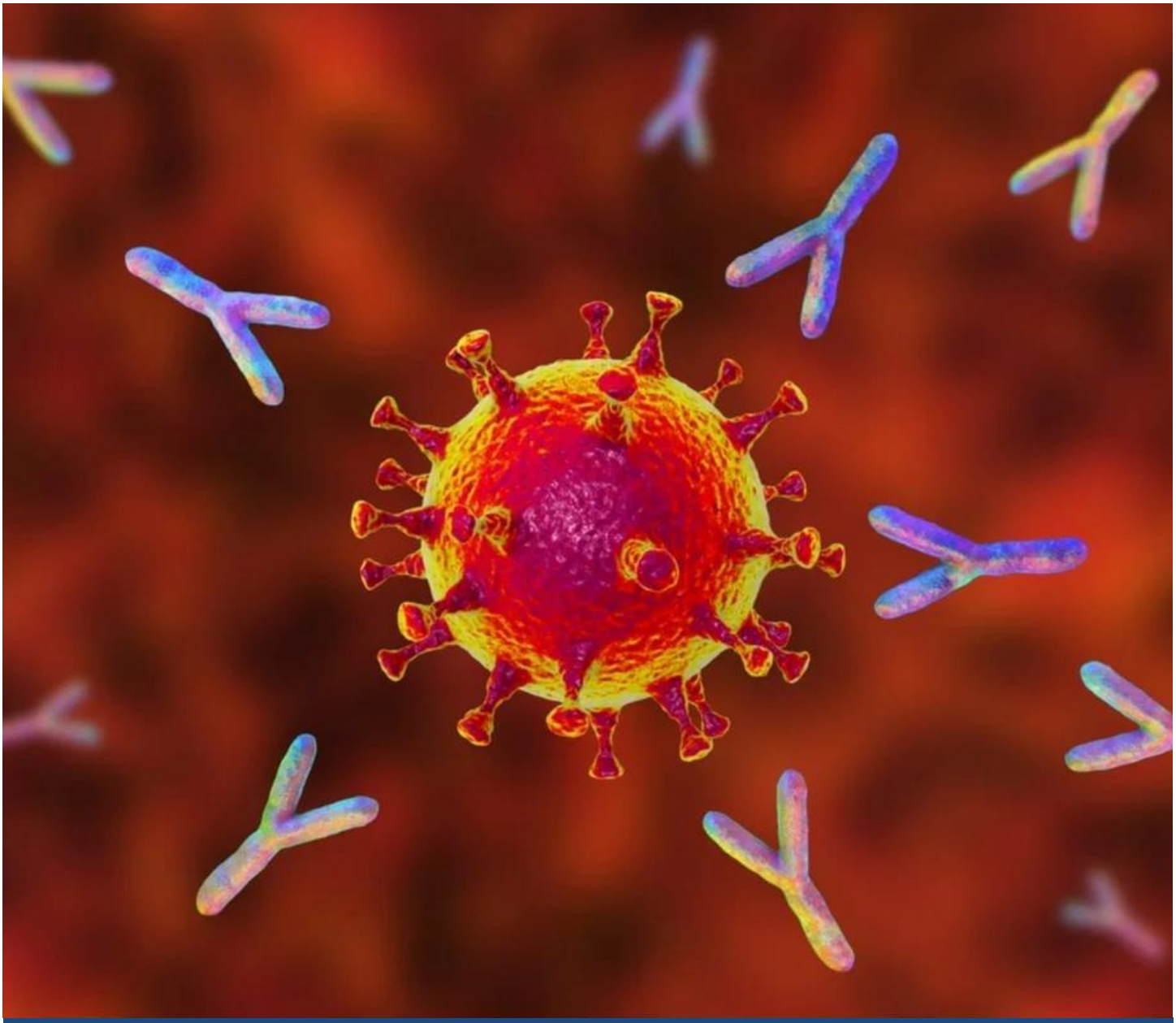

Immuno-Pathology

A collection of MCQs

Vikas Kumar

Pathology

Introduction

Welcome to **Immuno-Pathology MCQ**, a comprehensive question bank designed to enhance your understanding of microbiology. This ebook contains over 900+ multiple-choice questions (MCQs) covering a wide array of topics within the field of Pathology.

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.

How This Ebook Can Help You

- **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.

Compilation and Sources

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.

Copyright Page

Immuno-Pathology MCQ
Compiled and Published by Vikas Bhardwaj /medicalmcq.in

Sources of Content

This ebook is a compilation of multiple-choice questions (MCQs) sourced from various publicly available online resources. The content has been carefully selected, curated, and edited to provide a comprehensive learning experience for medical students and professionals. Although the MCQs have been adapted and reorganized for educational purposes, we acknowledge that the original sources of the information remain in the public domain.

No part of this ebook is intended to infringe on any copyright or proprietary rights of the original authors or content providers. All references to publicly available materials, including textbooks, websites, journals, and other online content, are provided in compliance with fair use principles for the purpose of education, scholarship, and research.

Disclaimer

While every effort has been made to ensure the accuracy and reliability of the information contained within this ebook, the publisher and author assume no responsibility for errors, omissions, or inconsistencies. The content is provided "as is" and is intended solely for educational purposes. Users are encouraged to verify any information independently before relying on it for professional practice or exam preparation.

By using this ebook, the reader agrees to hold the publisher and author harmless from any claims, damages, or liability arising from its use.

For inquiries regarding permissions, please contact:
MedicalMCQ.in

Questions

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

1: Polysaccharide

2: Protein

3: Antigen

4: Effector

2-: A 45-year-old woman complains of severe headaches and difficulty in swallowing. Over the past 6 months, she has noticed small, red lesions around her mouth as well as thickening of her skin. The patient has "stone facies" on physical examination. Which of the following antigens is the most common and most specific target of autoantibody in patients with this disease?

1: C-ANCA (anti-proteinase-3)

2: Double-stranded DNA

3: P-ANCA (anti-myeloperoxidase)

4: Scl-70 (anti-topoisomerase I)

3-: Sedimentation coefficient of Ig E is:

1: 7S

2: 8S

3: 11S

4: 20 S

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-: Agglutination test is -

1: ABO incompatibility

2: VDRL

3: Weil-felix test

4: FTA-ABS

7-: 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

8-: In type I hypersensitivity, the mediators is

1: IgE

2: IgG

3: IgM

4: IgC

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

1: RNA

2: DNA

3: Protein

4: Antibodies

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

1: B cells

2: T-cells

3: NK-cells

4: Both B & T Cells

11-: Multiple myeloma most common part involved is-

1: Bone marrow

2: Cortex of bone

3: Metaphyses

4: Epiphyses

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-: Cardinal signs of Inflammation are all except?

1: Rubor

2: Tumor

3: Color

4: Cyanosis

15-: 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

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

1: Macrophages

2: Astrocytes

3: NK cells

4: Langerhans cells

17-: Wire loop lesion seen in lupus nephritis is due to

1: Capillary wall thickening

2: Basement membrane thickening

3: Subepithelial deposits

4: Sclerosis of mesangium

18-: Causative organism of rheumatic fever -

1: Group A Streptococci

2: Staphylococci

3: Group B Streptococci

4: Group D Streptococci

19-: Bronchial secretion secretes -

1: IgA

2: IgE

3: IgM

4: IgG

20-: Which of the following cardiac valves is not commonly involved in rheumatic fever?

1: Mitral

2: Aoic

3: Pulmonary

4: Tricuspid

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

1: Type I

2: Type II

3: Type III

4: Type IV

22-: A 9-year-old girl is diagnosed with acute rheumatic fever. Instead of recovering as expected, her condition worsens and she dies. Which of the following is the most likely cause of death?

1: Central nervous system involvement

2: Endocarditis

3: Myocarditis

4: Streptococcal sepsis

23-: 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

24-: 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

25-: 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

26-: The false statement associated with Kaposi's sarcoma is:

1: Caused by human herpes virus 8

2: Seen in immune suppressed persons

3: Proliferative tumor of the blood vessels

4: Surgery is the treatment of choice

27-: 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

28-: 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

29-: A 70-year-old male has a pathologic fracture of femur. The lesion appears a lytic on X-rays film with a circumscribed punched out appearance. The curetting from fracture site is most likely to show which of the following?

1: Diminished and thinned trabecular bone

2: Sheets of atypical plasma cells

3: Metastatic prostatic adenocarcinoma

4: Malignant cells forming osteoid bone

30-: 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

31-: Which of the following immunoglobulin is absent in Ataxia telangiectasia:

1: IgG

2: IgM

3: IgA

4: IgD

32-: Immunoglobulins are produced by -

1: Macrophages

2: B-cells

3: T-cells

4: NK-cells

33-: CD4 is a marker for?

1: Stem cells

2: All leukocytes

3: B - cells

4: T - cells

34-: Type I hypersensitivity reaction is mediated by:

1: IgG

2: IgM

3: IgD

4: IgE

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

1: Exfoliative toxin

2: Cytolytic toxin

3: ProteinA

4: Leucocidin

36-: Which of the following is seen in cryoglobulinemia

1: IgG

2: IgM

3: IgA

4: IgE

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

1: RIA

2: ELISA

3: Immuno chromatography

4: Chemiluminescence assay

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

1: Macroglobulinaemia

2: SLE

3: Myeloma

4: All the above

39-: Serum sickness occurs after -

1: Injection with foreign serum

2: Injection with own serum

3: Injection with normal saline

4: All of the above

40-: 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

41-: 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

42-: All of the following are true in respect of hereditary angioneurotic edema (HAE), except:

1: Deficiency of C1 inhibitor (C1INH)

2: Uicaria

3: Pruritus is usually absent

4: Autosomal recessive disorder

43-: All are true about innate immunity except -

1: Non-specific

2: First line of defence

3: Not affected by genetic affected

4: Includes complement

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

1: Casoni test

2: Lepromin test

3: Tuberculin test

4: Schick test

45-: Which is a large granular lymphocyte?

1: NK cell

2: B-lymphocyte

3: T-lymphocyte

4: Macrophage

46-: 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

47-: 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

48-: Best marker of SLE?

1: Anti Sm antibodies

2: Anti-ds DNA antibodies

3: Anti-Histone antibodies

4: Anti Ro (SS-A) antibodies

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

1: IgG1

2: IgG2

3: IgG3

4: IgG4

50-: The macrophage to epitheliod conversion in Mycobacterium tuberculosis infection is mediated by:

1: TNF alpha

2: IFN-g

3: IL-4

4: TGF-Beia

51-: Passive cutaneous anaphylaxis detect:

1: Heterocytotropic ab

2: Wheal and flare reaction

3: Atopy

4: Cutaneous anaphylaxis

52-: True about immunoglobulins -

1: IgE has minimum concentration

2: IgG has minimum concentration

3: IgA has minimum concentration

4: IgM has minimum concentration

53-: 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)

54-: Which of the following immunoglobulins shows homocytotropism -

1: IgG

2: IgA

3: IgE

4: IgD

55-: Function of Ig A is -

1: Acts as a mucosal barrier for infection

2: Circulating antibody

3: Kills virus infected cells

4: Activates macrophages

56-: Normal CD4:CD8 ratio is

1: 3:01

2: 2:01

3: 1:02

4: 1:03

57-: IgE is secreted by -

1: Mast cell

2: Basophils

3: Eosinophils

4: Plasma cells

58-: Which of following antibody is pentameric -

1: IgM

2: IgG

3: IgA

4: IgD

59-: True about active immunity

1: Less effective

2: Can be given in immunodeficient state

3: Immunological memory present

4: No lag period

60-: Necrotizing lymphadenitis is seen in:

1: Kimura disease

2: Kikuchi Fujimoto disease

3: Hodgkin disease

4: Castelman disease

61-: Natural killer cell is -

1: MHC restricted

2: Antibody dependent

3: Null cells

4: B-lymphocytes

62-: Lymphoreticular system doesnot includes -

1: T-cells

2: B-cells

3: Platelets

4: Macropahges

63-: MCH located on -

1: Chromosome number 6

2: Chromosome number 7

3: Chromosome number 8

4: Chromosome number 9

64-: All are chemokines except -

1: IL-8

2: IL-1

3: Histamine

4: Eotaxin

65-: 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

66-: T helper cells recognises -

1: MHC class I

2: MHC class II

3: Processed peptides

4: Surface Ig

67-: Hapten is -

1: Same as epitope

2: Small molecular weight protein

3: Requires carrier for specific antibody production

4: Simple haptens are precipitate

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

1: Type I

2: Type II

3: Type III

4: Type IV

69-: 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

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

1: I

2: II

3: III

4: IV

71-: 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

72-: Intracellular accumulation of which of the following forms Russell bodies ?

1: Immunoglobulins

2: Cholesterol

3: Phospholipids

4: Lipoproteins

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

1: CD45RA

2: CD45RB

3: CD45RC

4: CD45RO

74-: Which of the following is an opsonin?

1: C3a

2: C3b

3: C5a

4: C6

75-: Cells involved in humoral immunity -

1: B-cells

2: T-cells

3: Helper cells

4: Dendritic cells

76-: 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

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

1: Production of interferon

2: Lymphokine production

3: Rosette formation

4: All of the above

78-: 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)

79-: 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

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

1: IgA

2: IgE

3: IgM

4: IgG

81-: MHC II are not presented by -

1: macrophage

2: Dendritic cells

3: Lymphocytes

4: Eosinophils

82-: What is the mechanism of acute rheumatic fever -

1: Cross reactivity with endogenous antigen

2: Innocent by slender effect

3: Due to toxin secretion by streptococci

4: Release of pyrogenic cytokines

83-: Genetic deficiency of complement factor causes:

1: Hereditary angioneurotic edema

2: SLE- an autoimmune disease

3: Pyogenic bacterial infections

4: All of the above

84-: 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

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

1: Immune complex deposition

2: Vascular blockage

3: Cell-mediated immunity and circulationg antibodies

4: Infection

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

1: Telomerase

2: Centromere

3: Restriction endonuclease

4: Exonuclease

87-: A 24-year-old woman who had previously been uneventfully transfused,receives a blood transfusion during surgery and sholy thereafter develops itching, generalized uicaria, laryngeal edema, and dyspnea with wheezing respiration. She has a past history of recurrent upper respiratory tract infections and frequent episodes of diarrhea. Laboratory studies are most likely to reveal decreased concentrations of which of the following immunoglobulins?

1: IgA

2: IgD

3: IgE

4: IgG

88-: Most specific antibody in SLE is -

1: Anti nuclear

2: Anti Sm

3: Anti Ro

4: Anti histone

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

1: C3a

2: C3b

3: C5a

4: C4d

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

1: Type I

2: Type II

3: Type III

4: Type IV

91-: 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

92-: 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

93-: 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

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

1: 1

2: 2

3: 3

4: 4

95-: 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

96-: Septic shock is due to -

1: Protein

2: Lipopolysaccharide

3: Teichoic acid

4: Peptidoglycan

97-: 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

98-: Which complement component is anaphylotoxin -

1: C3b

2: C5.-9

3: C5a

4: Cl-3

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

1: IgG class

2: IgM class

3: IgE class

4: IgA class

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

1: Ig A

2: Ig G

3: Ig M

4: Ig E

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

1: 12 hours

2: 2 weeks

3: 1 month

4: 3 months

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

1: Inmate immunity

2: Adoptive immunity

3: Active immunity

4: Local immunity

103-: 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)

104-: Immune complex deposition is the basic underlying pathology in which type of hypersensitivity reaction?

