpagandha      d) Roots of ashwagandha
429. Human immunodeficiency virus causes
- a) Acquired immuno deficiency syndrome      b) Anthrax  
 c) Tuberculosis      d) Polio
430. In heavy smokers, the alveoli of the lungs are enlarged and damaged, which reduces the surface area for the exchange of respiratory gases. The condition is called
- a) Asthma      b) Silicosis      c) Emphysema      d) Insomnia
431. *Entamoeba histolytica* feeds on
- a) Liver      b) Small intestine      c) Large intestine      d) WBCs
432. Identify the wrongly matched pair.
- a) Typhoid      - Widal test  
 b) Plague      - Viral disease

- c) Malignant malaria - *Plasmodium falciparum*  
d) Common cold - Rhinovirus
433. At which stage of HIV infection does one usually shows symptoms of AIDS?  
a) When viral DNA is produced by reverse transcriptase  
b) When HIV replicates rapidly in helper T-lymphocytes and damages large number of these  
c) With 15 days of sexual contact with an infected person  
d) When the infecting retrovirus enters host cells
434. Consider the following statements  
I. Dead cells of the skin prevents pathogen entry  
II. Skin secretes oil that makes skin surface acidic  
III. Skin secretes sweat that makes surface acidic  
Which of the statement given above are correct?  
a) I and II                      b) I and III                      c) II and III                      d) I, II and III
435. Symptoms of allergic reaction includes  
a) Watery eyes                      b) Running nose  
c) Respiratory complaints                      d) All of these
436. A person has developed interferon in his body. He seems to carry an infection of  
a) Typhoid                      b) Filariasis                      c) Malaria                      d) Measles
437. Spread of AIDS is due to  
a) Infected needles and syringes                      b) Sexual contact with infected person  
c) Both (a) and (b)                      d) Sharing public toilet
438. Human population growth is  
a) Lag                      b) Stationary                      c) Exponential                      d) None of these
439. Malarial parasite is introduced into the blood of man as a  
a) Metacystozoite                      b) Schizont                      c) Oocyte                      d) Sporozoite
440. Expanded form of ELISA is  
a) Enzyme Linked Immuno Sorbent Assay                      b) Enzyme Linked Ion Sorbent Assay  
c) Enzyme Linked Inductive Assay                      d) None of the above
441. Elephantiasis causing organism belong to  
a) Aschelminthes                      b) Platyhelminthes                      c) Cnidaria                      d) Porifera
442. Vaccination provides  
a) Natural immunity                      b) Passive immunity                      c) Both (a) and (b)                      d) Active immunity
443. Which of the following is not hallucinogen?  
a) Heroin                      b) LSD                      c) Marijuana                      d) Charas
444. Which one of the following acts as a physiological barrier to the entry of microorganisms in human body?  
a) Tears                      b) Monocytes  
c) Skin                      d) Epithelium of urogenital tract
445. The truck drivers usually take  
a) Amphetamines                      b) LSD                      c) Caffeine                      d) morphine
446. Short lived immunity acquired from mother to foetus across placenta or through mother's milk to the infant is categorized as  
a) Active immunity                      b) Passive immunity  
c) Cellular immunity                      d) Innate or non-specific immunity
447. Cancer cells are more easily damaged by radiation than normal cells because they are  
a) Starved of mutation                      b) Undergoing rapid division  
c) Different in structure                      d) Non-dividing
448. Cattle fed with spoiled hay to sweet clover, which contains dicumarol  
a) are healthier due to good diet  
b) Catch infections easily

