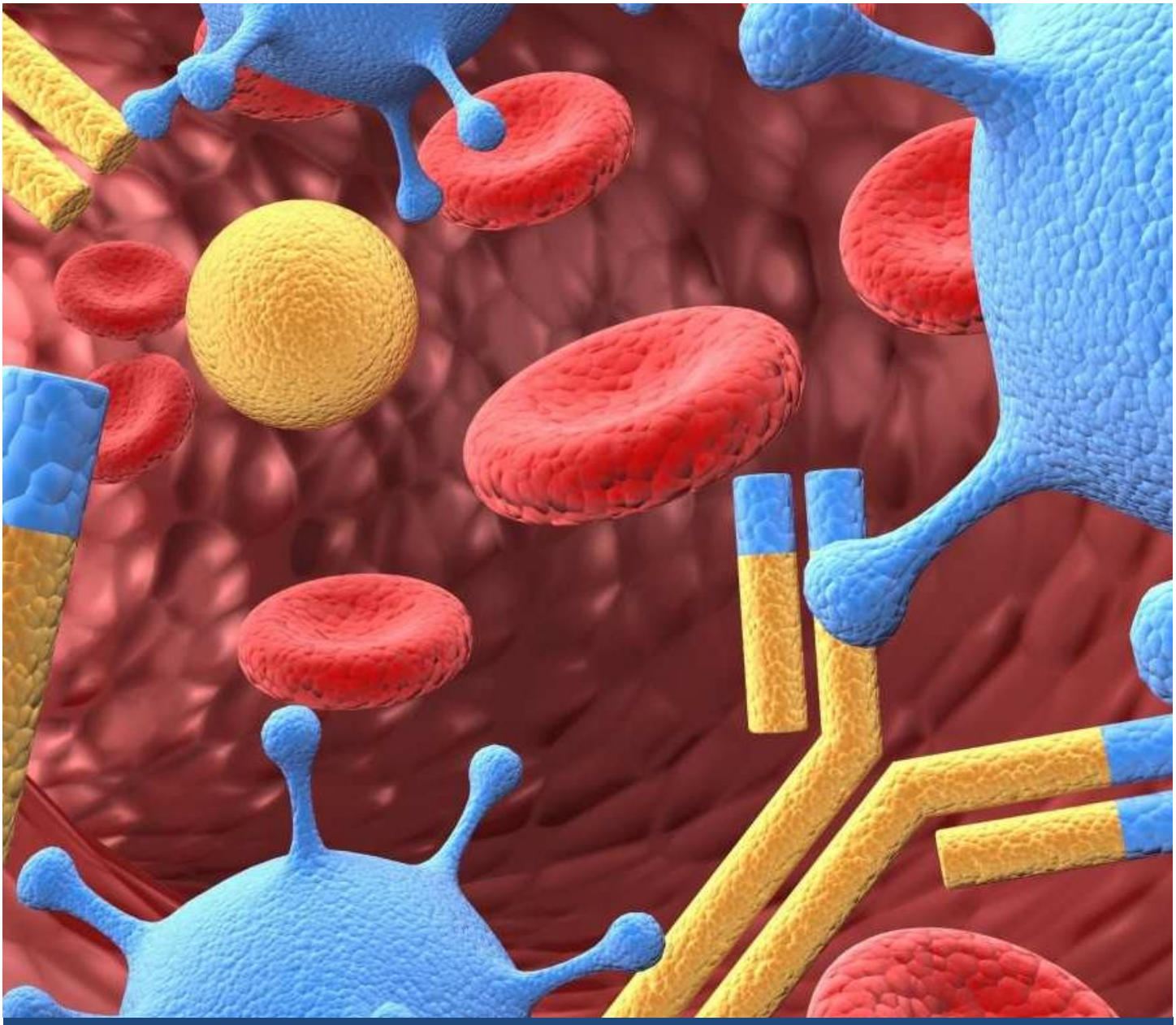

Immunology MCQ

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Microbiology

Introduction

Welcome to **Immunology MCQ**, a comprehensive question bank designed to enhance your understanding of microbiology. This ebook contains over 800+ multiple-choice questions (MCQs) covering a wide array of topics within the field of Microbiology.

Whether you're a medical student preparing for exams, a postgraduate aspirant aiming for success in competitive entrance tests, or a healthcare professional looking to refine your expertise, this book will serve as an invaluable resource in your learning journey. The questions in this ebook are structured to reflect the patterns seen in major medical entrance exams such as NEET PG, USMLE, AIIMS, and others, making it a perfect tool for self-assessment and revision.

Purpose

The primary goal of this ebook is to provide a reliable and extensive resource that students and professionals can use to test their knowledge, improve their diagnostic skills, and solidify key microbiological concepts. With the included detailed answers and explanations, this book goes beyond just helping you answer questions — it enables you to understand the reasoning behind each answer, facilitating deeper learning.

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- **For Students**: The MCQs in this book are designed to match the rigor and format of real exam questions. By practicing regularly, you'll not only enhance your knowledge but also gain confidence in approaching exam challenges.
- **For Professionals**: This ebook helps professionals stay updated with the latest developments in clinical microbiology and refresh critical concepts required in day-to-day practice.
- **For Educators**: Teachers and educators can use this collection to formulate quizzes, exams, or as supplementary teaching material for their students.

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This ebook is a compilation of publicly available online content. Each question has been carefully selected and curated to ensure relevance and accuracy. While this material is sourced from multiple platforms, it has been reorganized and edited to provide a streamlined learning experience.

We hope this book becomes an essential part of your academic and professional toolkit, helping you achieve your goals in Biochemistry.

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Questions

1-: Which of the following is very difficult to induce antibody -

1: Polysaccharide

2: Protein

3: Antigen

4: Effector

2-: Sedimentation coefficient of Ig E is:

1: 7S

2: 8S

3: 11S

4: 20 S

3-: In respiratory and GIT infections, which is the most affected immunoglobulin -

1: IgA

2: IgG

3: IgM

4: IgD

4-: PK reactio detects -

1: IgG

2: IgA

3: IgE

4: IgM

5-: A 3 year old child presents with a history of repeated sinopulmonary infections caused by encapsulated organisms. Which of the following is most likely to be deficient in this case?

1: IgG4

2: IgG3

3: IgG2

4: IgG1

6-: The type of receptors present on T cells is-

1: IgG

2: IgD

3: CD4

4: Prostaglandins

7-: Agglutination test is -

1: ABO incompatibility

2: VDRL

3: Weil-felix test

4: FTA-ABS

8-: A young girl has had repeated infections with Candida albicans and respiratory viruses since she was 3 months old. As part of the clinical evaluation of her immune status, her responses to routine immunization procedures should be tested. In this evaluation, the use of which of the following vaccines is contraindicated?

1: Bacillus Calmette-Guerin (BCG)

2: Bordetella pertussis vaccine

3: Diphtheria toxoid

4: Inactivated polio

9-: In type I hypersensitivity, the mediators is

1: IgE

2: IgG

3: IgM

4: IgC

10-: Northern blot is used for identification of: (Repeat)

1: RNA

2: DNA

3: Protein

4: Antibodies

11-: Which type of cells are prominently infiltrated in Rheumatoid arthritis?

1: B cells

2: T-cells

3: NK-cells

4: Both B & T Cells

12-: Chediak-Higashi syndrome is characterized by

1: Defects in phagolysosome function

2: Defects in macrophage production

3: Defects in leukocyte adhesion

4: Defects in microbicidal activity

13-: Example of Type IV hypersensitivity is -

1: Serum sickness

2: Granulomatous reaction

3: Shwartzman reaction

4: Arthus reaction

14-: Superantigens true is -

1: They bind to the left of the MHC

2: Needs to processed before presentation

3: They are presented by APC'S to T cells

4: Directly attached to lateral aspect of TCR b chain

15-: Which of the following features is not shared between 'T cells' and 'B cells' -

1: Positive Selection during Development

2: Class I MHC Expression

3: Antigen Specific Receptors

4: All of the above

16-: Apa from T & B lymphocytes, the other class of lymphocytes is -

1: Macrophages

2: Astrocytes

3: NK cells

4: Langerhans cells

17-: Bronchial secretion secretes -

1: IgA

2: IgE

3: IgM

4: IgG

18-: Serum sickness is which type of hypersensitivity reaction?

1: Type I

2: Type II

3: Type III

4: Type IV

19-: Helper T-cells are primarily involved in -

1: Cell mediated immunity

2: Killing virus infected cells

3: Killing tumor cells

4: Involved in type II hypersensitivity

20-: A mother brings her 1 year old child to the hospital with complaints that he turns blue while breastfeeding. It resolves when he assumes a squatting position. On examination, a cleft palate is seen. Labs show hypocalcemia. Which of the following abnormalities are expected to be seen in the lymphoid organs?

1: Decreased size of periaeriolar lymphoid sheath of spleen

2: Increased size of spleenic follicles

3: Increased size of para coical areas of lymph nodes

4: Decreased size of germinal centres of lymph nodes

21-: Natural killer cells

1: Belongs to B-cell lineage

2: Belongs to T-cell lineage

3: Display cytotoxic effect on tumor cell

4: Requires previous antigen exposure for activation

22-: Oakley-Fulthorpe procedure is:

1: Single diffusion in one dimension

2: Double diffusion in one dimension

3: Single diffusion in two dimensions

4: Double diffusion in two dimensions

23-: An 11-year-old boy was brought to the pediatric OPD with multiple abscesses over his face, chest, and back. The child has a history of recurrentrespiratory infections. On examination, he has atopic excoriating skin and multiple cold abscesses on his back. What is the most probable diagnosis?

1: Hyper IgE syndrome

2: Hyper IgM syndrome

3: Carcinoid syndrome

4: Wiskott aldrich syndrome

24-: A young girl has had repeated infections with Candida albicans and respiratory viruses since the time she was 3 months old. As pa of the clinical evaluation of her immune status, her responses to routine immunization procedures should be tested. In this evaluation, the use of which of the following vaccines is contraindicated?

1: Diphtheria toxoid

2: Bordetella peussis vaccine

3: Tetanus toxoid

4: BCG

25-: Immunoglobulins are produced by -

1: Macrophages

2: B-cells

3: T-cells

4: NK-cells

26-: Type I hypersensitivity reaction is mediated by:

1: IgG

2: IgM

3: IgD

4: IgE

27-: Which of the following staphylococcal protein is a superantigen-

1: Exfoliative toxin

2: Cytolytic toxin

3: ProteinA

4: Leucocidin

28-: Opsonization takes place through-

1: C3a

2: C3b

3: C5a

4: C5b

29-: Which of the following is seen in cryoglobulinemia

1: IgG

2: IgM

3: IgA

4: IgE

30-: Berson and yellow 1st described the following test

1: RIA

2: ELISA

3: Immuno chromatography

4: Chemiluminescence assay

31-: Which of the following is not a 'heterophile reaction':

1: Weil Felix test

2: Paul Bunnell test

3: Frei's test

4: Cold agglutinin test

32-: Cryoglobulins are present in blood in which of the following clinical scenarios

1: Macroglobulinaemia

2: SLE

3: Myeloma

4: All the above

33-: A patient with cerebellar problems and spider angiomas is diagnosed with a combined T-cell and B-cell deficiency known as ataxia- telangiectasia. In addition to a defect in this patient's DNA repair enzymes, which immunoglobulin is the primary antibody in saliva, tears, and intestinal and genital secretions, and is also deficient in this illness?

1: IgG

2: IgA

3: IgM

4: IgD

34-: Feature (s) of DiGeorge syndrome is/are all except:

1: Results from failure of development of the third and fourth pharyngeal pouches

2: Absent thyroid

3: Absent parathyroid glands

4: B cell defect

35-: All are true about innate immunity except -

1: Non-specific

2: First line of defence

3: Not affected by genetic affected

4: Includes complement

36-: Skin test based on neutralization reaction is/are -

1: Casoni test

2: Lepromin test

3: Tuberculin test

4: Schick test

37-: Which is a large granular lymphocyte?

1: NK cell

2: B-lymphocyte

3: T-lymphocyte

4: Macrophage

38-: Amniocentesis conducted during genetic counseling of a pregnant woman reveals a fetal adenosine deaminase deficiency. This autosomal recessive immunodeficiency is usually associated with which of the following?

1: Humoral Immunity - Normal; Cellular Immunity - Normal

2: Humoral Immunity - Normal; Cellular Immunity - Deficient

3: Humoral Immunity - Deficient; Cellular Immunity - Normal

4: Humoral Immunity - Deficient; Cellular Immunity - Deficient

39-: A woman receives an organ transplant from her sister who is an identical twin. What type of graft is it?

1: Allograft

2: Autograft

3: Xenograft

4: Isograft

40-: Thomsen friedensreich phenomenon is -

1: Red cells infection by CMV

2: Red cell agglutination by all blood group sera

3: Hemolysis of transfused blood

4: Due to B antigen

41-: Best marker of SLE?

1: Anti Sm antibodies

2: Anti-ds DNA antibodies

3: Anti-Histone antibodies

4: Anti Ro (SS-A) antibodies

42-: The serum concentration in which of the following human IgG subclasses is maximum?

1: IgG1

2: IgG2

3: IgG3

4: IgG4

43-: Passive cutaneous anaphylaxis detect:

1: Heterocytotropic ab

2: Wheal and flare reaction

3: Atopy

4: Cutaneous anaphylaxis

44-: True about immunoglobulins -

1: IgE has minimum concentration

2: IgG has minimum concentration

3: IgA has minimum concentration

4: IgM has minimum concentration

45-: A latent, measles-like viral infection and, presumably, a defect in cellular immunity is associated with which of the following diseases?

1: Progressive multifocal leukoencephalopathy (PML)

2: Multiple sclerosis (MS)

3: Creutzfeldt-Jakob disease

4: Subacute sclerosing panencephalitis (SSPE)

46-: Which of the following immunoglobulins shows homocytotropism -

1: IgG

2: IgA

3: IgE

4: IgD

47-: Function of Ig A is -

1: Acts as a mucosal barrier for infection

2: Circulating antibody

3: Kills virus infected cells

4: Activates macrophages

48-: Normal CD4:CD8 ratio is

1: 3:01

2: 2:01

3: 1:02

4: 1:03

49-: IgE is secreted by -

1: Mast cell

2: Basophils

3: Eosinophils

4: Plasma cells

50-: Which of following antibody is pentameric -

1: IgM

2: IgG

3: IgA

4: IgD

51-: True about active immunity

1: Less effective

2: Can be given in immunodeficient state

3: Immunological memory present

4: No lag period

52-: Natural killer cell is -

1: MHC restricted

2: Antibody dependent

3: Null cells

4: B-lymphocytes

53-: Lymphoreticular system doesnot includes -

1: T-cells

2: B-cells

3: Platelets

4: Macropahges

54-: Myasthenia gravis is which type of hypersensitivity-

1: Type I

2: Type II

3: Type III

4: Type IV

55-: MCH located on -

1: Chromosome number 6

2: Chromosome number 7

3: Chromosome number 8

4: Chromosome number 9

56-: All are chemokines except -

1: IL-8

2: IL-1

3: Histamine

4: Eotaxin

57-: True about silent mutation in gene : (PGI Nov 2009)

1: No change in mRNA

2: No change in Amino acid sequence in protein

3: No expression of protein

4: No change in expression of protein

58-: A 3-year-old male child is brought by his father with complaint of recurrent infections despite proper treatment and hygiene. While reviewing his history, pediatrician notices that the child has been infected multiple times with S. aureus, Pseudomonas & E. coli. Which of the following test will be useful to diagnose condition of the child?

1: Negative nitroblue-tetrazolium test

2: Positive nitroblue-tetrazolium test

3: Increased IgM, Decreased IgG, IgA, and IgE

4: Increased IgE and IgA, Decreased IgM

59-: T helper cells recognises -

1: MHC class I

2: MHC class II

3: Processed peptides

4: Surface Ig

60-: Hapten is -

1: Same as epitope

2: Small molecular weight protein

3: Requires carrier for specific antibody production

4: Simple haptens are precipitate

61-: Graves disease is an example of which type of Immunologic response?

1: Type I

2: Type II

3: Type III

4: Type IV

62-: C-reactive protein is -

1: An antibody produced as a result of peumococcal infection

2: Derived from pneumoconiosis

3: Detective by precipitation recation

4: Increased in peumococcal in fection

63-: Skin test are used for which hypersensitivity reactions?

1: I

2: II

3: III

4: IV

64-: Which of the following potentially represents the most dangerous situation?

1: Rh+ve mother with 2nd Rh-ve child

2: Rh-ve mother with 2nd Rh+ve child

3: Rh+ve mother with 1st Rh-ve child

4: Rh-ve mother with 1st Rh+ve child

65-: Memory T cells can be identified by using the following marker:

1: CD45RA

2: CD45RB

3: CD45RC

4: CD45RO

66-: Which of the following is an opsonin?

1: C3a

2: C3b

3: C5a

4: C6

67-: Cells involved in humoral immunity -

1: B-cells

2: T-cells

3: Helper cells

4: Dendritic cells

68-: Which of the following is characteristic of the mucosal immune system?

1: A vigorous response is made to all nonself antigens encountered

2: Chronic inflammation makes an inhospitable environment for microbes

3: IL-2 and IFN-g contribute to a Th-1 like environment

4: Tolerance to foreign antigens is the norm rather than the exception

69-: Function of T-lymphocyte is/are-

1: Production of interferon

2: Lymphokine production

3: Rosette formation

4: All of the above

70-: A 45-year-old businesswoman arrives in your office with vague abdominal complaints. She has noticed melenic stool. Upon performing a sigmoidoscopy, you find a 4-cm mass in the upper colon. You should immediately order a blood test for which of the following tumor markers?

1: a-Fetoprotein

2: Anti-tumor antibody

3: Antitumor light chains

4: Carcinoembryonic antigen (CEA)

71-: Which of the following is a Type 2 Hypersensitivity reaction?

1: Chronic Kidney Rejection episode

2: Autoimmune Hemolytic anaemia

3: Arthus reaction

4: Mitsuda reaction

72-: Predominant class of immunoglobulin during primary immune response is -

1: IgA

2: IgE

3: IgM

4: IgG

73-: MHC II are not presented by -

1: macrophage

2: Dendritic cells

3: Lymphocytes

4: Eosinophils

74-: Genetic deficiency of complement factor causes:

1: Hereditary angioneurotic edema

2: SLE- an autoimmune disease

3: Pyogenic bacterial infections

4: All of the above

75-: A 45 year old man who is a known hypeensive complains of fever, migraine, loss of appetite, myalgia and presented with ulcerations on the calf and near the malleoli. On examination, splinter haemorrhages and palpable purpura were noted. On CT angiography, aneurysm and stenosis of medium sized vessels were observed. The type of hypersensitivity to this condition is

1: Type 1 hypersensitivity

2: Type 2 hypersensitivity

3: Type 3 hypersensitivity

4: Type 4 hypersensitivity

76-: Rejection of allografts are complex process primarily involving -

1: Immune complex deposition

2: Vascular blockage

3: Cell-mediated immunity and circulationg antibodies

4: Infection

77-: Ends of chromosomes replicated by: (PGI Dec 2006)

1: Telomerase

2: Centromere

3: Restriction endonuclease

4: Exonuclease

78-: After a solid organ transplantation, which of the following is responsible for acute graft rejection.?

1: C3a

2: C3b

3: C5a

4: C4d

79-: Coombs test is

1: Precipitation test

2: Agglutination test

3: CFT

4: Neutrilization test

80-: Wheal and Flare reaction is which type of Hypersensitivity?

1: Type I

2: Type II

3: Type III

4: Type IV

81-: Which precipitates at 50 to 60degC but Redis solve on heating?

1: Bence Jones protein

2: Heavy chain

3: Both light and heavy chains

4: Light chains

82-: All of the following forces are involved in Antigen antibody reaction except -

1: Vander Waal's forces

2: Electrostatic bond

3: Hydrogen bond

4: Covalent bond

83-: All of the following are functions of CD 4 helper cells, except -

1: Immunogenic memory

2: Produce immunoglobulins

3: Activate macrophages

4: Activate cytotoxic cells

84-: Number of variable regions on each light and heavy chain of an antibody -

1: 1

2: 2

3: 3

4: 4

85-: True about MHC -

1: Present on chromosome 4

2: Class II compromises A, B, C loci

3: Class III has complement

4: Class I is involved in mixed leucocyte reaction

86-: Which of the following antibodies shows anamnestic response?

1: IgA

2: IgM

3: IgG

4: IgD

87-: Septic shock is due to -

1: Protein

2: Lipopolysaccharide

3: Teichoic acid

4: Peptidoglycan

88-: True about DNA structure: (PGI Nov 2010)

1: Purines are adenine and guanine ; pyrimidines are uracil and cyTosine

2: Watson and Crick discovered structure in 1973

3: Doxyribose-phosphate backbone with bases stacked inside

4: Mainly consists of left handed helix

89-: Which complement component is anaphylotoxin -

1: C3b

2: C5.-9

3: C5a

4: Cl-3

90-: Antibodies acting predominantly on the mucosal cells belong to -

1: IgG class

2: IgM class

3: IgE class

4: IgA class

91-: Type I hypersensitivity is mediated by which of the following immunoglobulins?

1: Ig A

2: Ig G

3: Ig M

4: Ig E

92-: Hyperacute graft rejection occurs after how much time?

1: 12 hours

2: 2 weeks

3: 1 month

4: 3 months

93-: Immunity acquired due to the injection ofimmunologically competent lymphocytes is termed as-

1: Inmate immunity

2: Adoptive immunity

3: Active immunity

4: Local immunity

94-: All of the following are pyrogenic cytokines, except:

1: Interleukin 18 (IL-18)

2: Interleukin 6 (IL-6)

3: Tumor Necrosis Factor (TNF)

4: Interferon a (IFN a)

95-: Killer cells are associated with type....immunologic response -

1: Type I

2: Type II

3: Type III

4: Type IV

96-: The following are true for T lymphocytes except -

1: Constitute 70 to 80% circulating pool of lymphocytes

2: Release macrophage inhibition factor

3: Secrete specific antibodies

4: Release lymphotoxin

97-: Adenosine deaminase deficiency is seen in the following -

1: Common variable immunodeficiency

2: Severe combined immunodeficiency

3: Chronic granulomatous disease

4: Nezelof syndrome

98-: In myasthenia gravis, the antibodies are formed against?

1: Muscarinic receptor proteins

2: Acetylcholine receptors

3: Actin

4: Myosin

99-: Hemagglutinin (Anti A and Anti B) are which type of antibodies -

1: Ig G

2: Ig M

3: Ig A

4: IgE

100-: C3 convease acts on -

1: C4b2b

2: C4b2B3a

3: C4b

4: C3

101-: An idiotype is characterized by

1: Determinant exposed after papain cleavage to an F(ab')2 fragment

2: Determinant from one clone of cells and probably located close to the antigenbinding site of the immunoglobulin

3: Determinant inherited in a Mendelian fashion and recognized by crossimmunization of individuals in a species

4: Heavy-chain determinant recognized by heterologous antisera

102-: Type I hypersensitivity, the mediator is:

1: IgE

2: IgE

3: IgM

4: IgC

103-: Gama globulins are synthesized in -

1: Liver

2: Lung

3: Plasma cells

4: Spleen

104-: Super antigen acts through?

1: IL-3

2: IL-6

3: IFN-Gamma

4: IL_1 & TNF

105-: C1 esterase inhibitor deficiency causes -

1: Neisseria infection

2: Hereditary angioneurotic edema

3: Hemolytic disease

4: Hemolytic uremic syndrome

106-: Which one of the following statements best describes immunoglobulin structure?