1: Type I

2: Type 2

3: Type 3

4: Type 4

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

1: Type I

2: Type II

3: Type III

4: Type IV

106-: 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

107-: Antibodies in ITP are -

1: IgG

2: IgM

3: IgE

4: IgD

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

1: Common variable immunodeficiency

2: Severe combined immunodeficiency

3: Chronic granulomatous disease

4: Nezelof syndrome

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

1: Muscarinic receptor proteins

2: Acetylcholine receptors

3: Actin

4: Myosin

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

1: Ig G

2: Ig M

3: Ig A

4: IgE

111-: C3 convease acts on -

1: C4b2b

2: C4b2B3a

3: C4b

4: C3

112-: 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

113-: Antischkow cells are -

1: Modified macrophages

2: Modified neutrophils

3: Modified B cells

4: Modified RBCs

114-: Type I hypersensitivity, the mediator is:

1: IgE

2: IgE

3: IgM

4: IgC

115-: Gama globulins are synthesized in -

1: Liver

2: Lung

3: Plasma cells

4: Spleen

116-: Super antigen acts through?

1: IL-3

2: IL-6

3: IFN-Gamma

4: IL_1 & TNF

117-: C1 esterase inhibitor deficiency causes -

1: Neisseria infection

2: Hereditary angioneurotic edema

3: Hemolytic disease

4: Hemolytic uremic syndrome

118-: 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

119-: Prozone phenomenon is due to:

1: Antigen excess

2: Antibody excess

3: Excessive immune complex

4: Acute phase reactants

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

1: IgM production

2: IgE production

3: IgA production

4: Hypogammaglobulinemia

121-: Immunoglobulin found in B lymphocyte -

1: IgA

2: IgE

3: IgG

4: IgD

122-: Which of the following is responsible for respiratory burst and production of superoxide ions-

1: Hydrolase

2: Catalase

3: Peroxidase

4: NADPH oxidase

123-: 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

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

1: Stabilizer

2: Adjuvant

3: Preservative

4: None of the above

125-: 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

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

1: Lipids

2: Nucleic acids

3: Polysachharides

4: Proteins

127-: 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

128-: Graft versus Host reaction is caused by -

1: B-Lymphocytes

2: T-Lymphocytes

3: Macrophages

4: Complement

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

1: Neutrophilia

2: Defective degranulation

3: Delayed microbial killing

4: Giant granules

130-: Recent noble prize is for

1: RNA i

2: Lipoxin

3: T beta transcription factor

4: Mitochondrial DNA

131-: Memory cells are best provided by?

1: Helper cells

2: Cytotoxic cells

3: Macrophages

4: NK cells

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

1: Lipids

2: Nucleic acids

3: Polysachharides

4: Proteins

133-: 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

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

1: Neutrophils

2: B-cells

3: NK cells

4: Monocytes

135-: Most important antigen presenting cells in human?

1: Macrophages

2: Plasma cells

3: Langerhan's cells/histiocytes

4: Lymphocytes

136-: Acute phase reaction in acute inflammation are -

1: Albumin

2: Rfibrinogen

3: Haptoglobulin

4: Gammaglobulin

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

1: IgA

2: IgG

3: IgM

4: IgE

138-: Phagocytosis is the function of-

1: Astrocytes

2: Oligodendrocytes

3: Microglia

4: Schawan cells

139-: Finding of multiple myeloma in kidney are all except:

1: Tubular casts

2: Amyloidosis

3: Wire loop lesions

4: Renal tubular necrosis

140-: 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

141-: Humoral immunity arises from -

1: T cells

2: B cells

3: Null cell

4: K cell

142-: Preformed antibodies cause:

1: Hyperacute rejection

2: Acute rejection

3: Chronic rejection

4: Acute humoral rejection

143-: 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

144-: 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

145-: Anitshow's cells are seen in?

1: Rheumatic heart disease

2: Rheumatic arthritis

3: Bacterial endocarditis

4: Marantic endocarditis

146-: Mononuclear phagocytes are produced by -

1: Thymus

2: Spleen

3: Bone marrow

4: Liver

147-: 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

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

1: TH1

2: TH2

3: Macrophages

4: TH19

149-: 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

150-: HLA B27 is maximally associated with?

1: Rheumatoid arthritis

2: Ankylosing spondylitis

3: Rieter syndrome

4: Psoriasis

151-: 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

152-: 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

153-: Active immunity is not acquired by:

1: Infection

2: Vaccination

3: Immunoglobulin transfer

4: Sub - clinical infection

154-: Most potent stimulator of naive T cell is:

1: Mature dendritic cell

2: Follicular dendritic cell

3: Macrophages

4: B cell

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

1: Type I

2: Type II

3: Type III

4: Type IV

156-: 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

157-: Anti-histone antibodies are diagnostic of?

1: Drug induced LE

2: Systemic sclerosis

3: Mixed connective tissue disorder

4: Sicca syndrome

158-: Heat labile immunoglobulin -

1: IgA

2: IgG

3: IgE

4: IgM

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

1: C5a

2: C5-9

3: C3b

4: C3a

160-: Complement responsible for activation of bacterial lysis is:

1: C3a

2: C3b

3: C5-9

4: C5a

161-: ANA seen in SLE are directed against?

1: mRNA

2: dsDNA

3: Nucleolus

4: Ribosomes

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

1: B cells

2: T cells

3: Dendritic cells

4: Langerhans cells

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

1: Factor H

2: IgA

3: Bacteria

4: Toxin

164-: Interleukin I primarily acts on -

1: T-lymphocytes

2: B-lymphocytes

3: Neutrophils

4: Macrophages

165-: 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

166-: Marker of chronic inflammation is?

1: IL-1, IL-6

2: IL-1, TNF

3: IL-6, TNF

4: IL-12, IFN-g

167-: HEPA filter is used to disinfect -

1: Water

2: Air

3: Culture

4: Blood

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

1: Type I

2: Type II

3: Type III

4: Type IV

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

1: IgG 1

2: IgG 2

3: IgG 3

4: IgG 4

170-: 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

171-: Which antibody is a/w the condition showing following features?

1: Anti ds. DNA

2: Anti-Ro

3: Anti CCP

4: Anti SCL - 70

172-: Mantoux test is based on which hypersensitivity-

1: Typel

2: Type 2

3: Type 3

4: Type 4

173-: Class MHC 2 antigen attaches to?

1: CD4

2: CD8

3: CD16

4: CD34

174-: In utero infecion leads to which immunoglobulin?

1: IgG

2: IgA

3: IgM

4: IgD

175-: Which of the following is agglutination test -

1: Widal test

2: VDRL

3: Ascoli's test

4: Kahn test

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

1: T cells

2: B cells

3: Fibroblasts

4: Dendritic cells

177-: Which amongst the following is the most common form of plasma cell dyscrasia?

1: Solitary myeloma (Plasmacytoma)

2: Monoclonal Gammopathy of Unceain Significance (MGUS)

3: Multiple myeloma

4: Lymphoplasmacytic lymphoma

178-: Note a delayed type of hypersensitive reactions -

1: Contact dermatitis

2: Bronchial asthma

3: Hemolytic anemia

4: Multiple sclerosis

179-: 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

180-: Deficiency of C1 inhibitor can produce

1: Hereditary angioneurotic edema

2: SLE

3: No disease

4: Pyogenic infections

181-: Superantigens are -

1: Erythrotoxin of staph. Aureus

2: CI. Difficile toxin

3: Staphyloccocal toxic shock syndrome toxin

4: Cholera toxin

182-: True about Northern blot technique:

1: Detects DNA

2: Detects RNA

3: Detects proteins

4: Detects post translational modifications in proteins

183-: Ig secreted in secondary immune response is:

1: Ig G

2: Ig M

3: Ig A

4: Ig E

184-: 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

185-: Auto antibody specific for SLE -

1: ds DNA

2: Anti RO

3: Anti-topoisomerase

4: Antihistone

186-: 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

187-: 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

188-: Charcot Leyden crystals are derived from?

1: Macrophages

2: Eosinophils

3: Basophils

4: Neutrophils

189-: Site of biopsy in amyloidosis

1: Kidney

2: Abdominal fat

3: Lip

4: Rectum

190-: Palatal edema is significant for:

1: Alpha heavy chain disease

2: Gamma heavy chain disease

3: Mu chain disease

4: Beta heavy chain disease

191-: Angiodema is seen due to deficiency of?

1: Angiotensin converting enzyme

2: C1 esterase inhibitor

3: Histamine

4: Angiotensin 1

192-: IgE binds to which cell-

1: T cells

2: B cells

3: Mast cells

4: NK cells

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

1: IgA

2: IgM

3: IgE

4: IgG

194-: 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

195-: 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

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

1: SLE

2: Hereditary angioneurotic edema

3: Severe recurrent pyogenic infection

4: Gram-negative bacteremia

197-: 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

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

1: Carbohydrate sequence in cell wall

2: Flagella

3: Bacterial cell membrane

4: Nucleus

199-: 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.

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

1: GGTCCT

2: GTTCCT

3: GTCCCT

4: GGUGGT

201-: Chemical nature of complement is

1: Lipid

2: Polysaccharide

3: Lipo polysaccharide

4: Protein

202-: 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

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

1: Lysozyme

2: Acidic pH

3: Skin

4: Lactose

204-: 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

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

1: C4b2b

2: C3b

3: C3bBb

4: C3a

206-: 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

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

1: Antigenic cross-reactivity

2: Antigenic specificity

3: Passive immunity

4: Innate immunity

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

1: Wiskott - Aldrich syndrome

2: Digeorge syndrome

3: Agammaglobulinemia

4: SCID

209-: Beta-2 microglobulin is used as a tumor marker for which of the following diseases?

1: Multiple myeloma

2: Acute lymphoblastic leukemia

3: Hairy cell leukemia

4: Lymphoplasmacytic lymphoma

210-: Northern bioting is used for seperation of?

1: DNA

2: RNA

3: Proteins

4: None

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

1: Typel

2: Type2

3: Type3

4: Type4

212-: Plasma cells are derived from -

1: B lymphocytes

2: T lymphocytes

3: NK cells

4: Monocytes

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

1: Type I hypersensitivity

2: Type II hypersensitivity

3: Type III hypersensitivity

4: Type IV hypersensitivity

214-: Pentameric antibody with a J chain is?

1: IgA

2: IgG

3: IgM

4: IgE

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

1: Lacrimal secretions

2: CSF

3: Saliva

4: Respiratory tract secretions

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

1: 6 months

2: 1 year

3: 2 years

4: 3 years

217-: 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

218-: 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

219-: 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

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

1: Type 1

2: Type 2

3: Type 3

4: Type 4

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

1: Type I

2: Type II

3: Type III

4: Type IV

222-: CD3 is a marker for?

1: B - cells

2: T - cells

3: NK- cells

4: Monocytes

223-: IL -I produces -

1: T lymphocyte activation

2: Delayed wound healing

3: Increased pain perception

4: Decreased PMN release from bone marrow

224-: CD 3 receptor is seen in -

1: T cells

2: B cells

3: Macrophages

4: Eosinophils

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

1: Immune complex mediated

2: Antigen - antibody mediated

3: Arthus phenomenon

4: Granulomatous reaction

226-: 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

227-: Coombs test is -

1: Precipitation

2: Agglutination test

3: CFT

4: Neutrilization test

228-: 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

229-: Immunoglobulin present in local secretion is?

1: IgG

2: IgA

3: IgM

4: IgD

230-: 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

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

1: Clone

2: Epitope

3: Idiotope

4: Effector

232-: The complement component with opsonin activity is

1: C3a

2: C3b

3: C5a

4: C5b

233-: 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

234-: A 7-month-old boy has had multiple bouts of otitis media, sinusitis, bronchitis, oral candidiasis, and multiple viral infections. Cessation of the recurrent infections follows successful engraftment of a bone marrow transplant. The basis of the clinical improvement is

1: direct transfusion of antibodyproducing B cells.

2: direct transfusion of donor CD4+ and CD8+ lymphocytes.

3: donor suppression of recipient cytotoxic T cells

4: maturation of donor lymphoid progenitor cells

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

1: Irradiation

2: Leuckoreduction/leuckofiltration

3: Immunosuppression

4: Buffy coat removal

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

1: NK cell

2: T cell

3: Histiocyte

4: Macrophage

237-: C3b is converted to C3 convertase by-

1: Factor B

2: Factor P

3: Factor H

4: Factor I

238-: Least likely associated with SLE -

1: Anti ds DNA

2: Anti Sm

3: Anti topoisomerase

4: Anti histone

239-: Perivascular lymphocytic and microglial nodules are seen in

1: Multiple sclerosis

2: HIV encephalitis

3: Bacterial meningitis

4: CMV encephalitis

240-: Charcot Leyden crystal are derived from?

1: Macrphages

2: Eosinophils

3: Basophils

4: Neutrophils

241-: Opsonization takes place through -

1: C3a

2: C3b

3: C5a

4: C5b

242-: Nagler reaction is type of -

1: Neutrilization reaction is type of -

2: CFT

3: Precipitation

4: Agglutination

243-: CANCA is associated with -

1: Wegener's granulomatosis

2: Microscopic poly angitis

3: Chrug strauss syndrome

4: Good pasture syndrome

244-: Adoptive immunity is by:

1: Infection

2: Injection of antibodies

3: Injection of lymphocytes

4: Immunization

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

1: T-cells

2: B-cells

3: Langhan cells

4: Macrophage

246-: Mantoux test is an indicator of

1: Immediate hypersensitivity

2: Delayed hypersensitivity

3: Cell mediated hypersensitivity

4: Immune complex mediated hypersensitivity

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

1: Ig A

2: Ig G

3: Ig M

4: Ig E

248-: 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

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

1: Macrophage

2: B cells

3: T cells

4: Stromal cells

250-: 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

251-: 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

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

1: 6 months

2: 1 year

3: 2 years

4: 3 years

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

1: HLA1

2: HLA2

3: HLA3

4: All of the above

254-: 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

255-: Presence of >10% plasma cells with no lytic lesion and M protein in serum is seen in?

1: Smoldering myeloma

2: Multiple myeloma

3: Monoclonal Gammopathy of unknown significance

4: Non secretory Myeloma

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

1: DNA Polymerase

2: DNA Ligase

3: RNA polymerase

4: Primase

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

1: Irradiation

2: Washing

3: Chemical treatment

4: All of the above

258-: 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

259-: T cell functions are assessed by -

1: phagocyte index

2: T cell count

3: Migration inhibition test

4: Immunoglobin index

260-: Virus infected cell is killed by?

1: Interferons

2: Macrophages

3: Neutrophils

4: Autolysis

261-: In thymus, which gene is responsible for recognition of self-antigens?

1: NOTCH 1

2: AIRE

3: Rb

4: PTEN

262-: Hyperacute rejection occurs within:?

1: 12 hours

2: 2 weeks

3: 1 month

4: 3 months

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

1: Immune response

2: Phagocytosis

3: Liberation of histamine

4: Destruction of old erythrocytes

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

1: ELISA (Enzyme Linked Immunosorbent Assay

2: Hemagglutination inhibition test

3: Radioimmunoassay

4: Immunofluorescence

265-: Mechanism similar to Schwartzman reaction occurs in:

1: Fitz Hugh Curtis syndrome

2: Waterhouse Friderichsen syndrome

3: Eichwald slimser effect

4: Anaphylactoid reaction

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

1: IL-3

2: IL-7

3: IL-11

4: IL-5

267-: 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

268-: Frei test which type of hypersensitivity -

1: Type I

2: Type II

3: Type III

4: Type IV

269-: 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

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

1: Prozone

2: Postzone

3: Zoneof equivalence

4: Noneof the above

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

1: Antigenic cross-reactivity

2: Antigenic specificity

3: Passive immunity

4: Innate immunity

272-: 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

273-: 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

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

1: Ahrus reaction

2: Serum sickness

3: Shwazman reaction

4: Granulomatous reaction

275-: Circulating antibodies formed by?