- c) May suffer with vitamin-K deficiency and prolonged bleeding  
d) May suffer from beri-beri due to deficiency of vitamin-B
449. Which of the following are the reasons for rheumatoid arthritis? Choose the correct option  
I. Lymphocytes become more active  
II. Body attacks self cells  
III. More antibodies are produced in the body  
IV. The ability to differentiate pathogens or foreign molecules from self cells is lost  
a) I and II                      b) II and IV                      c) III and IV                      d) I and III
450. In which of the following disorders, person will become hypersensitive about one's look?  
a) Hypochondria              b) Anxiety                      c) Mood                      d) Phobia
451. Warning signs of drug and alcohol abuse includes  
I. Drop in academic performance  
II. Absence from school/college  
III. Lack of interest in personal hygiene  
IV. Isolation, depression, fatigue, aggressive and rebellious behavior  
a) I, II and III                  b) I, III and IV                  c) II, III and IV                  d) I, II, III and IV
452. How does antigen-determinant differ from antigen binding site?  
a) By its structure              b) By its location              c) By its function              d) All of these
453. Infective stage to man of the parasite that causes haematuria is  
a) Miracidium                  b) Redia                      c) Microfilaria                  d) Cercaria
454. Health is affected by  
I. genetic disorders  
II. infections  
III. life style  
Which of the key words given above are correct?  
a) I and II                      b) I and III                      c) II and III                      d) I, II and III
455. Normal cells have genes called ...A... which are present in an inactivated state but under certain conditions like ...B... they get transformed to ...C... Here A, B and C refers to  
a) A-cellular oncogenes, B-mutation, C-cancer causing oncogenes  
b) A-proto-oncogenes, B-mutation, C-disease causing genes  
c) A-viral oncogenes, B-mutation, C-tumour causing genes  
d) None of the above
456. Purified antibiotic penicillin of *Penicillium notatum* was discovered by  
a) Alexander Fleming          b) Howard Florey              c) Robert Hooke              d) Carolus Linnaeus
457. Amoebiasis is caused by  
a) *Plasmodium*                                      b) *Entamoeba histolytica*  
c) House flies                                      d) Contaminated food and water
458. Which of the following drugs can be used to reduce allergic reaction due to unavoidable substances?  
I. Anti-histamine  
II. Adrenaline  
III. Steroids  
a) I and II                      b) I and III                      c) II and III                      d) I, II and III
459. Thymus is ...A... at the time of puberty but it ...B... with age. Here A and B refers to  
a) A-large; B-reducing                              b) A-small; B-increasing  
c) A-large; B-disappear                              d) A-not present; B-appears
460. Which one is not a symptom of disease caused by *E. histolytica*?  
a) Stools with excess mucus                      b) Constipation  
c) Abdominal pain                                      d) Nasal discharge
461. Choose the wrong statement



- a) HIV has RNA as its genetic material
- b) HIV replicates in T<sub>H</sub>-lymphocytes
- c) Antiretroviral drugs are partially effective for AIDS treatment
- d) The time-lag between the infection and appearance of AIDS symptoms may vary from few hours to a week

462. Human health can be maintained by

- a) Balanced diet                      b) Personal hygiene                      c) Regular exercise                      d) All of these

463. Genetic counsellors can identify heterozygous individuals by

- a) Height of individuals                      b) Colour of individuals
- c) Screening procedures                      d) All of the above

464. Electric potential of the brain is recorded by

- a) CT scan                      b) Sphygmomanometer
- c) ECG                      d) EEG

465. Jaundice is a disease of

- a) Pancreas                      b) Kidney                      c) Liver                      d) Duodenum

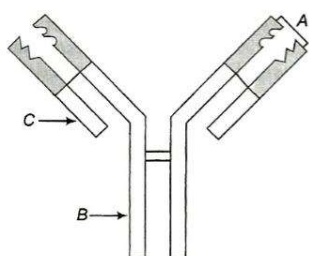
466. T-lymphocytes differentiate and matured in

- a) Bone marrow                      b) Kidneys                      c) Liver                      d) Thymus gland

467. Fever in malaria is due to

- a) Release of merozoites from RBCs                      b) Entry of sporozoites into blood capillaries
- c) Entry of cryptomerozoites into RBCs                      d) Entry of merozoites into liver cells

468. The figure given below shows an antibody molecule. Name the parts A, B and C



- a) A-Antigen binding site, B-Heavy chain, C-Light chain
- b) A-Antibody binding site, B-Light chain, C-Heavy chain
- c) A-Antigen binding site, B-Short chain, C-Long chain
- d) A-Antibody binding site, B-Long chain, C-Short chain