1: The amino acid sequence variation of the heavy chains is different than that observed in light chains

2: In humans, there are approximately twice as many Ig molecules with k and l chains

3: In the three-dimensional structure of Ig, there is little, if any, flexibility in the hinge region between the Fc and two Fab poions

4: IgM is a monomeric structure

107-: Prozone phenomenon is due to:

1: Antigen excess

2: Antibody excess

3: Excessive immune complex

4: Acute phase reactants

108-: VDRL is an example of-

1: Slide agglutination

2: Tube agglutination

3: Slide flocculation

4: Tube flocculation

109-: Which of the following responses is found in atopic individuals -

1: IgM production

2: IgE production

3: IgA production

4: Hypogammaglobulinemia

110-: Immunoglobulin found in B lymphocyte -

1: IgA

2: IgE

3: IgG

4: IgD

111-: EAC rosette formation is the propey of one of the following type of immune cells -

1: T cells

2: B cells

3: Macrophages

4: All of the above

112-: Which of the following is used to increase antigenicity of vaccine -

1: Stabilizer

2: Adjuvant

3: Preservative

4: None of the above

113-: IgM is:

1: Monomer

2: Dimer

3: Pentamer

4: Tetramer

114-: All the following types of hypersensitivity reactions can be demonstrated by skin test except -

1: Type I

2: Type II

3: Type III

4: Type IV

115-: Which of the following chemical nature makes a better antigen?

1: Lipids

2: Nucleic acids

3: Polysachharides

4: Proteins

116-: A patient presents with fever, uicaria, itching and swelling followed by injection of Penicillin. It is due to

1: IgG Hypersensitivity

2: IgE Hypersensitivity

3: Delayed Hypersensitivity

4: Immune complex Hypersensitivity

117-: Graft versus Host reaction is caused by -

1: B-Lymphocytes

2: T-Lymphocytes

3: Macrophages

4: Complement

118-: Chediak Higashi disease is characterized by the following except?

1: Neutrophilia

2: Defective degranulation

3: Delayed microbial killing

4: Giant granules

119-: Which antibody is most commonly produced in secondary immune response?

1: IgG

2: IgA

3: IgD

4: IgM

120-: Recent noble prize is for

1: RNA i

2: Lipoxin

3: T beta transcription factor

4: Mitochondrial DNA

121-: Memory cells are best provided by?

1: Helper cells

2: Cytotoxic cells

3: Macrophages

4: NK cells

122-: Which one of the following chemical nature makes a better antigen?

1: Lipids

2: Nucleic acids

3: Polysachharides

4: Proteins

123-: Vaccination is based on the principle of

1: Agglutination

2: Phagocytosis

3: Immunologic Memory

4: Clonal Deletion

124-: A 29-year-old man has developed marked joint pain beginning 12 days after receiving snake antivenom injection. On physical examination, there is diffuse joint pain with movement. The stool is negative for occult blood. Laboratory studies show a serum creatinine level of 4.4 mg/dL and urea nitrogen level of 42 mg/dL. Microscopic examination of a renal biopsy specimen shows focal fibrinoid necrosis of the small arterial and arteriolar vascular media and intravascular microthrombi. Scattered neutrophils are seen in these areas of necrosis. Which of the following laboratory findings in the blood is most likely present in this patient?

1: CD4+ lymphocytosis

2: Hypocomplementemia

3: Increased IgE

4: Neutropenia

125-: Cells that are identified by presence of immunoglobulins on the surface are?

1: Neutrophils

2: B-cells

3: NK cells

4: Monocytes

126-: Most important antigen presenting cells in human?

1: Macrophages

2: Plasma cells

3: Langerhan's cells/histiocytes

4: Lymphocytes

127-: Acute phase reaction in acute inflammation are -

1: Albumin

2: Rfibrinogen

3: Haptoglobulin

4: Gammaglobulin

128-: The Fc piece of which immunoglobulin fixes C1 -

1: IgA

2: IgG

3: IgM

4: IgE

129-: Which of the following statements is true about isotypic variation?

1: These result due to subtle amino acid changes resulting from allelic differences

2: These result due to changes in amino acid in heavy and light chain at variable region

3: Changes in heavy and light chain in constant region is responsible for class and subclass of immunoglobulins

4: These are areas in antigen that bind specifically to antibody

130-: Humoral immunity arises from -

1: T cells

2: B cells

3: Null cell

4: K cell

131-: Preformed antibodies cause:

1: Hyperacute rejection

2: Acute rejection

3: Chronic rejection

4: Acute humoral rejection

132-: Which of the following statement is true?

1: Paul Bunnel test is used to diagnosed measles

2: Rose Waaler test is a complement fixation test

3: Indirect hemagglutination test is less sensitive than gel diffusion test

4: Antigen antibody reaction cannot occur in the absence of electrolytes

133-: Acutehumoral renal transplant rejection is characterized by the following except:

1: Presence of anti-donor antibodies

2: Interstitial and tubular mononuclear cell infiltrate

3: Necrotizing vasculitis

4: Acute cortical necrosis

134-: Mononuclear phagocytes are produced by -

1: Thymus

2: Spleen

3: Bone marrow

4: Liver

135-: Lysozyme is present in all except:

1: Lacrimal secretions

2: CSF

3: Saliva

4: Respiratory tract secretions

136-: In humans, two closely linked genetic loci, each made up of two alleles, compose the histocompatibility locus (HL-A). Paired first and second locus antigens are called haplotypes. The HL-A haplotypes (separated by a semicolon) of a child's parents are given below.Father 3, 25; 7, 12Mother 1, 3; 8, 9Assuming that no cross-over events have occurred, the child's histotype could be which of the following?

1: 1, 3; 7, 8

2: 7, 12; 1, 3

3: 3, 3; 7, 9

4: 1, 25; 7, 12

137-: In normal immune system, the epithelioid cells are derived from:

1: TH1

2: TH2

3: Macrophages

4: TH19

138-: A 47-year-old male has a history of end stage renal failure and required a kidney transplant. Approximately four weeks after receiving his transplanted kidney he developed oliguria, fever, hypertension and pain or tenderness over his allograft. On the basis of the findings, the most likely underlying immunological process is:

1: Autoimmunity

2: Acute rejection

3: Chronic rejection

4: Hyperacute rejection

139-: HLA B27 is maximally associated with?

1: Rheumatoid arthritis

2: Ankylosing spondylitis

3: Rieter syndrome

4: Psoriasis

140-: Contrast agent-induced reactions like edema, uicaria, rash, and hypotension are mediated due to

1: IgG mediated reaction

2: Anaphylactoid reaction

3: Type I allergic reaction

4: IgE mediated reaction

141-: IgE receptor is present on:

1: Mast cell

2: Promonocyte

3: B cell

4: NK cell

142-: A woman receives a kidney transplant from her sister who is an identical twin. What type of graft is it

1: Allograft

2: Autograft

3: Xenograft

4: Isograft

143-: Active immunity is not acquired by:

1: Infection

2: Vaccination

3: Immunoglobulin transfer

4: Sub - clinical infection

144-: Serum sickness is due to which type of hypersensitivity?

1: Type I

2: Type II

3: Type III

4: Type IV

145-: The protection against small pox by previous infection with cowpox represents-

1: Antigenic cross-reactivity

2: Antigenic specificity

3: Passive immunity

4: lnnate immunity

146-: An autograft of a burn victim is best described by which one of the following?

1: Transplant from one region of a person to another region

2: Transplant from one person to a genetically identical person

3: Transplant from one species to the same species

4: Transplant from one species to another species

147-: Anti-histone antibodies are diagnostic of?

1: Drug induced LE

2: Systemic sclerosis

3: Mixed connective tissue disorder

4: Sicca syndrome

148-: Heat labile immunoglobulin -

1: IgA

2: IgG

3: IgE

4: IgM

149-: What is the formula for lytic complex in complement system?

1: C5a

2: C5-9

3: C3b

4: C3a

150-: Bence Jones proteins are best described as-

1: u chains

2: g chains

3: Kappa & Lambda chains

4: Fibrin split products

151-: All of these are antigen presenting cells (APC's) except-

1: B cells

2: T cells

3: Dendritic cells

4: Langerhans cells

152-: Which of the following are/is not an activator of alternate complement system?

1: Factor H

2: IgA

3: Bacteria

4: Toxin

153-: Interleukin I primarily acts on -

1: T-lymphocytes

2: B-lymphocytes

3: Neutrophils

4: Macrophages

154-: The components of Innate immunity that are active against viral cells include

1: NK cells

2: Memory T cells

3: Cytotoxic cells

4: B cells

155-: Marker of chronic inflammation is?

1: IL-1, IL-6

2: IL-1, TNF

3: IL-6, TNF

4: IL-12, IFN-g

156-: HEPA filter is used to disinfect -

1: Water

2: Air

3: Culture

4: Blood

157-: Erythroblastosis fetalis is an example of which type of hypersensitivity reaction -

1: Type I

2: Type II

3: Type III

4: Type IV

158-: The commonest IgG with maximum individual variation is -

1: IgG 1

2: IgG 2

3: IgG 3

4: IgG 4

159-: Which of the following is not a feature of bronchial asthma?

1: Thickening of bronchial wall

2: Increase in number of airway goblet cells

3: Fibroblastic foci

4: Sub-basement membrane fibrosis

160-: Class MHC 2 antigen attaches to?

1: CD4

2: CD8

3: CD16

4: CD34

161-: In utero infecion leads to which immunoglobulin?

1: IgG

2: IgA

3: IgM

4: IgD

162-: Which of the following is agglutination test -

1: Widal test

2: VDRL

3: Ascoli's test

4: Kahn test

163-: All of the above are antigen presenting cells (APC's) except -

1: T cells

2: B cells

3: Fibroblasts

4: Dendritic cells

164-: Note a delayed type of hypersensitive reactions -

1: Contact dermatitis

2: Bronchial asthma

3: Hemolytic anemia

4: Multiple sclerosis

165-: Endotoxin is pa of the outer poion of the cell wall of -

1: Gram-positive bacteria

2: Gram-negative bacteria

3: Candida albicans

4: All of the above

166-: Deficiency of C1 inhibitor can produce

1: Hereditary angioneurotic edema

2: SLE

3: No disease

4: Pyogenic infections

167-: Superantigens are -

1: Erythrotoxin of staph. Aureus

2: CI. Difficile toxin

3: Staphyloccocal toxic shock syndrome toxin

4: Cholera toxin

168-: A discontinuous antigen epitope is:

1: Presented by MHC molecules.

2: Produced by amino acid residues on non-adjacent polypeptide sequences.

3: Representative of only a minority of B-cell epitopes.

4: Produced by a continuous linear peptide sequence.

169-: True about Northern blot technique:

1: Detects DNA

2: Detects RNA

3: Detects proteins

4: Detects post translational modifications in proteins

170-: Ig secreted in secondary immune response is:

1: Ig G

2: Ig M

3: Ig A

4: Ig E

171-: Membrane attack complex (MAC) in complement system is -

1: C3b

2: C 1-3

3: C 5-9

4: C 2-4

172-: Isoantigens are -

1: Found in some but not all members of species

2: Found in some but not all members of species

3: Occurs in different biological species, class and kingdoms

4: All individuals in a paicular species

173-: Auto antibody specific for SLE -

1: ds DNA

2: Anti RO

3: Anti-topoisomerase

4: Antihistone

174-: Following conditions must be fulfilled in a person before taking him as a kidney donor EXCEPT

1: ABO compatibility with recipient

2: Presence of two normally functioning kidneys

3: No HIV infection

4: Zero HLA mismatch with recipient

175-: Which of the following cytokines are not secreted by Th2 type of helper T-cells?

1: IL-1

2: IL-4

3: IL-5

4: IL-13

176-: Charcot Leyden crystals are derived from?

1: Macrophages

2: Eosinophils

3: Basophils

4: Neutrophils

177-: Site of biopsy in amyloidosis

1: Kidney

2: Abdominal fat

3: Lip

4: Rectum

178-: Which of the following cytokine have endogenous pyrogenic activity?

1: IL-8

2: IL-6

3: TGF-b

4: IL-3

179-: Palatal edema is significant for:

1: Alpha heavy chain disease

2: Gamma heavy chain disease

3: Mu chain disease

4: Beta heavy chain disease

180-: IgE binds to which cell-

1: T cells

2: B cells

3: Mast cells

4: NK cells

181-: Which immunoglobulin is elevated in a case of chronic allergy?

1: IgA

2: IgM

3: IgE

4: IgG

182-: A woman with infertility receives an ovary transplant from her sister who is an identical twin. What type of graft it is?

1: Xenograf

2: Autograft

3: Allograft

4: Isograft

183-: All of the following are false regarding classes if immunoglobulin except :

1: IgM has maximum half-life of 23 days

2: IgE has least serum concentration of 0.00004 mg/ml

3: IgG has maximum sedimentation co-efficient of 19

4: IgD has a carbohydrate concentration of 8 %

184-: In Bare Lymphocyte Syndrome, failure of antigen presentation is due to defective expression of

1: MHC class I genes

2: Immunoglobulins

3: T and B cell surface receptors

4: Cluster determinants

185-: Deficiency of C1 (complement 1) inhibitor results in -

1: SLE

2: Hereditary angioneurotic edema

3: Severe recurrent pyogenic infection

4: Gram-negative bacteremia

186-: A 35-year-old male patient presents with numerous subcutaneous hemorrhages. History and physical examination reveal that he has been taking sedormid (a sedative) for the past week. Laboratory tests indicate normal hemoglobin and white blood cell levels with significant thrombocytopenia (very low platelet count). You suspect that he has developed a drug-induced type II hypersensitivity reaction. This reaction may occur if the drug does which of the following?

1: Activates T cytotoxic cells

2: Acts as a hapten

3: Induces mast cell degranulation, releasing mediators such as histamine, leukotrienes, and prostaglandins

4: Induces oxygen radical production through the respiratory burst pathway

187-: Innate immunity is stimulated by which part of bacteria?

1: Carbohydrate sequence in cell wall

2: Flagella

3: Bacterial cell membrane

4: Nucleus

188-: True about polymorphism is: (PGI Dec 2006)

1: Single locus - multiple normal alleles

2: Single locus - multiple abnormal alleles

3: Single phenotype: single Iocus->multiple normal alleles multiple abnormal alleles

4: Single phenotype: Single !ocus->>multiple abnormal alleles.

189-: Transition mutation of GATCCT is: (PGI Dec 2006)

1: GGTCCT

2: GTTCCT

3: GTCCCT

4: GGUGGT

190-: Chemical nature of complement is

1: Lipid

2: Polysaccharide

3: Lipo polysaccharide

4: Protein

191-: A patient has an increased antibody titer to delta agent. You would most likely suspect

1: Fifth disease

2: Susceptibility to chickenpox

3: Possible subacute sclerosing panencephalitis (SSPE)

4: Possible hepatitis B infection

192-: First chemical barrier encountered by microorganism for common exposed sites-

1: Lysozyme

2: Acidic pH

3: Skin

4: Lactose

193-: Which one of the following antibody is produced rapidly and in high amounts during secondary response?

1: IgG

2: IgA

3: IgM

4: IgM and IgG

194-: C-3 convease in alternate complement pathway -

1: C4b2b

2: C3b

3: C3bBb

4: C3a

195-: The complementarity-determining regions are-

1: Restricted to light chains

2: Are in the constant pa of the Ig molecule

3: Binds to Fc receptor

4: Are concerned in antigen recognition

196-: Job's syndrome is the following type of immuno deficiency disease -

1: humoral immunodeficiency

2: Cellular immunodeficiency

3: Disorder of complement

4: Disorder of phagocytosis

197-: The protection against small pox by previous infection with cowpox represents:

1: Antigenic cross-reactivity

2: Antigenic specificity

3: Passive immunity

4: Innate immunity

198-: A patient presents with thrombocytopenia, eczema and recurrent infection -

1: Wiskott - Aldrich syndrome

2: Digeorge syndrome

3: Agammaglobulinemia

4: SCID

199-: Northern bioting is used for seperation of?

1: DNA

2: RNA

3: Proteins

4: None

200-: Granuloma formation is seen with which hypersensitivity reaction?

1: Typel

2: Type2

3: Type3

4: Type4

201-: Type 2 lepra reaction is an example of -

1: Type I hypersensitivity

2: Type II hypersensitivity

3: Type III hypersensitivity

4: Type IV hypersensitivity

202-: Pentameric antibody with a J chain is?

1: IgA

2: IgG

3: IgM

4: IgE

203-: Lysozyme is present in the following secretions of the body except:

1: Lacrimal secretions

2: CSF

3: Saliva

4: Respiratory tract secretions

204-: Capacity of producing IgG stas at what age -

1: 6 months

2: 1 year

3: 2 years

4: 3 years

205-: Antibody diversity is due to-

1: Hinge region

2: Constant region

3: Variable region

4: Hypervariable region

206-: Toll like receptors, recognize bacterial products and stimulates immune response by:

1: Perforin and granzyme mediated apoptosis

2: FADD ligand apoptosis

3: Transcription of nuclear factor mediated by NF-kB which recruits cytokines

4: Cyclin

207-: IgA antibody is the first line of defense against infections at the mucous membrane. It is usually an early specific antibody. Which of the following statements regarding IgA is not true?

1: Complement fixation tests for IgA antibody will be positive if specific IgA antibody is present

2: IgA is not found in saliva, therefore an IgA diagnostic test on saliva would have no value

3: IgA can be destroyed by bacterial proteases

4: IgA is absent in colostrum

208-: All the following are uses of enzyme-linked immunosorbent assay detection except

1: Hepatitis B markers

2: Rotavirus

3: Enterotoxin of E coli

4: Hepatitis A virus

209-: Erythroblastosis foetalis is an example of which type of hypersensitivity?

1: Type 1

2: Type 2

3: Type 3

4: Type 4

210-: Type of immunologic injury in AIHA (Auto immune hemolytic anemia)

1: Type I

2: Type II

3: Type III

4: Type IV

211-: IL -I produces -

1: T lymphocyte activation

2: Delayed wound healing

3: Increased pain perception

4: Decreased PMN release from bone marrow

212-: CD 3 receptor is seen in -

1: T cells

2: B cells

3: Macrophages

4: Eosinophils

213-: Which is true about type II hypersensitivity reaction?

1: Immune complex mediated

2: Antigen - antibody mediated

3: Arthus phenomenon

4: Granulomatous reaction

214-: When the tissue pretreated with potassium permanganate is stained with Congo-red stain, the apple-green birefringence is abolished. The tissue is likely to contain which type of amyloid?

1: AA amyloidosis

2: AL amyloidosis

3: Primary amyloidosis

4: Hereditary amyloidosis

215-: Coombs test is -

1: Precipitation

2: Agglutination test

3: CFT

4: Neutrilization test

216-: All are Type-III hypersensitivity reaction except:

1: Polyaeritis nodosa

2: Post- streptococcal glomerulonephritis

3: Epstein barr virus infections

4: Pemphigus vulgaris

217-: A neonate develops spastic contractions on the second post-partum day Laboratory studies show hypocalcemia. MRI studies demonstrate aplasia of the thymus and parathyroid glands. What is the appropriate diagnosis?

1: Adenosine deaminase deficiency

2: Common variable immunodeficiency

3: DiGeorge syndrome

4: Transient hypogammaglobulinemia of infancy

218-: Immunoglobulin present in local secretion is?

1: IgG

2: IgA

3: IgM

4: IgD

219-: What will happen to DNA if salt is added to it: (PGI Dec 2008)

1: Increase Melting point (Tm)

2: Decrease Tm

3: Not affect Tm

4: Melting lead to denaturation of DNA

220-: The exact pa of the antigen that reacts with the immune system is called as -

1: Clone

2: Epitope

3: Idiotope

4: Effector

221-: The complement component with opsonin activity is

1: C3a

2: C3b

3: C5a

4: C5b

222-: In a patient with a Salmonella infection, which of the following mechanisms will most likely be the earliest adaptive response for clearing the infection while bacteria are present within intracellular endosomes?

1: Antibody mediated neutralization of free bacteria

2: Complement mediated lysis of infected host cells

3: CTL recognition of bacterial peptides presented by MHC class II

4: DTH responses generated by CD4 +T cells

223-: Graft vs Host reaction can be reduced by?

1: Irradiation

2: Leuckoreduction/leuckofiltration

3: Immunosuppression

4: Buffy coat removal

224-: First line of defence against tumor and virus?

1: NK cell

2: T cell

3: Histiocyte

4: Macrophage

225-: C3b is converted to C3 convertase by-

1: Factor B

2: Factor P

3: Factor H

4: Factor I

226-: Charcot Leyden crystal are derived from?

1: Macrphages

2: Eosinophils

3: Basophils

4: Neutrophils

227-: Opsonization takes place through -

1: C3a

2: C3b

3: C5a

4: C5b

228-: Nagler reaction is type of -

1: Neutrilization reaction is type of -

2: CFT

3: Precipitation

4: Agglutination

229-: Adoptive immunity is by:

1: Infection

2: Injection of antibodies

3: Injection of lymphocytes

4: Immunization

230-: In contact dermatitis which cells play major role-

1: T-cells

2: B-cells

3: Langhan cells

4: Macrophage

231-: Mantoux test is an indicator of

1: Immediate hypersensitivity

2: Delayed hypersensitivity

3: Cell mediated hypersensitivity

4: Immune complex mediated hypersensitivity

232-: Which of the following immunoglobulin is responsible for opsonisation -

1: Ig A

2: Ig G

3: Ig M

4: Ig E

233-: The process increasing the ability for phagocytosis of foreign bodies by body is called -

1: Cross reactivity

2: Opsonisation

3: Immune Tolerance

4: Immune Surveillance

234-: Interleukin - 7 is produced by which one of the following -

1: Macrophage

2: B cells

3: T cells

4: Stromal cells

235-: Immunity may be natural or acquired. Which of the following best describes acquired immunity?

1: Increase in C-reactive protein (CRP)

2: Presence of natural killer (NK) cells

3: Complement cascade

4: Maternal transfer of antibody

236-: An immunologist is conducting an experiment to understand precipitation reactions. He notes that on adding excessive amount of antibody to a serum sample containing small amount of antigen, the amount of precipitate formed is less, compared to adding smaller amount of antibody to the same sample. What is this phenomenon called?

1: Pro-zone phenomenon

2: Zone of equivalence

3: Post-zone phenomenon

4: Flocculation phenomenon

237-: Capacity of producing IgG starts at what age -

1: 6 months

2: 1 year

3: 2 years

4: 3 years

238-: Cell mediated lysis of tumor cells is mediated by?

1: HLA1

2: HLA2

3: HLA3

4: All of the above

239-: Regarding NK cells, false statement is -

1: it is activated by IL-2

2: Expresses CD 3 receptor

3: It is a variant of large lymphocyte

4: There is antibody induced proliferation of NK cells

240-: In conversion of DNA to RNA, enzyme required are: (PGI June 2008)

1: DNA Polymerase

2: DNA Ligase

3: RNA polymerase

4: Primase

241-: Transfusion associated graft vs host disease can be prevented by?

1: Irradiation

2: Washing

3: Chemical treatment

4: All of the above

242-: EAC rosette formation is the propey of one of the following type of immune cells?

1: T-cells

2: B-cells

3: Macrophages

4: All of the above

243-: T cell functions are assessed by -

1: phagocyte index

2: T cell count

3: Migration inhibition test

4: Immunoglobin index

244-: PK reaction detects

1: IgG

2: IgA

3: IgE

4: IgM

245-: Virus infected cell is killed by?

1: Interferons

2: Macrophages

3: Neutrophils

4: Autolysis

246-: Hyperacute rejection occurs within:?

1: 12 hours

2: 2 weeks

3: 1 month

4: 3 months

247-: The function common to neutrophils, monocyte and macrophages is:

1: Immune response

2: Phagocytosis

3: Liberation of histamine

4: Destruction of old erythrocytes

248-: The following methods of diagnosis utilize labelled antibodies except -

1: ELISA (Enzyme Linked Immunosorbent Assay

2: Hemagglutination inhibition test

3: Radioimmunoassay

4: Immunofluorescence

249-: Mechanism similar to Schwartzman reaction occurs in:

1: Fitz Hugh Curtis syndrome

2: Waterhouse Friderichsen syndrome

3: Eichwald slimser effect

4: Anaphylactoid reaction

250-: Which interleukin is T-cell growth factor?