1: T-cells

2: B-cells

3: Macrophages

4: Plasma cells

276-: 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

277-: which antibody is called the millionaire molecule

1: IgA

2: IgM

3: IgG

4: IgD

278-: Primary immune response is by which cell?

1: B cell

2: T cell

3: B and T cell both

4: Complement mediated

279-: Rapid serological diagnostic tests include all except -

1: Latex agglutination

2: Spectrophometry

3: Gel electrophoresis

4: Radioimmunoassay

280-: 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

281-: 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

282-: Immune privilege site is:

1: Optic nerve

2: Seminiferous tubule

3: Area posterna

4: Spinal cord

283-: 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

284-: 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

285-: Secondary immune response is mediated by -

1: IgF

2: IgM

3: IgG

4: IgA

286-: Prokaryotes have all, except

1: Rigid cell wall

2: Flagella

3: Ribosomes

4: Well defined Nuclear membrane

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

1: IgA

2: IgG

3: IgM

4: IgE

288-: T cell dependent region is -

1: Coical follicles of lymph node

2: Medullary cords

3: Mantle layer

4: Paracoical area

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

1: T-cells

2: B-cells

3: macrophages

4: CD8+ T cells

290-: A patient presented with a progressive history of muscle weakness resulting in getting up from a chair and climbing steps. The physician also notices a lilac colored discoloration of the upper eyelids associated with periorbital edema. Laboratory evaluation reveals increased creatinine phosphokinase and a positive antinuclear antibody. Which of the following antibodies is most expected to be seen in this patient?

1: Anti-Jo1 antibodies

2: Anti-P155 antibody

3: Anti-P140 antibody

4: Anti-Mi2 antibodies

291-: Springcatarrh is which type of hypersensitivity reaction -

1: Type I

2: Type II

3: Type II & III

4: Type IV

292-: 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

293-: In an AIDS patient chorioretinitis is typically caused by:

1: Cytomegalovirus

2: Toxoplasma gondi

3: Cryptococcus neoformans

4: Histoplasma capsulatum

294-: Cellular immunity is affected by -

1: Cytokines

2: Immunoglobulins

3: g-globulins

4: Prostaglandins

295-: 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)

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

1: Chronic infectious mononucleosis

2: Primary syphilis

3: Scarlet fever

4: Primary atypical pneumonia

297-: 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

298-: Variable poion of antibody molecule is -

1: C-terminal

2: N-terminal

3: Intermediate region

4: Carbohydrate moiety

299-: Interleukins and growth factors are

1: Neurotransmitters

2: Metalloproteinases

3: Phosphoproteinases

4: Cytokines

300-: MHC class III genes encode -

1: Complement component C3

2: Tumor necrosis factor

3: Interleukin 2

4: Beta 2 microglobulin

301-: Secondary amyloidosis is a complication of?

1: RA

2: Plasmacytosis

3: Multiple myeloma

4: None

302-: DNA is detected by:

1: Southern blot

2: Northern blot

3: Western blot

4: Eastern blot

303-: Southern blotting is used for -

1: RNA

2: DNA

3: Protein

4: Antibody

304-: Complement formed in liver -

1: C2,C4

2: C3,C6,C9

3: C5,C8

4: C1

305-: 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

306-: 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

307-: First antibody produced by newborn?

1: IgA

2: IgG

3: IgE

4: IgM

308-: Which is not a macrophage -

1: Monocyte

2: Microglia

3: Kupffer cells

4: Lymphocytes

309-: Which is not major criteria for diagnosis of rheumatic fever ?

1: Carditis

2: Subcutaneousnodules

3: Increased ASLO

4: Arthritis

310-: HIV affects?

1: B-cells

2: Helper T cells

3: Suppressor T-cells

4: Cytotoxic T-cells

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

1: AUG

2: UGC

3: GUG

4: GCU

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

1: SLE

2: RA

3: Sjogren's syndrome

4: Systemic sclerosis

313-: Prausnitz-kustner reaction is a

1: Type I Hypersensitivity

2: Type II Hypersensitivity

3: Type III Hypersensitivity

4: Type IV Hypersensitivity

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

1: IgG

2: IgD

3: CD4

4: Prostaglandins

315-: Which portion of antibody binds to antigen -

1: Hinge region

2: Constant region

3: Variable region

4: Hypervariable region

316-: B lymphocytes are associated with -

1: CD 19

2: CD 27

3: CD 4

4: CD 35

317-: Which Antibody crosses placenta?

1: IgG1

2: IgG4

3: IgA

4: IgD

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

1: Autoimmune hemolytic anemia

2: Anaphylaxis

3: Extrinsic asthma

4: Hay fever

319-: CD marker for cytotoxic T-cells-

1: CD 4

2: CD 8

3: CD 21

4: CD 45

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

1: Agglutination

2: Precipitation

3: Complement fixation test

4: Hemagglutination test

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

1: Rabbit

2: Adult mice

3: Monkey

4: Guinea Pig

322-: Large granular cells belong to -

1: Neutrophils

2: Macrophages

3: Eosinophils

4: Lymphocytes

323-: The most common primary immunodeficiency is:

1: Common variable immunodeficiency

2: Isolated IgA immunodeficiency

3: Wiskott-Aldrich syndrome

4: AIDS

324-: Maximum half life -

1: Ig G

2: Ig A

3: Ig M

4: Ig E

325-: Antibody involved in primary immune response -

1: IgE

2: IgM

3: IgA

4: IgD

326-: 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

327-: Chediak higashi syndrome, defect is -

1: Fusion of lysosome

2: T-cells

3: B-cells

4: Complement

328-: 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

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

1: NK cell

2: T cell

3: Histiocyte

4: Macrophage

330-: 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

331-: 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

332-: Which pa of bacteria is most antigenic -

1: Proetin coat

2: Lipopolysaccharide

3: Nucleic acid

4: Lipids

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

1: Natural active immunity

2: Aificial active immunity

3: Aificial passive immunity

4: Adoptive immunity

334-: 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

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

1: Opsonisation

2: Chemotaxis

3: Decoding

4: CFT

336-: Pentameric structure -

1: IgM

2: IgG

3: IgA

4: IgD

337-: 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

338-: Most potent antigen presenting cell is?

1: B cells

2: Dendritic cells

3: T cells

4: NK cells

339-: Complement attaches to immunoglobulin at:

1: Aminoterminal

2: Fab region

3: Variable region

4: Fc fragment

340-: All of the following statements are true about Wiskott Aldrich syndrome except:

1: It is an autosomal recessive disorder

2: There is failure of aggregation of platelets in response to agonists

3: Thrombocytopenia is seen

4: Patient presents with eczema

341-: Which one of the following is NOT true about chemical mediators:

1: Leukotrienes are formed by lipo-oxygenase pathway

2: Histamine is a preformed chemical mediator

3: Prostaglandin causes vasoconstriction at the site of inflammation

4: Thromboxane A2 is associated with platelet aggregation

342-: 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

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

1: Immediate

2: Immune complex-mediated

3: Antibody-mediated

4: Delayed-type

344-: Anti RO (SSA) antibodies are seen in:

1: Systemic sclerosis

2: Subacute cutaneous lupus

3: Myasthenia gravis

4: Mixed connective tissue disorder

345-: 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

346-: 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

347-: Examples of type I hypersensitivity is:

1: Lepromin test

2: Tuberculin

3: Casoni's test

4: Arthus reaction

348-: Most common malignancy in AIDS:

1: Kaposi sarcoma

2: B cell lymphoma

3: Leukemia of myeloid origin

4: Burkitt's lymphoma

349-: Antigen-antibody binding occurs at-

1: Surface

2: Center

3: Inside molecule

4: Anywhere in structure

350-: Immunoglobulin found in bronchial secretion:

1: IgA

2: IgG

3: IgM

4: IgE

351-: Plasma cells are derived from?

1: T cells

2: B cells

3: Macrophages

4: Neutrophils

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

1: IgG

2: IgA

3: IgM

4: IgE

353-: To rule out rheumatoid arthrirtis, most important among the followings is?

1: HLA DR8

2: HLA DR4

3: HLA DQ1

4: HLA B27

354-: 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

355-: First immunoglobulin to appear following infection -

1: IgG

2: IgM

3: IgA

4: IgE

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

1: Immune complex

2: Lipopolysaccharide

3: Exotoxin

4: Zymosan

357-: Virus infected cells killed by:

1: Natural killer cells

2: Plasma cells

3: B cells

4: None

358-: Superantigen is produced by

1: Staphylococcus aureus

2: Streptococcus pneumoniae

3: Pseudomonas aeruginosa

4: Clostridium diphtheriae

359-: Immune complex mediated hypersensitivity is classified as: (Repeat)

1: Type 1 H ypersensitivity reaction

2: Type 2 Hypersensitivity reaction

3: Type 3 Hypersensitivity reaction

4: Type 4 Hypersensitivity reaction

360-: A 25-year-old woman presents with a history of recurrent shoness of breath and severe wheezing. Laboratory studies demonstrate that she has a deficiency of C1 inhibitor, an esterase inhibitor that regulates the activation of the classical complement pathway. What is the diagnosis?

1: Chronic granulomatous disease

2: Hereditary angioedema

3: Myeloperoxidase deficiency

4: Selective IgA deficiency

361-: Which is not related to immunity -

1: MPGN

2: PSGN

3: Diabetic nephropathy

4: IgA nephropathy

362-: Center of complement pathway -

1: C3

2: C1

3: C5

4: C2

363-: 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

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

1: Aificial active

2: Aificial passive

3: Natural active

4: Natural passive

365-: Prozone phenomenon is due to -

1: Excess antigen

2: Excess antibody

3: Hyperimmune reaction

4: Dispropoiona te antigen-antibody cells

366-: 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

367-: 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

368-: Macrophages- false statement is?

1: Derived from monocytes

2: Harbor Mycobacteria

3: Involved in Type 3 HSN

4: Produces TNF and interleukins

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

1: Type-1

2: Type-II

3: Type-Ill

4: Type-IV

370-: 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

371-: A 40-year-old man complains of a 2-week history of increasing abdominal pain and yellow discoloration of his sclera. Physical examination reveals right upper quadrant pain. Laboratory studies show elevated serum levels of alkaline phosphatase (520 U/dL) and bilirubin (3.0 mg/dL). A liver biopsy shows poal fibrosis, with scattered foreign bodies consistent with schistosome eggs. Which of the following inflammatory cells is most likely to predominate in the poal tracts in the liver of this patient?

1: Basophils

2: Eosinophils

3: Macrophages

4: Monocytes

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

1: Type I

2: Type II

3: Type III

4: Type IV

373-: Skin test useful in Hydatid disease is?

1: Casoni's test

2: Schick test

3: Patch test

4: Dick s test

374-: HLA complex is on chromosome -

1: 6

2: 7

3: 8

4: 9

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

1: Type I

2: Type II

3: Type III

4: Type IV

376-: Langerhans cells in skin are -

1: Antigen presenting cells

2: Pigment producing cells

3: Keratin synthesizing cells

4: Sensory neurons

377-: 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

378-: Which of the following genetic aberrations is not a causative mechanism in cases of Prader-Willi syndrome?

1: Gene deletions

2: Defective genomic imprinting

3: Single nucleotide polymorphisms (SNPs)

4: Uniparental disomy

379-: 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

380-: MHC1 is involved in?

1: Tumor lysis

2: Mixed leukocyte reaction

3: Autoimmune disease susceptibility

4: All of the above

381-: 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

382-: Graft Versus host reaction is mediated by

1: Macrophages

2: T lymphocytes

3: B lymphocytes

4: T lymphocytes and macrophages

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

1: Burnet

2: Susumu Tonegawa

3: Neils K jerne

4: Paul Ehrlich

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

1: SLE

2: Ahus reaction

3: Contact dermatitis

4: Post streptococcal glomerulonephritis

385-: Common antibody seen in antiphospholipid syndrome:

1: Anticardiolipin

2: Anti-b2GPI

3: ANA

4: Anti-Sm

386-: Cellular immunitty is induced by -

1: Nk-cells

2: Dendritic-cells

3: TH1-cells

4: TH2-cells

387-: Which of these is not an antigen presenting cell?

1: Bipolar cell

2: Dendritic cell

3: Follicular Dendritic cell

4: Tissue macrophages

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

1: Ahus reaction

2: SLE

3: Autoimmune hemolytic anemia

4: Contact dermatitis

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

1: Type I

2: Type II

3: Type III

4: Type IV

390-: HLA association with Myasthenia gravis is -

1: HLA-B27

2: HLA-B51

3: HLA-B47

4: HLA-B8

391-: SCID is caused due to deficiency of?

1: Pyridoxine phosphate

2: Cytochrome oxidase

3: Adenosine deaminase

4: Phyntanoyl Co A

392-: 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

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

1: Type 1

2: Type 2

3: Type 3

4: Type 4

394-: Widal test is a type of

1: Slide agglutination test

2: Tube agglutination test

3: CFT

4: Ring precipitation test

395-: Antibody transferred from mother to foetus -

1: IgG

2: IgM

3: IgD

4: IgA

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

1: Macrophages

2: Mast cells

3: Neutrophils

4: Lymphocytes

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

1: Agglutination

2: Complement fixation

3: Precipitation

4: Heamagglultination

398-: 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

399-: A patient has been diagnosed with systemic sclerosis. He has the presence of anti RNA polymerase III antibody. Which of the following is more common in this patient?

1: Reduced risk of scleroderma renal crisis

2: Acute onset of disease

3: Reduced risk of malignancy

4: Increased risk of pulmonary hypeension

400-: The mechanism of the development of Acute Rheumatic Fever is which of the following?

1: Cross reactivity with exogenous antigen

2: Innocent bystander effect

3: Due to toxin secretion by streptococci

4: Release of pyrogenic cytokines

401-: First antibody response is mediated by -

1: IgE

2: IgM

3: IgA

4: IgD

402-: 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

403-: 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

404-: 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

405-: 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

406-: 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

407-: Most common accepted theory for antibody production is

1: Direct template

2: Indirect template

3: Natural selection

4: Clonal selection

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

1: Macrophages

2: Kupffler cells

3: NK cells

4: Neutrophils

409-: 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

410-: 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

411-: B cells are processed in

1: Bone marrow

2: Liver

3: Spleen

4: Lymph nodes

412-: 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

413-: Graft from homozygotic twin is known as -

1: Autograft

2: Isograft

3: Allograft

4: Xenograft

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

1: IgA

2: IgM

3: IgG

4: IgD

415-: Chediak - Higashi syndrome, true is:

1: Defect in phagocytosis

2: Neutropenia

3: Agammaglobulinemia

4: IgA deficiency

416-: Which category of hypersensitivity involves complement activation?

1: 2

2: 3

3: 2 & 3

4: 4 & 2

417-: Anti-topoisomerase I is marker of:

1: Systemic sclerosis

2: Classic polyaeritis nodosa

3: Nephrotic syndrome

4: Rheumatoid ahritis

418-: Proliferation and survival of myeloma cells are dependent on which of the following cytokines?

1: IL-1

2: IL-6

3: IL-2

4: IL-5

419-: 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

420-: 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

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

1: 1

2: 2

3: 3

4: 4

422-: 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

423-: HLA III gene codes for -

1: Immunological reaction in graft rejection

2: Complement

3: Graft versus host reaction

4: Immunoglobulins

424-: 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.

425-: Immune privilege site is?

1: Seminiferous tubule

2: Optic nerve

3: Area postrema

4: Spinal canal

426-: Antigen binding site in immunoglobulin is -

1: Variable region

2: Hypervariable region

3: Constant region

4: Idiotype

427-: 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

428-: 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

429-: 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

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

1: Southern blot

2: Nohern blot

3: Western blot

4: None

431-: Amyloidosis is?