469. A vaccine meant for protection against tuberculosis is

- a) BCG                      b) DPT                      c) TT                      d) BGC

470. Which one of the following pairs is not correctly matched?

- a) Vitamin-B<sub>12</sub>      \_\_\_\_\_ Pernicious anaemia                      b) Vitamin-B<sub>6</sub>      \_\_\_\_\_ Loss of appetite
- c) Vitamin-B<sub>1</sub>      \_\_\_\_\_ Beri-beri                      d) Vitamin-B<sub>2</sub>      \_\_\_\_\_ Pellagar

471. An example of liquid tumour is

- a) Glioblastoma                      b) Adenocarcinoma
- c) Chondrosarcoma                      d) Myelocytic leukaemia

472. The drug 'cyclosporin' used for organ transplant patients is obtained from a

- a) Bacterium                      b) Fungus                      c) Virus                      d) Plant

473. Sand fly spreads a particular type of disease by its

- a) proboscis                      b) Mandible                      c) Salivary gland                      d) None of these

474. Which of the following disease caused internal bleeding, muscular pain, fever, anaemia and blockage of the intestinal passage?

- a) Ascariasis                      b) Filariasis                      c) Amoebiasis                      d) Trypanosomiasis

475. Which of the following statement is not true about HIV/AIDS?

- a) HIV is a contagious disease



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- a) I-True; II-True      b) I-False; II-False      c) I-True; II-False      d) I-False; II-True
493. Anaemia is due to deficiency of  
a) Ca      b) Fe      c) Mg      d) P
494. Which of the following diseases is spread by housefly?  
a) Dengue fever      b) Encephalitis      c) Filariasis      d) Typhoid
495. HIV belongs to which of the following families of viruses?  
a) Retrovirus      b) Togavirus      c) Adenovirus      d) Lentivirus
496. Neurasthenia refers to  
a) Undue concern about health  
b) Traumatic experience like rape  
c) Disorder of sensory perception  
d) Mental inability to concentrate on or enjoy things
497. Grafting of tissue or organ between individuals of different species is called  
a) Autograft      b) Isograft      c) Xenograft      d) Allograft
498. Passive immunization include  
a) Transfer of lymphocyte directly      b) Transfer of maternal antibodies across placenta to the foetus  
c) Introduction of antibodies      d) Both (b) and (c)
499. Ultrasound of how much frequency is beamed into human body for sonography?  
a) 30-45 MHz      b) 15-30 MHz      c) 1-15 MHz      d) 45-70 MHz
500. The tests that are used in the diagnosis of AIDS are  
a) ELISA and immunoblot      b) Northern blot and ELISA  
c) ELISA and southern blot      d) Western blot and ELISA
501. The complexes formed during immune complex mediated hypersensitivity are removed by  
a) Eosinophils and T<sub>c</sub> cells      b) Monocytes and B-lymphocytes  
c) Eosinophils and monocytes      d) Eosinophils and basophils
502. If a person is feeding only on meat, egg and milk then he will suffer from  
a) Nightblindness      b) Scurvy      c) Rickets      d) Beri-beri
503. *Plasmodium* life cycle is  
a) Digenetic      b) Monogenetic      c) Both (a) and (b)      d) None of these
504. The method, which yields the best pictorial from and does not expose the patient to potentially harmful ionizing radiations is  
a) X-ray radiography      b) Angiography  
c) Computed tomography      d) Magnetic resonance imaging
505. Human Immunodeficiency Virus (HIV)  
I. belongs to the group retrovirus  
II. has RNA genome enclosed in an envelope  
Which of the statements given above are correct?  
a) Only I      b) Only II      c) I and II      d) None of these
506. Physical carcinogens are  
a) UV-rays      b) X-rays      c) γ-rays      d) All of these
507. Immunity gained after an infection is called  
a) Active immunity      b) Innate immunity      c) Passive immunity      d) None of these
508. Which of the following method is used for detection of antibodies?  
a) Competitive ELISA      b) Indirect or sandwich ELISA  
c) Antibody class captive ELISA      d) All of the above
509. Antibody production is assisted by  
a) Monocytes      b) Natural killer cells      c) T-lymphocytes      d) Phagocyte
510. Which of the following substances can cure Parkinson's disease?