1: IL-3

2: IL-7

3: IL-11

4: IL-5

251-: A 35-year-old man asks for advice regarding seasonal eye itching and runny nose. Recurrent conjunctivitis in this patient is most likely caused by which of the following mechanisms of disease?

1: Autoimmunity

2: Bacterial infection

3: Chemical toxicity

4: Hypersensitivity

252-: Frei test which type of hypersensitivity -

1: Type I

2: Type II

3: Type III

4: Type IV

253-: The hypersensitivity reaction involved in the hyper acute rejection of renal transplant is -

1: Type I

2: Type II

3: Type III

4: Type IV

254-: Large antigen-antibody complexes are formed in -

1: Prozone

2: Postzone

3: Zoneof equivalence

4: Noneof the above

255-: The protection againts small pox by previous infection with cowpox represents -

1: Antigenic cross-reactivity

2: Antigenic specificity

3: Passive immunity

4: Innate immunity

256-: IgE is secreted by

1: Mast cell

2: Basophils

3: Eosinophils

4: Plasma cells

257-: A 2-year-old boy has had almost continuous infections since he was 6 months old. These infections have included otitis media, pneumonia, and impetigo. Organisms cultured include Haemophilus influenzae, Streptococcus pneumoniae, and Staphylococcus aureus. He also has had diarrhea, with Giardia lamblia cysts identified in stool specimens. The family history indicates that an older brother with a similar condition died because of overwhelming infections. The boy's two sisters and both parents are not affected. Which of the following laboratory findings would most likely be seen in this boy?

1: Absence of IgA

2: Agammaglobulinemia

3: Decreased complement C3

4: High titer of HIV-1 RNA

258-: A 39-year-old woman sees her physician because of acute onset of severe dyspnea. On physical examination, she is afebrile and has marked laryngeal stridor and severe airway obstruction. The medical history indicates that she has had similar episodes since childhood and episodes of colicky gastrointestinal pain. Her mother and her brother are similarly affected. There is no history of severe or recurrent infections. She does not have urticaria. Laboratory studies show normal WBC count, hematocrit, and platelet count. A deficiency in which of the following plasma components is most likely to produce these findings?

1: b2-Microglobulin

2: C1 inhibitor

3: C3

4: 5-Hydroxytryptamine

259-: Which of the following is an example of Type IV hypersensitivity -

1: Ahrus reaction

2: Serum sickness

3: Shwazman reaction

4: Granulomatous reaction

260-: Circulating antibodies formed by?

1: T-cells

2: B-cells

3: Macrophages

4: Plasma cells

261-: Relative to the primary immunological response, secondary and later booster responses to a given hapten-protein complex can be associated with which one of the following?

1: Lower titers of antibody

2: Increased antibody affinity for the hapten

3: Decreased antibody avidity for the original hapten-protein complex

4: Maintenance of the same subclass, or idiotype, of antibody produced

262-: which antibody is called the millionaire molecule

1: IgA

2: IgM

3: IgG

4: IgD

263-: Rapid serological diagnostic tests include all except -

1: Latex agglutination

2: Spectrophometry

3: Gel electrophoresis

4: Radioimmunoassay

264-: Immunoglobulin responsible for anamnestic response is -

1: IgA

2: IgG

3: IgM

4: IgE

265-: Which of the following is a non-organ-specific (systemic) autoimmune disease?

1: Myasthenia gravis

2: Systemic lupus erythematosus

3: Hashimoto's thyroiditis

4: Pernicious anemia

266-: Which of the following does not describe a documented mechanism of tumor-mediated immune evasion?

1: Down regulation of class I MHC

2: Secretion of TGF-b

3: Secretion of decoy molecules

4: Antigenic variation

267-: Human immunoglobulin A can be described by which of the following statements?

1: It is the predominant immunoglobulin in plasma

2: It exists in four subclasses, of which IgA 2 is predominant

3: It can prevent attachment of microorganisms to epithelial cell membranes

4: It is prominent early in the immune response and is the major class of antibody in cold agglutinins

268-: Those cells that must co-operate with B cells to produce antibody in response to ceain antigens are known as

1: Stem cells

2: Plasma cells

3: Macrophages

4: Helper T cells

269-: Hybridoma technique is used to obtain

1: Specific antigen

2: Complement

3: Specific antibody

4: Interleukins

270-: Secondary immune response is mediated by -

1: IgF

2: IgM

3: IgG

4: IgA

271-: Prokaryotes have all, except

1: Rigid cell wall

2: Flagella

3: Ribosomes

4: Well defined Nuclear membrane

272-: Prausnitz-kustner (PK) reaction was used to demonstrate -

1: IgA

2: IgG

3: IgM

4: IgE

273-: T cell dependent region is -

1: Coical follicles of lymph node

2: Medullary cords

3: Mantle layer

4: Paracoical area

274-: Which of the following does T cells independent Antigen acts through -

1: T-cells

2: B-cells

3: macrophages

4: CD8+ T cells

275-: Springcatarrh is which type of hypersensitivity reaction -

1: Type I

2: Type II

3: Type II & III

4: Type IV

276-: N.K cell and cytotoxic cells are differentiated by -

1: Interferons reduce N.K cell activity

2: Antibody specificity

3: Receptor fo IgG

4: Presence in spleen

277-: Cellular immunity is affected by -

1: Cytokines

2: Immunoglobulins

3: g-globulins

4: Prostaglandins

278-: A 15-year-old male is rushed to the emergency room with a temperature of 103degF, severe headache, and stiff neck. Upon physical examination, a petechial rash is observed all over his body. Suspecting meningitis, the physician orders a lumbar puncture, revealing gram-negative diplococci (Neisseria meningitidis) on Gram stain. The physician wishes to use a more sensitive test to confirm this as the causative agent. Which of the following tests combines features of gel diffusion and immune-electrophoresis and is applicable only to negatively charged antigens?

1: Coagglutination (COA)

2: Counter immuno-electrophoresis (CIE)

3: Enzyme-linked immunosorbent assay (ELISA)

4: Latex agglutination (LA)

279-: Reactive cold agglutinins suggests which one of the following diseases?

1: Chronic infectious mononucleosis

2: Primary syphilis

3: Scarlet fever

4: Primary atypical pneumonia

280-: Which of the following laboratory assays can be used to detect the number and types of immune cells in the peripheral blood?

1: Immunofixation electrophoresis

2: Immunoblot

3: EIA

4: Flow cytometry

281-: Variable poion of antibody molecule is -

1: C-terminal

2: N-terminal

3: Intermediate region

4: Carbohydrate moiety

282-: Interleukins and growth factors are

1: Neurotransmitters

2: Metalloproteinases

3: Phosphoproteinases

4: Cytokines

283-: MHC class III genes encode -

1: Complement component C3

2: Tumor necrosis factor

3: Interleukin 2

4: Beta 2 microglobulin

284-: Examples of type I hypersensitivity is -

1: Lepromin test

2: Tuberculin

3: Casoni's test

4: Ahus reaction

285-: Secondary amyloidosis is a complication of?

1: RA

2: Plasmacytosis

3: Multiple myeloma

4: None

286-: DNA is detected by:

1: Southern blot

2: Northern blot

3: Western blot

4: Eastern blot

287-: Southern blotting is used for -

1: RNA

2: DNA

3: Protein

4: Antibody

288-: Complement formed in liver -

1: C2,C4

2: C3,C6,C9

3: C5,C8

4: C1

289-: The process of increasing the ability for phagocytosis of foreign bodies called as:

1: Cross reactivity

2: Opsonization

3: Immune tolerance

4: Immune surveillance

290-: The first cell culture vaccine was

1: Human diploid cell (HDC) vaccine

2: Low egg passage (LEP) vaccine

3: Purified chick embryo cell (PCEC) vaccine

4: Purified vero cell (PVC) vacccine

291-: Which of the following statements is true about hapten-

1: It induces brisk immune response

2: It needs carrier to induce immune response

3: It is a T-independent Antigen

4: It has no association with MHC

292-: First antibody produced by newborn?

1: IgA

2: IgG

3: IgE

4: IgM

293-: Which is not a macrophage -

1: Monocyte

2: Microglia

3: Kupffer cells

4: Lymphocytes

294-: HIV affects?

1: B-cells

2: Helper T cells

3: Suppressor T-cells

4: Cytotoxic T-cells

295-: tRNArmet would recognize : (PGI Nov 2009)

1: AUG

2: UGC

3: GUG

4: GCU

296-: ANA (antinuclear antibody) is seen in all except:

1: SLE

2: RA

3: Sjogren's syndrome

4: Systemic sclerosis

297-: Prausnitz-kustner reaction is a

1: Type I Hypersensitivity

2: Type II Hypersensitivity

3: Type III Hypersensitivity

4: Type IV Hypersensitivity

298-: The type of receptors present on T cells are:

1: IgG

2: IgD

3: CD4

4: Prostaglandins

299-: Which portion of antibody binds to antigen -

1: Hinge region

2: Constant region

3: Variable region

4: Hypervariable region

300-: B lymphocytes are associated with -

1: CD 19

2: CD 27

3: CD 4

4: CD 35

301-: Which Antibody crosses placenta?

1: IgG1

2: IgG4

3: IgA

4: IgD

302-: Type 1 hypersensitivity includes all of the following except -

1: Autoimmune hemolytic anemia

2: Anaphylaxis

3: Extrinsic asthma

4: Hay fever

303-: The reaction between antibody and soluble antigen is demonstrated by -

1: Agglutination

2: Precipitation

3: Complement fixation test

4: Hemagglutination test

304-: Animal used to demonstrate anaphylaxis in the lab is -

1: Rabbit

2: Adult mice

3: Monkey

4: Guinea Pig

305-: Large granular cells belong to -

1: Neutrophils

2: Macrophages

3: Eosinophils

4: Lymphocytes

306-: The most common primary immunodeficiency is:

1: Common variable immunodeficiency

2: Isolated IgA immunodeficiency

3: Wiskott-Aldrich syndrome

4: AIDS

307-: Maximum half life -

1: Ig G

2: Ig A

3: Ig M

4: Ig E

308-: Antibody involved in primary immune response -

1: IgE

2: IgM

3: IgA

4: IgD

309-: A 40-year-old man complains of having yellow skin and sclerae, abdominal tenderness, and dark urine. Physical examination reveals jaundice and mild hepatomegaly Laboratory studies demonstrate elevated serum bilirubin (3.1 mg/dL), decreased serum albumin (2.5 g/dL), and prolonged prothrombin time (17 seconds). Serologic tests reveal antibodies to hepatitis B core antigen (IgG anti-HBcAg). The serum is also positive for HBsAg and HBeAg. What glycoprotein on virally infected hepatocytes provides a target for cell-mediated cytotoxicity in the patient?

1: CD4

2: CD8

3: Class I HLA molecules

4: Class II HLA molecules

310-: Immunoglobulin in peyer's patch is?

1: IgM

2: IgG

3: IgA

4: IgD

311-: Chediak higashi syndrome, defect is -

1: Fusion of lysosome

2: T-cells

3: B-cells

4: Complement

312-: Normal % of CD4 cells in a newborn -

1: 35% of T cells

2: 45% of T cells

3: 55% of T cells

4: 65% of T cells

313-: First line of defence against tumour and virus?

1: NK cell

2: T cell

3: Histiocyte

4: Macrophage

314-: Immunoglobulin isotype class switching is determined by -

1: Constant region of light chain

2: Constant region of heavy chain

3: Variable region of light chain

4: Variable region of heavy chain

315-: Which of the following cell does not have cytotoxic activity -

1: NK cells

2: Cytotoxic T-cells

3: Helper T-cells

4: Antibody dependent cells

316-: Which pa of bacteria is most antigenic -

1: Proetin coat

2: Lipopolysaccharide

3: Nucleic acid

4: Lipids

317-: When transfer factor is given as treatment results in -

1: Natural active immunity

2: Aificial active immunity

3: Aificial passive immunity

4: Adoptive immunity

318-: A 9-year-old female with a recent history of weight loss and vision problems arrives at the hospital. Soon after, it is determined that she has low blood glucose, and autoantibodies against P cells are detected in her serum. Which of the following is the most likely diagnosis?

1: Goodpasture syndrome

2: Graves' disease

3: Hashimoto disease

4: Juvenile-onset diabetes mellitus

319-: Phagocytosis enhanced by coating the surface of antigen is called:(1996)

1: Opsonisation

2: Chemotaxis

3: Decoding

4: CFT

320-: Pentameric structure -

1: IgM

2: IgG

3: IgA

4: IgD

321-: Most common cause of chronic granulomatous disease in children is -

1: Myeloperoxidase deficiency

2: Defective phagocytosis

3: Defective H2 O2 production

4: Job's disease

322-: Most potent antigen presenting cell is?

1: B cells

2: Dendritic cells

3: T cells

4: NK cells

323-: Complement attaches to immunoglobulin at:

1: Aminoterminal

2: Fab region

3: Variable region

4: Fc fragment

324-: A 25-year-old man is exposed to Ascaris but does not develop clinical signs of infection. Which of the following mechanisms is likely to be responsible for his resistance to infection?

1: Antibody mediated destruction of worm infected host cells

2: CTL induced apoptosis of worm infected host cells

3: Complement mediated lysis of worm attached to host tissues

4: IgE mediated type I hypersensitivity disrupting worm attachment

325-: Transfusion reactions are due to which type of hypersensitivity?

1: Immediate

2: Immune complex-mediated

3: Antibody-mediated

4: Delayed-type

326-: Antigen antibody precipitation is maximally seen in which of the following?

1: Excess of antibody

2: Excess of antigen

3: Equivalence of antibody and antigen

4: Antigen Hapten interaction

327-: A child is suffering from recurrent chronic infections with encapsulated bacteria; Which subclass of IgG does the child has deficiency?

1: IgG1

2: IgG2

3: IgG3

4: IgG4

328-: A 40-year-old man has been infected with HIV for the past 10 years. During this time, he has had several bouts of oral candidiasis, but no major illnesses. He is now diagnosed with Kaposi sarcoma involving the skin. He has had a 7-kg weight loss in the past 6 months. Laboratory studies show the HIV-1 RNA viral load is currently 60,000 copies/mL. Which of the following types of cells is most depleted in his lymph nodes?

1: CD4+ lymphocyte

2: CD8+ lymphocyte

3: CD19+ lymphocyte

4: Macrophage

329-: Examples of type I hypersensitivity is:

1: Lepromin test

2: Tuberculin

3: Casoni's test

4: Arthus reaction

330-: Antigen-antibody binding occurs at-

1: Surface

2: Center

3: Inside molecule

4: Anywhere in structure

331-: Immunoglobulin found in bronchial secretion:

1: IgA

2: IgG

3: IgM

4: IgE

332-: Plasma cells are derived from?

1: T cells

2: B cells

3: Macrophages

4: Neutrophils

333-: Immunoglobulin that is inactive at high temperature is?

1: IgG

2: IgA

3: IgM

4: IgE

334-: A single immunoglobulin molecule contains -

1: 1 light chain, 1 heavy c hain

2: 2 heavy chains, 1 light

3: 2 light chains, 2 heavy chains

4: 2 light chains, 1 heavy chain

335-: First immunoglobulin to appear following infection -

1: IgG

2: IgM

3: IgA

4: IgE

336-: Which of the following activates the classical complement pathway?

1: Immune complex

2: Lipopolysaccharide

3: Exotoxin

4: Zymosan

337-: Virus infected cells killed by:

1: Natural killer cells

2: Plasma cells

3: B cells

4: None

338-: Superantigen is produced by

1: Staphylococcus aureus

2: Streptococcus pneumoniae

3: Pseudomonas aeruginosa

4: Clostridium diphtheriae

339-: All are true about Immune Reconstitution Inflammatory syndrome (IRIS) except:

1: It occurs when CD4 cell count is < 50 cells/mm3

2: Develops after initiation of anti-retroviral therapy

3: Associated with delayed type of hypersensitivity

4: Does not require a specific antimicrobial therapy for recovery

340-: Which is not related to immunity -

1: MPGN

2: PSGN

3: Diabetic nephropathy

4: IgA nephropathy

341-: Center of complement pathway -

1: C3

2: C1

3: C5

4: C2

342-: Adenosine deaminase (enzyme) deficiency is associated with:

1: Severe combined immunodeficiency (SCID)

2: X-linked agammaglobulinemia

3: Transient hypogammaglobulinemia of infancy

4: Chronic granulomatous disease

343-: A 1 year old boy is brought to the OPD by his parents with complaints of inability to gain weight and chronic diarrhoea. He was growing well till the age of 6 months. After that, he staed to develop recurrent episodes of pneumonia. Family history is positive for similar symptoms in a maternal uncle. On examination, he is below the 3rd percentile for weight.

Tonsils are absent. Stool is positive for Giardia. Which of the following is not true regarding his condition?

1: All classes of immunoglobulin levels are reduced

2: Lymph node biopsy shows depletion of follicles

3: Both humoral and cell mediated immunity are affected

4: It is caused by a mutation of the Btk gene

344-: Which cells cause rosette formation with sheep RBCs?

1: T cells

2: NK cells

3: Monocytes

4: B cells

345-: Type of immunity conferred on an individual by vaccination is -

1: Aificial active

2: Aificial passive

3: Natural active

4: Natural passive

346-: Prozone phenomenon is due to -

1: Excess antigen

2: Excess antibody

3: Hyperimmune reaction

4: Dispropoiona te antigen-antibody cells

347-: Elevated IgG and IgM antibody titers to parvovirus suggest a diagnosis of

1: Fifth disease

2: Susceptibility to chickenpox

3: Possible subacute sclerosing panencephalitis (SSPE)

4: Possible hepatitis B infection

348-: Macrophages- false statement is?

1: Derived from monocytes

2: Harbor Mycobacteria

3: Involved in Type 3 HSN

4: Produces TNF and interleukins

349-: Graves disease is an example of which type of hypersensitivity -

1: Type-1

2: Type-II

3: Type-Ill

4: Type-IV

350-: N. meningitis can be due to deficiency of this complement system:

1: C1 - C4 deficiency

2: C5 - C9 deficiency

3: C3 deficiency

4: C2 deficiency

351-: Ahus reaction is an example for which type of hypersensitivity?

1: Type I

2: Type II

3: Type III

4: Type IV

352-: Skin test useful in Hydatid disease is?

1: Casoni's test

2: Schick test

3: Patch test

4: Dick s test

353-: HLA complex is on chromosome -

1: 6

2: 7

3: 8

4: 9

354-: Ahus phenomenon is an example of which hypersensitivity -

1: Type I

2: Type II

3: Type III

4: Type IV

355-: Langerhans cells in skin are -

1: Antigen presenting cells

2: Pigment producing cells

3: Keratin synthesizing cells

4: Sensory neurons

356-: A patient presents with a painless ulcer on his penis. A Wasserman test is done and is positive. Wasserman reaction is an example of _

1: Complement fixation

2: Precipitation

3: Neutralization

4: Agglutination

357-: Which of the following statements best applies to the following diagram?

1: Depicts the cell-membrane MHC product associated with narcolepsy

2: Essential for the transplacental passage of antibody

3: Found on T and B lymphocytes and all nucleated cells

4: Present on macrophages but not neutrophils

358-: MHC1 is involved in?

1: Tumor lysis

2: Mixed leukocyte reaction

3: Autoimmune disease susceptibility

4: All of the above

359-: IL-2 is secreted by -

1: CD4 lymphocytes

2: CD8 cells

3: Macrophages

4: Neutrophils

360-: Which of the following is/are true about PCR except:

1: Uses heat labile DNA polymerase

2: Uses heat stable DNA polymerase

3: Is technique for DNA amplification

4: Used to yield multiple copies of DNA

361-: Graft Versus host reaction is mediated by

1: Macrophages

2: T lymphocytes

3: B lymphocytes

4: T lymphocytes and macrophages

362-: A 40-year-old female, presented to OPD with hemoptysis and hematuria. Lab studies show the presence of anti-basement membrane antibodies. The patient undergoes plasmapheresis & her symptoms improved. Which of the following diseases is of the same hypersensitivity category as this disease?

1: Systemic lupus erythematosus

2: Seasonal allergies

3: Myasthenia gravis

4: Poison ivy rash

363-: Who got nobel prize for discovery of split genes?

1: Burnet

2: Susumu Tonegawa

3: Neils K jerne

4: Paul Ehrlich

364-: Which of the following is not an example of immune complex disease?

1: SLE

2: Ahus reaction

3: Contact dermatitis

4: Post streptococcal glomerulonephritis

365-: Common antibody seen in antiphospholipid syndrome:

1: Anticardiolipin

2: Anti-b2GPI

3: ANA

4: Anti-Sm

366-: Cellular immunitty is induced by -

1: Nk-cells

2: Dendritic-cells

3: TH1-cells

4: TH2-cells

367-: Which of the immunoglobulin has Maximum half-life-

1: Ig G

2: Ig A

3: Ig M

4: Ig E

368-: All are peripheral lymphoid organs except-

1: Lymph nodes

2: Spleen

3: Mucosa associated lymphoid tissue

4: Thymus

369-: The prototype of type-II hypersensitivity reaction is -

1: Ahus reaction

2: SLE

3: Autoimmune hemolytic anemia

4: Contact dermatitis

370-: Which is concerned with cell mediated immunity

1: B-Lymphocytes

2: T-Lymphocytes

3: Eosinophils

4: Monocytes

371-: Wheal & flare reaction is what type of hypersensitivity recations?

1: Type I

2: Type II

3: Type III

4: Type IV

372-: SCID is caused due to deficiency of?

1: Pyridoxine phosphate

2: Cytochrome oxidase

3: Adenosine deaminase

4: Phyntanoyl Co A

373-: A patient presents with recurrent swelling of the lips as shown. He has no itching. Family history is positive. Which of the following is deficient in this patient?

1: C1,C2,C4

2: C1 inhibitor

3: C3b inactivator

4: C5-C8

374-: Skin test demonstrates all types of hypersensitivity except:

1: Type 1

2: Type 2

3: Type 3

4: Type 4

375-: Widal test is a type of

1: Slide agglutination test

2: Tube agglutination test

3: CFT

4: Ring precipitation test

376-: Antibody transferred from mother to foetus -

1: IgG

2: IgM

3: IgD

4: IgA

377-: The most impoant cells in type I hypersensitivity -

1: Macrophages

2: Mast cells

3: Neutrophils

4: Lymphocytes

378-: The reaction between antibody and soluble antigen is demonstrated by

1: Agglutination

2: Complement fixation

3: Precipitation

4: Heamagglultination

379-: A patient presents with a wound on his leg. It heals six weeks later. Which of the following mediators is involved in promoting wound healing?

1: TGF -Beta

2: TNF-Alpha

3: INF-Beta

4: IFN-Alpha

380-: IFN beta stimulated by:

1: Bacterial infection

2: Viral infection

3: Fungal infection

4: Mycoplasma infection

381-: First antibody response is mediated by -

1: IgE

2: IgM

3: IgA

4: IgD

382-: A child present with recurrent episodes of sinopulmonary infection by bacteria with polysaccharide rich capsule. Deficiency of which of the following immunoglobulin subclasses should be specifically investigated?

1: IgA

2: IgG1

3: IgG2

4: IgA + IgG2

383-: TRUE about immunoglobulins is -

1: IgE fixes complement

2: IgM fixes complement

3: IgG is found in minimum concentration

4: IgG is elevated in primary immune response

384-: Which of the following is involved in the pathogenesis of myasthenia gravis?

1: Mutation in ryanodine receptors

2: Autoantibodies against acetylcholine receptors

3: Autoantibodies against synaptobrevin

4: Autoantibodies against presynaptic calcium channels

385-: A woman with infeility receives an ovary transplant from her sister who is an identical twin. What type of graft it is?