1: RNA misfolding

2: DNA repair defect

3: Mitochondrial defect

4: Misfolding of protein

432-: Mast cell synthesize and/or secrete -

1: Adrenaline

2: Ach

3: Histamine

4: Heparin

433-: IgE receptor present on?

1: Mast cell

2: NK cell

3: B cell

4: T cell

434-: Which of the following is false about monoclonal gammopathy of unknown significance (MGUS)?

1: Less than 3g/dL of monoclonal protein

2: No evidence of Bence-Jones proteinuria

3: Bone marrow plasma cells less than 10%

4: Does not progress to multiple myeloma

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

1: AA

2: AL

3: Beta - 2- microglobulin

4: ATTR

436-: 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

437-: A 9-month-old girl with a history of recurrent pulmonary infections is found to have a congenital deficiency of adenosine deaminase, which is associated with a viual absence of lymphocytes in her peripheral lymphoid organs. What is the appropriate diagnosis?

1: Bruton X-linked agammaglobulinemia

2: DiGeorge syndrome

3: Isolated IgA deficiency

4: Severe combined immunodeficiency

438-: 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

439-: All are true about endotoxins except:

1: Lipopolysaccharides in nature

2: Circulated in blood

3: Highly antigenic

4: Induces IL1 and TNF

440-: A 21-year-old woman presents with a 3-month history of malaise, joint pain, weight loss, and sporadic fever. The patient appears agitated. Her temperature is 38degC (101degF). Other physical findings include malar rash, erythematous pink plaques with telangiectatic vessels, oral ulcers, and non blanching purpuric papules on her legs. Laboratory studies show elevated levels of blood urea nitrogen and creatinine. Antibodies directed to which of the following antigens would be expected in the serum of this patient?

1: C-ANCA (anti-proteinase-3)

2: Double-stranded DNA

3: P-ANCA (anti-myeloperoxidase)

4: Rheumatoid factor

441-: In multiple myeloma there is proliferation of -

1: Plasma cells

2: Basophils

3: Eosinophils

4: Neutrophils

442-: T-cell mediated disease is?

1: Asthma

2: Myasthenia gravis

3: SLE

4: Sarcoidosis

443-: Endogenous chemoattractant is:

1: C5a

2: Bacterial products

3: Lipopolysaccharide A

4: C8

444-: Delayed hypersensitivity involves:

1: Neutrophils

2: Monocytes

3: Eosinophils

4: Lymphocytes

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

1: CD2

2: CD3

3: CD 19

4: CD 25

446-: Cachectin is produced by -

1: Neutrophils

2: Eosinophils

3: Macrophages

4: Basophils

447-: 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

448-: 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

449-: All are involved in HIV except

1: Macrophages

2: Lymphocytes

3: Neutrophils

4: Dendritic cells

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

1: Serum sickness

2: Farmer's lung

3: SLE

4: Graft rejection

451-: All the following disorders are inherited except:

1: Protein S deficiency

2: Antiphospholipid antibody syndrome

3: Protein C deficiency

4: Factor V Leiden mutation

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

1: IgA

2: IgG

3: IgM

4: IgD

453-: 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

454-: Chediak-Higashi syndrome

1: Disorders of specific immunity

2: Disorders of complement

3: Disorders of phagocytosis

4: Secondary immunodeficiencies

455-: Interferon is....in nature -

1: Protein

2: Lipid

3: Polysaccharides

4: All of the above

456-: CD4 count refers to -

1: T helper cells

2: B cells

3: Cytotoxic cells

4: Both B And T Cells

457-: 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

458-: 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

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

1: Type I

2: Type II

3: Type III

4: Type IV

460-: 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

461-: Analysis of protein antigen is by

1: Southern blot

2: Nohern blot

3: Western blot

4: Eastern blot

462-: Chediak Higashi syndrome is characterized by-

1: Giant granules in leukocytes

2: Albinism

3: Mutation in LYST gene

4: All the above

463-: C3 complement is cleared by?

1: CD 59

2: CD 55

3: Factor D

4: Factor E

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

1: IgG

2: IgD

3: CD4

4: Protaglandins

465-: Opsonins are -

1: C3a

2: C3b

3: C5a

4: C5-C9

466-: A neonate develops spastic contractions on the second postpaum 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

467-: Which is concerned with cell mediated immunity -

1: B-Lymphocytes

2: T-Lymphocytes

3: Eosinophils

4: Monocytes

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

1: IgA

2: IgD

3: IgM

4: IgG

469-: 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

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

1: Alpha

2: Beta

3: Gamma

4: All of the above

471-: Aschoff nodules are characteristically seen in: (Repeat)

1: Rheumatic carditis

2: Infective endocarditis

3: Viral Myocarditis

4: Libman-Sacks endocarditis

472-: Increased level of IgM indicates-

1: Vaccination

2: Immunized person

3: Acute infection

4: Chronic infection

473-: Antischkow cells seen in all except

1: Systemic sclerosis

2: Rheumatic Fever

3: Iron def Anemia

4: Recurrent aphthous stomatitis

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

1: Detects mutation

2: Recognizes trinucleotide repeat

3: Detects deletion

4: Blunt ends are produced

475-: 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

476-: An 8-month-old boy with a history of recurrent pneumonia is found to have almost no circulating IgG. Cellular immunity is normal. His brother had this same disease and died of echovirus encephalitis. His parents and sisters have normal serum levels of IgG. What is the appropriate diagnosis?

1: DiGeorge syndrome

2: Isolated IgA deficiency

3: Wiskott Aldrich syndrome

4: X-linked agammaglobulinemia of Bruton

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

1: Agglutination

2: Precipitation

3: Flocculation

4: Complement fixation

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

1: Monocytes

2: Reticuloendothelial cells

3: Neutrophils

4: Lymphocytes

479-: Aschoff bodies in rheumatic hea disease show all of the following, except:

1: Antischkow cells

2: Epitheloid cells

3: Giant cells

4: Fibrinoid necrosis

480-: HLA associated with rheumatoid arthritis is -

1: HLA B27

2: HLA DR 4

3: HLA B19

4: HLA DR2

481-: Runt disease is -

1: Graft rejection

2: Graft versus host reaction

3: Deficient T cell function

4: Complement deficiency

482-: Yearly vaccination on fixed dates is done for

1: Polio

2: Malaria

3: Pertusis

4: Tetanus

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

1: Distribution

2: Absorption

3: Antigenicity

4: Metabolism

484-: 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

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

1: Xenograft

2: Autograft

3: Allograft

4: Isograft

486-: Highest molecular weight immunoglobulins are

1: IgG

2: IgA

3: IgM

4: IgD

487-: Mac Callum's patch is diagnostic of -

1: Infective endocarditis

2: Rheumatic endocarditis

3: Myocardial infarction

4: Tetralogy of Fallot (ToF)

488-: 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

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

1: Tetany

2: Eczema

3: Mucocutaneous candidiasis

4: Absent B and T cells

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

1: Multiple myeloma

2: Cystinosis

3: Gout

4: Eale's disease

491-: Which immunoglobulin crosses placenta?

1: IgG

2: IgM

3: IgA

4: IgD

492-: Myasthenia gravis is associated with:

1: Hypergammaglobulenaemia

2: Thymoma

3: Squamous cell carcinoma

4: Hepatic adenoma

493-: Antibody elevated in parasitic infection -

1: IgA

2: IgE

3: IgG

4: IgM

494-: Atopy is mediated by -

1: IgE

2: IgD

3: IgM

4: IgA

495-: A 19-year-old intravenous drug user has regularly sought human immunodeficiency virus (HIV) testing, always with negative results. He admits to carelessly sharing needles on multiple occasions with individuals later found to be HIV-positive. He has heard that there is an inherited genetic basis for some people to be relatively "immune" to HIV infection. The genetic change that he is referring to is a mutation in a gene coding for which of the following proteins?

1: CCR5

2: CD4

3: gp120

4: gp41

496-: 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

497-: 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

498-: Type III reaction is:

1: Antibody mediated

2: Immune complex mediated

3: Cell mediated

4: None

499-: 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

500-: A 52 year old female came to OPD with dysphagia, hea burn and pain in joints of her fingers. She mentions that her fingers and toes turns blue on exposure to cold. Physical examination reveals thickened skin of her fingers and tender, painful small lumps under skin of flexor surface of hand, some of which drain white chalky substance. what is the clinical diagnosis?

1: Systemic lupus erythematosus

2: Sjogren Syndrome

3: CREST syndrome

4: Mikulicz syndrome

501-: Perforins are produced by -

1: Cytotoxic T cells

2: Suppressor T cells

3: Memory helper T cells

4: Plasma cells

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

1: Kidney

2: Liver

3: Eye lens

4: Platelets

503-: 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

504-: Rubor is inflammation due to:

1: Decreased tissue oncotic pressure

2: Decreased oncotic pressure in arterioles

3: Constriction of the capillaries

4: Dilatation of the arterioles

505-: Interferon gamma secreted by?

1: CD4 T cell

2: CD8 cells

3: RBC

4: Neutrophils

506-: 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

507-: 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

508-: 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

509-: Immunoglobulin secreted by fetus as primary response -

1: IgA

2: IgM

3: IgG

4: IgD

510-: All of the following are included in the criteria for diagnosis of SLE, except:

1: Oral ulcers

2: Psychosis

3: Discoid rash

4: Leucocytosis

511-: 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

512-: Which antibody protects from intestinal infection?

1: IgA

2: IgM

3: IgG

4: IgE

513-: Helper cells belong to?

1: T cells

2: Macrophages

3: B cells

4: Monocytes

514-: Common between B and T cells -

1: Origin from same cell lineage

2: Site differentiation

3: Antigenic marker

4: Both humoral and cellular immunity

515-: 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

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

1: Histones

2: Proteins

3: RNA

4: DNA

517-: Job syndrome is due to

1: Defect in chemotaxis

2: Defect in phagocytosis

3: Defect in synthesis

4: Defect in leukocyte function

518-: Immune complex mediated hypersensivitv reaction is -

1: Type-1 hypersensitivity

2: Type -2 hypersensitivity

3: Type -3 hypersensitivity

4: Type -4 hypersensitivity

519-: Functions of complement include all except-

1: Chemotaxis

2: Opsonization

3: Celllysis

4: Antigen presentation

520-: A 16-year-old girl comes to the hospital with chest pain and respiratory distress. On physical examination, the patient is sho of breath, wheezing and gasping for air. A prominent pansystolic hea murmur and a prominent third hea sound are heard on cardiac auscultation. An X-ray study of the chest shows marked enlargement of the hea. The patient expires despite intense suppoive measures. At autopsy, microscopic examination of the myocardium discloses aggregates of mononuclear cells arranged around centrally located deposits of eosinophilic collagen. What is the appropriate diagnosis?

1: Acute bacterial endocarditis

2: Rheumatic hea disease

3: Subacute bacterial endocarditis

4: Viral myocarditis

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

1: Phytohemagglutinin

2: Chemotactic factor

3: Leukotrienes

4: Prostaglandins

522-: Most common primary malignancy of bone is?

1: Multiple myeloma

2: Osteoid osteoma

3: Osteosarcoma

4: PNET

523-: Gross findings of hea from an 18yrs/F presented with a history of sore throat 3 months back & joint pains have been shown below. On auscultatory finding, a murmur was noted.What is your diagnosis

1: Libmansach endocarditis

2: Infective endocarditis

3: Rheumatic carditis

4: Marantic carditis

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

1: IgA

2: IgG

3: IgM

4: IgD

525-: Hereditary angioneurotic edema is due to -

1: Deficiency of C1 inhibitor

2: Deficiency of NADPH oxidase

3: Deficiency of MPO

4: Deficiency of properdin

526-: NK cells express -

1: CD 15,CD55

2: CD16,CD56

3: CD 16,CD 57

4: CD21 CD 66

527-: Which is not pyrogenic -

1: IL-1

2: TNF-a

3: IL-4

4: IL-6

528-: 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

529-: Opsonisation is by -

1: IgA

2: IgE

3: IgG

4: IgM

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

1: Dendritic cell

2: Macrophages

3: Langerhans cell

4: Kupffer cells

531-: 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

532-: Complement binding immunoglobulin the classical pathway is -

1: IgG & IgM

2: IgG & IgA

3: IgG & IgD

4: IgD & IgE

533-: 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

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

1: Type 1

2: Type 2

3: Type 3

4: Type 4

535-: Lipopolysaccharide of gram negative bacteria -

1: Hapten

2: Heterophile antibody

3: Stimulator for B lymphocytes

4: Induce cell mediated immunity'

536-: The most important source of histamine -

1: Mast cells

2: Eosinophil

3: Neutrophil

4: Macrophages

537-: 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

538-: 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)

539-: Polysaccharide antigens are:

1: T cell independent antigens

2: T cell dependent antigens

3: MHC I dependent antigens

4: MHC II dependent antigens

540-: Autoantigen is -

1: Blood group antigen

2: Forssman antigen

3: Both

4: None

541-: Which in Pan T-cell marker -

1: CD3

2: CD8

3: CD45

4: CD30

542-: 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

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

1: Immunoglobulin

2: CD3

3: TCR

4: MHC Class I

544-: Tissue of origin of Kaposi sarcoma is:

1: Lymphoid

2: Vascular

3: Neural

4: Muscular

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

1: IgGl

2: IgG2

3: IgG3

4: IgG4

546-: Allograft rejection is an example of?

1: GVHD

2: Delayed types hypersensitivity

3: Immediate hypersensitivity

4: Acute rejection

547-: Deficiency of complement proteins C5 to C8 leads to increased infection by which of the following?

1: Streptococcus

2: Neisseria

3: Pseudomonas

4: Staphylococcus

548-: 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

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

1: IL-2

2: IL-4

3: IL-5

4: IL-10

550-: Which is not a heterophile agglutination test -

1: Weil Felix test

2: Widal test

3: Paul Bunnel test

4: Streptococcus MG

551-: Mast cells release?

1: IFN-g

2: IL-5

3: Histamine

4: Lysozyme

552-: 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

553-: 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

554-: 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

555-: Autoimmunity is caused by all of the following, except:

1: Infections

2: Expression of cryptic antigens

3: Negative selection of T-cells in the thymus

4: Inappropriate expression of the MHC proteins

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

1: Enteric fever

2: Rabies antigen

3: HIV

4: Syphilis

557-: Complement synthesis by liver is?

1: C1

2: C5

3: C3

4: C4

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

1: Antigen specificity

2: Species specificity

3: Isospecificity

4: Auto specificity

559-: MALT is most commonly present in

1: Duodenum

2: Jejunum

3: Ileum

4: Stomach

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

1: IgM

2: IgG

3: IgG & IgA

4: IgG, IgM, IgA, IgE

561-: MAST cells play a central role in the development of which type of hypersensitivity reaction?

1: Immediate

2: Antibody mediated

3: Cell mediated

4: Immune complex mediate

562-: HLA associated with psoriasis:

1: HLA-B27

2: HLA-DR4

3: HLA-CW6

4: HLA-B8

563-: Risk of HIV transmission is not seen with:

1: Whole blood

2: Platelets

3: Plasma derived Hepatitis B vaccine

4: Leucocytes

564-: 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

565-: 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.

566-: Antigen combining site of the antibody -

1: Idiotype

2: Paratope

3: Epitope

4: Hapten

567-: 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

568-: 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

569-: Role of macrophages in antibody production is?

1: Antigen presentation

2: B cell production

3: Class switching

4: B cell activation

570-: Delayed hypersensitivity is due to -

1: Neutrophils

2: Monocytes

3: Eosinophils

4: Lymphocytes

571-: 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

572-: 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

573-: Which mediator of inflammation does NOT cause fever?