- a) GABA                                      b) Acetylcholine                                      c) Dopamine                                      d) Glutamic acid
511. Tetanus disease is caused by  
a) Virus                                      b) Bacteria                                      c) Fungi                                      d) Mycoplasma
512. Interferon is a type of  
a) Anti-bacterial protein                                      b) Anti-viral protein  
c) Complex protein                                      d) Anti-clotting protein
513. Humoral immunity is also called as  
a) Antibody mediated immunity                                      b) Non-specific immune response  
c) Antigen mediated immunity                                      d) None of the above
514. Select the true statements  
I. Cancer can be detected by the use of antibodies against cancer specific antigens for certain type of cancer  
II. The tumour cells are surgically removed to reduce the load of cancerous cells  
III. Certain chemotherapeutic drugs are used to kill the cancerous cells, but majority of the drugs have side effects like hair loss, anaemia, etc.  
a) I and II                                      b) I and III                                      c) II and III                                      d) I, II and III
515. The type of antibody present in colostrum secreted by mammary gland during the initial days of lactation is  
a) IgA                                      b) IgM                                      c) IgG                                      d) IgE
516. Increased asthmatic attacks in certain seasons are related to  
a) Hot and humid environment                                      b) Eating fruits preserved in tin containers  
c) Inhalation of seasonal pollen                                      d) Low temperature
517. Intermediate host of *Wuchereria* is  
a) Female *Anopheles*                                      b) Female *Aedes*                                      c) Female *Culex*                                      d) None of these
518. First line of defence include  
a) Skin                                      b) Mucous coating  
c) Lysozyme secretion from eyes                                      d) All of the above
519. If a quick immune response is needed as in tetanus infection, preformed antibodies or antitoxin is injected into the patient body. This type of immunization is called.....  
a) Active immunization                                      b) Passive immunisation  
c) Innate immunity                                      d) Humoral immunity
520. The full form of SCID is  
a) Secondary communicable Internal Disease                                      b) Secondary communicable Infectious Disease  
c) Severe Communicable Immuno Deficiency                                      d) Severe Communicable Infectious Disease
521. Which of the following is STD?  
a) Cancer                                      b) Malaria                                      c) Pneumonia                                      d) Trichomoniasis
522. Common symptoms of amoebiasis are  
a) Constipation, stool with blood clots                                      b) Abdominal pain and cramp  
c) Weakness                                      d) All of the above
523. Foetal abnormalities are caused by  
a) LSD                                      b) Opium                                      c) Nicotine                                      d) Alcohol
524. Activity of brain is recorded by  
a) ECG                                      b) EEG                                      c) MET                                      d) CT
525. MRI is not allowed in the following conditions except one. Identify the exception  
a) Presence of pace-maker in the body  
b) Pregnant women  
c) Person suffering from stroke  
d) Presence of metallic plate in the body from treatment of broken bones
526. Antibody  
a) Induce formation of antigen                                      b) Helps in production of WBCs