1: Xenograft

2: Autograft

3: Allograft

4: Isograft

386-: CD4 lymphocytes (helper cells) recognize -

1: HLA class I antigen

2: HLA class II antigen

3: HLA class III antigen

4: None of the above

387-: Most common accepted theory for antibody production is

1: Direct template

2: Indirect template

3: Natural selection

4: Clonal selection

388-: Pentavalent immunoglobin is-

1: IgA

2: IgG

3: IgM

4: IgE

389-: Which antibody has the maximum concentration in GI Secretions -

1: IgG

2: IgM

3: IgA

4: IgD

390-: Which of the following is not a phagocytic cell -

1: Macrophages

2: Kupffler cells

3: NK cells

4: Neutrophils

391-: Which of the following antigen is found within the nuclei of infected hepatocytes and NOT usually in the peripheral circulation in Hepatitis B infection?

1: HBeAg

2: HBcAg

3: Anti-HBc

4: HBsAg

392-: Interleukin 1 (IL-1) is a potent cytokine. It is best described by which one of the following statements?

1: Synthesis of IL-1 is inhibited in activated macrophages

2: It can be produced by natural killer cells

3: It exerts its effects on T and B cells as a costimulator

4: It is multimeric and consists of more than one protein

393-: B cells are processed in

1: Bone marrow

2: Liver

3: Spleen

4: Lymph nodes

394-: MgCl2 is added to polio-vaccine because of the following

1: Potentiates the vaccine

2: Vaccine can be kept in higher temperature

3: Preservative

4: None

395-: Graft from homozygotic twin is known as -

1: Autograft

2: Isograft

3: Allograft

4: Xenograft

396-: Which of the following immunoglobulins can cross placenta -

1: IgA

2: IgM

3: IgG

4: IgD

397-: Chediak - Higashi syndrome, true is:

1: Defect in phagocytosis

2: Neutropenia

3: Agammaglobulinemia

4: IgA deficiency

398-: Which category of hypersensitivity involves complement activation?

1: 2

2: 3

3: 2 & 3

4: 4 & 2

399-: Structure of antibodies is composed of -

1: Single peptide chain

2: Two peptide chain

3: Non sulphur amino acid

4: 2 long and 2 sho peptide chains

400-: Transplantation involving tissue from twin brothers possessing identical HLA genes is best described by which one of the following?

1: Allograft: transplant from one species to the same species

2: Autograft: transplant from one region of a person to another region

3: Isograft: transplant from one person to a genetically identical person

4: Xenograft: transplant from one species to another species

401-: Numbers of variable regions on each light and heavy chain of an antibody -

1: 1

2: 2

3: 3

4: 4

402-: All of the following statements about NK cells are true except:

1: They are derived from large granular cells

2: They comprise about 5% of human peripheral lymphoid cells

3: They are MHC restricted cytotoxic cells

4: They express IgG Fc receptors

403-: HLA III gene codes for -

1: Immunological reaction in graft rejection

2: Complement

3: Graft versus host reaction

4: Immunoglobulins

404-: First antibody to appear in intrauterine life

1: IgM

2: IgA

3: IgD

4: IgE

405-: Heterophile agglutination test is?

1: Heterophile antibody that reacts with the microorganism or cells of unrelated species due to common antigen sharing.

2: Test is performed in hypertonic saline (5%saline) or albumin saline.

3: Coomb, Mourant and Race devised a reagent: Rabbit anti-human gamma globulin.

4: Helps to detect the blood group and for cross matching.

406-: Immune privilege site is?

1: Seminiferous tubule

2: Optic nerve

3: Area postrema

4: Spinal canal

407-: Antigen binding site in immunoglobulin is -

1: Variable region

2: Hypervariable region

3: Constant region

4: Idiotype

408-: During development, all the antigens of self are introduced to thymic cells in-order to be removed to prevent autoimmunity. Which of the following genes is involved in the process?

1: NOTCH1

2: AIRE

3: RB gene

4: CPK gene

409-: A 21-year-old woman has a history since childhood of recurrent episodes of swelling of the submucosal and subcutaneous tissue of the gastrointestinal and respiratory tracts. Her C1 inhibitor level is less than 5% of the reference value. These findings support a diagnosis of:

1: DiGeorge syndrome

2: Hereditary angioedema

3: Nutritional based immune deficiency

4: Paroxysmal nocturnal hemoglobinuria

410-: A 45-year old patient presented with fever, night sweats and weight loss. On X-ray, a mass was seen in apical lobe. On histopathology, caseous necrosis was present. What is the name of underlying process?

1: Enzymatic degeneration

2: Acute decrease in blood supply

3: Decreased supply of growth factor

4: Hypersensitivity reaction with modified macrophages, lymphocytes and giant cells

411-: The technique of immunoblotting to analyze RNA is named as

1: Southern blot

2: Nohern blot

3: Western blot

4: None

412-: Amyloidosis is?

1: RNA misfolding

2: DNA repair defect

3: Mitochondrial defect

4: Misfolding of protein

413-: Mast cell synthesize and/or secrete -

1: Adrenaline

2: Ach

3: Histamine

4: Heparin

414-: Causative organism of tropical spastic paraparesis is?

1: HIV 1

2: HIV 2

3: HBV

4: HTLV

415-: Which of the following is not true regarding IgE antibodies?

1: It mediates release of histmaine and other chemical mediators

2: It is the primary antibody involved in allergic reactions

3: It is involved in anti-parasitic immune responses

4: May cross the placenta and fix complement

416-: IgE receptor present on?

1: Mast cell

2: NK cell

3: B cell

4: T cell

417-: In systemic senile amyloidosis there is deposition of?

1: AA

2: AL

3: Beta - 2- microglobulin

4: ATTR

418-: A 45 yr old patient presents with fever, night sweats, weight loss. On X ray a mass in apical lobe of lung is seen. On histopathology found to have caseous necrosis. What is the underlying process?

1: Enzymatic degeneration

2: Hypersensitivity reaction with modified macrophages, lymphocytes and giant cells

3: Acute decrease in blood supply

4: decreased growth factors

419-: A young patient with severe recurrent pyogenic bacterial infections, but with normal T-cell and B-cell numbers, arrives at the hospital. Testing reveals that this patient's CD4 T-helper cells have a defect in CD40 ligand. As a result, humoral immunity evaluation reveals a significant elevation in the levels of which immunoglobulin that is present as a monomer on B-cell surfaces, as a pentamer in serum, and is initially seen in the primary immune response?

1: IgG

2: IgA

3: IgM

4: IgD

420-: Immunoglobulin present in local secretions is?

1: IgG

2: IgA

3: IgM

4: IgD

421-: All are true about endotoxins except:

1: Lipopolysaccharides in nature

2: Circulated in blood

3: Highly antigenic

4: Induces IL1 and TNF

422-: Type III reaction is-

1: Antibody mediated

2: Immune complex mediated

3: Cell mediated

4: None

423-: T-cell mediated disease is?

1: Asthma

2: Myasthenia gravis

3: SLE

4: Sarcoidosis

424-: Delayed hypersensitivity involves:

1: Neutrophils

2: Monocytes

3: Eosinophils

4: Lymphocytes

425-: Which of the following is a pan T lymphocite marker -

1: CD2

2: CD3

3: CD 19

4: CD 25

426-: Earliest immune response is by -

1: IgM

2: IgG

3: IgA

4: IgE

427-: Cachectin is produced by -

1: Neutrophils

2: Eosinophils

3: Macrophages

4: Basophils

428-: An immunologist sees a child with a suspected primary immunodeficiency and orders a nitroblue tetrazolium test. What condition is she screening the child for?

1: Chediak-Higashi syndrome

2: Tuftsin deficiency

3: Chronic granulomatous disease

4: Wiskott-Aldrich syndrome

429-: Which one of the following hypotheses may be sufficient to explain non precipitation in antigen-antibody system?

1: The antigen has a multivalent determinant

2: The antigen has a single, non-repeated determinant

3: The antibody has been cleaved to divalent Fab' ligands

4: The antibody has been cleaved to divalent Fab'2 ligands

430-: All are involved in HIV except

1: Macrophages

2: Lymphocytes

3: Neutrophils

4: Dendritic cells

431-: All of the following are immune complex disease except -

1: Serum sickness

2: Farmer's lung

3: SLE

4: Graft rejection

432-: Active immunity is not acquired by-

1: Infection

2: Vaccination

3: Immunoglobulin transfer

4: Sub-clinical infection

433-: In respiratory and GIT infections, which is the most affected immunoglulin -

1: IgA

2: IgG

3: IgM

4: IgD

434-: A 19-year-old college student develops a rash. She works part-time in a pediatric AIDS clinic. Her blood is drawn and tested for specific antibody to the chicken pox virus (varicella-zoster). Which of the following antibody classes would you expect to find if she is immune to chicken pox?

1: IgG

2: IgA

3: IgM

4: IgD

435-: Chediak-Higashi syndrome

1: Disorders of specific immunity

2: Disorders of complement

3: Disorders of phagocytosis

4: Secondary immunodeficiencies

436-: Interferon is....in nature -

1: Protein

2: Lipid

3: Polysaccharides

4: All of the above

437-: True about type II hypersensitivity reaction is?

1: May be complement mediated

2: Schultz dale phenomenin is a type 2 hypersensitivity

3: Antibody independent

4: Role of IgE

438-: Skin transplant was done from sister to brother. After few years, brother to sister skin transplant was done, but rejection occurred. This phenomenon is known as

1: Eichwald silmser effect

2: Schultz Dale phenomena

3: Theobald smith phenomena

4: Schwazman reaction

439-: Mysthenia gravis is which type of hypersensitivity' -

1: Type I

2: Type II

3: Type III

4: Type IV

440-: Antigen antibody precipitation is maximally seen in which of the following ?

1: Excess of antibody

2: Excess of antigen

3: Equivalence of antibody and antigen

4: Antigen Hapten interaction

441-: Analysis of protein antigen is by

1: Southern blot

2: Nohern blot

3: Western blot

4: Eastern blot

442-: The type of receptors present on T cells are -

1: IgG

2: IgD

3: CD4

4: Protaglandins

443-: Opsonins are -

1: C3a

2: C3b

3: C5a

4: C5-C9

444-: Which is concerned with cell mediated immunity -

1: B-Lymphocytes

2: T-Lymphocytes

3: Eosinophils

4: Monocytes

445-: Which one of the following immunoglobulins constitues the antigen binding component of B-cell receptor -

1: IgA

2: IgD

3: IgM

4: IgG

446-: Which of the following statements concerning immunoglobulins is wrong:

1: IgM does not cross placenta

2: IgE increased in parasitic infection

3: IgM increased in primary response

4: Fetal infection can be diagnosed by detection of IgG

447-: A 54-year-old woman is involved in an automobile accident and requires a blood transfusion. Five hours later, she becomes febrile and has severe back pain. Laboratory

studies show evidence of intravascular hemolysis. It is discovered that type A Rh+ blood was given by mistake to this type B Rh+ patient. Which of the following best explains the development of intravascular hemolysis in this patient?

1: Antibody-dependent cellular cytotoxicity

2: Antibody-mediated complement fixation

3: Delayed-type hypersensitivity

4: Immune complex disease

448-: Fibroblasts in tissue culture form interferon of type-

1: Alpha

2: Beta

3: Gamma

4: All of the above

449-: Rose-Waaler test is a?

1: Co-agglutination test

2: Latex agglutination test

3: Slide agglutination test

4: Haemagglutination test

450-: Interleukin I primarily acts on-

1: T-lymphocytes

2: B-lymphocytes

3: Neutrophils

4: Macrophages

451-: Increased level of IgM indicates-

1: Vaccination

2: Immunized person

3: Acute infection

4: Chronic infection

452-: True about RFLP: (PGI Dec 2006)

1: Detects mutation

2: Recognizes trinucleotide repeat

3: Detects deletion

4: Blunt ends are produced

453-: An infant with a history of delayed separation of umbilical cord now presents with recurrent pneumonia. The total count is 20,000/ml. Which of the following genetic defects is most likely present?

1: Low levels of NADPH oxidase and negative DHR test

2: Mutation of Bruton tyrosine kinase gene

3: Excessive IgM with reduced IgG and IgA

4: Reduced phagocyte surface expression of Sialyl-Lewis x

454-: Reaction of soluble antigen with antibody is known as -

1: Agglutination

2: Precipitation

3: Flocculation

4: Complement fixation

455-: In an inflammatory response, macrophages are usually derived from -

1: Monocytes

2: Reticuloendothelial cells

3: Neutrophils

4: Lymphocytes

456-: Runt disease is -

1: Graft rejection

2: Graft versus host reaction

3: Deficient T cell function

4: Complement deficiency

457-: Yearly vaccination on fixed dates is done for

1: Polio

2: Malaria

3: Pertusis

4: Tetanus

458-: The main aim of an adjuvant is to increase -

1: Distribution

2: Absorption

3: Antigenicity

4: Metabolism

459-: All the following about drug induced SLE are true except

1: More common in females

2: Renal and CNS involvement is uncommon

3: Complement level are normal

4: The disease remits after withdrawal of the offending drug

460-: Graft between member of the same family species but of different genetic constituent is known as:

1: Xenograft

2: Autograft

3: Allograft

4: Isograft

461-: Highest molecular weight immunoglobulins are

1: IgG

2: IgA

3: IgM

4: IgD

462-: With four subclasses, which immunoglobulin is the predominant antibody in the secondary immune response and has the greatest concentration of the five immunoglobulin classes in the fetus?

1: IgG

2: IgA

3: IgM

4: IgD

463-: Helper cells belong to

1: T cells

2: Macrophages

3: B cells

4: Monocytes

464-: Which is found in DiGeorge's syndrome -

1: Tetany

2: Eczema

3: Mucocutaneous candidiasis

4: Absent B and T cells

465-: "Tophus" is the pathognomic lesion of which of the following condition:

1: Multiple myeloma

2: Cystinosis

3: Gout

4: Eale's disease

466-: Which immunoglobulin crosses placenta?

1: IgG

2: IgM

3: IgA

4: IgD

467-: Myasthenia gravis is associated with:

1: Hypergammaglobulenaemia

2: Thymoma

3: Squamous cell carcinoma

4: Hepatic adenoma

468-: Antibody elevated in parasitic infection -

1: IgA

2: IgE

3: IgG

4: IgM

469-: Atopy is mediated by -

1: IgE

2: IgD

3: IgM

4: IgA

470-: A 12-year-old boy presents with a 5-day history of sore throat. His temperature is 38.7degC (103degF). Physical examination reveals inflamed tonsils and swollen cervical lymph nodes. Trafficking and recirculation of blood-borne lymphocytes through the cervical lymph nodes in this patient occurs primarily at which of the following locations?

1: Afferent lymphatic vessel

2: Efferent lymphatic vessel

3: Hassall corpuscles

4: High endothelial venules

471-: Weil Felix reaction is based on sharing of antigens between

1: Sheep RBC and EBV

2: Mycoplasma and human RBC

3: Rickettsia antigens and proteus antigens

4: None

472-: All are true regarding superantigens except?

1: Activate very large numbers of B cells

2: Bind outside the antibody binding groove

3: Are medium sized proteins

4: Cause release of cytokines

473-: Type III reaction is:

1: Antibody mediated

2: Immune complex mediated

3: Cell mediated

4: None

474-: A 27-year-old male patient (blood group O) arrives at the emergency room with a massive intestinal bleed (hematochezia) Within hours he has lost half of his blood volume, and you decide to transfuse. Due to human error, you transfuse blood group AB into him and within minutes he develops a fever, chills, dyspnea, and a dramatic drop in blood pressure. This reaction is most likely due to which of the following?

1: A cell-mediated response against AB antigens

2: IgG production by the recipient in response to AB antigens

3: Preformed anti-A and anti-B antibodies in the recipient

4: Preformed anti-A and anti-B antibodies of the blood donor

475-: Perforins are produced by -

1: Cytotoxic T cells

2: Suppressor T cells

3: Memory helper T cells

4: Plasma cells

476-: Which of the following determines the class of immunoglobulin?

1: L-chain

2: H-chain

3: J-chain

4: Variable region

477-: Which of the following organ can cause antigen reaction when exposed in self blood?

1: Kidney

2: Liver

3: Eye lens

4: Platelets

478-: Reaction due to lysis of bacterial cell wall & necrotic cell product -

1: Arthus reaction

2: Serum sickness

3: Jerish herheximer reaction

4: Infectious mononucleosis-ampicillin reaction

479-: Interferon gamma secreted by?

1: CD4 T cell

2: CD8 cells

3: RBC

4: Neutrophils

480-: A 1 yr old boy presents with history of recurrent pneumonia. He also has eczema and a history of prolonged bleeding after circumcision. Peripheral smear shows thrombocytopenia with small platelets. Which of the following is most likely to be deficient?

1: IgA

2: IgE

3: IgM

4: IgG

481-: An Rh -ve woman became pregnant with Rh +ve fetus. Within few days after bih, the infant developed jaundice, ascites, hepatomegaly and edema. The likely substance(s) deposited in skin and sclera in jaundice is/are given below. Which is the best possible answer?

1: Biliverdin

2: Conjugated and unconjugated bilirubin

3: Unconjugated bilirubin

4: Conjugated bilirubin

482-: Anaphylaxis refers to

1: The severe reaction following primary injection of protein solutions

2: The state of immunity developed by repeated injections of any foreign substance

3: The severe reaction resulting from sensitive to common allergens

4: The severe reaction following re-injection of protein solution in a sensitized animal

483-: Immunoglobulin secreted by fetus as primary response -

1: IgA

2: IgM

3: IgG

4: IgD

484-: Paul bunnel reaction is a ty pe of -

1: Agglutination

2: CF

3: Precipitation

4: Flocculation test

485-: A 29-year-old woman has had increasing weakness over the past year, and now has difficulty climbing a single flight of stairs. Her muscles are sore most of the time. She has little difficulty writing or typing, however. During the past 3 months, she has had increasing difficulty swallowing. She has experienced chest pain for the past week. On physical examination, she is afebrile. Her blood pressure is 115/75 mm Hg. Muscle strength is 4/5 in all extremities. No rashes are present. She has 2+ pitting edema to the knees. Rales are auscultated over lower lung fields. Laboratory studies show serum creatine kinase level of 458 U/L and Jo-1 antibodies. Which of the following additional complications of her disease is she most likely to have?

1: Bony ankylosis

2: Myocarditis

3: Pericarditis

4: Sclerodactyly

486-: Which antibody protects from intestinal infection?

1: IgA

2: IgM

3: IgG

4: IgE

487-: Helper cells belong to?

1: T cells

2: Macrophages

3: B cells

4: Monocytes

488-: Common between B and T cells -

1: Origin from same cell lineage

2: Site differentiation

3: Antigenic marker

4: Both humoral and cellular immunity

489-: True about cytokines is -

1: It is always a polypeptide

2: It acts on protein targets

3: It takes pa in intrinsic enzymatic reactions

4: Chemotactic

490-: Northern blotting used in separation and diagnosis of:

1: Histones

2: Proteins

3: RNA

4: DNA

491-: Job syndrome is due to

1: Defect in chemotaxis

2: Defect in phagocytosis

3: Defect in synthesis

4: Defect in leukocyte function

492-: Functions of complement include all except-

1: Chemotaxis

2: Opsonization

3: Celllysis

4: Antigen presentation

493-: What enhances multiplication of T cells in culture -

1: Phytohemagglutinin

2: Chemotactic factor

3: Leukotrienes

4: Prostaglandins

494-: Immunoglobulin having maxium molecular weight and is first to be synthesised in fetus?

1: IgA

2: IgG

3: IgM

4: IgD

495-: Hereditary angioneurotic edema is due to -

1: Deficiency of C1 inhibitor

2: Deficiency of NADPH oxidase

3: Deficiency of MPO

4: Deficiency of properdin

496-: Which is not pyrogenic -

1: IL-1

2: TNF-a

3: IL-4

4: IL-6

497-: An 8-year-old boy presents with periorbital edema and throbbing headaches. His parents report that the boy had a "strep throat" 2 weeks ago. Urinalysis shows 3+ hematuria. A renal biopsy shows hypercellular glomeruli, and electron microscopic examination of glomeruli discloses subepithelial "humps." Which of the following best explains the pathogenesis of glomerulonephritis in this patient?

1: Antineutrophil cytoplasmic autoantibodies

2: Deposition of circulating immune complexes

3: Directly cytotoxic IgG and IgM antibodies

4: IgE-mediated mast cell degranulation

498-: Opsonisation is by -

1: IgA

2: IgE

3: IgG

4: IgM

499-: Most potent stimulator of naive Tcells-

1: Mature dendritic cells

2: Follicular dendritic cells

3: Macrophages

4: B cell

500-: Most efficient antigen presenting cell in the skin -

1: Dendritic cell

2: Macrophages

3: Langerhans cell

4: Kupffer cells

501-: Autologous transplant means?

1: Graft from Individuals of same genetic constitution

2: Graft from self

3: Graft from Twins

4: Graft from members of different species

502-: Complement binding immunoglobulin the classical pathway is -

1: IgG & IgM

2: IgG & IgA

3: IgG & IgD

4: IgD & IgE

503-: A 10-month-old patient with recurrent pyogenic infections, eczema, and severe bleeding (thrombocytopenia) is diagnosed with Wiskott-Aldrich syndrome. This immune disorder is usually associated with which of the following?

1: Humoral Immunity - Normal; Cellular Immunity - Normal

2: Humoral Immunity - Normal; Cellular Immunity - Deficient

3: Humoral Immunity - Deficient; Cellular Immunity - Normal

4: Humoral Immunity - Deficient; Cellular Immunity - Deficient

504-: Steven Johnson Syndrome is seen with what kind of hypersensitivity reaction?

1: Type 1

2: Type 2

3: Type 3

4: Type 4

505-: Lipopolysaccharide of gram negative bacteria -

1: Hapten

2: Heterophile antibody

3: Stimulator for B lymphocytes

4: Induce cell mediated immunity'

506-: Delayed hypersensitivity in skin tests, is assessed by

1: Erythema

2: Bulla

3: Necrosis

4: Induration

507-: Heat labile immunoglobulin-

1: IgA

2: IgG

3: IgE

4: IgM

508-: Prozone phenomenon is responsible for-

1: False negative test

2: False positive test

3: May cause any of the above

4: Has no relation with accuracy of test

509-: A pediatric patient with progressively developing degenerative neurologic disease/disorder has an elevated CSF antibody titer to measles virus. You should suspect which of the following?

1: Acute Lyme disease

2: Fifth disease

3: Possible hepatitis B infection

4: Possible subacute sclerosing panencephalitis (SSPE)

510-: Polysaccharide antigens are:

1: T cell independent antigens

2: T cell dependent antigens

3: MHC I dependent antigens

4: MHC II dependent antigens

511-: Autoantigen is -

1: Blood group antigen

2: Forssman antigen

3: Both

4: None

512-: Which in Pan T-cell marker -

1: CD3

2: CD8

3: CD45

4: CD30

513-: A 63-year-old man has had chronic arthritis for the past 15 years. Physical examination shows ulnar deviation with bony ankylosis producing swan neck deformities of the fingers. Laboratory studies show 4.2 g of protein in a 24-hour urine collection, serum creatinine of 3.1 g/ dL, and urea nitrogen of 3 g/dL. Level of C-reactive protein is markedly elevated. A rectal biopsy is performed, which shows deposition of amorphous pink material with H&E staining in the mucosa. The material stains positive with Congo red. Which of the following proteins is the most likely precursor to this material in the mucosa?