1: IL-1

2: TNF-a

3: Nitric Oxide

4: Prostaglandin

574-: 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

575-: All of Which is family of selectin., except -

1: P selectin

2: L selectin

3: A selectin

4: E selectin

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

1: IgA

2: IgG

3: IgE

4: IgM

577-: Tuberclin test is reaction of -

1: Anaphylaxis mediated

2: Cell mediated

3: Antibody mediated

4: Immune complex mediated

578-: 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

579-: 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

580-: 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

581-: 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

582-: Vaccination is based on the principle of -

1: Agglunation

2: Phagocytosis

3: Immunologic Memory

4: Clonal Detection

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

1: Intracellular antigen, extracellular antigens and complement

2: Extracellular antigens, intracellular antigens, toxins

3: Cytokines

4: Macrophages

584-: MHC class III genes encode:

1: Complement component C3

2: Tumor necrosis factor

3: Interleukin 2

4: Beta 2 microglobulin

585-: MHC III codes for

1: TNF alpha

2: IL 1

3: HLA A

4: HLAB

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

1: Allograft

2: Isograft

3: Xenograft

4: Autograft

587-: 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

588-: Activator of alternative complent pathway -

1: Antigen-Antibody complex

2: Mannose-binding lectin

3: Bacterial surface polysaccharide

4: All of the above

589-: Biopsy of parotid gland in Sjogren's shows:

1: Lymphocytes

2: Neutrophils

3: Eosinophils

4: Basophils

590-: 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

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

1: Immune response

2: Phagocytosis

3: Liberation of histamine

4: Destruction of old crythrocytes

592-: 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

593-: IL_2 is secreted by -

1: CD4 lymphocytes

2: CD8 cells

3: Macrophages

4: Neutrophils

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

1: IL6

2: IL3

3: IL12

4: IFN gamma

595-: 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

596-: Activation of classical complement pathway -

1: IgA

2: IgG

3: IgM

4: IgD

597-: 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

598-: 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

599-: 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

600-: Following is an example of Type 4 hypersensitivity?

1: Glomerulonephrirtis

2: Serum sickness

3: Myasthenia gravis

4: Contact dermatitis

601-: The professional antigen presenting cells -

1: B cells

2: Dendritic cells

3: T cells

4: NK cells

602-: M-spike in multiple myeloma is due to?

1: IgM

2: IgA

3: IgG

4: IgD

603-: Most common antibody in sjogren syndrome

1: Anti-DNA topoisomerase

2: Anti-Centromere

3: Anti-RNA polymerase

4: Anti-Ribonucleoprotein

604-: Antigen part that is attached to antibody -

1: Epitope

2: Paratope

3: Idiotype

4: Allotype

605-: 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

606-: 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

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

1: IgG

2: IgM

3: IgA

4: IgE

608-: Type III reaction is -

1: Antibody mediated

2: Immune complex mediated

3: Cell mediated

4: None

609-: Active immunity is not acquired by -

1: Infection

2: Vaccination

3: Immunoglobulin transfer

4: Sub-clinical infection

610-: Oedema can be caused by:

1: decreased hydrostatic pressure

2: sodium retention

3: hyperproteinaemia

4: polycythaemia

611-: Lymphocyte phenotype test done for?

1: Agammaglobinemia

2: SCID

3: Sepsis

4: Acute leukemia

612-: 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

613-: CD4 is associated with HLA?

1: HLA 1

2: HLA 2

3: HLA 3

4: All of them

614-: The most avidly complement fixing antibody is -

1: IgA

2: IgG

3: IgM

4: IgE

615-: Delayed hypersensitivity involves -

1: Neutrophils

2: Monocytes

3: Eosinophils

4: Lymphocytes

616-: 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

617-: 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

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

1: B-cells

2: NADPH oxidase

3: IgA

4: T-cell

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

1: T cells

2: B cells

3: NK cells

4: Neutrophils

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

1: Releasing factor

2: Stop codon

3: Peptidyl transferase

4: UAA codon

621-: 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

622-: Most common site of angioedema:

1: Hands

2: Lips

3: 3rd week

4: Eyelid

623-: 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

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

1: Asthma

2: Contact dermatitis

3: SLE

4: AIHA

625-: Immunoglobulin transpoed through the placenta is

1: IgA

2: IgG

3: IgM

4: IgE

626-: 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.

627-: 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

628-: Allergic hypersensitivity is mediated by -

1: IgM

2: IgG

3: IgD

4: IgE

629-: 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

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

1: B cells

2: Active T cells

3: NK cells

4: Plasma cells

631-: 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

632-: In acute inflammation the tissue response consists of all except:

1: Vasodilatation

2: Exudation

3: Neutrophilic response

4: Granuloma formation

633-: Pinch purpura is seen in?

1: Primary systemic amyloidosis

2: Vitamin C deficiency

3: Purpura fulminans'

4: Kawasaki disease

634-: Hypersensitivity reaction seen in immune thrombocytopenic purpura is

1: 1

2: 2

3: 3

4: 4

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

1: IL-1

2: IL-2

3: IL-4

4: IL-3

636-: Virus infected cells are killed by -

1: Macrophages

2: Complement system

3: MHC II related cells

4: NK cells

637-: DNA is detected by -

1: Southern blot

2: Nohern blot

3: Western blot

4: Eastern blot

638-: Primary mediators of anaphylaxis are all EXCEPT:

1: Histamine

2: Serotonin

3: Prostaglandins

4: TNF

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

1: Opsonisation

2: Chemotaxis

3: Decoding

4: CFT

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

1: IgE

2: IgG

3: IgD

4: IgA

641-: Regarding severe combined immunodeficiency disease (SCID), which of the following statements is true?

1: Adenosine deaminase deficiency

2: Myeloperoxidase deficiency

3: NADPH oxidase deficiency

4: C1 esterase deficiency

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

1: IL-2

2: IL-4

3: IL-5

4: DL-10

643-: 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

644-: Hyperacute graft rejection is seen within

1: 24 hours

2: 1 week

3: 1 Month

4: 1 year

645-: Most impoant inflammatory mediator?

1: TNF

2: IL-2

3: Interferon

4: PAF

646-: GM-CSF among the following?

1: Filgrastim

2: Sargramostim

3: Aldesleukin

4: Interleukin-11

647-: 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)

648-: 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

649-: Opsonic index is related to -

1: Phagocytosis

2: Vasodilatation

3: Apoptosis

4: Necrosis

650-: 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

651-: Which immunoglobulin is scarce in human serum-

1: IgA

2: IgG

3: IgM

4: IgE

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

1: Type I

2: Type II

3: Type III

4: Type IV

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

1: Neutrophills

2: Natural killer cells

3: Basophils

4: Langerhans cells

654-: 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

655-: Histamine in anaphylaxis is secreted by

1: Mast cells

2: B-cells

3: Basophils

4: Macrophages

656-: Idiotypic class of antibody is determined by -

1: Fc region

2: Hinge region

3: Carboxy end

4: Amino end

657-: Type I hypersensitivity, the mediator is -

1: IgE

2: IgD

3: IgM

4: IgC

658-: Shrinking lung syndrome is seen in -

1: SLE

2: Rheumatoid arthritis

3: Scleroderma

4: Sarcoidosis

659-: 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

660-: Primary immune response is mediated by?

1: IgE

2: IgM

3: IgA

4: IgD

661-: MHC I is recognized by?

1: CD 4 T cells

2: CD 8 T cells

3: Dendritic cells

4: Macrophages

662-: Following injection of lymphokines, the same class of immunoglobulin is produced. This is to be referred as:

1: Group switching

2: Clonal selection

3: Hybridisation

4: Class switching

663-: 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

664-: 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

665-: IL-1 is produced by -

1: Macrophage

2: Helper T lymphocytes

3: B cells

4: Cytotoxic T-cells

666-: 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

667-: Immunoglobulins are seen as surface antigens on:

1: Neutrophils

2: Monocytes

3: NK Cells

4: B cells

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

1: Heavy chain

2: Light chain

3: Both

4: None of the above

669-: 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

670-: Most potent stimulator of naive T cells -

1: Mature dendritic cells

2: Follicular dendritic cells

3: Macrophages

4: B cell

671-: 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

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

1: IgA

2: IgG

3: IgE

4: IgM

673-: 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

674-: Thymic hypoplasia is seen in -

1: Wiskott-Aldrich syndrome

2: Digeorge syndrome

3: IgA deficiency

4: Agammaglobulinemia

675-: The immunoglobulin lacking hinge region is

1: Ig A

2: Ig G

3: Ig D

4: Ig E

676-: 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

677-: A 10-year-old boy with a 2-week history of an upper respiratory infection was admitted to the hospital with malaise, fever, joint swelling and diffuse rash. The patient is treated and discharged. However, the patient suffers from recurrent pharyngitis and a few years later, develops a hea murmur. This patient's hea murmur is most likely caused by exposure to which of the following pathogens?

1: Beta-hemolytic streptococcus

2: Candida albicans

3: Epstein-Barr virus

4: Streptococcus viridans

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

1: Widal test

2: Weil - felix test

3: VDRL

4: Paul - Bunnel test

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

1: Secretory piece

2: H chain

3: L chain

4: j piece

680-: CD 4 are associated with -

1: Helper T cell

2: Supressor T cell

3: NK cells

4: T cell antigen receptor complex

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

1: T cells

2: B-Cells

3: NK cells

4: LAK Cells

682-: Example for Live vaccine is

1: Rubella and Yellow fever

2: Polio and TAB

3: Diptheria and Tetanus

4: Hepatitis A and Rabies

683-: 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

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

1: Macrophages

2: Mast cells

3: Neutrophils

4: Lymphocytes

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

1: Idiotype

2: Allotype

3: Epitope

4: Paratope

686-: 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

687-: Components of innate immunity are -

1: T lymphocytes

2: Complement proteins

3: B lymphocytes

4: NK cells

688-: During pregnancy HIV transmission occurs mostly during:

1: 1st trimester

2: 2nd trimester

3: 3rd trimester

4: During labour

689-: C5a act as a/an?

1: Opsonin

2: Chemotactic agent

3: MAC

4: Vasodilator

690-: IgA secretion is seen in -

1: Tears and saliva

2: CSF

3: Hairs

4: Vaginal fluid

691-: 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

692-: 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

693-: NK cell activity is enhanced by:

1: IL1

2: TNF

3: IL 2

4: TGFb

694-: Xenograft is:

1: Graft across species

2: Graft from same species

3: Graft from same individual

4: Graft from same organ

695-: HLA allele associated with Graves disease is

1: DR4

2: B27

3: B8

4: DQ8

696-: Epitope spreading refers to:

1: A type of mechanism of spread of malignant tumors

2: One type of mechanism of HIV dissemination

3: A mechanism for the persistence and evolution of autoimmune disease

4: One of the mechanisms of apoptosis

697-: Granuloma formation is seen in Hypersensitivity reaction type

1: I

2: II

3: III

4: IV

698-: Antigen binding site on antibody is -

1: Hinge region

2: Constant region

3: Variable region

4: Hypervariable region

699-: 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

700-: 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

701-: 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

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

1: Schick test

2: Eleks gel precipitation test

3: Neil Mooser reaction

4: Naeglers test

703-: Which of the following is not a C-C chemokine?

1: IL-18

2: MCP-1

3: Eotaxin

4: MIP-1a

704-: NK cell marker is?

1: CD 34

2: CD 56

3: CD 1

4: CD 45

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

1: T-cells

2: B-cells

3: Neutrophils

4: Monocytes

706-: Hybridoma technique is used to obtain -

1: Specific antigen

2: Complement

3: Specific antibody

4: Interleukins

707-: All are peripheral lymphoid organs except -

1: Lymph nodes

2: Spleen

3: Mucosa associated lymphoid tissue

4: Thymus

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

1: Type I

2: Type II

3: Type III

4: Type IV

709-: Sago spleen is seen in

1: Infarction

2: Amyloidosis

3: Chronic venous congestion

4: Tuberculosis

710-: Paul bunnel reaction is a type of -

1: Agglutination

2: CFT

3: Precipitation

4: Flocculation test

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

1: Mast cell

2: Fibroblast

3: Melanocyte

4: Macrophages

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

1: Autologous grafts

2: Syngeneic grafts

3: Allogeneic grafts

4: Xenogeneic grafts

713-: 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

714-: The most potent stimulator of naive T cells is -

1: B cell

2: Mature dendritic cells

3: Epithelial cells

4: Macrophages

715-: Mysthenia gravis is which type of hypersensitivity-

1: Type I

2: Type II

3: Type III

4: Type IV

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

1: CD8

2: CD4

3: CD1a

4: CD1

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

1: C3a

2: C3b

3: C5a

4: LTB4

718-: Burkitt's lymphoma is malignancy of

1: B.cells

2: T cells

3: Antigen presenting cells

4: Null cells

719-: Diagnosis of X linked Agammaglobulinemia should be suspected if:

1: Female sex

2: Absent tonsils and no palpable lymph nodes on physical examination

3: High isohemagglutinins titers

4: Low CD3

720-: A 40 year old man has chronic cough with fever for several months. The chest radiograph reveals a diffuse reticulondular pattern. Microscopically on transbronchial biopsy there are focal areas of inflammation containing epitheloid cell granuloma, Langhans giant cells, and lymphocytes. These findings are typical for which of the following type of hypersensitivity immunologic responses:

1: Type I

2: Type II

3: Type III

4: Type IV

721-: Polyglandular autoimmune syndrome I true are all except -

1: Autosomal recessive

2: Mutations in gene APECED

3: Associated with chronic active hepatitis

4: Associated with celiac disease

722-: Hallmark of AIDS is reduction of

1: CD3

2: CD4

3: CD8

4: CD20

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

1: Type 1

2: Type 2

3: Type 3

4: Type 4

724-: Mc Callum's patch is diagnostic of:

1: Infective endocarditis

2: Rheumatic endocarditis

3: Myocardial infarction

4: Tetralogy of Fallot (ToF)

725-: 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

726-: 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

727-: Hypogammaglobenemia causes?

1: Chronic recurrent sinusitis

2: Epistaxis

3: Contractures

4: Eczemia

728-: RH incompatibility is?

1: Type 1 hypersensitivity reaction

2: Type 2 hypersensitivity reaction

3: Type 3 hypersensitivity reaction

4: Type 4 hypersensitivity reaction

729-: 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

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

1: 0-1

2: 5-Feb

3: 10-May

4: 15-20

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

1: Contact dermatitis

2: Hemolytic anemia

3: Serum sickness

4: Good pasture syndrome

732-: Secondary immune response is mediated by

1: IgA

2: IgG

3: IgM

4: IgE

733-: 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

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

1: C3

2: C5

3: C7

4: C9

735-: Interleukin secreted by Th1 cells include?

1: IL-2

2: IL-4

3: IL-10

4: IL-13

736-: Papain acts an gamma globulin to form -

1: 2 Fc fragments

2: 2 Fab fragments

3: I Fab fragments

4: None

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

1: Ionic bond

2: Covalent bond

3: Hydrogen bond

4: Vanderwalls forces

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

1: Type I

2: Type II

3: Type III

4: Type IV

739-: Nitro-blue tetrazolium test is done for?

1: Chronic glomerulonephritis

2: Chronic granulomatous disorder

3: Acute granulomatous disease

4: Chediak Higashi syndrome

740-: "Aschoff bodies" are seen in:

1: Rheumatoid arthritis

2: Rheumatic fever

3: Bacterial endocarditis

4: Marantic endocarditis

741-: 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

742-: Cell type that lacks HLA antigen is:

1: Monocyte

2: Thrombocyte

3: Neutrophil

4: Red blood cell

743-: 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

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

1: Isograft

2: Allograft

3: Xenograft

4: Autograft

745-: 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

746-: 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

747-: 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)

748-: Defect in Chediak Hegashi syndrome is?