- c) Is formed by WBC  
d) None of the above
527. The AIDS virus spreads by decreasing  
a) Killer T-cells      b) Helper T-cells      c) Suppressor T-cells      d) Carrier T-cells
528. Which one of the following disease is sexually transmitted disease  
a) Cancer      b) Syphilis      c) Diphtheria      d) Myocarditis
529. Consider the following statements  
I. Cocaine interferes with the transport of the neurotransmitter dopamine  
II. It is usually taken by sniffing and snorting  
III. It has a potential stimulating action on the central nervous system  
Which of the statements given above are correct?  
a) I and II      b) I and III      c) II and III      d) I, II and III
530. Which of the following disease is caused by bacteria *Salmonella typhi*?  
a) Typhoid      b) Pneumonia      c) Malaria      d) Cold
531. Which one of the following is used for external application in the cure of leprosy?  
a) Rice bran oil      b) Neem seed oil      c) Cotton seed oil      d) Groundnut oil
532. Incubation period of *Plasmodium vivax* is  
a) 14 days      b) 30 days      c) 40 days      d) 32 days
533. The antibody dependent cytotoxicity is seen in  
a) Generalized anaphylaxis      b) Local anaphylaxis  
c) Non-compatible blood transfusion      d) Immune complex reaction
534. The letter T in T-lymphocyte refers to  
a) Thyroid      b) Thalamus      c) Tonsil      d) Thymus
535. Which of the following pairs is correct?  
a) *E. coli* - *Entamoeba histolytica*      b) *Culex* - Elephantiasis  
c) Bed bug - Kala-azar      d) *Plasmodium* - sleeping sickness
536. Which of the following are symptoms of radiation disease?  
a) Red and ulcered skin      b) Nausea and loss of hair  
c) Nausea and anaemia      d) Ulcered skin, anaemia, nausea and loss of hair
537. Amniocentesis detects  
a) Deformity in brain      b) Deformity in heart      c) Hereditary diseases      d) All of these
538. Removal or absence of thymus in early life shall bring about  
a) Lack of lymphocytes      b) Lack of antibodies  
c) Lack of lymph nodes      d) All of these
539. Which of the following is an opiate narcotic?  
a) Morphine      b) LSD      c) Amphetamines      d) Barbiturates
540. Ultrasound is produced by  
a) Lead bead      b) Lead zirconate      c) Lithium chloride      d) None of these
541. The gland often referred in relation to AIDS is  
a) Adrenal      b) Thyroid      c) Thymus      d) Pituitary
542. LSD is derived from  
a) *Claviceps purpurea*      b) *Pseudomonas putida*      c) *Cannabis indica*      d) *Cannabis sativa*
543. Which among the following is an autoimmune disease?  
a) Rheumatoid arthritis  
b) AIDS  
c) Hepatitis-B  
d) Swine flue
544. Which of the following disorders is not hereditary?  
a) Haemophilia      b) Cataract      c) Sickle cell anaemia      d) Colour blindness
545. Which of the following diseases is not caused by virus?

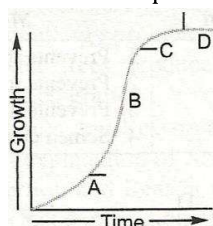
- a) Mumps                      b) Rabies                      c) AIDS                      d) Tuberculosis
546. Which of the following provides immunity to digestive tract against antigen?  
a) IgA                      b) IgD                      c) IgG                      d) IgE
547. The group of diseases carried (transmitted) by insects is  
a) Typhoid, jaundice, tuberculosis                      b) Mumps, measles, smallpox  
c) Scrabies, ringworm, swine flu                      d) Malaria, filaria, yellow fever
548. Which one of the following diseases is communicable?  
a) Rickets                      b) Amoebiasis                      c) Diabetes                      d) Cancer
549. *Plasmodium* completes its life cycle in  
a) One host                      b) Two host                      c) Multiple host                      d) None of these
550. 'Mammalian thymus' is mainly concerned with  
a) Regulation of body temperature                      b) Regulation of body growth  
c) Immunological functions                      d) Secretion of thyrotropin
551. Match the correct combination  
a) *Leishmania donovani* \_\_\_\_ Sleeping sickness                      b) *Wuchereria bancrofti* \_\_\_\_ Filariasis  
c) *Amoeba proteus* \_\_\_\_ Kala-azar                      d) *Anopheles maculipennis* \_\_\_\_ Malaria
552. Transmission of HIV occurs by  
I. sexual contact with infected person  
II. transfusion of contaminated blood  
III. sharing infected needles  
IV. from infected mother to her baby through placenta  
Which of the statements given above are correct?  
a) I and II                      b) I and III                      c) II, III and IV                      d) I, II, III and IV
553. Which of the following is a viral disease?  
a) TB                      b) Diphtheria                      c) Small pox                      d) All of these
554. Cirrhosis is  
a) Alcohol related disease                      b) Smoke related disease  
c) Junk food related disease                      d) Polluted air related disease
555. Identify the hepatitis virus, which cannot survive independently and requires another hepatitis virus for its multiplication.  
a) Hepatitis-A virus                      b) Hepatitis-B virus                      c) Hepatitis-C virus                      d) Hepatitis-D virus
556. Excessive dosage of cocaine causes  
a) Hallucination                      b) Respiratory disorders  
c) Cardiovascular failure                      d) All of these
557. The disease elephantiasis is caused by  
a) Protozoan                      b) Bacteria                      c) Virus                      d) Worm
558. Which of the following causes cancer of vagina?  
a) Cadmium oxide                      b) Diethyl stilbestrol                      c) Aflatoxin                      d) Vinyl chloride
559. Cyclosporin A, which is used as an immunosuppressive agent, is produced by  
a) *Aspergillus*                      b) *Clostridium*                      c) *Saccharomyces*                      d) *Trichoderma*
560. AIDS virus contains  
a) RNA with protein                      b) RNA with protein  
c) DNA without protein                      d) DNA only
561. In a graph of population, on x-axis time and on y-axis population is plotted. A parallel line to x-axis shows  
a) Natality increases mortality decreases                      b) Natality equal to mortality  
c) Natality decreases mortality increases                      d) Natality constant mortality increases
562. Antipoison against snake venom contains  
a) Antigen                      b) Antibody  
c) Hormone                      d) Enzyme substrate complex