1: Acute-phase reactant

2: b2-Microglobulin

3: g light chains

4: Transthyretin

514-: All are true about severe combined immunodeficiency except:

1: B & Teel 1 deficiency

2: Adenosine deaminase deficiency may occur

3: Affected child can survives beyond adolescence without treatment

4: Can transmit either as X-linked or autosomal recessive defect

515-: Cell surface markers expressed by both TH1 cells and macrophages include:

1: Immunoglobulin

2: CD3

3: TCR

4: MHC Class I

516-: Which subtype of IgG activates alternate complement system.

1: IgGl

2: IgG2

3: IgG3

4: IgG4

517-: Allograft rejection is an example of?

1: GVHD

2: Delayed types hypersensitivity

3: Immediate hypersensitivity

4: Acute rejection

518-: Hypogammaglobinemia causes?

1: Chronic recurrent sinusitis

2: Epistaxis

3: Contractures

4: Eczema

519-: A 27-year-old female presents to the emergency room with a temperature of 103degF, severe fatigue, weight loss, and joint pain. During the history and physical examination, the patient reports that she stopped taking her aspirin and corticosteroids to control her condition. A butterfly-type rash over her cheeks, sensitivity to light, and a heart murmur are apparent. The patient also reports a history of a progressively developing arthritis and glomerulonephritis. Laboratory tests further indicate anemia, leukopenia, and thrombocytopenia. This condition is best diagnosed by the presence of which of the following?

1: Anticentromere antibodies

2: Anti-dsDNA antibodies

3: Antimitochondrial antibodies

4: Antineutrophil antibodies

520-: The following interleukin is characteristically produced in a TH1 response?

1: IL-2

2: IL-4

3: IL-5

4: IL-10

521-: Secretions are rich in which immunoglobulin?

1: IgG

2: IgA

3: Ig M

4: Ig D

522-: Which is not a heterophile agglutination test -

1: Weil Felix test

2: Widal test

3: Paul Bunnel test

4: Streptococcus MG

523-: A patient of cirrhosis with liver failure comes to you for stem cell transplantation your method will be?

1: Transfer of stem cells from other persons liver

2: Taking patient skin stem cell and transferring into liver

3: Tranfer hepatocytes from the same person for regeneration

4: Transfer hepatic progenitor cells (HPCs) of same person for regeneration

524-: Job's syndrome is the following type of immuno-nondeficiency disease -

1: humoral immunodeficiency

2: Cellular immunodeficiency

3: Disorder of complement

4: Disorder of phagocytosis

525-: All of the following are true regarding Hyper IgE syndrome, except:

1: Autosomal dominant

2: Kyphoscoliosis

3: Recurrent cutaneous abscesses

4: Low serum IgG, IgA and IgM levels

526-: Tube agglutination test is used for serological diagnosis for

1: Enteric fever

2: Rabies antigen

3: HIV

4: Syphilis

527-: Complement synthesis by liver is?

1: C1

2: C5

3: C3

4: C4

528-: HLA is the major histocompatibility antigen determining homograft rejection. This comes under

1: Antigen specificity

2: Species specificity

3: Isospecificity

4: Auto specificity

529-: MALT is most commonly present in

1: Duodenum

2: Jejunum

3: Ileum

4: Stomach

530-: T cell dependent tubercular antigens produces which of the following antibodies?

1: IgM

2: IgG

3: IgG & IgA

4: IgG, IgM, IgA, IgE

531-: HLA associated with psoriasis:

1: HLA-B27

2: HLA-DR4

3: HLA-CW6

4: HLA-B8

532-: Chediak higashi syndrome, defect is-

1: Fusion of lysosome

2: T-cells

3: B-cells

4: Complement

533-: A 19-year-old college student develops a rash. She works pa-time in a pediatric AIDS clinic. Her blood is drawn and tested for specific antibody to the chickenpox virus (varicella-zoster). Which of the following antibody classes would you expect to find if she is immune to chickenpox?

1: IgA

2: IgG

3: IgM

4: IgD

534-: The HLA class-III region genes are impoant elements in

1: Transplant rejection phenomenon

2: Complement system

3: Immune surveillance

4: Antigen presentation and elimination.

535-: Antigen combining site of the antibody -

1: Idiotype

2: Paratope

3: Epitope

4: Hapten

536-: All of the following are true about bacteriophage EXCEPT:

1: It is a bacteria

2: It helps in transduction

3: It imparts toxigenicity by lysogenic conversion

4: It can cause drug resistance

537-: Immunoglobulin present in mouth local secretion s-

1: IgA

2: IgM

3: IgG

4: IgE

538-: Autoimmunity can be caused due to all of the following except:

1: Forbidden clones

2: Expression of cryptic antigens

3: Negative selection of T cells in thymus

4: Inappropriate expression of MHC proteins

539-: Role of macrophages in antibody production is?

1: Antigen presentation

2: B cell production

3: Class switching

4: B cell activation

540-: Delayed hypersensitivity is due to -

1: Neutrophils

2: Monocytes

3: Eosinophils

4: Lymphocytes

541-: Recurrent facial/oropharyngeal/laryngeal edema in a patient has low C4, normal C3 and normal factor B. The phathogenesis is most likely due to:

1: Immune complex disease

2: C1 esterase inhibitors deficiency

3: Hereditary deficiency of C2

4: Classical pathway activation by IgM

542-: The role played by Major Histocompatibility Complex (MHC)-1 and -2 is to:(AlIMS November 2014, November 2013)

1: Transduce the signal to T-cell following antigen recognition

2: Mediate immunogenic class switching

3: Present antigens for recognition by T-cell antigen receptors

4: Enhance secretion of cytokines

543-: Patients with C5 through C9 complement deficiencies would be most likely to have which of the following infections?

1: AIDS

2: Meningococcal infection

3: Pneumococcal infection

4: Giardiasis

544-: Immunoglobulin inactive by heating and elevated in helminthic infections:

1: IgA

2: IgG

3: IgE

4: IgM

545-: Tuberclin test is reaction of -

1: Anaphylaxis mediated

2: Cell mediated

3: Antibody mediated

4: Immune complex mediated

546-: All are true regarding agammaglobulinemia except -

1: Loss of germinal centre in lymph node

2: Normal coical lymphocytes

3: Normal coical lymphocytes in paracoex and medulla

4: Decreased red pulp in spleen

547-: Difference between natural killer and cytotoxic cells is -

1: Interferon decreases natural killer activity

2: NK cell has CD4

3: Cytotoxic cell lyse IgG coated target cells

4: NK cell contain azurophilic granules

548-: Phagocytic function is assessed by -

1: Proloiferative response to mitogen

2: Reduction of NBT (Nitroblue tetrazolium test)

3: Serum immunoglobulin assay

4: Skin test with purified protein derivative

549-: Type 1 hypersensitivity reaction differs from type 2 hypersensitivity reaction being?

1: Type 1 reaction is Ig E mediated

2: Type 1 reaction is compliment mediated

3: Type 1 reaction is involves opsonization

4: All of the above

550-: Vaccination is based on the principle of -

1: Agglunation

2: Phagocytosis

3: Immunologic Memory

4: Clonal Detection

551-: MHC I, II and III function for:

1: Intracellular antigen, extracellular antigens and complement

2: Extracellular antigens, intracellular antigens, toxins

3: Cytokines

4: Macrophages

552-: MHC class III genes encode:

1: Complement component C3

2: Tumor necrosis factor

3: Interleukin 2

4: Beta 2 microglobulin

553-: MHC III codes for

1: TNF alpha

2: IL 1

3: HLA A

4: HLAB

554-: Tissue transplanted between two people of identical genetic makeup is called as?

1: Allograft

2: Isograft

3: Xenograft

4: Autograft

555-: Effector binding region of the antibody is

1: Constant region of heavy chain

2: Variable region of heavy chain

3: Constant region of heavy and light chain

4: Variable region of heavy and light chain

556-: Activator of alternative complent pathway -

1: Antigen-Antibody complex

2: Mannose-binding lectin

3: Bacterial surface polysaccharide

4: All of the above

557-: About interferon true is:

1: It is a synthetic antiviral agent

2: Inhibits viral replication in cells

3: Is specific for a particular virus

4: None

558-: The function common to neutrophilis, monocyte & macrophages is-

1: Immune response

2: Phagocytosis

3: Liberation of histamine

4: Destruction of old crythrocytes

559-: About interferon true is

1: It is a synthetic antiviral agent

2: Inhibits viral replication in cells

3: Is specific for a paicular virus

4: No role in cellular processes

560-: IL_2 is secreted by -

1: CD4 lymphocytes

2: CD8 cells

3: Macrophages

4: Neutrophils

561-: Phagocytosis of mycobacterium tuberculosis by macrophages is mainly mediated by-

1: IL6

2: IL3

3: IL12

4: IFN gamma

562-: A 31-year-old man with AIDS complains of difficulty swallowing. Examination of his oral cavity demonstrates whitish membranes covering much of his tongue and palate. Endoscopy also reveals several whitish, ulcerated lesions in the esophagus. Which of the

following enzymes converts the HIV genome into double-stranded DNA in host cells in the patient?

1: DNA polymerase (Pol-1)

2: DNA polymerase (Pol-2)

3: Integrase

4: Reverse transcriptase

563-: Activation of classical complement pathway -

1: IgA

2: IgG

3: IgM

4: IgD

564-: True about Hybridoma : (PGI Dec 2008)

1: Immortalise myeloma cell

2: Hybridoma cell produced by fusion of T-cell & myeloma

3: Cell is of human origin

4: Prior immunisation is done

565-: TRALI usually is due to?

1: High titre anti-HLA antibodies in recipient plasma

2: low titre anti-HLA antibodies in donor plasma

3: High titre anti-HLA antibodies in donor plasma

4: HPA-la on the platelet glycoprotein Ilia receptor

566-: What type of hypersensitivity reaction is seen in myasthenia gravis?

1: Type 1 hypersensitivty reaction

2: Type 2 hypersensitivty reaction

3: Type 3 hypersensitivty reaction

4: Type 4 hypersensitivty reaction

567-: Most common antibody in sjogren syndrome

1: Anti-DNA topoisomerase

2: Anti-Centromere

3: Anti-RNA polymerase

4: Anti-Ribonucleoprotein

568-: Antigen part that is attached to antibody -

1: Epitope

2: Paratope

3: Idiotype

4: Allotype

569-: Autoimmunity can be caused due to all of the all following except -

1: The pressure of forbidden clones

2: Expression of cryptic antigens

3: Negative selection of T-cells in the thymus

4: Inappropriate expression of the MHC proteins

570-: A person died of HIV infection. Lung Autopsy performed in this person showed intranuclear basophilic inclusions. His CD4 count was less than 100/uL. Which is the most probable diagnosis?

1: CMV

2: Herpes infection

3: ARDS

4: Pneumocystis carinii

571-: Which of Immunoglobulins is associated with allergic disorders?

1: IgG

2: IgM

3: IgA

4: IgE

572-: Type III reaction is -

1: Antibody mediated

2: Immune complex mediated

3: Cell mediated

4: None

573-: Active immunity is not acquired by -

1: Infection

2: Vaccination

3: Immunoglobulin transfer

4: Sub-clinical infection

574-: Lymphocyte phenotype test done for?

1: Agammaglobinemia

2: SCID

3: Sepsis

4: Acute leukemia

575-: During an infection with Streptococcus pyogenes, an individual generated sufficiently high levels of IgM and IgG antibodies against Streptococcus pyogenes antigen with structural similarities to the heart that cardiac damage was caused. In this example the microbe contributed to autoimmunity via a process known as:

1: Anergy

2: Central tolerance

3: Epitope spreading

4: Molecular mimicry

576-: CD4 is associated with HLA?

1: HLA 1

2: HLA 2

3: HLA 3

4: All of them

577-: The most avidly complement fixing antibody is -

1: IgA

2: IgG

3: IgM

4: IgE

578-: Delayed hypersensitivity involves -

1: Neutrophils

2: Monocytes

3: Eosinophils

4: Lymphocytes

579-: A 14-month-old child has had multiple infections since birth, including pneumonia with Pseudomonas aeruginosa, adenovirus, and Aspergillus fumigatus; diarrhea with Isospora belli; otitis media with Haemophilus influenzae; and urinary tract infection with Candida albicans. Laboratory studies show hemoglobin, 13.2 g/dL; hematocrit, 39.7%; platelet count, 239,100/mm3; and WBC count, 3450/mm3 with 85% segmented neutrophils, 6% bands, 2% lymphocytes, and 7% monocytes. Serum immunoglobulin levels are IgG, 118 mg/dL; IgM, 14 mg/dL; and IgA, 23 mg/dL. The child dies of pneumonia. At autopsy, a hypoplastic thymus, small lymph nodes that lack germinal centers, and scant gut-associated lymphoid tissue are seen. Which of the following is the most likely cause of this disease?

1: Abnormal CD40 ligand

2: Adenosine deaminase deficiency

3: BTK gene mutation

4: Chromosome 22q11 deletion

580-: One of the most remarkable aspects of the human immune system is its diversity, that is, the ability to recognize a wide range of antigens and to mount a specific antibody response. This is called clonal selection. At the cellular level, which of the following are primarily responsible for such specificity?

1: Cytotoxic T cells

2: Hypervariable regions in domains of B cells

3: The major histocompatibility complex

4: Specific T cell receptors

581-: Chronic granulomatous disorder is due to defect in -

1: B-cells

2: NADPH oxidase

3: IgA

4: T-cell

582-: ADCC is seen with which of the following cells

1: T cells

2: B cells

3: NK cells

4: Neutrophils

583-: Termination processor protein synthesis is performed by all except: (PGI May 2010)

1: Releasing factor

2: Stop codon

3: Peptidyl transferase

4: UAA codon

584-: Following is true about C reactive protein -

1: Detected by precipitation with cabohydrate

2: Raised in acute pneumococcal infection

3: It is antibody

4: Detected by agglutination test

585-: Most common site of angioedema:

1: Hands

2: Lips

3: 3rd week

4: Eyelid

586-: Which of the following class specific antigenic determinants of an immunoglobulin is associated with?

1: L - chain

2: H - chain

3: J - chain

4: Variable region

587-: Which of the following is an example of Type 3 hypersensitivity

1: Asthma

2: Contact dermatitis

3: SLE

4: AIHA

588-: Which one of the following is False

1: Theobald - smith phenomenon is a type I hypersensitivity reaction

2: Serum sickness is a type II hypersensitivity reaction

3: Allograft rejection is a type IV hypersensitivity reaction

4: Transfusion reaction is a type II hypersensitivity reaction

589-: Immunoglobulin transpoed through the placenta is

1: IgA

2: IgG

3: IgM

4: IgE

590-: TRUE about immunoglobulins is :

1: IgE fixes complements

2: IgM fixes complements.

3: IgG is found in minimum concentration.

4: IgG is elevated in primary immune response.

591-: Which of the following is true regarding Toll like receptor

1: Antigen specific

2: Acts by cytokine release

3: Pa of adaptive immunity

4: Pa of innate immunity

592-: Allergic hypersensitivity is mediated by -

1: IgM

2: IgG

3: IgD

4: IgE

593-: Which of the following statements is true about hapten?

1: It induces brisk immune response

2: It needs carrier to induce immune response

3: It is a T-independent antigen

4: It has no association with MHC

594-: Type IV hypersensitivity reaction is mediated by which of following?

1: B cells

2: Active T cells

3: NK cells

4: Plasma cells

595-: Which one of the following is False -

1: Theobald - smith phenomenon is a type 1 hypersensitivity reaction

2: Serum sickness is a type II hypersensitivity reaction

3: Allograft rejection is a type IV hypersensitivity reaction

4: Transfusion reaction is a type II hypersensitivity reaction

596-: Pinch purpura is seen in?

1: Primary systemic amyloidosis

2: Vitamin C deficiency

3: Purpura fulminans'

4: Kawasaki disease

597-: Hypersensitivity reaction seen in immune thrombocytopenic purpura is

1: 1

2: 2

3: 3

4: 4

598-: Which of the following is an example of Type IV hypersensitivity-

1: Ahrus reaction

2: Serum sickness

3: Shwazman reaction

4: Granulomatous reaction

599-: Which of the following is secreted by classically activated macrophages (M1)?

1: IL-1

2: IL-2

3: IL-4

4: IL-3

600-: Virus infected cells are killed by -

1: Macrophages

2: Complement system

3: MHC II related cells

4: NK cells

601-: DNA is detected by -

1: Southern blot

2: Nohern blot

3: Western blot

4: Eastern blot

602-: Primary mediators of anaphylaxis are all EXCEPT:

1: Histamine

2: Serotonin

3: Prostaglandins

4: TNF

603-: Phagocytosis enhanced by coating the surface of antigen is called -

1: Opsonisation

2: Chemotaxis

3: Decoding

4: CFT

604-: Antibody involved in type-2 hypersensitivity is -

1: IgE

2: IgG

3: IgD

4: IgA

605-: Antibodies against double stranded DNA and smooth muscle antigens are virtually diagnostic of:

1: Systemic sclerosis

2: Systemic Lupus Erythematosus

3: Sjogren's disease

4: Wegener's granulomatosis

606-: Severe combined immunodeficiency is seen with:

1: Pre B- Cell

2: Pre T Cell

3: Both

4: NK Cell

607-: Hyperacute graft rejection is seen within

1: 24 hours

2: 1 week

3: 1 Month

4: 1 year

608-: Which of the following immunoglobulin is a pen tamer?

1: IgG

2: IgA

3: IgM

4: IgD

609-: Most impoant inflammatory mediator?

1: TNF

2: IL-2

3: Interferon

4: PAF

610-: GM-CSF among the following?

1: Filgrastim

2: Sargramostim

3: Aldesleukin

4: Interleukin-11

611-: It is determined an infant suffers from Bruton's agammaglobulinemia. Which of the following pathogens will present the most serious threat to this child?

1: Measles virus

2: Mycobacterium tuberculosis

3: Chlamydia trachomatis

4: Varicella-zoster virus (VZV)

612-: Prozone phenomenon is seen with -

1: Same concentration of antibody and antigen

2: In antigen excess to antibody

3: Antibody excess to antigen

4: Hyperimmune reaction

613-: Opsonic index is related to -

1: Phagocytosis

2: Vasodilatation

3: Apoptosis

4: Necrosis

614-: Which immunoglobulin has no known function but is present on the surface of B lymphocytes and it may function as an antigen receptor?

1: IgA

2: IgE

3: Ig D

4: IgM

615-: Which immunoglobulin is scarce in human serum-

1: IgA

2: IgG

3: IgM

4: IgE

616-: Wheal & flare reaction is what type of hypersensitivity reaction?

1: Type I

2: Type II

3: Type III

4: Type IV

617-: Most important cells acting against virus and cancer cells are?

1: Neutrophills

2: Natural killer cells

3: Basophils

4: Langerhans cells

618-: Which of the following statements concerning immunoglobulins is wrong -

1: Igm does not cross placenta

2: IgE is | ed in parasitic infection

3: IgM increased in primary response

4: Fetal infection is characterised by increased in IgG

619-: Histamine in anaphylaxis is secreted by

1: Mast cells

2: B-cells

3: Basophils

4: Macrophages

620-: Idiotypic class of antibody is determined by -

1: Fc region

2: Hinge region

3: Carboxy end

4: Amino end

621-: Type I hypersensitivity, the mediator is -

1: IgE

2: IgD

3: IgM

4: IgC

622-: Graves disease is an example of which of the following immunologic processes?

1: Autoimmune disease associated with HLA gene B27

2: Autoimmune disease associated with HLA gene DR3

3: Immune deficiency associated with HLA gene DR2

4: Immune deficiency associated with HLA gene DR4

623-: Primary immune response is mediated by?

1: IgE

2: IgM

3: IgA

4: IgD

624-: MHC I is recognized by?

1: CD 4 T cells

2: CD 8 T cells

3: Dendritic cells

4: Macrophages

625-: A pregnant 21-year-old Rh-negative female is about to deliver. The baby's father is determined to be Rh-positive. To reduce the chance for the development of hemolytic disease of the newborn, which of the following procedures should you order?

1: Administration of anti-Rh antibodies to the fetus postdelivery

2: Administration of anti-Rh antibodies to the mother postdelivery

3: Immediate blood transfusion of the suspected father

4: Immediate blood transfusion of the mother with Rh-positive blood

626-: Immunoglobulin isotype class switching is determined by:

1: Constant region of light chain

2: Constant region of heavy chain

3: Variable region of light chain

4: Variable region of heavy chain

627-: Molecular mass of IgG (in K D

1: 150

2: 400

3: 1000

4: 1500

628-: IL-1 is produced by -

1: Macrophage

2: Helper T lymphocytes

3: B cells

4: Cytotoxic T-cells

629-: During the physical examination of a 22-year-old man, a purified protein derivative isolated from Mycobacterium tuberculosis is injected into the skin. Three days later, the injection site appears raised and indurated. Which of the following glycoproteins was directly involved in antigen presentation during the initiation phase of delayed hypersensitivity in this patient?

1: Class III HLA molecules

2: Non-HLA dependent antigen presentation

3: Class I HLA molecules

4: Class II HLA molecules

630-: Immunoglobulins are seen as surface antigens on:

1: Neutrophils

2: Monocytes

3: NK Cells

4: B cells

631-: Which precipitates at 50 oC-60 oC but disappears on heating -

1: Heavy chain

2: Light chain

3: Both

4: None of the above

632-: Agglutination test in CSF sample is done for -

1: Streptococcus

2: Candida

3: Cryptococcus

4: Histoplasma

633-: Allograft is defined as -

1: Graft from oneself

2: Graft from identical twin

3: Graft from member of same species

4: Graft from other species

634-: Most potent stimulator of naive T cells -

1: Mature dendritic cells

2: Follicular dendritic cells

3: Macrophages

4: B cell

635-: A xenograft is best described as a

1: Transplant from one region of a person to another

2: Transplant from one person to a genetically identical person

3: Transplant from one species to the same species

4: Transplant from one species to another species

636-: Plasma cells are derived from

1: T cells

2: B cells

3: Macrophages

4: Neutrophils

637-: The earliest immunoglobulin to be synthesized by the fetus is-

1: IgA

2: IgG

3: IgE

4: IgM

638-: A patients plasma has high levels of interferon beta. He most likely has an infection due to

1: Bacteria

2: Virus

3: Fungi

4: Mycoplasma

639-: The immunoglobulin lacking hinge region is

1: Ig A

2: Ig G

3: Ig D

4: Ig E

640-: Which is a example of antigen - antibody reaction-

1: Flocculation reaction

2: Precipitation

3: Agglutination

4: All of the above

641-: True about nucleosome: (PGI Nov 2009)

1: Use only one type of histone protein

2: Each complex is separated from each other by non histone proteins

3: Regular repeating structure of DNA & histone proteins

4: Reflect small nucleus

642-: Which of the following is a flocculation test -

1: Widal test

2: Weil - felix test

3: VDRL

4: Paul - Bunnel test

643-: Poion of immunoglobulin molecule with molecular weight of 50,000-

1: Secretory piece

2: H chain

3: L chain

4: j piece

644-: CD 4 are associated with -

1: Helper T cell

2: Supressor T cell

3: NK cells

4: T cell antigen receptor complex

645-: Nude Mouse is able to accept Xeno-Graft because they lack:

1: T cells

2: B-Cells

3: NK cells

4: LAK Cells

646-: Example for Live vaccine is

1: Rubella and Yellow fever

2: Polio and TAB

3: Diptheria and Tetanus

4: Hepatitis A and Rabies

647-: Synthesis of an immunoglobulin in membrane bound or secretory form is determined by:

1: One turn to two turn joining rule

2: Class switching

3: Differential RNA processing

4: Allelic exclusion

648-: The most important cells in type I hypersensitivity:

1: Macrophages

2: Mast cells

3: Neutrophils

4: Lymphocytes

649-: Distinct amino acid sequence at the antigen combining site is called:

1: Idiotype

2: Allotype

3: Epitope

4: Paratope

650-: Ram Devi presented with generalized edema sweating and flushing tachycardia and fever after bee sting. This is:

1: T cell mediated cytotoxicity

2: IgE mediated reaction

3: IgG mediated reaction

4: IgA mediated hypersensitivity reaction

651-: Components of innate immunity are -

1: T lymphocytes

2: Complement proteins

3: B lymphocytes

4: NK cells

652-: C5a act as a/an?