1: Fusion of lysosome

2: T-cells

3: B-cells

4: Complement

749-: Band test is done in:

1: RA

2: SLE

3: Scleroderma

4: PAN

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

1: Carotenoids

2: Flavenoids

3: Curcumoids

4: Benzene

751-: 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

752-: Antigen idiotype is related to -

1: Fc fragment

2: Hinge region

3: C-terminal

4: N-terminal

753-: 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

754-: Following injury to a blood vessel, immediate haemostasis is achieved by -

1: Fibrin deposition

2: Vasoconstriction

3: Platelet adhesion

4: Thrombosis

755-: 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

756-: 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

757-: 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

758-: A 31-year-old man with AIDS complains of difficulty in 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

759-: Antinuclear antibodies are seen in:

1: SLE

2: RA

3: Sjogrens syndrome

4: All

760-: A 25-year-old lady presents with inability to form a fist and marked stiffening of joints. Diagnosis is.

1: Coup de sabre

2: Scleroderma

3: Morphea

4: Rheumatoid arthritis

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

1: Clone

2: Epitope

3: Idiotope

4: Effector

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

1: Hemorrhagic disease of newborn

2: Graves disease

3: Rheumatoid ahritis

4: Hemolytic anemia

763-: Cytokine having pyrogenic activity is:-

1: TGF-beta

2: IL-6

3: IL-5

4: IL-2

764-: Ig active in type 1 hypersensitivity.

1: A

2: E

3: D

4: G

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

1: Heavy chain

2: Light chain

3: Both

4: None

766-: T - cells mature in?

1: Bone marrow

2: Liver

3: Thymus

4: Lymph nodes

767-: Nitroblue tetrazolium test is used for?

1: Phagocytes

2: Complement

3: T cell

4: B cell

768-: What is true about interferon?

1: Are specific for individual viruses

2: Are protective against only viruses

3: Induce enzyme synthesis in the target cell

4: Are divided into 5 subtypes

769-: Leukocyte migration through capillary wall is called?

1: Rolling

2: Diapedesis

3: Migration

4: Pavementing

770-: Decreased T cell immunity is a feature of -

1: Digeorge syndrome

2: Hyper lgM syndrome

3: Severe congenital neutropenia

4: Chronic granulomatous diseas

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

1: Complement

2: NK cells

3: Macrophages

4: T cells

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

1: CD4

2: CD8

3: CD1

4: CD16

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

1: Autoimmune hemolytic anemia

2: Anaphylaxis

3: Extrinsic asthma

4: Hay fever

774-: 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

775-: Increased vascular permeability in acute inflammation is due to -

1: Histamine

2: IL 2

3: TGF beta

4: FGF

776-: 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

777-: TH1 cells produced by?

1: Memory T cells

2: Cytotoxic T cells

3: Helper T-cells

4: Suppressor T cells

778-: Which is concerned with cell mediated immunity?

1: B - Lymphocytes

2: T - Lymphocytes

3: Eosinophils

4: Monocytes

779-: 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

780-: Bence Jones proteins are derived from?

1: Alpha globulins

2: Light chain globulins

3: Beta globulins

4: Delta globulins

781-: Opsonization takes place through:

1: C3a

2: C3b

3: C5a

4: C5b

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

1: Enteropathic

2: Reactive arthritis

3: Rheumatoid arthritis

4: Ankylosing spondylitis

783-: 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

784-: Plasma cells are derived from:

1: T cells

2: B cells

3: Macrophages

4: Neutrophils

785-: 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

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

1: NK cell

2: NK cell only

3: Macrophage

4: NK cells, neutrophils & macrophages

787-: 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

788-: Graft from identical twin is defined as:

1: Allograft

2: Isograft

3: Xenograft

4: Autograft

789-: 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

790-: Superantigens causes -

1: Polyclonal activation of T-cells

2: Stimulation of B cells

3: Enhancement of phagocytosis

4: Activation of complement

791-: 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

792-: 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

793-: 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

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

1: Type I

2: Type II

3: Type III

4: Type IV

795-: 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

796-: 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

797-: Gene components of HLA class I includes -

1: A, B, C

2: DR

3: DQ

4: DP

798-: Examples of type 1 hypersensitivity is -

1: Lepromin test

2: Tuberculin

3: Casoni's test

4: Ahus reaction

799-: Leukotrienes are secreted by all except -

1: Macrophages

2: T4 cells

3: T8 cells

4: Platelets

800-: Recurrent Neisseria infections are predisposed by -

1: Early complement component deficiency

2: Late complement component deficiency

3: C1 esterase deificiency

4: Properdin deficiency

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

1: Epithelial surfaces

2: Antibody

3: Lysozyme

4: Sebum

802-: 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

803-: 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

804-: Antibody diversity is due to -

1: Gene rearrangement

2: Gene translocation

3: Antigenic variation

4: CD40 molecules

805-: Wiskott Aldrich syndrome true is -

1: Raised IgE

2: Reduced IgM

3: Reduced IgA

4: CD4 and CD8 defect

806-: Prozone phenomenon is a feature is -

1: Tularemia

2: Legionnaire's disease

3: Plague

4: Brucellosis

807-: Cell type which lacks HLA antigen is:

1: Monocyte

2: Thrombocytes

3: Neutrophil

4: Red blood cell

808-: Primary complex of TB is known as:

1: Ranke's complex

2: Ghon's complex

3: Assman focus

4: Simon's focus

809-: 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

810-: 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

811-: 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

812-: 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

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

1: B cells

2: NK cells

3: Monocytes

4: Neutrophils

814-: Innate immunity active againts viral cells -

1: NK cells

2: Cytotoxic T cells

3: B cell

4: Memory B cell

815-: HLA antigen is located at?

1: Short arm of chr-6

2: Long arm of chr-6

3: Short arm of chr-8

4: Long arm of chr-8

816-: The primary function of Toll like Receptors is?

1: Vasodilation

2: Activation of Immune System

3: Regulation of Calcium channel

4: Second Messenger

817-: 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

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

1: Agglutination

2: Flocculation

3: Passive agglutination

4: Gel precipitation

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

1: Capsular polysaccharide in pneumococcus

2: Concanavalin-a

3: Calretinin

4: Cellular

820-: 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

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

1: Papillary

2: Follicular

3: Anaplastic

4: Medullary

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

1: IgA

2: IgE

3: IgG

4: IgM

823-: 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

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

1: CD45 RA

2: CD45 RB

3: CD45 RC

4: CD45 RO

825-: 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

826-: A 34-year-old man presents with a 5-day history of a painful sore on his hand. Physical examination reveals a 0.5-cm abscess on the extensor surface of the left hand that drains a thick, purulent material. Diapedesis of leukocytes into and around this patient's infected wound occurs primarily at which of the following anatomic locations?

1: Lymphatic capillaries

2: Postcapillary venules

3: Precapillary aerioles

4: Small dermal aeries

827-: 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

828-: 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

829-: 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

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

1: Duffy

2: Landsteiner

3: Rhesus

4: Lutheran

831-: A 35-year-old woman present for regular health check-up. She denies any current medical problem except the fact that she remembers being hospitalize for throat infection as a child. Examination reveals normal vitals. On physical examination, normal S1 and S2 with late rumbling diastolic murmur was heard at apex and is enhanced by expiration. Which of the following skin lesion may have accompanied the illness?

1: Erythema migrans

2: Erythema marginatum

3: Erythema multiforme

4: Janeway lesion

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

1: Lungs

2: Spleen

3: Thymus

4: Lens of the eye

833-: All are mononuclear-macrophages except -

1: Histiocytes

2: Microglia

3: Kupfer cells

4: B-cells

834-: 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

835-: Which of the following statements is false regarding Familial Mediterranean fever?

1: Form of hereditary amyloidosis

2: Excessive production of TNFa

3: Autosomal recessive

4: Mutation affecting pyrin protein

836-: 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

837-: Most common cause of UTI in neonate is

1: E.coli

2: S.aureus

3: Enterococcus

4: Anerobes

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

1: C1

2: C2

3: C3

4: C4

839-: HLA-B27 is associated with -

1: Ankylosing spondylitis

2: Rheumatoid arthritis

3: Chronic active hepatitis

4: Diabetes

840-: Precipitation & agglutination are caused by:

1: IgG and IgM

2: IgM and IgG

3: IgM and IgA

4: IgD and IgA

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

1: Type 1

2: "type 2

3: Type 3

4: Type 4

842-: 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

843-: Granulomatous inflammation is which type of hypersensitivity?

1: Type I

2: Type II

3: Type III

4: Type IV

844-: N.K Cell provides immunity againts -

1: Virus

2: Bacteria

3: Fungus

4: Chlamydia

845-: 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

846-: Type II Hypersensitivity is seen in?

1: Pernicious anaemia

2: Serum sickness

3: Arthus phenomenon

4: Pathergy phenomenon

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

1: Autograft

2: Isograft

3: Allograft

4: Xenograft

848-: 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

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

1: C1

2: C2

3: C3

4: C5

850-: Glycosated Hb estimated by:

1: HPLC

2: ELISA

3: PCR

4: Spectrometry

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

1: T cells

2: NK cells

3: Monocytes

4: B cells

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

1: Plasma cells

2: NK cells

3: T cells

4: K cells

853-: The following interleukin is characteristically produced in TH1 response -

1: IL1

2: IL2

3: IL3

4: IL4

854-: C-reactive protein are -

1: Alpha-1 globulin

2: Beta-1 globulin

3: Alpha-2 globulin

4: Non-specific inflammatory protein

855-: Papain acts an gamma globulin to form-

1: 2 Fc fragments

2: 2 Fab fragments

3: 1 Fab fragments

4: None

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

1: T-cell lymphoma

2: Hairy cell leukemia

3: AIDS

4: Infectious mononucleosis

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

1: Peyer's patches

2: Lymph node

3: Thymus

4: Bursa of fabricius

858-: Complement proteins constitute what percentage of serum proteins?

1: <1

2: 5-Jan

3: 5-10%

4: >10%

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

1: IgE

2: IgM

3: IgG3

4: IgG1

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

1: Zinc finger

2: Helix-tum-helix

3: Leucine zipper

4: RNA

861-: Chediak higashi syndrome, true is -

1: Defect in phagocytosis

2: Neutropenia

3: Agammaglobulinemia

4: IgA defficiency

862-: AH are live vaccines except:

1: BCG

2: Salk vaccine

3: Measles

4: Mumps

863-: The following are features of which disease?

1: SLE

2: RA

3: Autoimmune hepatitis

4: HIV

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

1: RNA polymerase 1

2: RNA polymerase 11

3: RNA polymerase HI

4: DNA polymerase

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

1: Precipitation test

2: Agglutination

3: Immunofluorescence

4: Flocculation

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

1: T-cell

2: B-cell

3: NK-cells

4: Macrophages

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

1: Vander waals forces

2: Electrostatic bond

3: Hydrogen bond

4: Covalent bond

868-: Which of the following is cytophilic antibody -

1: IgM

2: IgA

3: IgE

4: IgG

869-: Which is not a Macrophage :

1: Monocyte

2: Microglia

3: Kupffer cells

4: Lymphocytes

870-: 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

871-: HIV was discovered in which year?

1: 1983

2: 1979

3: 1969

4: 1990

872-: Hormones are best assessed by?

1: Flowcytometry

2: Electrophoresis

3: ELISA

4: RIA

873-: NK cell CD marker is -

1: 16

2: 60

3: 32

4: 25

874-: A 40-year-old woman with a history of rheumatic fever presents with shoness of breath, weight loss, fatigue and abdominal distension. Physical examination shows rales in the lungs, hepatosplenomegaly and 2+ pitting edema of the legs. A chest X-ray reveals only left atrial enlargement and pulmonary edema. What is the most likely cause of pulmonary edema in this patient?

1: Aoic insufficiency

2: Aoic stenosis

3: Mitral stenosis

4: Tricuspid insufficiency

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

1: Primary

2: Secondary

3: Tertiary

4: Quaternary

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

1: IgG

2: IgA

3: IgM

4: IgD

877-: Thymic hyperplasia is seen in -

1: Thymoma

2: Thymic lymphoma

3: Myasthenia gravis

4: Scleroderma

878-: 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

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

1: CD 2

2: CD 3

3: CD 7

4: CD 19

880-: Bronchial secretion secretes:

1: IgA

2: IgE

3: IgM

4: IgG

881-: Allergic hy persensitivity is mediated by -

1: IgM

2: IgG

3: IgD

4: IgE

882-: Antibodies in ITP are:

1: IgG

2: IgM

3: IgE

4: IgD

883-: Heterophile antibody is found in -

1: Weil Felix test

2: Widal test

3: VDRL

4: All

884-: HLA B27 is not seen in -

1: SLE

2: Ankylosing spondylitis

3: Reiter's syndrome

4: Psoriotic arthritis

885-: Complement complex that attacks cell membrane is:

1: C12345

2: C23456

3: C34567

4: C56789

886-: NK cells are -

1: Activated macrophages

2: Antibody-activated T cells

3: Null cells activated by complement

4: Independent of antibody

887-: 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)

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

1: IgA

2: IgG

3: IgM

4: IgD

889-: VDRL is a -

1: Slide flocculation test

2: Tube floccolation test

3: Gel precipitation test

4: Indirect haemagglutination test

890-: Serum sickness is which type of reaction?

1: Type-1 hypersensitivity

2: Type -2 hypersensitivity

3: Type -3 hypersensitivity

4: Type -4 hypersensitivity

891-: Cell type which lacks HLA antigen is -

1: Monocyte

2: Thrombocytes

3: Neutrophil

4: Red blood cell

892-: 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

893-: Contact dermatitis is -

1: Type-I hypersensitivity

2: Type-II hypersensitivity

3: Type-III hypersensitivity

4: Type-IV hypersensitivity

894-: 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

895-: Antitschkow cells in acute rheumatic fever are derived from -

1: Lymphocytes

2: Histiocytes

3: Macrophages

4: Neutrophils

896-: Chemoattractant is -

1: C5a

2: C1

3: C3

4: C2

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

1: C5a

2: C3a

3: C3b

4: TNF-a

898-: True about interferon -

1: It is virus specific

2: It is Bacteria specific

3: Produced from Bacteria

4: Effective against viral infection

899-: 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)

900-: 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

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

1: Type 1

2: Type 2

3: Type 3

4: Type 4

902-: IL-2 is secreted by

1: CD4 lymphocytes

2: CD8 cells

3: Macrophages

4: Neutrophils

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

1: B4

2: C4

3: D4

4: E4

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

1: IgG

2: IgM

3: IgE

4: IgA

905-: Red infarcts occur in -

1: Kidney

2: Lung

3: Spleen

4: Hea

906-: 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

907-: Pick the true statement about major criteria of Jones in acute rheumatic fever.

1: Carditis is the earliest clinical manifestation seen in acute rheumatic fever

2: Sydenham chorea is a late manifestation

3: Involvement of small joints is a characteristic feature

4: Subcutaneous nodule are seen on flexor aspects of the limbs

908-: Bence jones proteins are best described as -

1: chains

2: g chains

3: Kappa & Lambda chains

4: Fibrin split products

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

1: HLA B27

2: HLA DR4

3: HLA B8

4: HLA DP

910-: 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

911-: 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

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

1: NK cells

2: Cytotoxic cells

3: B-cell

4: Memory B cell

913-: MHC class I represented on-

1: All cells

2: All nucleated cells

3: RBCs

4: None

914-: Stem cells are taken from?