563. Which one of the following is a bacterial diseases?  
 a) Measles                      b) Chicken pox                      c) Rabies                      d) Tuberculosis
564. Where will you look for the sporozoites of the malarial parasite?  
 a) RBCs of humans suffering from malaria                      b) Spleen of infected person  
 c) Salivary glands of freshly moulted female *Anopheles* mosquito                      d) Saliva of infected female *Anopheles* mosquito
565. The lymph nodes  
 I. are small solid structures throughout the body  
 II. filter lymph fluid as it flows through them, trapping bacteria, viruses and other antigens, which are then destroyed by lymphocytes  
 Which of the statements given above is/are correct?  
 a) Only I                      b) Only II                      c) I and II                      d) None of these
566. Active immunity may be acquired by  
 a) Natural infection                      b) Vaccines                      c) Toxoids                      d) All of these
567. Which of the following is used in analysis of metabolic and physiological process of tissue?  
 a) Sonography                      b) CT-Scan                      c) NMR                      d) ECG
568. Smokeless tobacco causes  
 a) Oral cancer                      b) Lung cancer                      c) Bronchitis                      d) Heart disease
569. The treatment of snake-bite by antivenin is an example of  
 a) Artificially acquired active immunity                      b) Artificially acquired passive immunity  
 c) Naturally acquired passive immunity                      d) Specific natural immunity
570. ECG is a measure of  
 a) Rate of heart beat                      b) Difference in electric potential  
 c) Volume of blood pumped                      d) Ventricular contraction
571. Which of the following property is possessed by cancerous cell?  
 a) A new blood vessels formation                      b) Uncontrolled cell division  
 c) Both (a) and (b)                      d) Controlled cell division
572. The carnivorous fish used for eradication of mosquito larva in stagnated water is  
 a) *Gambusia*                      b) *Anabas*                      c) Rohu                      d) *Catla catla*
573. Which of the following options is not appropriate for anxiety disorder?  
 a) Perspiration occurs  
 b) Distorted thoughts  
 c) In this condition, person reacts very strongly to any situation of stress  
 d) Heart beats increase
574. The intermediate host of *Schistosoma* is  
 a) Snail                      b) Mosquito                      c) Housefly                      d) Sheep
575. A male showing aggressiveness, mood swings, depression, reduction of size of the testicles, decreased sperm production, breast enlargement premature baldness. Possibly he is taking  
 a) Anabolic steroids                      b) Heroin                      c) Marijuana                      d) Morphine
576. Alteration of which genes leads to cancer?  
 a) Cell proliferation gene(proto-oncogenes)                      b) Tumour suppressor gene  
 c) Tumour virus gene                      d) All of the above
577. Which one of the following can help in the diagnosis of a genetical disorder?  
 a) ELISA                      b) ABO blood group                      c) PCR                      d) NMR
578. Cells involved in immune system is/are  
 a) Leukocytes                      b) Blood platelets                      c) Thrombocytes                      d) All of these
579. Vaccine for tuberculosis is known as  
 a) PAS vaccine                      b) BCG vaccine                      c) OPV                      d) DPT
580. Smoking causes many types of cancer including cancer of