1: Opsonin

2: Chemotactic agent

3: MAC

4: Vasodilator

653-: The exact pa of the antigen that reacts with the immune system is called as

1: Clone

2: Epitope

3: Idiotope

4: Effector

654-: IgA secretion is seen in -

1: Tears and saliva

2: CSF

3: Hairs

4: Vaginal fluid

655-: The serum concentration of which of the following human IgG subclass is maximum ?

1: IgG 1

2: IgG 2

3: IgG 3

4: IgG 4

656-: Epstein Barr virus causes autoimmunity by -

1: Molecular Mimicry

2: Release of Sequestrated Antigen

3: Inappropriate Expression of MHC Class II Molecules

4: Polyclonal B cell Activation

657-: NK cell activity is enhanced by:

1: IL1

2: TNF

3: IL 2

4: TGFb

658-: Xenograft is:

1: Graft across species

2: Graft from same species

3: Graft from same individual

4: Graft from same organ

659-: Superantigen causes-

1: Polyclonal activation of T-cells

2: Stimulation of B cells

3: Enhancement of phagocytosis

4: Activation of complement

660-: HLA allele associated with Graves disease is

1: DR4

2: B27

3: B8

4: DQ8

661-: Granuloma formation is seen in Hypersensitivity reaction type

1: I

2: II

3: III

4: IV

662-: Antigen binding site on antibody is -

1: Hinge region

2: Constant region

3: Variable region

4: Hypervariable region

663-: During a clinic office visit, a 35-year-old male stockbroker shows signs of excessive nervousness and irritability and complains that the office is too hot. History and physical examination reveals the presence of a goiter and exophthalmia. Laboratory analysis of his blood reveals high antibody titers against the thyroid-stimulating hormone (TSH) receptor. Which of the following is the most likely diagnosis?

1: Goodpasture syndrome

2: Graves' disease

3: Hashimoto disease

4: Juvenile-onset diabetes mellitus

664-: All are true regarding NK cells except -

1: CD 16 & CD 56 positive

2: Secrete complement like substance

3: Impoant role in viral infected cell

4: None

665-: About interferon true is -

1: It is a synthetic antiviral agent

2: Inhibits viral replication in cells

3: Is specific for a paicular virus

4: None

666-: All are toxin-antitoxin neutralization tests except:

1: Schick test

2: Eleks gel precipitation test

3: Neil Mooser reaction

4: Naeglers test

667-: NK cell marker is?

1: CD 34

2: CD 56

3: CD 1

4: CD 45

668-: Postzone phenomenon is seen in -

1: Antigen excess

2: Antibody excess

3: Equivalance zone

4: None of the above

669-: Major immunoglobulin secreted by intestine -

1: IgG

2: IgM

3: IgA

4: IgD

670-: Rosette formation with sheep RBC's indicate functioning of -

1: T-cells

2: B-cells

3: Neutrophils

4: Monocytes

671-: Hybridoma technique is used to obtain -

1: Specific antigen

2: Complement

3: Specific antibody

4: Interleukins

672-: All are peripheral lymphoid organs except -

1: Lymph nodes

2: Spleen

3: Mucosa associated lymphoid tissue

4: Thymus

673-: What enhances multiplication of T cells in culture

1: Phytohemagglutinin

2: Chemotactic factor

3: Leukotrienes

4: Prostaglandins

674-: Erythroblastosis-foetalis is a example of which type of hypersensitivity reaction:

1: Type I

2: Type II

3: Type III

4: Type IV

675-: Sago spleen is seen in

1: Infarction

2: Amyloidosis

3: Chronic venous congestion

4: Tuberculosis

676-: Paul bunnel reaction is a type of -

1: Agglutination

2: CFT

3: Precipitation

4: Flocculation test

677-: Toluidine blue staining is used for identification of?

1: Mast cell

2: Fibroblast

3: Melanocyte

4: Macrophages

678-: Type of grafts transplanted between genetically different members of the same species?

1: Autologous grafts

2: Syngeneic grafts

3: Allogeneic grafts

4: Xenogeneic grafts

679-: True of the following is/are-

1: IgA crosses placenta

2: Half life of IgG is 23 days

3: IgD is heat stable

4: IgE has highest carbohydrate content

680-: Mysthenia gravis is which type of hypersensitivity-

1: Type I

2: Type II

3: Type III

4: Type IV

681-: Which of these is CD marker of cytotoxic cells?

1: CD8

2: CD4

3: CD1a

4: CD1

682-: Which of the following acts as an opsonin?

1: C3a

2: C3b

3: C5a

4: LTB4

683-: Burkitt's lymphoma is malignancy of

1: B.cells

2: T cells

3: Antigen presenting cells

4: Null cells

684-: Hallmark of AIDS is reduction of

1: CD3

2: CD4

3: CD8

4: CD20

685-: Prausnitz kustner reaction is which type of hypersensitivity -

1: Type 1

2: Type 2

3: Type 3

4: Type 4

686-: A mother and newborn are exposed to a pathogen while at the hospital for a routine checkup and breastfeeding clinic. This same pathogen had infected the mother about a year previously, and she had successfully recovered from the subsequent illness. Immunity may be innate or acquired. Which of the following best describes acquired immunity with respect to the newborn?

1: Complement cascade

2: Increase in C-reactive protein (CRP)

3: Inflammatory response

4: Maternal transfer of antibody

687-: T-cell are identified by -

1: Rosette formation with sheep RBC

2: Immunoglobulins on their surface

3: EAC Rosette with sheep erytnrocytes

4: Have filamentous projections on their surface

688-: Hypogammaglobenemia causes?

1: Chronic recurrent sinusitis

2: Epistaxis

3: Contractures

4: Eczemia

689-: RH incompatibility is?

1: Type 1 hypersensitivity reaction

2: Type 2 hypersensitivity reaction

3: Type 3 hypersensitivity reaction

4: Type 4 hypersensitivity reaction

690-: Which of the following best describes the mechanism(s) of action of CTLA-4?

1: Signal 1 and costimulation

2: Competition and inhibition

3: Activation and proliferation

4: ZAP-70 and ITAMs

691-: Null cells constitute what percentage of peripheral lymphocytes?

1: 0-1

2: 5-Feb

3: 10-May

4: 15-20

692-: Which is an example of type-III hypersensitivity

1: Contact dermatitis

2: Hemolytic anemia

3: Serum sickness

4: Good pasture syndrome

693-: Secondary immune response is mediated by

1: IgA

2: IgG

3: IgM

4: IgE

694-: A 1-year-old girl has not received any recommended vaccines since birth. She remains healthy despite her daily association with several other children for the past 3 months at a play school. Which of the following phenomenon explains why she has not contracted any vaccine-preventable diseases such as measles, diphtheria, or pertussis?

1: Herd immunity

2: Tolerance

3: Immune evasion

4: Genetic shift

695-: Membrane attack complex is formed by all except?

1: C3

2: C5

3: C7

4: C9

696-: Interleukin secreted by Th1 cells include?

1: IL-2

2: IL-4

3: IL-10

4: IL-13

697-: Papain acts an gamma globulin to form -

1: 2 Fc fragments

2: 2 Fab fragments

3: I Fab fragments

4: None

698-: All of the following interaction occurs between antigen and antibody Except

1: Ionic bond

2: Covalent bond

3: Hydrogen bond

4: Vanderwalls forces

699-: Contact dermatitis is an example of--HS

1: Type I

2: Type II

3: Type III

4: Type IV

700-: Infection with Epstein-Barr virus (EBV) results in the development of virus-specific antibodies. The pattern of these antibodies helps to stage the illness . EBV-VCA (IgG) Ab

1: Appears 2 weeks to several months after onset and is present more often in atypical cases of infectious mononucleosis

2: Appears 3 to 4 weeks after onset; titers correlate with severity of clinical illness

3: Arises early in the course of the illness; detectable titers persist a lifetime

4: Appears late in the course of the disease and persists a lifetime

701-: Cell type that lacks HLA antigen is:

1: Monocyte

2: Thrombocyte

3: Neutrophil

4: Red blood cell

702-: A 28-year-old man has had hemoptysis and hematuria for the past 2 days. On physical examination, his temperature is 36.8deg C, pulse is 87/min, respirations are 19/min, and blood pressure is 150/90 mm Hg. Laboratory studies show creatinine of 3.8 mg/dL and urea nitrogen of 35 mg/dL. Urinalysis shows 4+ hematuria, 2 + proteinuria, and no glucose. A renal biopsy specimen examined microscopically shows glomerular damage and linear immunofluorescence with labeled complement C3 and anti-IgG antibody. Which of the following autoantibodies has the greatest specificity for this patient's condition?

1: Anti-basement membrane

2: Anticardiolipin

3: Anti-double-stranded DNA

4: Anti-histone

703-: Transplantation of the hosts own tissue is known as -

1: Isograft

2: Allograft

3: Xenograft

4: Autograft

704-: Within 5 minutes after a bee sting, a 15-year-old girl suddenly has difficulty breathing, with marked inspiratory stridor from laryngeal edema. She experiences marked urticaria and notes swelling of the hand that was stung. Which of the following is the best pharmacologic agent to treat her signs and symptoms?

1: Cyclosporine

2: Epinephrine

3: Glucocorticoids

4: Methotrexate

705-: False statement about macrophages?

1: Can harbor mycobacteria

2: Derived from blood monocytes

3: Involved in type III hypersensitivity reactions

4: Produce tumor necrosis factor and interleukins

706-: A small child presents with a low-grade fever, coryza, sore throat, a bright red rash on his cheeks, and a less intense erythematous rash on his body. Elevated IgG and IgM antibody titers to parvovirus suggest a diagnosis of which of the following?

1: Acute Lyme disease

2: Fifth disease

3: Possible hepatitis B infection

4: Possible subacute sclerosing panencephalitis (SSPE)

707-: The role played by major histocompatibility complex proteins (MHC-1 and MHC-2) is to -

1: Transduce the signals to T cells following antigen recognition

2: Mediate immunoglobulin class-switching

3: Present antigens for recognition by T cell antigen receptors

4: Enhance the secretion of cytokines

708-: Defect in Chediak Hegashi syndrome is?

1: Fusion of lysosome

2: T-cells

3: B-cells

4: Complement

709-: Band test is done in:

1: RA

2: SLE

3: Scleroderma

4: PAN

710-: Anti-carcinogens are: (PGI Dec 2007)

1: Carotenoids

2: Flavenoids

3: Curcumoids

4: Benzene

711-: Which of the following statements is true about hapten -

1: It induces brisk immune response

2: It needs carrier to induce immune response

3: It is a T-independent Antigen

4: It has no association with MHC

712-: Antigen idiotype is related to -

1: Fc fragment

2: Hinge region

3: C-terminal

4: N-terminal

713-: A 12-year-old boy has had multiple recurrent infections for the past 10 years, including Pneumocystis jiroveci pneumonia, Streptococcus pneumoniae otitis media, and Pseudomonas aeruginosa urinary tract infection. On physical examination, he has a temperature of 38.5deg C and pharyngeal erythema with exudate. Laboratory studies show hemoglobin, 9.1 g/ dL; hematocrit, 27.6%; platelet count, 130,900/mm3; and WBC count, 3440/mm3 with 47% segmented neutrophils, 3% bands, 40% lymphocytes, and 10% monocytes. Serum immunoglobulin levels show very low IgG, very high IgM, and undetectable IgA. A peripheral blood smear shows nucleated RBCs. Which of the following immunologic defects is most likely to produce this disease?

1: Absence of adenosine deaminase

2: Abnormal CD40-CD40L interaction

3: Deletion of chromosome 22q11

4: HIV infection

714-: The Fc piece of which immunoglobulin fixes complement 1 -

1: IgA

2: IgG

3: IgM

4: IgE

715-: Which of the follow ing is an example of heterophile antibody test-

1: Widal test

2: Weil-Felix reaction

3: Rose-wraler test

4: Blood grouping & cross matching

716-: A superantigen is a bacterial product that -

1: Binds to B7 and CD28 costimulatory molecules

2: Binds to the beta chain of TCR and MHC class II molecules of APC stimulating T cell activation

3: Binds to the CD4+ molecule causing T cell activation

4: Is presented by mactrophages to a larger-than-normal number of T helper CD4 + lumphocytes

717-: HLA -A, B, C belongs to which class of HLA Complex of genes located on 6th chromosome

1: Class I

2: Class II

3: Class III

4: Class IV

718-: Antinuclear antibodies are seen in:

1: SLE

2: RA

3: Sjogrens syndrome

4: All

719-: The exact part of the antigen that reacts with the immune system is called as:

1: Clone

2: Epitope

3: Idiotope

4: Effector

720-: All are type-II hypersensitivity reaction except-

1: Hemorrhagic disease of newborn

2: Graves disease

3: Rheumatoid ahritis

4: Hemolytic anemia

721-: Ig active in type 1 hypersensitivity.

1: A

2: E

3: D

4: G

722-: Recurrent Neisseria infections are not predisposed by-

1: Early complement component deficiency

2: Late complement component deficiency

3: Factor D deficiency

4: Properdin deficiency

723-: Which part is responsible for the class of immunoglobulin?

1: Heavy chain

2: Light chain

3: Both

4: None

724-: Nitroblue tetrazolium test is used for?

1: Phagocytes

2: Complement

3: T cell

4: B cell

725-: All of the following are pa of the innate immunity except -

1: Complement

2: NK cells

3: Macrophages

4: T cells

726-: Which CD molecule is important for presentation of lipid antigen

1: CD4

2: CD8

3: CD1

4: CD16

727-: Type I hypersensitivity includes all of the following except:

1: Autoimmune hemolytic anemia

2: Anaphylaxis

3: Extrinsic asthma

4: Hay fever

728-: Of the five immunoglobulin classes, IgA is the main immunoglobulin of secretions from the genital, respiratory, and intestinal tracts. As a result, IgA antibody is the first line of defense against infections at the mucous membrane. It is usually an early specific antibody. Which of the following statements most accurately describes IgA?

1: Complement fixation tests for IgA antibody will be positive if specific IgA antibody is present

2: IgA can be destroyed by bacterial proteases

3: IgA is absent in colostrum

4: IgA is not found in saliva; therefore, an IgA diagnostic test on saliva would have no value

729-: HLA-I is present on:

1: All nucleated cells

2: Only on cells of immune system

3: Only on B cells

4: Only on T cells

730-: TH1 cells produced by?

1: Memory T cells

2: Cytotoxic T cells

3: Helper T-cells

4: Suppressor T cells

731-: Which is concerned with cell mediated immunity?

1: B - Lymphocytes

2: T - Lymphocytes

3: Eosinophils

4: Monocytes

732-: The following diagnostic tests are useful for corresponding purposes except

1: Ziehl-Neelsen staining - Detection of mycobacteria

2: Immunoflorescence - Detection of Influenza virus

3: Specific IgM antibodies - Immunity against Rubella

4: Specific IgM antibodies - Detection of acute infection

733-: Opsonization takes place through:

1: C3a

2: C3b

3: C5a

4: C5b

734-: HLA B-27 has > 90% association with?

1: Enteropathic

2: Reactive arthritis

3: Rheumatoid arthritis

4: Ankylosing spondylitis

735-: All are true about Autoimmune disease except -

1: T cells recognise self antigen

2: Hashimoto's thyroiditis is an example

3: Higher incidence among males

4: Polyclonal B cell activation

736-: Plasma cells are derived from:

1: T cells

2: B cells

3: Macrophages

4: Neutrophils

737-: The tuberculin test is associated with all of the following except:

1: Indicates the cell mediated immunity against the bacteria

2: Likely to be positive in prior exposure to mycobacteria

3: Can distinguish between infection and disease

4: May be false negative in immunosuppression

738-: Antibody dependant cell mediated toxicity is seen in?

1: NK cell

2: NK cell only

3: Macrophage

4: NK cells, neutrophils & macrophages

739-: Maximum Lattice formation occurs in -

1: Zone of antibody excess

2: Zone of antigen excess

3: Zone of equivalence

4: Can occur in any zone

740-: Which part of the IgE antibody is responsible for binding to mast cells and basophils?

1: Light chain

2: Immunoglobulin fold

3: Fc region

4: Complement binding site

741-: Graft from identical twin is defined as:

1: Allograft

2: Isograft

3: Xenograft

4: Autograft

742-: A 30 year old lady presents to the outpatient department with an erythematous butterfly rash on her cheeks. Which of the following antibodies should be assayed initially for her suspected condition:

1: Anti-ds-DNA

2: Anti-Ro-Antibody

3: Anti-Centromere-Antibody

4: Anti-mitochondrial-Antibody

743-: Superantigens causes -

1: Polyclonal activation of T-cells

2: Stimulation of B cells

3: Enhancement of phagocytosis

4: Activation of complement

744-: The secretory component of immunoglobulin molecule is -

1: Formed by epithelial cells of lining mucosa

2: Formed by plasma cell

3: Formed by epithelial cell and plasma cell

4: Secreted by bone marrow

745-: In tuberculosis, the cytokine playing major role in the conversion of tissue macrophages in to epithelloid cells -

1: Interferon gamma

2: Tumor necrosis factor

3: Interleukin 12

4: Macrophage chemoattractant protein

746-: When an antigen is administered for the first time to an animal or a human being who has never been exposed to it, the first antibody to develop -

1: IgG type

2: IgM type

3: IgA type

4: IgE type

747-: Asthma is a result of which type of hypersensitivity

1: Type I

2: Type II

3: Type III

4: Type IV

748-: A 26-year-old man has had myalgias and a fever for the past week. On physical examination, his temperature is 38.6deg C. He has diffuse muscle tenderness, but no rashes or joint pain on movement. Laboratory studies show elevated serum creatine kinase and peripheral blood eosinophilia. Larvae of Trichinella spiralis are present within the skeletal

muscle fibers of a gastrocnemius biopsy specimen. Two years later, a chest radiograph shows only a few small calcifications in the diaphragm. Which of the following immunologic mechanisms most likely contributed to the destruction of the larvae?

1: Abscess formation with neutrophils

2: Antibody-mediated cellular cytotoxicity (ADCC)

3: Complement-mediated cellular lysis

4: Formation of Langhans giant cells

749-: Gene components of HLA class I includes -

1: A, B, C

2: DR

3: DQ

4: DP

750-: Examples of type 1 hypersensitivity is -

1: Lepromin test

2: Tuberculin

3: Casoni's test

4: Ahus reaction

751-: Leukotrienes are secreted by all except -

1: Macrophages

2: T4 cells

3: T8 cells

4: Platelets

752-: Recurrent Neisseria infections are predisposed by -

1: Early complement component deficiency

2: Late complement component deficiency

3: C1 esterase deificiency

4: Properdin deficiency

753-: The following is NOT a component of innate immunity -

1: Epithelial surfaces

2: Antibody

3: Lysozyme

4: Sebum

754-: A 12-month-old infant with a history of recurrent infections, eczema, generalized edema, and easy bruising is diagnosed with an X-linked, recessive, congenital immunodeficiency. The CBC shows thrombocytopenia. What is the most likely diagnosis?

1: DiGeorge syndrome

2: Isolated IgA deficiency

3: Severe combined immunodeficiency

4: Wiskott-Aldrich syndrome

755-: A child present with recurrent episodes of sinopulmonary infection by bacteria with polysachride rich capsule. Deficiency of which of the following immunoglobulin subclasses should be specifically investigated -

1: IgA

2: IgG1

3: IgG2

4: IgA + IgG2

756-: Antibody diversity is due to -

1: Gene rearrangement

2: Gene translocation

3: Antigenic variation

4: CD40 molecules

757-: Wiskott Aldrich syndrome true is -

1: Raised IgE

2: Reduced IgM

3: Reduced IgA

4: CD4 and CD8 defect

758-: Prozone phenomenon is a feature is -

1: Tularemia

2: Legionnaire's disease

3: Plague

4: Brucellosis

759-: Cell type which lacks HLA antigen is:

1: Monocyte

2: Thrombocytes

3: Neutrophil

4: Red blood cell

760-: Primary complex of TB is known as:

1: Ranke's complex

2: Ghon's complex

3: Assman focus

4: Simon's focus

761-: All are true about autoimmune disease except:

1: T cells recognize self - antigen

2: Hashimoto's thyroiditis is an example

3: Higher incidenc' among males

4: Polyclonal B cell activation

762-: A 21-year-old patient in severe kidney failure receives a kidney from his 30-year-old brother. This type of transplantation is best described by which of the following?

1: Allograft: transplant from one species to the same species

2: Autograft: transplant from one region of a person to another region

3: Isograft: transplant from one person to a genetically identical person

4: Xenograft: transplant from one species to another species

763-: A 10 year old male presented to the pediatric OPD with colicky pain, nausea, vomiting. Erect abdominal Xray shows multiple air fluid levels. Stool examination shows the following egg. Which of the following interleukin is secreted in this scenario?

1: IL-1

2: IL-2

3: IL-3

4: IL-5

764-: Synthesis of an immunoglobulin in membrane bound or secretory form is determined by -

1: One turn to two turn joining rule

2: Class switching

3: Differential RNA processing

4: Allelic exclusion

765-: Cells that are identified by the presence of immunoglobulins on the surface include?

1: B cells

2: NK cells

3: Monocytes

4: Neutrophils

766-: Innate immunity active againts viral cells -

1: NK cells

2: Cytotoxic T cells

3: B cell

4: Memory B cell

767-: An IgG2 molecule is composed of?

1: One gamma1 chain and two kappa chains

2: Two gamma1 chains and one kappa and one lambda chain

3: Two gamma1 chains and two kappa chains

4: Two gamma2 chains and two kappa chains

768-: A 31-year-old man with AIDS complains of difficulty swallowing. Examination of his oral cavity demonstrates whitish membranes covering much of his tongue and palate. Endoscopy also reveals several whitish, ulcerated lesions in the esophagus. These pathologic findings are fundamentally caused by loss of which of the following immune cells in this patient?

1: B lymphocytes

2: Helper T lymphocytes

3: Killer T lymphocytes

4: Monocytes/macrophages

769-: What is the type of Ag-Ab reaction seen in VDRL

1: Agglutination

2: Flocculation

3: Passive agglutination

4: Gel precipitation

770-: C' in C reactive protein stands for -

1: Capsular polysaccharide in pneumococcus

2: Concanavalin-a

3: Calretinin

4: Cellular

771-: The NBT (nitroblue tetrazolium) reduction assay is used to -

1: Evaluate granulocyte function

2: Evaluate T-cell function

3: Determine whether polymorphonuclear leucocytes can produce superoxide

4: Stain B-lymphocytes

772-: All of the following statements about carbohydrate antigen are true except -

1: It has lower immunogenicity

2: Memory response is seen

3: Cause polyclonal B cell stimulation

4: Does not require stimulation by T cells

773-: Which thyroid carcinoma is associated with calcitonin amyloid deposition?

1: Papillary

2: Follicular

3: Anaplastic

4: Medullary

774-: The immunoglobulin which exhibits 'homocytotropism' is -

1: IgA

2: IgE

3: IgG

4: IgM

775-: A 55years male presented with dry mouth, & rheumatoid arthritis with high titre of anti SS-A and SS-B antibodies, diagnosed a case of minor salivary gland tumour. The earliest histologic finding in

1: Endothelial cells

2: Basophils

3: Lymphocyte

4: Eosinophils

776-: Memory T cells can be identified by using the following marker?

1: CD45 RA

2: CD45 RB

3: CD45 RC

4: CD45 RO

777-: MHC class I is present on-

1: All nucleated cells

2: Only on cells of immune system

3: Only on B-cells

4: Only on T-cells

778-: 7. A 2 yr old boy presents with recurrent bacterial infections and Pneumocystis jiroveci pneumonia. Labs show markedly elevated IgM and low IgG. Which of the following is the most likely cause of his illness?