1: Skin

2: Bone marrow

3: Oral mucosa

4: Elementary tract

915-: 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

916-: Which one of the following is not included as major criteria in Jones criteria?

1: Pancarditis

2: Ahritis

3: Subcutaneous nodules

4: Elevated ESR

917-: Coombs test is:

1: Precipitation test

2: Agglutination test

3: CFT

4: Neutralization test

918-: Myasthenia gravis is most commonly associated with which of the following?

1: Thymoma

2: Thymic carcinoma

3: Thymic hyperplasia

4: Lymphoma

919-: 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

920-: 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

921-: 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

922-: A 10-year-old boy, Pappu, died of acute rheumatic fever. All the following can be expected at autopsy, except:

1: Aschoff's nodules

2: Anitschkow cells

3: McCallum patch

4: Fibrinous pericarditis

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

1: Lacrimal secretions

2: CSF

3: Saliva

4: Respiratory tract secretions

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

1: Infection

2: Vaccination

3: Immunoglobulin transfer

4: Sub clinical infection

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

1: IgM

2: IgA

3: IgG

4: IgD

926-: Which among the following is not an autoimmune disease?

1: Myasthenia gravis

2: Systemic lupus erythematosus

3: Graves disease

4: Sickle cell disease

927-: Surface Immunoglobulin is found in which cell?'

1: T-cell

2: B-cell

3: NK cell

4: Plasma cells

928-: Plasma cells are activated:

1: B cells

2: T cells

3: Macrophages

4: Monocytes

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

1: IgG

2: IgM

3: IgA

4: IgD

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

1: Salk polio vaccine

2: Sabin polio vaccine

3: Rabies vaccine

4: KFD vaccine

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

1: B cells

2: T cells

3: Monocytes

4: Macrophages

932-: N K cell shows presence of -

1: CD 44

2: CD 16

3: CD 54

4: CD 32

933-: 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

934-: Antibody in cold agglutin disease is

1: IgA

2: IgG

3: IgE

4: IgM

935-: Stellate Granuloma are seen in

1: Cat scratch disease

2: Sarcoidosis

3: LGV

4: Histoplasmosis

936-: Cell involved in immunity against parasitic infection:

1: Neutrophil

2: Eosinophil

3: Basophil

4: Lymphocyte

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

1: Liver

2: Adrenal

3: Gut

4: Skin

938-: 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

939-: Autoantibody specific for SLE -

1: ds DNA

2: Anti RO

3: Anticentromere

4: Anti topoisomerse

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

1: IgG1

2: IgG2

3: IgG3

4: IgG4

941-: Immunoglobulin changes in variable region -

1: Idiotype

2: Isotype

3: Allotype

4: Epitope

942-: A 25-year-old woman complains of low-grade fever, fatigue, and persistent rash over her nose and upper chest. She also notes pain in her knees and elbows. A skin biopsy shows dermal inflammation and granular deposits of IgG and C3 complement along the basement membrane at the epidermal/dermal junction. Urinalysis reveals microscopic hematuria and proteinuria. The ANA is positive. The development of thromboembolic complications (e.g., deep venous thrombosis) in this patient is commonly associated with elevated serum levels of antibodies to which of the following antigens?

1: ABO blood group antigens

2: Class II HLA molecules

3: Clotting factors

4: Phospholipids

943-: All of the following vascular changes are observ ed in acute inflammation, except-

1: Vasodilation

2: Stasis of blood

3: Increased vascular permeability

4: Decreased hydrostatic pressure

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

1: IgA

2: IgD

3: IgG

4: IgM

945-: Anti-Ro antibody is found in?

1: SLE

2: Scleroderma

3: MCTD

4: Neonatal lupus

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

1: IgA

2: IgD

3: IgG

4: IgE

947-: Live vaccine is -

1: Salk polio

2: KFD

3: Sabin polio

4: Meningococci

948-: CD marker of stem cell is:

1: CD 34

2: CD 1

3: CD19

4: CD 21

949-: Delayed tuberculin test response is due to-

1: B lymphocytes

2: T lymphocytes

3: Monocytes

4: Histiocytes

950-: 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

951-: Ig seen in breast milk & secretions:

1: IgA

2: IgE

3: IgG

4: IgD

952-: All of the following methods are used for the diagnosis of HIV infection in a 2 months old child, except:

1: HIV-1 PCR

2: Viral culture

3: HIV ELISA

4: p24 antigen assay

953-: 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

954-: Most sensitive test for antigen detection is -

1: RIA

2: Elisa

3: Immunofluorescence

4: Passive hemagglutination

955-: B cell maturation takes place in -

1: thymus

2: Lymph node

3: Bone marrow

4: Spleen

956-: 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

957-: Asthma is which type of hypersensitivity?

1: Type -1 hypersensitivity

2: Type -2 hypersensitivity

3: Type -3 hypersensitivity

4: Type -4 hypersensitivity

958-: Anaphylactic shock is caused by w hich type of hypersensitivity reaction?

1: I

2: II

3: III

4: IV

959-: Adoptive immunity is by?

1: Infection

2: Injection of antibodies

3: Injection of lymphocytes

4: Immunization

960-: Pentavalent immunoglobin is -

1: IgA

2: IgG

3: IgM

4: IgE

961-: Bence Jones proteins are best described as:

1: u chains

2: g chains

3: Kappa and Lambda chains

4: Fibrin split products

962-: CD8 antigen is present on

1: T helper cells

2: B cells

3: T suppressor cells

4: Macrophages

963-: N K cells activity is enahnced by -

1: IL-1

2: TNF

3: IL-2

4: TGP-b

964-: 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	4	Scl-70 (anti-topoisomerase I)
3	2	8S
4	3	IgE
5	3	IgG2
6	3	Weil-felix test
7	1	Bacillus Calmette-Guerin (BCG)
8	1	IgE
9	1	RNA
10	2	T-cells
11	1	Bone marrow
12	1	Defects in phagolysosome function
13	2	Granulomatous reaction
14	4	Cyanosis
15	4	Directly attached to lateral aspect of TCR b chain
16	3	NK cells
17	1	Capillary wall thickening
18	1	Group A Streptococci
19	1	IgA
20	3	Pulmonary
21	3	Type III
22	3	Myocarditis

23	1	Cell mediated immunity
24	1	Decreased size of periaeriolar lymphoid sheath of spleen
25	3	Display cytotoxic effect on tumor cell
26	4	Surgery is the treatment of choice
27	2	Double diffusion in one dimension
28	1	Hyper IgE syndrome
29	2	Sheets of atypical plasma cells
30	4	BCG
31	3	IgA
32	2	B-cells
33	4	T - cells
34	4	IgE
35	1	Exfoliative toxin
36	2	IgM
37	1	RIA
38	4	All the above
39	1	Injection with foreign serum
40	2	IgA
41	4	B cell defect
42	4	Autosomal recessive disorder
43	3	Not affected by genetic affected
44	4	Schick test
45	1	NK cell
46	4	Humoral Immunity - Deficient; Cellular Immunity - Deficient

47	4	Isograft
48	2	Anti-ds DNA antibodies
49	1	IgG1
50	2	IFN-g
51	1	Heterocytotropic ab
52	1	IgE has minimum concentration
53	4	Subacute sclerosing panencephalitis (SSPE)
54	3	IgE
55	1	Acts as a mucosal barrier for infection
56	2	2:01
57	4	Plasma cells
58	1	IgM
59	3	Immunological memory present
60	2	Kikuchi Fujimoto disease
61	3	Null cells
62	3	Platelets
63	1	Chromosome number 6
64	3	Histamine
65	2	No change in Amino acid sequence in protein
66	2	MHC class II
67	3	Requires carrier for specific antibody production
68	2	Type II
69	4	Increased in peumococcal in fection
70	1	I
71	2	Rh-ve mother with 2nd Rh+ve child

72	1	Immunoglobulins
73	4	CD45RO
74	2	C3b
75	1	B-cells
76	4	Tolerance to foreign antigens is the norm rather than the exception
77	4	All of the above
78	4	Carcinoembryonic antigen (CEA)
79	2	Autoimmune Hemolytic anaemia
80	3	IgM
81	4	Eosinophils
82	1	Cross reactivity with endogenous antigen
83	4	All of the above
84	3	Type 3 hypersensitivity
85	3	Cell-mediated immunity and circulationg antibodies
86	1	Telomerase
87	1	IgA
88	2	Anti Sm
89	4	C4d
90	1	Type I
91	1	Bence Jones protein
92	4	Covalent bond
93	2	Produce immunoglobulins
94	1	1
95	3	Class III has complement

96	2	Lipopolysaccharide
97	3	Doxyribose-phosphate backbone with bases stacked inside
98	3	C5a
99	4	IgA class
100	4	Ig E
101	1	12 hours
102	2	Adoptive immunity
103	1	Interleukin 18 (IL-18)
104	3	Type 3
105	2	Type II
106	2	Release macrophage inhibition factor
107	1	IgG
108	2	Severe combined immunodeficiency
109	2	Acetylcholine receptors
110	2	Ig M
111	4	C3
112	2	Determinant from one clone of cells and probably located close to the antigenbinding site of the immunoglobulin
113	1	Modified macrophages
114	1	IgE
115	3	Plasma cells
116	4	IL_1 & TNF
117	2	Hereditary angioneurotic edema
118	2	In humans, there are approximately twice as many Ig molecules with k and l chains

119	2	Antibody excess
120	2	IgE production
121	4	IgD
122	4	NADPH oxidase
123	1	T cells
124	2	Adjuvant
125	2	Type II
126	4	Proteins
127	1	IgG Hypersensitivity
128	2	T-Lymphocytes
129	1	Neutrophilia
130	1	RNA i
131	1	Helper cells
132	4	Proteins
133	2	Hypocomplementemia
134	2	B-cells
135	3	Langerhan's cells/histiocytes
136	1	Albumin
137	3	IgM
138	3	Microglia
139	3	Wire loop lesions
140	3	Changes in heavy and light chain in constant region is responsible for class and subclass of immunoglobulins
141	2	B cells
142	1	Hyperacute rejection

143	4	Antigen antibody reaction cannot occur in the absence of electrolytes
144	2	Interstitial and tubular mononuclear cell infiltrate
145	1	Rheumatic heart disease
146	3	Bone marrow
147	2	7, 12; 1, 3
148	3	Macrophages
149	2	Acute rejection
150	2	Ankylosing spondylitis
151	2	Anaphylactoid reaction
152	4	Isograft
153	3	Immunoglobulin transfer
154	1	Mature dendritic cell
155	3	Type III
156	1	Transplant from one region of a person to another region
157	1	Drug induced LE
158	3	IgE
159	2	C5-9
160	3	C5-9
161	2	dsDNA
162	2	T cells
163	1	Factor H
164	1	T-lymphocytes
165	1	NK cells
166	4	IL-12, IFN-g

167	2	Air
168	2	Type II
169	1	IgG 1
170	3	Fibroblastic foci
171	4	Anti SCL - 70
172	4	Type 4
173	1	CD4
174	3	IgM
175	1	Widal test
176	1	T cells
177	2	Monoclonal Gammopathy of Unceain Significance (MGUS)
178	1	Contact dermatitis
179	2	Gram-negative bacteria
180	1	Hereditary angioneurotic edema
181	1	Erythrotoxin of staph. Aureus
182	2	Detects RNA
183	1	Ig G
184	2	Found in some but not all members of species
185	1	ds DNA
186	4	Zero HLA mismatch with recipient
187	1	IL-1
188	2	Eosinophils
189	4	Rectum
190	2	Gamma heavy chain disease

191	2	C1 esterase inhibitor
192	3	Mast cells
193	3	IgE
194	4	Isograft
195	1	MHC class I genes
196	2	Hereditary angioneurotic edema
197	2	Acts as a hapten
198	1	Carbohydrate sequence in cell wall
199	4	Single phenotype: Single !ocus->>multiple abnormal alleles.
200	1	GGTCCT
201	4	Protein
202	4	Possible hepatitis B infection
203	2	Acidic pH
204	1	IgG
205	3	C3bBb
206	4	Disorder of phagocytosis
207	1	Antigenic cross-reactivity
208	1	Wiskott - Aldrich syndrome
209	1	Multiple myeloma
210	2	RNA
211	4	Type4
212	1	B lymphocytes
213	3	Type III hypersensitivity
214	3	IgM

215	2	CSF
216	1	6 months
217	3	Transcription of nuclear factor mediated by NF-kB which recruits cytokines
218	3	IgA can be destroyed by bacterial proteases
219	4	Hepatitis A virus
220	2	Type 2
221	2	Type II
222	2	T - cells
223	1	T lymphocyte activation
224	1	T cells
225	2	Antigen - antibody mediated
226	1	AA amyloidosis
227	2	Agglutination test
228	3	DiGeorge syndrome
229	2	IgA
230	1	Increase Melting point (Tm)
231	2	Epitope
232	2	C3b
233	4	DTH responses generated by CD4 +T cells
234	4	maturation of donor lymphoid progenitor cells
235	1	Irradiation
236	1	NK cell
237	1	Factor B
238	3	Anti topoisomerase

239	2	HIV encephalitis
240	2	Eosinophils
241	2	C3b
242	1	Neutrilization reaction is type of -
243	1	Wegener's granulomatosis
244	3	Injection of lymphocytes
245	1	T-cells
246	2	Delayed hypersensitivity
247	3	Ig M
248	2	Opsonisation
249	4	Stromal cells
250	4	Maternal transfer of antibody
251	1	Pro-zone phenomenon
252	1	6 months
253	1	HLA1
254	4	There is antibody induced proliferation of NK cells
255	1	Smoldering myeloma
256	3	RNA polymerase
257	1	Irradiation
258	2	B-cells
259	3	Migration inhibition test
260	2	Macrophages
261	2	AIRE
262	1	12 hours
263	2	Phagocytosis

264	2	Hemagglutination inhibition test
265	2	Waterhouse Friderichsen syndrome
266	2	IL-7
267	4	Hypersensitivity
268	4	Type IV
269	2	Type II
270	3	Zoneof equivalence
271	1	Antigenic cross-reactivity
272	2	Agammaglobulinemia
273	2	C1 inhibitor
274	4	Granulomatous reaction
275	4	Plasma cells
276	2	Increased antibody affinity for the hapten
277	2	IgM
278	1	B cell
279	2	Spectrophometry
280	2	Systemic lupus erythematosus
281	4	Antigenic variation
282	2	Seminiferous tubule
283	3	It can prevent attachment of microorganisms to epithelial cell membranes
284	4	Helper T cells
285	3	IgG
286	4	Well defined Nuclear membrane
287	4	IgE

288	4	Paracoical area
289	2	B-cells
290	4	Anti-Mi2 antibodies
291	1	Type I
292	2	Antibody specificity
293	1	Cytomegalovirus
294	1	Cytokines
295	2	Counter immuno-electrophoresis (CIE)
296	4	Primary atypical pneumonia
297	4	Flow cytometry
298	2	N-terminal
299	4	Cytokines
300	2	Tumor necrosis factor
301	1	RA
302	1	Southern blot
303	2	DNA
304	2	C3,C6,C9
305	1	Human diploid cell (HDC) vaccine
306	2	It needs carrier to induce immune response
307	4	IgM
308	4	Lymphocytes
309	3	Increased ASLO
310	2	Helper T cells
311	1	AUG
312	2	RA