- a) Lungs                      b) Urinary bladder                      c) Throat                      d) All of these
581. Which of the following disease is caused by protozoan and transmitted by mosquito?  
a) Pneumonia                      b) Malaria                      c) Filariasis                      d) Typhoid
582. In India, the population control programme launched in  
a) 1955                      b) 1976                      c) 1901                      d) 1987
583. Pathogenicity of bacteria causing tuberculosis and leprosy is due to  
a) Cholesterol                      b) Ergosterol                      c) Prostaglandins                      d) Wax-D
584. Hela cells used in cell biology are  
a) Cancerous cells grown in cancer research laboratory  
b) Cervical cancer cell derivatives  
c) Both (a) and (b)  
d) None of the above
585. *Plasmodium*, a small protozoan causes  
a) Malaria                      b) Filariasis                      c) Amoebiasis                      d) Typhoid
586. A non-communicable disease is  
a) Measles                      b) Rabies                      c) Diphtheria                      d) Diabetes
587. Innate immunity is also called  
a) Familial                      b) Inborn                      c) Genetic                      d) All of these
588. HIV affects ..... in AIDS patients  
a) Cytotoxic cells                      b) Killer T-cells                      c) Suppressor cell                      d) Helper T-cell
589. VCRC stands for  
a) Vaccine Creation Research Center                      b) Vector Control Research Center  
c) Venum Control Research Center                      d) Vital Chemical ReleaseC
590. Quinine used for treatment of malarial fever, is extracted form  
a) *Atropa belladonna*                      b) *Cinchona officinalis*  
c) *Aconitum napellus*                      d) *Rauwolfia serpentina*
591. Which of the following is an example of carcinoma?  
a) Melanoma cancer of skin                      b) Cancer of lymph gland  
c) Cancer of muscle                      d) Cancer of blood
592. Which Ig is produced in primary immune response?  
a) IgA                      b) IgE                      c) IgG                      d) IgM
593. Peyer's patches are found in  
a) Liver                      b) Small intestine                      c) Large intestine                      d) Spleen
594. The filariasis pathogens are transmitted to a healthy person through the bite of  
a) Female mosquito                      b) Housefly                      c) Cockroach                      d) None of these
595. Biolistic technique is used in  
a) Tissue culture process                      b) Gene transfer process  
c) Hybridization process                      d) Germplasm conservation process
596. Which one of the following is protozoan disease?  
a) Polio                      b) AIDS                      c) Taeniasis                      d) Malaria
597. Consider the following statements about AIDS.  
I. AIDS patient become easily infected by bacteria, viruses and even parasites  
II. The person is unable to protect himself against any infection  
III. National AIDS Control Organisation (NACO) and non-governmental organization are trying their best to educate people about AIDS  
Which of the statements given above are correct?  
a) I and II                      b) I and III                      c) II and III                      d) I, II and III
598. A certain patient is suspected to be suffering from acquired immuno deficiency syndrome. Which diagnostic technique will you recommend for its detection

- a) MIRI                      b) Ultra Sound                      c) WIDAL                      d) ELISA
599. The causative agent of mad-cow disease is a  
a) Bacterium                      b) Prion                      c) Worm                      d) Virus
600. Which one of the following is not the property of cancerous cells?  
a) They do not require extracellular growth factors    b) They do not remain confined in the area of formation  
c) They show contact inhibition                      d) They divide in an uncontrolled manner
601. Regarding lymphocytes consider the following statement  
I. The T-lymphocytes form Cell Mediated Immune System (CMIS)  
II. The T-lymphocytes cells do not secrete antibodies but help the B-lymphocyte cell to produce them  
Which of the statement given above is/are correct?  
a) Only I                      b) Only II                      c) I and II                      d) None of these
602. HIV was reported in 1981 and isolated by  
a) Pasteur                      b) Mantagnier                      c) Robert Hook                      d) Hansen
603. In the sigmoid curve of growth, the alphabets indicate the sequence of events. Choose the correct option where the alphabet specifies the event.