1: Autosomal- dominant mutation in the STAT3 gene

2: Deficiency in CD40 ligand or CD40

3: Defect in the NADPH oxidative pathway

4: Defective cytokine signaling in Tcell precursors

779-: A 31-year-old male patient complains of fatigue, yeast infection in his mouth, and enlarged lymph nodes under his arms. He said that he was involved in "high-risk" behavior 6 years ago while on a trip to eastern and southern Africa. He also indicated that his "HIV test" was negative. Which one of the following options would be most appropriate?

1: Initiate treatment for HIV disease

2: Order a test for human T cell leukemia virus (HTLV)

3: Repeat the test for HIV-1

4: Order an HIV test which would include antibodies to HIV-1 and HIV-2

780-: In PCR, Acquaticus thermophilus is preferred over E.coli because: (PGI Dec 2007)

1: Thermostable at temperature at which DNA liquefies

2: Proof reading done

3: Done more precisely

4: Does not require primer

781-: AB blood group antigen are known as.....factor -

1: Duffy

2: Landsteiner

3: Rhesus

4: Lutheran

782-: MAC in complement system is -

1: C3a

2: C3b

3: C5-9

4: C4b

783-: Which one of the following is called the immunologically sequestered antigen?

1: Lungs

2: Spleen

3: Thymus

4: Lens of the eye

784-: All are mononuclear-macrophages except -

1: Histiocytes

2: Microglia

3: Kupfer cells

4: B-cells

785-: During the infancy days of cardiac transplantation, nonhuman primate hearts were transplanted into humans to save lives. This type of transplantation is best described by which one of the following?

1: Allograft: transplant from one species to the same species

2: Autograft: transplant from one region of a person to another region

3: Isograft: transplant from one person to a genetically identical person

4: Xenograft: transplant from one species to another species

786-: Transplacental transfer of antibodies from immunized mother to her newborn is

1: Natural active immunity

2: Natural passive immunity

3: Acquired active immunity

4: Acquired passive immunity

787-: Most common cause of UTI in neonate is

1: E.coli

2: S.aureus

3: Enterococcus

4: Anerobes

788-: Which complement component is involved in both classical and alternative pathways -

1: C1

2: C2

3: C3

4: C4

789-: Precipitation & agglutination are caused by:

1: IgG and IgM

2: IgM and IgG

3: IgM and IgA

4: IgD and IgA

790-: Which among the following hypersensitivity cannot be detected by skin test

1: Type 1

2: "type 2

3: Type 3

4: Type 4

791-: Real time PCR is used for -

1: Multiplication of RNA

2: Multiplication of Proteins

3: Multiplication of specific segments of DNA

4: For quantitative dectection of PCR material

792-: N.K Cell provides immunity againts -

1: Virus

2: Bacteria

3: Fungus

4: Chlamydia

793-: Neonatal thymectomy leads to -

1: Decreased size of germinal center

2: Decreased size of paracoical areas

3: Increased antibody production by B cells

4: Increased bone marrow production of lymphocytes

794-: Type II Hypersensitivity is seen in?

1: Pernicious anaemia

2: Serum sickness

3: Arthus phenomenon

4: Pathergy phenomenon

795-: Transplantation between genetically different members of the same species is termed as -

1: Autograft

2: Isograft

3: Allograft

4: Xenograft

796-: A child upon ingestion of shellfish , developed tingling sensation in the mouth, swelling of the face, lips and tongue and also complained of abdominal pain and dizziness. This is an example of _

1: IgG mediated reaction

2: IgA mediated reaction

3: T cell mediated cytotoxicity

4: IgE mediated reaction

797-: Complement component involved in both classical and alternate pathway:

1: C1

2: C2

3: C3

4: C5

798-: Glycosated Hb estimated by:

1: HPLC

2: ELISA

3: PCR

4: Spectrometry

799-: Which cells cause rosette formation with sheep RBCs-

1: T cells

2: NK cells

3: Monocytes

4: B cells

800-: Which of the following cells is known as large granular lymphocyte (LGL) -

1: Plasma cells

2: NK cells

3: T cells

4: K cells

801-: C-reactive protein are -

1: Alpha-1 globulin

2: Beta-1 globulin

3: Alpha-2 globulin

4: Non-specific inflammatory protein

802-: Papain acts an gamma globulin to form-

1: 2 Fc fragments

2: 2 Fab fragments

3: 1 Fab fragments

4: None

803-: T4/T8 ratio reversal is seen in -

1: T-cell lymphoma

2: Hairy cell leukemia

3: AIDS

4: Infectious mononucleosis

804-: T-cell mature in:(1991)

1: Peyer's patches

2: Lymph node

3: Thymus

4: Bursa of fabricius

805-: The following immunoglobulin DOES NOT fix to complement -

1: IgE

2: IgM

3: IgG3

4: IgG1

806-: Steriod recetor regulatory protein is: (PGI Dec 2006)

1: Zinc finger

2: Helix-tum-helix

3: Leucine zipper

4: RNA

807-: Chediak higashi syndrome, true is -

1: Defect in phagocytosis

2: Neutropenia

3: Agammaglobulinemia

4: IgA defficiency

808-: AH are live vaccines except:

1: BCG

2: Salk vaccine

3: Measles

4: Mumps

809-: Which immunoglobulin is scarce in human serum -

1: IgA

2: IgG

3: IgM

4: IgE

810-: The following are features of which disease?

1: SLE

2: RA

3: Autoimmune hepatitis

4: HIV

811-: Micro RNA transcribed by: (PGI Dec 2008)

1: RNA polymerase 1

2: RNA polymerase 11

3: RNA polymerase HI

4: DNA polymerase

812-: VDRL test for diagnosis of syphilis is an example for

1: Precipitation test

2: Agglutination

3: Immunofluorescence

4: Flocculation

813-: CD8 is a marker for which of the following cell?

1: T-cell

2: B-cell

3: NK-cells

4: Macrophages

814-: All the following forces are involved in antigen antibody reaction except:

1: Vander waals forces

2: Electrostatic bond

3: Hydrogen bond

4: Covalent bond

815-: Which of the following is cytophilic antibody -

1: IgM

2: IgA

3: IgE

4: IgG

816-: Which is not a Macrophage :

1: Monocyte

2: Microglia

3: Kupffer cells

4: Lymphocytes

817-: Not true regarding NK cells is?

1: Active against malignant cells

2: Involve MHC antigen for killing micro-organisms

3: First line defense against viral infections

4: No prior sensitization required

818-: HIV was discovered in which year?

1: 1983

2: 1979

3: 1969

4: 1990

819-: Hormones are best assessed by?

1: Flowcytometry

2: Electrophoresis

3: ELISA

4: RIA

820-: Changes in which amyloid structure makes it insoluble?

1: Primary

2: Secondary

3: Tertiary

4: Quaternary

821-: Immunoglobulin which is produced first by the fetus in response to infection:(1987)

1: IgG

2: IgA

3: IgM

4: IgD

822-: A 38 year old woman presents with fever of 103degF, hypotension, confusion and a diffuse, erythematous rash. She had uncontrollable epistaxis for which a nasal pack was placed 3 days ago. What is the likely mechanism of action of the microbial toxin that has caused her current illness?

1: Increased antigen presentation by macrophages

2: Polyclonal activation of T-cells

3: uncontolled activation of complement

4: Enhancement of phagocytosis

823-: Which is a flow cytometric B cell marker?

1: CD 2

2: CD 3

3: CD 7

4: CD 19

824-: Bronchial secretion secretes:

1: IgA

2: IgE

3: IgM

4: IgG

825-: Allergic hy persensitivity is mediated by -

1: IgM

2: IgG

3: IgD

4: IgE

826-: Common between B and T cells - (PGI Nov 14)

1: Origin from same cell lineage

2: Site differentiation

3: Antigenic mark

4: Both humoral and cellular immunity

827-: Antibodies in ITP are:

1: IgG

2: IgM

3: IgE

4: IgD

828-: Heterophile antibody is found in -

1: Weil Felix test

2: Widal test

3: VDRL

4: All

829-: NK cells are -

1: Activated macrophages

2: Antibody-activated T cells

3: Null cells activated by complement

4: Independent of antibody

830-: A 7-month-old baby who is failing to thrive is brought into a neighborhood clinic. History reveals that the baby's mother died of AIDS 2 months ago. Blood is obtained and sent to the laboratory to check for HIV infection. The physician orders a test whose detection system is based on enzymatic activity. Which of the following tests is a heterogeneous immunoassay?

1: Coagglutination (COA)

2: Counter immuno-electrophoresis (CIE)

3: Enzyme-linked immunosorbent assay (ELISA)

4: Latex agglutination (LA)

831-: In respiratory and GIT infections, which is the most affected immunoglobulin?

1: IgA

2: IgG

3: IgM

4: IgD

832-: F plasmid of high frequency recombination is a

1: Extrachromosomal

2: Chromosomal

3: Mesosome

4: Ribosomes

833-: VDRL is a -

1: Slide flocculation test

2: Tube floccolation test

3: Gel precipitation test

4: Indirect haemagglutination test

834-: Cell type which lacks HLA antigen is -

1: Monocyte

2: Thrombocytes

3: Neutrophil

4: Red blood cell

835-: Which of the following statements is true regarding kappa, lambda and heavy chain immunoglobins -

1: Coded in the same site of a chromosome

2: Coded in different sites of same chromosome

3: The chains are formed by genetic rearrangement after maturation

4: Different chains of same immunoglobulins are coded by different chromosomes

836-: Contact dermatitis is -

1: Type-I hypersensitivity

2: Type-II hypersensitivity

3: Type-III hypersensitivity

4: Type-IV hypersensitivity

837-: True about secondary immune response is -

1: Long latent period

2: Usually of low titire

3: Antibodies appear in sho time

4: Persist for long

838-: Chemoattractant is -

1: C5a

2: C1

3: C3

4: C2

839-: Which of the following is responsible for phagocytosis?

1: C5a

2: C3a

3: C3b

4: TNF-a

840-: True about interferon -

1: It is virus specific

2: It is Bacteria specific

3: Produced from Bacteria

4: Effective against viral infection

841-: A 15-year-old boy is bitten by an Ixodes tick while camping with his parents and presents 1 week later with fatigue, fever, headache, and a reddish rash over his trunk and extremities. Positive IgM antibody (1 :200) to Borrelia burgdorferi is associated with which of the following?

1: Acute Lyme disease

2: Fifth disease

3: Possible hepatitis B infection

4: Possible subacute sclerosing panencephalitis (SSPE)

842-: During heterosexual intercourse, seminal fluid containing HIV contacts vaginal squamous mucosa. Cells capture virions and transport the virus via lymphatics to regional lymph nodes. Within the germinal centers of these lymph nodes, the virions infect CD4+ lymphocytes and proliferate, causing CD4+ cell lysis with release of more virions, which are taken up on the surface of cells having Fc receptors, allowing continued infection by HIV of more CD4+ cells passing through the nodes. Which of the following types of cells is most likely to capture HIV on its surface via Fc receptors?

1: B lymphocyte

2: CD8+ cytotoxic lymphocyte

3: Follicular dendritic cell

4: Natural Killer cell

843-: TH1 is involved in w hich type of hypersensitivity?

1: Type 1

2: Type 2

3: Type 3

4: Type 4

844-: IL-2 is secreted by

1: CD4 lymphocytes

2: CD8 cells

3: Macrophages

4: Neutrophils

845-: Which leukotriene is the adhesion factor for the neutrophil on the cell surface to attach endothelium?

1: B4

2: C4

3: D4

4: E4

846-: The following constitutes approximately 75% of total immunoglobin in humans -

1: IgG

2: IgM

3: IgE

4: IgA

847-: Red infarcts occur in -

1: Kidney

2: Lung

3: Spleen

4: Hea

848-: Which of the following features is not shared between 'T cells' and 'B cells' ?

1: Positive selection during development

2: Class I MHC Expression

3: Antigen Specific Receptors

4: All of the above

849-: Bence jones proteins are best described as -

1: chains

2: g chains

3: Kappa & Lambda chains

4: Fibrin split products

850-: Which of the following HLA types is associated with rheumatoid ahritis 135?

1: HLA B27

2: HLA DR4

3: HLA B8

4: HLA DP

851-: A 52-year-old man complains of pain in his back and fatigue for 6 months. He admits to polyuria and polydipsia. An X-ray film of the upper torso reveals numerous lytic lesions in the lumbar vertebral bodies. Laboratory studies show hypoalbuminemia and mild anemia and thrombocytopenia. A monoclonal immunoglobulin peak is demonstrated by serum electrophoresis, and a bone marrow aspiration demonstrates numerous atypical plasma cells. Urinalysis shows 4+ proteinuria. A renal biopsy in this patient would most likely show deposits of which of the following amyloid precursor proteins?

1: Amylin

2: Apo serum amyloid A

3: Fibrinogen

4: Immunoglobulin light chain

852-: Complement is a series of impoant host proteins which provide protection from invasion by foreign microorganisms. Which one of the following statements best describes complement?

1: Complement inhibits phagocytosis

2: Microorganisms agglutinate in the presence of complement but do not lyse

3: Complement plays a minor role in the inflammatory response

4: Complement protects the host from pneumococcal and Haemophilus infection through complement components C1, C2, and C4

853-: Components of Innate immunity that are active against viral cells includes -

1: NK cells

2: Cytotoxic cells

3: B-cell

4: Memory B cell

854-: Complement attaches to immunoglobulin at -

1: Aminoterminal

2: Fab region

3: Variable region

4: Fc fragment

855-: A 34-year-old male patient visits a physician with complaints of fatigue, weight loss, night sweats, and "swollen glands." The physician also observes that he has an oral yeast infection. Which of the following tests would most likely reveal the cause of his problems?

1: A test for CD8 lymphocytes

2: A human T-lymphotropic virus type I (HTLV-I) test

3: An HIV ELISA test

4: A test for infectious mononucleosis

856-: Coombs test is:

1: Precipitation test

2: Agglutination test

3: CFT

4: Neutralization test

857-: All of the following are true about type 1 HLA except?

1: Present on APC

2: Activate cytotoxic T cell and kill virus infected cell

3: Present on nucleated cells

4: First line defense mechanism

858-: Which of the following is a generic term for a protein or glycoprotein released by one cell population that acts as an intercellular mediator?

1: image_question

2: image_question

3: image_question

4: image_question

859-: 45 Year old homeless man has chronic cough and cavitatory lesion of lungs. His sputum is positive for acid fast bacilli which of the following is the peripheral form of defense by which his body fights this infection -

1: Antibody mediated

2: Cell mediated hypersensitivity

3: Ig A mediated hypersensitivity

4: Ig E mediated hypersensitivity

860-: Lysozyme is present in the following secretions of the body except -

1: Lacrimal secretions

2: CSF

3: Saliva

4: Respiratory tract secretions

861-: Active immunity is not acquired by:(1994)

1: Infection

2: Vaccination

3: Immunoglobulin transfer

4: Sub clinical infection

862-: This serum immunoglobulin constitutes 80% of immunoglobulins in our body is

1: IgM

2: IgA

3: IgG

4: IgD

863-: Plasma cells are activated:

1: B cells

2: T cells

3: Macrophages

4: Monocytes

864-: Which of the following immunoglobulins increased in primary bacterial infections is

1: IgG

2: IgM

3: IgA

4: IgD

865-: Which of the following is live attenuated vaccine-

1: Salk polio vaccine

2: Sabin polio vaccine

3: Rabies vaccine

4: KFD vaccine

866-: Which of the following is not the function of complements?

1: Ceil lysis

2: Antiviral action

3: Promotes phagocytosis

4: Toxin neutralization

867-: Killer cells & helper cells are pa of -

1: B cells

2: T cells

3: Monocytes

4: Macrophages

868-: Virus infected cells killed by?

1: Natural killer cells

2: Plasma cells

3: B-cells

4: None

869-: HLA complex in humans is located on?

1: Long arm of chromosome 6

2: Short arm of chromosome 6

3: Short arm of chromosome 8

4: Long arm of chromosome 8

870-: Antibody in cold agglutin disease is

1: IgA

2: IgG

3: IgE

4: IgM

871-: Stellate Granuloma are seen in

1: Cat scratch disease

2: Sarcoidosis

3: LGV

4: Histoplasmosis

872-: Cell involved in immunity against parasitic infection:

1: Neutrophil

2: Eosinophil

3: Basophil

4: Lymphocyte

873-: Acute graft versus host disease reaction occurs in all EXCEPT

1: Liver

2: Adrenal

3: Gut

4: Skin

874-: Epstein-Barr virus (EBV) VCA-IgG 1 :80 and EBV antibody to early antigen EA1 :320 suggest which one of the following diseases?

1: Chronic infectious mononucleosis

2: Primary syphilis

3: Scarlet fever

4: Primary atypical pneumonia

875-: The serum concentration of which of the following human IgG subclasses is maximum?

1: IgG1

2: IgG2

3: IgG3

4: IgG4

876-: Immunoglobulin changes in variable region -

1: Idiotype

2: Isotype

3: Allotype

4: Epitope

877-: Binary (secondary) exposure to an antigen results in sudden increase in -

1: IgA

2: IgD

3: IgG

4: IgM

878-: Anti-Ro antibody is found in?

1: SLE

2: Scleroderma

3: MCTD

4: Neonatal lupus

879-: Which of the following is the predominant immunoglobulin isotype secreted in the human MALT?

1: IgA

2: IgD

3: IgG

4: IgE

880-: Live vaccine is -

1: Salk polio

2: KFD

3: Sabin polio

4: Meningococci

881-: Delayed tuberculin test response is due to-

1: B lymphocytes

2: T lymphocytes

3: Monocytes

4: Histiocytes

882-: A 25-year-old man has a negative Dick test and a positive Schick test. These results indicate that he has

1: Neutralizing antibodies against diphtheria

2: Neutralizing antibodies against scarlet fever

3: A defect in cellular immunity

4: Had the full complement of diphtheria penussis tetanus (DPT) shots as a child

883-: Ig seen in breast milk & secretions:

1: IgA

2: IgE

3: IgG

4: IgD

884-: Not true regarding NK cells -

1: Active against malignant cells

2: Inactive MHC antigen for killing microorganisms

3: First line defense against viral infections

4: No prior sensitization required

885-: Most sensitive test for antigen detection is -

1: RIA

2: Elisa

3: Immunofluorescence

4: Passive hemagglutination

886-: B cell maturation takes place in -

1: thymus

2: Lymph node

3: Bone marrow

4: Spleen

887-: IFN-a and IFN-b are produced by the virus-infected cell due to the interaction of virus nucleic acid with which of the following?

1: C3 (third component of complement)

2: Defensins

3: TLR pathway

4: IL-12

888-: The function common to neutrophils, monocyte & macrophages is

1: Immune response

2: Phagocytosis

3: Liberation of histamine

4: Destruction of old erythrocytes

889-: The earliest immunoglobulin to be synthesized by the fetus is -

1: IgA

2: IgG

3: IgE

4: IgM

890-: Adoptive immunity is by?

1: Infection

2: Injection of antibodies

3: Injection of lymphocytes

4: Immunization

891-: Pentavalent immunoglobin is -

1: IgA

2: IgG

3: IgM

4: IgE

892-: Bence Jones proteins are best described as:

1: u chains

2: g chains

3: Kappa and Lambda chains

4: Fibrin split products

893-: CD8 antigen is present on

1: T helper cells

2: B cells

3: T suppressor cells

4: Macrophages

894-: N K cells activity is enahnced by -

1: IL-1

2: TNF

3: IL-2

4: TGP-b

895-: Which of the following is true regarding lattice formation

1: Associated with precipitation and not agglutination

2: Associated with agglutination and not precipitation

3: Associated with both precipitation and agglutination

4: Associated with neither precipitation and nor agglutination

Answers

Question No	Answer Option	Answer
1	1	Polysaccharide
2	2	8S
3	1	IgA
4	3	IgE
5	3	IgG2
6	3	CD4
7	3	Weil-felix test
8	1	Bacillus Calmette-Guerin (BCG)
9	1	IgE
10	1	RNA
11	2	T-cells
12	1	Defects in phagolysosome function
13	2	Granulomatous reaction
14	4	Directly attached to lateral aspect of TCR b chain
15	1	Positive Selection during Development
16	3	NK cells
17	1	IgA
18	3	Type III
19	1	Cell mediated immunity
20	1	Decreased size of periaeriolar lymphoid sheath of spleen
21	3	Display cytotoxic effect on tumor cell

22	2	Double diffusion in one dimension
23	1	Hyper IgE syndrome
24	4	BCG
25	2	B-cells
26	4	IgE
27	1	Exfoliative toxin
28	2	C3b
29	2	IgM
30	1	RIA
31	3	Frei's test
32	4	All the above
33	2	IgA
34	4	B cell defect
35	3	Not affected by genetic affected
36	4	Schick test
37	1	NK cell
38	4	Humoral Immunity - Deficient; Cellular Immunity - Deficient
39	4	Isograft
40	2	Red cell agglutination by all blood group sera
41	2	Anti-ds DNA antibodies
42	1	IgG1
43	1	Heterocytotropic ab
44	1	IgE has minimum concentration
45	4	Subacute sclerosing panencephalitis (SSPE)

46	3	IgE
47	1	Acts as a mucosal barrier for infection
48	2	2:01
49	4	Plasma cells
50	1	IgM
51	3	Immunological memory present
52	3	Null cells
53	3	Platelets
54	2	Type II
55	1	Chromosome number 6
56	3	Histamine
57	2	No change in Amino acid sequence in protein
58	1	Negative nitroblue-tetrazolium test
59	2	MHC class II
60	3	Requires carrier for specific antibody production
61	2	Type II
62	4	Increased in peumococcal in fection
63	1	I
64	2	Rh-ve mother with 2nd Rh+ve child
65	4	CD45RO
66	2	C3b
67	1	B-cells
68	4	Tolerance to foreign antigens is the norm rather than the exception
69	4	All of the above

70	4	Carcinoembryonic antigen (CEA)
71	2	Autoimmune Hemolytic anaemia
72	3	IgM
73	4	Eosinophils
74	4	All of the above
75	3	Type 3 hypersensitivity
76	3	Cell-mediated immunity and circulationg antibodies
77	1	Telomerase
78	4	C4d
79	2	Agglutination test
80	1	Type I
81	1	Bence Jones protein
82	4	Covalent bond
83	2	Produce immunoglobulins
84	1	1
85	3	Class III has complement
86	3	IgG
87	2	Lipopolysaccharide
88	3	Doxyribose-phosphate backbone with bases stacked inside
89	3	C5a
90	4	IgA class
91	4	Ig E
92	1	12 hours
93	2	Adoptive immunity

94	1	Interleukin 18 (IL-18)
95	2	Type II
96	2	Release macrophage inhibition factor
97	2	Severe combined immunodeficiency
98	2	Acetylcholine receptors
99	2	Ig M
100	4	C3
101	2	Determinant from one clone of cells and probably located close to the antigenbinding site of the immunoglobulin
102	1	IgE
103	3	Plasma cells
104	4	IL_1 & TNF
105	2	Hereditary angioneurotic edema
106	2	In humans, there are approximately twice as many Ig molecules with k and l chains
107	2	Antibody excess
108	3	Slide flocculation
109	2	IgE production
110	4	IgD
111	1	T cells
112	2	Adjuvant
113	3	Pentamer
114	2	Type II
115	4	Proteins
116	1	IgG Hypersensitivity