- a) A-Phase of slow growth  
B- Phase of exponential growth  
C- Phase of diminishing growth  
D-Stationary phase
- b) A- Phase of rapid growth  
B- Phase of diminishing growth  
C- Stationary phase  
D- Phase of slow growth
- c) A- Diminishing growth  
B- exponential growth  
C- Slow growth  
D- Stationary phase
- d) A- Stationary phase  
B- Phase of slow growth  
C- Phase of rapid growth  
D- Phase of diminishing growth
604. *Ascaris* is also known as  
a) Roundworm                      b) Flatworm                      c) Tapeworm                      d) Liverworm
605. Which of the following helps in differentiation of cells of the immune system  
a) Thymosin                      b) Thyroxine                      c) Cortisol                      d) Steroid
606. Common symptoms of typhoid are  
a) High fever and weakness                      b) Stomach pain and constipation  
c) Headache and loss of appetite                      d) All of the above
607. The immune system may at times reject certain tissues of a person's own body as 'non-self'. This breakdown of the body's self-recognition system is called ...A... The auto-immune reactions cause a variety of diseases known as ....B... . ...C... is an autoimmune disease. The most appropriate option providing A, B and C correctly is

- a) A-autoimmunity, B-autoimmune disease, C-rheumatoid arthritis
- b) A-immunodeficiency, B-immunodeficiency disease, C-AIDS
- c) A-severe combined immunodeficiency, B-congenital disease, C-Addison's disease
- d) A-autoimmunity, B-secondary immunodeficiency disease, C-diabetes

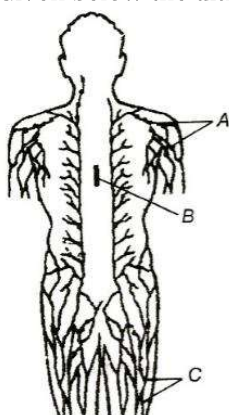
608. The word NACO stands for

- a) National AIDS Control Organisation
- b) Non-Governmental AIDS Control Organisation
- c) National Agrochemical Organisation
- d) Both (b) and (c)

609. Ringworm is caused by

- a) Bacteria
- b) Virus
- c) Protozoa
- d) Fungi

610. Given below the diagrammatic representation of lymph nodes



Label A, B and C

- a) A-Lymph nodes, B-Thymus, C-Lymphatic vessels
- b) A-Lymphatic vessels, B-Thyroid, C-Lymph nodes
- c) A-Tonsils, B-Peyer's patches, C-Lymphatic vessels
- d) A-Tonsils, B-Thymus, C-Peyer's patches

611. Consider the following four statements (I-IV) regarding kidney transplant and select the two correct ones out of these.

- I. Even if a kidney transplant is proper the recipient may need to take immuno-suppressants for a long time.
- II. The cell-mediated immune response is responsible for the graft rejection.
- III. The B-lymphocytes are responsible for rejection of the graft.
- IV. The acceptance or rejection of a kidney transplant depends on specific interferons.

The two correct statements are

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

612. The rejection of organ transplanting in humans is prevented by using

- a) Aspirin
- b) Cyclosporine
- c) Calcitonin
- d) Thrombin

613. Examination of blood of a person suspected of having anaemia, shows large, immature, nucleated erythrocytes without haemoglobin. Supplementing his diet with which of the following, is likely to alleviate his symptoms?

- a) Thiamine
- b) Folic acid and cobalamine
- c) Riboflavin
- d) Iron compounds

614. The inability to distinguish between self cells and non-self cells may lead to

- a) Hypersensitivity
- b) Immunodeficiency
- c) Autoimmune disease
- d) Allergy

615. What is the most abundant and fastest chemical released by mast cell?

- a) Histamine
- b) Serotonin
- c) Both (a) and (b)
- d) Cytokine