117	2	T-Lymphocytes
118	1	Neutrophilia
119	1	IgG
120	1	RNA i
121	1	Helper cells
122	4	Proteins
123	3	Immunologic Memory
124	2	Hypocomplementemia
125	2	B-cells
126	3	Langerhan's cells/histiocytes
127	1	Albumin
128	3	IgM
129	3	Changes in heavy and light chain in constant region is responsible for class and subclass of immunoglobulins
130	2	B cells
131	1	Hyperacute rejection
132	4	Antigen antibody reaction cannot occur in the absence of electrolytes
133	2	Interstitial and tubular mononuclear cell infiltrate
134	3	Bone marrow
135	2	CSF
136	2	7, 12; 1, 3
137	3	Macrophages
138	2	Acute rejection
139	2	Ankylosing spondylitis

140	2	Anaphylactoid reaction
141	1	Mast cell
142	4	Isograft
143	3	Immunoglobulin transfer
144	3	Type III
145	1	Antigenic cross-reactivity
146	1	Transplant from one region of a person to another region
147	1	Drug induced LE
148	3	IgE
149	2	C5-9
150	3	Kappa & Lambda chains
151	2	T cells
152	1	Factor H
153	1	T-lymphocytes
154	1	NK cells
155	4	IL-12, IFN-g
156	2	Air
157	2	Type II
158	1	IgG 1
159	3	Fibroblastic foci
160	1	CD4
161	3	IgM
162	1	Widal test
163	1	T cells

164	1	Contact dermatitis
165	2	Gram-negative bacteria
166	1	Hereditary angioneurotic edema
167	1	Erythrotoxin of staph. Aureus
168	2	Produced by amino acid residues on non-adjacent polypeptide sequences.
169	2	Detects RNA
170	1	Ig G
171	3	C 5-9
172	2	Found in some but not all members of species
173	1	ds DNA
174	4	Zero HLA mismatch with recipient
175	1	IL-1
176	2	Eosinophils
177	4	Rectum
178	2	IL-6
179	2	Gamma heavy chain disease
180	3	Mast cells
181	3	IgE
182	4	Isograft
183	2	IgE has least serum concentration of 0.00004 mg/ml
184	1	MHC class I genes
185	2	Hereditary angioneurotic edema
186	2	Acts as a hapten
187	1	Carbohydrate sequence in cell wall

188	4	Single phenotype: Single !ocus->>multiple abnormal alleles.
189	1	GGTCCT
190	4	Protein
191	4	Possible hepatitis B infection
192	2	Acidic pH
193	1	IgG
194	3	C3bBb
195	4	Are concerned in antigen recognition
196	4	Disorder of phagocytosis
197	1	Antigenic cross-reactivity
198	1	Wiskott - Aldrich syndrome
199	2	RNA
200	4	Type4
201	3	Type III hypersensitivity
202	3	IgM
203	2	CSF
204	1	6 months
205	4	Hypervariable region
206	3	Transcription of nuclear factor mediated by NF-kB which recruits cytokines
207	3	IgA can be destroyed by bacterial proteases
208	4	Hepatitis A virus
209	2	Type 2
210	2	Type II
211	1	T lymphocyte activation

212	1	T cells
213	2	Antigen - antibody mediated
214	1	AA amyloidosis
215	2	Agglutination test
216	4	Pemphigus vulgaris
217	3	DiGeorge syndrome
218	2	IgA
219	1	Increase Melting point (Tm)
220	2	Epitope
221	2	C3b
222	4	DTH responses generated by CD4 +T cells
223	1	Irradiation
224	1	NK cell
225	1	Factor B
226	2	Eosinophils
227	2	C3b
228	1	Neutrilization reaction is type of -
229	3	Injection of lymphocytes
230	1	T-cells
231	2	Delayed hypersensitivity
232	3	Ig M
233	2	Opsonisation
234	4	Stromal cells
235	4	Maternal transfer of antibody
236	1	Pro-zone phenomenon

237	1	6 months
238	1	HLA1
239	4	There is antibody induced proliferation of NK cells
240	3	RNA polymerase
241	1	Irradiation
242	2	B-cells
243	3	Migration inhibition test
244	3	IgE
245	2	Macrophages
246	1	12 hours
247	2	Phagocytosis
248	2	Hemagglutination inhibition test
249	2	Waterhouse Friderichsen syndrome
250	2	IL-7
251	4	Hypersensitivity
252	4	Type IV
253	2	Type II
254	3	Zoneof equivalence
255	1	Antigenic cross-reactivity
256	4	Plasma cells
257	2	Agammaglobulinemia
258	2	C1 inhibitor
259	4	Granulomatous reaction
260	4	Plasma cells
261	2	Increased antibody affinity for the hapten

262	2	IgM
263	2	Spectrophometry
264	2	IgG
265	2	Systemic lupus erythematosus
266	4	Antigenic variation
267	3	It can prevent attachment of microorganisms to epithelial cell membranes
268	4	Helper T cells
269	3	Specific antibody
270	3	IgG
271	4	Well defined Nuclear membrane
272	4	IgE
273	4	Paracoical area
274	2	B-cells
275	1	Type I
276	2	Antibody specificity
277	1	Cytokines
278	2	Counter immuno-electrophoresis (CIE)
279	4	Primary atypical pneumonia
280	4	Flow cytometry
281	2	N-terminal
282	4	Cytokines
283	2	Tumor necrosis factor
284	3	Casoni's test
285	1	RA

286	1	Southern blot
287	2	DNA
288	2	C3,C6,C9
289	2	Opsonization
290	1	Human diploid cell (HDC) vaccine
291	2	It needs carrier to induce immune response
292	4	IgM
293	4	Lymphocytes
294	2	Helper T cells
295	1	AUG
296	2	RA
297	1	Type I Hypersensitivity
298	3	CD4
299	4	Hypervariable region
300	1	CD 19
301	1	IgG1
302	1	Autoimmune hemolytic anemia
303	2	Precipitation
304	4	Guinea Pig
305	4	Lymphocytes
306	2	Isolated IgA immunodeficiency
307	1	Ig G
308	2	IgM
309	3	Class I HLA molecules
310	3	IgA

311	1	Fusion of lysosome
312	1	35% of T cells
313	1	NK cell
314	2	Constant region of heavy chain
315	3	Helper T-cells
316	4	Lipids
317	4	Adoptive immunity
318	4	Juvenile-onset diabetes mellitus
319	1	Opsonisation
320	1	IgM
321	3	Defective H2 O2 production
322	2	Dendritic cells
323	4	Fc fragment
324	4	IgE mediated type I hypersensitivity disrupting worm attachment
325	3	Antibody-mediated
326	3	Equivalence of antibody and antigen
327	2	IgG2
328	1	CD4+ lymphocyte
329	3	Casoni's test
330	1	Surface
331	1	IgA
332	2	B cells
333	4	IgE
334	3	2 light chains, 2 heavy chains

335	2	IgM
336	1	Immune complex
337	1	Natural killer cells
338	1	Staphylococcus aureus
339	1	It occurs when CD4 cell count is < 50 cells/mm3
340	3	Diabetic nephropathy
341	1	C3
342	1	Severe combined immunodeficiency (SCID)
343	3	Both humoral and cell mediated immunity are affected
344	1	T cells
345	1	Aificial active
346	2	Excess antibody
347	1	Fifth disease
348	3	Involved in Type 3 HSN
349	2	Type-II
350	2	C5 - C9 deficiency
351	3	Type III
352	1	Casoni's test
353	1	6
354	3	Type III
355	1	Antigen presenting cells
356	1	Complement fixation
357	3	Found on T and B lymphocytes and all nucleated cells
358	1	Tumor lysis

359	1	CD4 lymphocytes
360	1	Uses heat labile DNA polymerase
361	2	T lymphocytes
362	3	Myasthenia gravis
363	2	Susumu Tonegawa
364	3	Contact dermatitis
365	1	Anticardiolipin
366	3	TH1-cells
367	1	Ig G
368	4	Thymus
369	3	Autoimmune hemolytic anemia
370	2	T-Lymphocytes
371	1	Type I
372	3	Adenosine deaminase
373	2	C1 inhibitor
374	2	Type 2
375	2	Tube agglutination test
376	1	IgG
377	2	Mast cells
378	3	Precipitation
379	1	TGF -Beta
380	2	Viral infection
381	2	IgM
382	4	IgA + IgG2
383	2	IgM fixes complement

384	2	Autoantibodies against acetylcholine receptors
385	4	Isograft
386	2	HLA class II antigen
387	4	Clonal selection
388	3	IgM
389	3	IgA
390	3	NK cells
391	2	HBcAg
392	2	It can be produced by natural killer cells
393	1	Bone marrow
394	2	Vaccine can be kept in higher temperature
395	2	Isograft
396	3	IgG
397	1	Defect in phagocytosis
398	3	2 & 3
399	4	2 long and 2 sho peptide chains
400	3	Isograft: transplant from one person to a genetically identical person
401	1	1
402	3	They are MHC restricted cytotoxic cells
403	2	Complement
404	1	IgM
405	1	Heterophile antibody that reacts with the microorganism or cells of unrelated species due to common antigen sharing.
406	1	Seminiferous tubule

407	2	Hypervariable region
408	2	AIRE
409	2	Hereditary angioedema
410	4	Hypersensitivity reaction with modified macrophages, lymphocytes and giant cells
411	2	Nohern blot
412	4	Misfolding of protein
413	3	Histamine
414	4	HTLV
415	4	May cross the placenta and fix complement
416	1	Mast cell
417	4	ATTR
418	2	Hypersensitivity reaction with modified macrophages, lymphocytes and giant cells
419	3	IgM
420	2	IgA
421	3	Highly antigenic
422	2	Immune complex mediated
423	4	Sarcoidosis
424	4	Lymphocytes
425	2	CD3
426	1	IgM
427	3	Macrophages
428	3	Chronic granulomatous disease
429	3	The antibody has been cleaved to divalent Fab' ligands

430	3	Neutrophils
431	4	Graft rejection
432	3	Immunoglobulin transfer
433	1	IgA
434	1	IgG
435	3	Disorders of phagocytosis
436	1	Protein
437	1	May be complement mediated
438	1	Eichwald silmser effect
439	2	Type II
440	3	Equivalence of antibody and antigen
441	3	Western blot
442	3	CD4
443	2	C3b
444	2	T-Lymphocytes
445	2	IgD
446	4	Fetal infection can be diagnosed by detection of IgG
447	2	Antibody-mediated complement fixation
448	2	Beta
449	4	Haemagglutination test
450	1	T-lymphocytes
451	3	Acute infection
452	1	Detects mutation
453	4	Reduced phagocyte surface expression of Sialyl-Lewis x

454	2	Precipitation
455	1	Monocytes
456	2	Graft versus host reaction
457	1	Polio
458	3	Antigenicity
459	1	More common in females
460	3	Allograft
461	3	IgM
462	1	IgG
463	1	T cells
464	1	Tetany
465	3	Gout
466	1	IgG
467	2	Thymoma
468	2	IgE
469	1	IgE
470	4	High endothelial venules
471	3	Rickettsia antigens and proteus antigens
472	1	Activate very large numbers of B cells
473	2	Immune complex mediated
474	3	Preformed anti-A and anti-B antibodies in the recipient
475	1	Cytotoxic T cells
476	2	H-chain
477	3	Eye lens

478	3	Jerish herheximer reaction
479	1	CD4 T cell
480	3	IgM
481	2	Conjugated and unconjugated bilirubin
482	4	The severe reaction following re-injection of protein solution in a sensitized animal
483	2	IgM
484	1	Agglutination
485	2	Myocarditis
486	1	IgA
487	1	T cells
488	1	Origin from same cell lineage
489	1	It is always a polypeptide
490	3	RNA
491	2	Defect in phagocytosis
492	4	Antigen presentation
493	1	Phytohemagglutinin
494	3	IgM
495	1	Deficiency of C1 inhibitor
496	3	IL-4
497	2	Deposition of circulating immune complexes
498	3	IgG
499	1	Mature dendritic cells
500	3	Langerhans cell
501	2	Graft from self

502	1	IgG & IgM
503	4	Humoral Immunity - Deficient; Cellular Immunity - Deficient
504	4	Type 4
505	3	Stimulator for B lymphocytes
506	4	Induration
507	3	IgE
508	1	False negative test
509	4	Possible subacute sclerosing panencephalitis (SSPE)
510	1	T cell independent antigens
511	4	None
512	1	CD3
513	1	Acute-phase reactant
514	3	Affected child can survives beyond adolescence without treatment
515	4	MHC Class I
516	4	IgG4
517	2	Delayed types hypersensitivity
518	1	Chronic recurrent sinusitis
519	2	Anti-dsDNA antibodies
520	1	IL-2
521	2	IgA
522	2	Widal test
523	4	Transfer hepatic progenitor cells (HPCs) of same person for regeneration
524	4	Disorder of phagocytosis

525	4	Low serum IgG, IgA and IgM levels
526	1	Enteric fever
527	3	C3
528	3	Isospecificity
529	3	Ileum
530	3	IgG & IgA
531	3	HLA-CW6
532	1	Fusion of lysosome
533	2	IgG
534	2	Complement system
535	2	Paratope
536	1	It is a bacteria
537	1	IgA
538	3	Negative selection of T cells in thymus
539	1	Antigen presentation
540	4	Lymphocytes
541	2	C1 esterase inhibitors deficiency
542	3	Present antigens for recognition by T-cell antigen receptors
543	2	Meningococcal infection
544	3	IgE
545	2	Cell mediated
546	2	Normal coical lymphocytes
547	3	Cytotoxic cell lyse IgG coated target cells
548	2	Reduction of NBT (Nitroblue tetrazolium test)

549	1	Type 1 reaction is Ig E mediated
550	3	Immunologic Memory
551	3	Cytokines
552	2	Tumor necrosis factor
553	1	TNF alpha
554	2	Isograft
555	4	Variable region of heavy and light chain
556	3	Bacterial surface polysaccharide
557	2	Inhibits viral replication in cells
558	2	Phagocytosis
559	2	Inhibits viral replication in cells
560	1	CD4 lymphocytes
561	4	IFN gamma
562	4	Reverse transcriptase
563	3	IgM
564	1	Immortalise myeloma cell
565	3	High titre anti-HLA antibodies in donor plasma
566	2	Type 2 hypersensitivty reaction
567	4	Anti-Ribonucleoprotein
568	1	Epitope
569	3	Negative selection of T-cells in the thymus
570	1	CMV
571	4	IgE
572	2	Immune complex mediated
573	3	Immunoglobulin transfer

574	2	SCID
575	4	Molecular mimicry
576	2	HLA 2
577	2	IgG
578	4	Lymphocytes
579	2	Adenosine deaminase deficiency
580	2	Hypervariable regions in domains of B cells
581	2	NADPH oxidase
582	3	NK cells
583	3	Peptidyl transferase
584	2	Raised in acute pneumococcal infection
585	2	Lips
586	2	H - chain
587	3	SLE
588	2	Serum sickness is a type II hypersensitivity reaction
589	2	IgG
590	2	IgM fixes complements.
591	4	Pa of innate immunity
592	4	IgE
593	2	It needs carrier to induce immune response
594	2	Active T cells
595	2	Serum sickness is a type II hypersensitivity reaction
596	1	Primary systemic amyloidosis
597	2	2
598	4	Granulomatous reaction

599	1	IL-1
600	4	NK cells
601	1	Southern blot
602	4	TNF
603	1	Opsonisation
604	2	IgG
605	2	Systemic Lupus Erythematosus
606	3	Both
607	1	24 hours
608	3	IgM
609	1	TNF
610	2	Sargramostim
611	3	Chlamydia trachomatis
612	3	Antibody excess to antigen
613	1	Phagocytosis
614	3	Ig D
615	4	IgE
616	1	Type I
617	2	Natural killer cells
618	4	Fetal infection is characterised by increased in IgG
619	1	Mast cells
620	4	Amino end
621	1	IgE
622	2	Autoimmune disease associated with HLA gene DR3
623	2	IgM

624	2	CD 8 T cells
625	2	Administration of anti-Rh antibodies to the mother postdelivery
626	2	Constant region of heavy chain
627	1	150
628	1	Macrophage
629	4	Class II HLA molecules
630	4	B cells
631	2	Light chain
632	3	Cryptococcus
633	3	Graft from member of same species
634	1	Mature dendritic cells
635	4	Transplant from one species to another species
636	2	B cells
637	4	IgM
638	2	Virus
639	4	Ig E
640	4	All of the above
641	3	Regular repeating structure of DNA & histone proteins
642	3	VDRL
643	2	H chain
644	1	Helper T cell
645	1	T cells
646	1	Rubella and Yellow fever
647	3	Differential RNA processing

648	2	Mast cells
649	1	Idiotype
650	2	IgE mediated reaction
651	4	NK cells
652	2	Chemotactic agent
653	2	Epitope
654	1	Tears and saliva
655	1	IgG 1
656	4	Polyclonal B cell Activation
657	3	IL 2
658	1	Graft across species
659	1	Polyclonal activation of T-cells
660	3	B8
661	4	IV
662	3	Variable region
663	2	Graves' disease
664	4	None
665	2	Inhibits viral replication in cells
666	2	Eleks gel precipitation test
667	2	CD 56
668	1	Antigen excess
669	3	IgA
670	1	T-cells
671	3	Specific antibody
672	4	Thymus

673	1	Phytohemagglutinin
674	2	Type II
675	2	Amyloidosis
676	1	Agglutination
677	1	Mast cell
678	3	Allogeneic grafts
679	2	Half life of IgG is 23 days
680	2	Type II
681	1	CD8
682	2	C3b
683	1	B.cells
684	2	CD4
685	1	Type 1
686	4	Maternal transfer of antibody
687	1	Rosette formation with sheep RBC
688	1	Chronic recurrent sinusitis
689	2	Type 2 hypersensitivity reaction
690	2	Competition and inhibition
691	3	10-May
692	3	Serum sickness
693	2	IgG
694	1	Herd immunity
695	1	C3
696	1	IL-2
697	2	2 Fab fragments

698	2	Covalent bond
699	4	Type IV
700	3	Arises early in the course of the illness; detectable titers persist a lifetime
701	4	Red blood cell
702	1	Anti-basement membrane
703	4	Autograft
704	2	Epinephrine
705	3	Involved in type III hypersensitivity reactions
706	2	Fifth disease
707	3	Present antigens for recognition by T cell antigen receptors
708	1	Fusion of lysosome
709	2	SLE
710	1	Carotenoids
711	2	It needs carrier to induce immune response
712	4	N-terminal
713	2	Abnormal CD40-CD40L interaction
714	3	IgM
715	2	Weil-Felix reaction
716	2	Binds to the beta chain of TCR and MHC class II molecules of APC stimulating T cell activation
717	1	Class I
718	4	All
719	2	Epitope
720	3	Rheumatoid ahritis

721	2	E
722	1	Early complement component deficiency
723	1	Heavy chain
724	1	Phagocytes
725	4	T cells
726	3	CD1
727	1	Autoimmune hemolytic anemia
728	2	IgA can be destroyed by bacterial proteases
729	1	All nucleated cells
730	3	Helper T-cells
731	2	T - Lymphocytes
732	3	Specific IgM antibodies - Immunity against Rubella
733	2	C3b
734	4	Ankylosing spondylitis
735	3	Higher incidence among males
736	2	B cells
737	3	Can distinguish between infection and disease
738	4	NK cells, neutrophils & macrophages
739	3	Zone of equivalence
740	3	Fc region
741	2	Isograft
742	1	Anti-ds-DNA
743	1	Polyclonal activation of T-cells
744	3	Formed by epithelial cell and plasma cell
745	1	Interferon gamma

746	2	IgM type
747	4	Type IV
748	2	Antibody-mediated cellular cytotoxicity (ADCC)
749	1	A, B, C
750	3	Casoni's test
751	4	Platelets
752	2	Late complement component deficiency
753	2	Antibody
754	4	Wiskott-Aldrich syndrome
755	4	IgA + IgG2
756	1	Gene rearrangement
757	2	Reduced IgM
758	4	Brucellosis
759	4	Red blood cell
760	2	Ghon's complex
761	3	Higher incidenc' among males
762	1	Allograft: transplant from one species to the same species
763	4	IL-5
764	3	Differential RNA processing
765	1	B cells
766	1	NK cells
767	4	Two gamma2 chains and two kappa chains
768	2	Helper T lymphocytes
769	2	Flocculation

770	1	Capsular polysaccharide in pneumococcus
771	3	Determine whether polymorphonuclear leucocytes can produce superoxide
772	2	Memory response is seen
773	4	Medullary
774	2	IgE
775	3	Lymphocyte
776	4	CD45 RO
777	1	All nucleated cells
778	2	Deficiency in CD40 ligand or CD40
779	4	Order an HIV test which would include antibodies to HIV-1 and HIV-2
780	1	Thermostable at temperature at which DNA liquefies
781	2	Landsteiner
782	3	C5-9
783	4	Lens of the eye
784	4	B-cells
785	4	Xenograft: transplant from one species to another species
786	2	Natural passive immunity
787	1	E.coli
788	3	C3
789	1	IgG and IgM
790	2	"type 2
791	4	For quantitative dectection of PCR material
792	1	Virus

793	2	Decreased size of paracoical areas
794	1	Pernicious anaemia
795	3	Allograft
796	4	IgE mediated reaction
797	3	C3
798	1	HPLC
799	1	T cells
800	2	NK cells
801	2	Beta-1 globulin
802	2	2 Fab fragments
803	3	AIDS
804	3	Thymus
805	1	IgE
806	1	Zinc finger
807	1	Defect in phagocytosis
808	2	Salk vaccine
809	4	IgE
810	1	SLE
811	2	RNA polymerase 11
812	4	Flocculation
813	1	T-cell
814	4	Covalent bond
815	3	IgE
816	4	Lymphocytes
817	2	Involve MHC antigen for killing micro-organisms

818	1	1983
819	4	RIA
820	2	Secondary
821	3	IgM
822	2	Polyclonal activation of T-cells
823	4	CD 19
824	1	IgA
825	4	IgE
826	1	Origin from same cell lineage
827	1	IgG
828	1	Weil Felix test
829	4	Independent of antibody
830	3	Enzyme-linked immunosorbent assay (ELISA)
831	1	IgA
832	1	Extrachromosomal
833	1	Slide flocculation test
834	4	Red blood cell
835	3	The chains are formed by genetic rearrangement after maturation
836	4	Type-IV hypersensitivity
837	3	Antibodies appear in sho time
838	1	C5a
839	3	C3b
840	4	Effective against viral infection
841	1	Acute Lyme disease

842	3	Follicular dendritic cell
843	4	Type 4
844	1	CD4 lymphocytes
845	1	B4
846	1	IgG
847	2	Lung
848	1	Positive selection during development
849	3	Kappa & Lambda chains
850	2	HLA DR4
851	4	Immunoglobulin light chain
852	4	Complement protects the host from pneumococcal and Haemophilus infection through complement components C1, C2, and C4
853	1	NK cells
854	4	Fc fragment
855	3	An HIV ELISA test
856	2	Agglutination test
857	4	First line defense mechanism
858	2	image_question
859	2	Cell mediated hypersensitivity
860	2	CSF
861	3	Immunoglobulin transfer
862	3	IgG
863	1	B cells
864	2	IgM
865	2	Sabin polio vaccine

866	4	Toxin neutralization
867	2	T cells
868	1	Natural killer cells
869	2	Short arm of chromosome 6
870	4	IgM
871	1	Cat scratch disease
872	2	Eosinophil
873	2	Adrenal
874	1	Chronic infectious mononucleosis
875	1	IgG1
876	1	Idiotype
877	3	IgG
878	4	Neonatal lupus
879	4	IgE
880	3	Sabin polio
881	2	T lymphocytes
882	2	Neutralizing antibodies against scarlet fever
883	1	IgA
884	2	Inactive MHC antigen for killing microorganisms
885	1	RIA
886	3	Bone marrow
887	3	TLR pathway
888	2	Phagocytosis
889	4	IgM
890	3	Injection of lymphocytes

891	3	IgM
892	3	Kappa and Lambda chains
893	3	T suppressor cells
894	3	IL-2
895	3	Associated with both precipitation and agglutination