313	1	Type I Hypersensitivity
314	3	CD4
315	4	Hypervariable region
316	1	CD 19
317	1	IgG1
318	1	Autoimmune hemolytic anemia
319	2	CD 8
320	2	Precipitation
321	4	Guinea Pig
322	4	Lymphocytes
323	2	Isolated IgA immunodeficiency
324	1	Ig G
325	2	IgM
326	3	Class I HLA molecules
327	1	Fusion of lysosome
328	1	35% of T cells
329	1	NK cell
330	2	Constant region of heavy chain
331	3	Helper T-cells
332	4	Lipids
333	4	Adoptive immunity
334	4	Juvenile-onset diabetes mellitus
335	1	Opsonisation
336	1	IgM
337	3	Defective H2 O2 production

338	2	Dendritic cells
339	4	Fc fragment
340	1	It is an autosomal recessive disorder
341	3	Prostaglandin causes vasoconstriction at the site of inflammation
342	4	IgE mediated type I hypersensitivity disrupting worm attachment
343	3	Antibody-mediated
344	2	Subacute cutaneous lupus
345	3	Equivalence of antibody and antigen
346	1	CD4+ lymphocyte
347	3	Casoni's test
348	1	Kaposi sarcoma
349	1	Surface
350	1	IgA
351	2	B cells
352	4	IgE
353	2	HLA DR4
354	3	2 light chains, 2 heavy chains
355	2	IgM
356	1	Immune complex
357	1	Natural killer cells
358	1	Staphylococcus aureus
359	3	Type 3 Hypersensitivity reaction
360	2	Hereditary angioedema
361	3	Diabetic nephropathy

362	1	C3
363	3	Both humoral and cell mediated immunity are affected
364	1	Aificial active
365	2	Excess antibody
366	1	All nucleated cells
367	1	Fifth disease
368	3	Involved in Type 3 HSN
369	2	Type-II
370	2	C5 - C9 deficiency
371	2	Eosinophils
372	3	Type III
373	1	Casoni's test
374	1	6
375	3	Type III
376	1	Antigen presenting cells
377	1	Complement fixation
378	3	Single nucleotide polymorphisms (SNPs)
379	3	Found on T and B lymphocytes and all nucleated cells
380	1	Tumor lysis
381	1	Uses heat labile DNA polymerase
382	2	T lymphocytes
383	2	Susumu Tonegawa
384	3	Contact dermatitis
385	1	Anticardiolipin

386	3	TH1-cells
387	1	Bipolar cell
388	3	Autoimmune hemolytic anemia
389	1	Type I
390	4	HLA-B8
391	3	Adenosine deaminase
392	2	C1 inhibitor
393	2	Type 2
394	2	Tube agglutination test
395	1	IgG
396	2	Mast cells
397	3	Precipitation
398	1	TGF -Beta
399	2	Acute onset of disease
400	1	Cross reactivity with exogenous antigen
401	2	IgM
402	4	IgA + IgG2
403	2	IgM fixes complement
404	2	Autoantibodies against acetylcholine receptors
405	4	Isograft
406	2	HLA class II antigen
407	4	Clonal selection
408	3	NK cells
409	2	HBcAg
410	2	It can be produced by natural killer cells

411	1	Bone marrow
412	2	Vaccine can be kept in higher temperature
413	2	Isograft
414	3	IgG
415	1	Defect in phagocytosis
416	3	2 & 3
417	1	Systemic sclerosis
418	2	IL-6
419	4	2 long and 2 sho peptide chains
420	3	Isograft: transplant from one person to a genetically identical person
421	1	1
422	3	They are MHC restricted cytotoxic cells
423	2	Complement
424	1	Heterophile antibody that reacts with the microorganism or cells of unrelated species due to common antigen sharing.
425	1	Seminiferous tubule
426	2	Hypervariable region
427	2	AIRE
428	2	Hereditary angioedema
429	4	Hypersensitivity reaction with modified macrophages, lymphocytes and giant cells
430	2	Nohern blot
431	4	Misfolding of protein
432	3	Histamine
433	1	Mast cell

434	4	Does not progress to multiple myeloma
435	4	ATTR
436	2	Hypersensitivity reaction with modified macrophages, lymphocytes and giant cells
437	4	Severe combined immunodeficiency
438	3	IgM
439	3	Highly antigenic
440	2	Double-stranded DNA
441	1	Plasma cells
442	4	Sarcoidosis
443	1	C5a
444	4	Lymphocytes
445	2	CD3
446	3	Macrophages
447	3	Chronic granulomatous disease
448	3	The antibody has been cleaved to divalent Fab' ligands
449	3	Neutrophils
450	4	Graft rejection
451	2	Antiphospholipid antibody syndrome
452	1	IgA
453	1	IgG
454	3	Disorders of phagocytosis
455	1	Protein
456	1	T helper cells
457	1	May be complement mediated

458	1	Eichwald silmser effect
459	2	Type II
460	3	Equivalence of antibody and antigen
461	3	Western blot
462	4	All the above
463	2	CD 55
464	3	CD4
465	2	C3b
466	3	DiGeorge syndrome
467	2	T-Lymphocytes
468	2	IgD
469	2	Antibody-mediated complement fixation
470	2	Beta
471	1	Rheumatic carditis
472	3	Acute infection
473	1	Systemic sclerosis
474	1	Detects mutation
475	4	Reduced phagocyte surface expression of Sialyl-Lewis x
476	4	X-linked agammaglobulinemia of Bruton
477	2	Precipitation
478	1	Monocytes
479	2	Epitheloid cells
480	2	HLA DR 4
481	2	Graft versus host reaction

482	1	Polio
483	3	Antigenicity
484	1	More common in females
485	3	Allograft
486	3	IgM
487	2	Rheumatic endocarditis
488	1	IgG
489	1	Tetany
490	3	Gout
491	1	IgG
492	2	Thymoma
493	2	IgE
494	1	IgE
495	1	CCR5
496	4	High endothelial venules
497	3	Rickettsia antigens and proteus antigens
498	2	Immune complex mediated
499	3	Preformed anti-A and anti-B antibodies in the recipient
500	3	CREST syndrome
501	1	Cytotoxic T cells
502	3	Eye lens
503	3	Jerish herheximer reaction
504	4	Dilatation of the arterioles
505	1	CD4 T cell

506	3	IgM
507	2	Conjugated and unconjugated bilirubin
508	4	The severe reaction following re-injection of protein solution in a sensitized animal
509	2	IgM
510	4	Leucocytosis
511	2	Myocarditis
512	1	IgA
513	1	T cells
514	1	Origin from same cell lineage
515	1	It is always a polypeptide
516	3	RNA
517	2	Defect in phagocytosis
518	3	Type -3 hypersensitivity
519	4	Antigen presentation
520	2	Rheumatic hea disease
521	1	Phytohemagglutinin
522	1	Multiple myeloma
523	3	Rheumatic carditis
524	3	IgM
525	1	Deficiency of C1 inhibitor
526	2	CD16,CD56
527	3	IL-4
528	2	Deposition of circulating immune complexes
529	3	IgG

530	3	Langerhans cell
531	2	Graft from self
532	1	IgG & IgM
533	4	Humoral Immunity - Deficient; Cellular Immunity - Deficient
534	4	Type 4
535	3	Stimulator for B lymphocytes
536	1	Mast cells
537	1	False negative test
538	4	Possible subacute sclerosing panencephalitis (SSPE)
539	1	T cell independent antigens
540	4	None
541	1	CD3
542	1	Acute-phase reactant
543	4	MHC Class I
544	2	Vascular
545	4	IgG4
546	2	Delayed types hypersensitivity
547	2	Neisseria
548	2	Anti-dsDNA antibodies
549	1	IL-2
550	2	Widal test
551	3	Histamine
552	4	Transfer hepatic progenitor cells (HPCs) of same person for regeneration
553	4	Disorder of phagocytosis

554	4	Low serum IgG, IgA and IgM levels
555	3	Negative selection of T-cells in the thymus
556	1	Enteric fever
557	3	C3
558	3	Isospecificity
559	3	Ileum
560	3	IgG & IgA
561	1	Immediate
562	3	HLA-CW6
563	3	Plasma derived Hepatitis B vaccine
564	2	IgG
565	2	Complement system
566	2	Paratope
567	1	It is a bacteria
568	3	Negative selection of T cells in thymus
569	1	Antigen presentation
570	4	Lymphocytes
571	2	C1 esterase inhibitors deficiency
572	3	Present antigens for recognition by T-cell antigen receptors
573	3	Nitric Oxide
574	2	Meningococcal infection
575	3	A selectin
576	3	IgE
577	2	Cell mediated

578	2	Normal coical lymphocytes
579	3	Cytotoxic cell lyse IgG coated target cells
580	2	Reduction of NBT (Nitroblue tetrazolium test)
581	1	Type 1 reaction is Ig E mediated
582	3	Immunologic Memory
583	3	Cytokines
584	2	Tumor necrosis factor
585	1	TNF alpha
586	2	Isograft
587	4	Variable region of heavy and light chain
588	3	Bacterial surface polysaccharide
589	1	Lymphocytes
590	2	Inhibits viral replication in cells
591	2	Phagocytosis
592	2	Inhibits viral replication in cells
593	1	CD4 lymphocytes
594	4	IFN gamma
595	4	Reverse transcriptase
596	3	IgM
597	1	Immortalise myeloma cell
598	3	High titre anti-HLA antibodies in donor plasma
599	2	Type 2 hypersensitivty reaction
600	4	Contact dermatitis
601	2	Dendritic cells
602	3	IgG

603	4	Anti-Ribonucleoprotein
604	1	Epitope
605	3	Negative selection of T-cells in the thymus
606	1	CMV
607	4	IgE
608	2	Immune complex mediated
609	3	Immunoglobulin transfer
610	2	sodium retention
611	2	SCID
612	4	Molecular mimicry
613	2	HLA 2
614	2	IgG
615	4	Lymphocytes
616	2	Adenosine deaminase deficiency
617	2	Hypervariable regions in domains of B cells
618	2	NADPH oxidase
619	3	NK cells
620	3	Peptidyl transferase
621	2	Raised in acute pneumococcal infection
622	2	Lips
623	2	H - chain
624	3	SLE
625	2	IgG
626	2	IgM fixes complements.
627	4	Pa of innate immunity

628	4	IgE
629	2	It needs carrier to induce immune response
630	2	Active T cells
631	2	Serum sickness is a type II hypersensitivity reaction
632	4	Granuloma formation
633	1	Primary systemic amyloidosis
634	2	2
635	1	IL-1
636	4	NK cells
637	1	Southern blot
638	4	TNF
639	1	Opsonisation
640	2	IgG
641	1	Adenosine deaminase deficiency
642	1	IL-2
643	2	Systemic Lupus Erythematosus
644	1	24 hours
645	1	TNF
646	2	Sargramostim
647	3	Chlamydia trachomatis
648	3	Antibody excess to antigen
649	1	Phagocytosis
650	3	Ig D
651	4	IgE
652	1	Type I

653	2	Natural killer cells
654	4	Fetal infection is characterised by increased in IgG
655	1	Mast cells
656	4	Amino end
657	1	IgE
658	1	SLE
659	2	Autoimmune disease associated with HLA gene DR3
660	2	IgM
661	2	CD 8 T cells
662	2	Clonal selection
663	2	Administration of anti-Rh antibodies to the mother postdelivery
664	2	Constant region of heavy chain
665	1	Macrophage
666	4	Class II HLA molecules
667	4	B cells
668	2	Light chain
669	3	Graft from member of same species
670	1	Mature dendritic cells
671	4	Transplant from one species to another species
672	4	IgM
673	2	Virus
674	2	Digeorge syndrome
675	4	Ig E
676	3	Regular repeating structure of DNA & histone proteins

677	1	Beta-hemolytic streptococcus
678	3	VDRL
679	2	H chain
680	1	Helper T cell
681	1	T cells
682	1	Rubella and Yellow fever
683	3	Differential RNA processing
684	2	Mast cells
685	1	Idiotype
686	2	IgE mediated reaction
687	4	NK cells
688	4	During labour
689	2	Chemotactic agent
690	1	Tears and saliva
691	1	IgG 1
692	4	Polyclonal B cell Activation
693	3	IL 2
694	1	Graft across species
695	3	B8
696	3	A mechanism for the persistence and evolution of autoimmune disease
697	4	IV
698	3	Variable region
699	2	Graves' disease
700	4	None

701	2	Inhibits viral replication in cells
702	2	Eleks gel precipitation test
703	1	IL-18
704	2	CD 56
705	1	T-cells
706	3	Specific antibody
707	4	Thymus
708	2	Type II
709	2	Amyloidosis
710	1	Agglutination
711	1	Mast cell
712	3	Allogeneic grafts
713	2	Half life of IgG is 23 days
714	2	Mature dendritic cells
715	2	Type II
716	1	CD8
717	2	C3b
718	1	B.cells
719	2	Absent tonsils and no palpable lymph nodes on physical examination
720	4	Type IV
721	4	Associated with celiac disease
722	2	CD4
723	1	Type 1
724	2	Rheumatic endocarditis

725	4	Maternal transfer of antibody
726	1	Rosette formation with sheep RBC
727	1	Chronic recurrent sinusitis
728	2	Type 2 hypersensitivity reaction
729	2	Competition and inhibition
730	3	10-May
731	3	Serum sickness
732	2	IgG
733	1	Herd immunity
734	1	C3
735	1	IL-2
736	2	2 Fab fragments
737	2	Covalent bond
738	4	Type IV
739	2	Chronic granulomatous disorder
740	2	Rheumatic fever
741	3	Arises early in the course of the illness; detectable titers persist a lifetime
742	4	Red blood cell
743	1	Anti-basement membrane
744	4	Autograft
745	2	Epinephrine
746	3	Involved in type III hypersensitivity reactions
747	2	Fifth disease
748	1	Fusion of lysosome

749	2	SLE
750	1	Carotenoids
751	2	It needs carrier to induce immune response
752	4	N-terminal
753	2	Abnormal CD40-CD40L interaction
754	2	Vasoconstriction
755	2	Weil-Felix reaction
756	2	Binds to the beta chain of TCR and MHC class II molecules of APC stimulating T cell activation
757	1	Class I
758	2	Helper T lymphocytes
759	4	All
760	2	Scleroderma
761	2	Epitope
762	3	Rheumatoid ahritis
763	2	IL-6
764	2	E
765	1	Heavy chain
766	3	Thymus
767	1	Phagocytes
768	3	Induce enzyme synthesis in the target cell
769	2	Diapedesis
770	1	Digeorge syndrome
771	4	T cells
772	3	CD1

773	1	Autoimmune hemolytic anemia
774	2	IgA can be destroyed by bacterial proteases
775	1	Histamine
776	1	All nucleated cells
777	3	Helper T-cells
778	2	T - Lymphocytes
779	3	Specific IgM antibodies - Immunity against Rubella
780	2	Light chain globulins
781	2	C3b
782	4	Ankylosing spondylitis
783	3	Higher incidence among males
784	2	B cells
785	3	Can distinguish between infection and disease
786	4	NK cells, neutrophils & macrophages
787	3	Fc region
788	2	Isograft
789	1	Anti-ds-DNA
790	1	Polyclonal activation of T-cells
791	3	Formed by epithelial cell and plasma cell
792	1	Interferon gamma
793	2	IgM type
794	4	Type IV
795	2	Antibody-mediated cellular cytotoxicity (ADCC)
796	2	IgE mediated reaction
797	1	A, B, C

798	3	Casoni's test
799	4	Platelets
800	2	Late complement component deficiency
801	2	Antibody
802	4	Wiskott-Aldrich syndrome
803	4	IgA + IgG2
804	1	Gene rearrangement
805	2	Reduced IgM
806	4	Brucellosis
807	4	Red blood cell
808	2	Ghon's complex
809	3	Higher incidenc' among males
810	1	Allograft: transplant from one species to the same species
811	4	IL-5
812	3	Differential RNA processing
813	1	B cells
814	1	NK cells
815	1	Short arm of chr-6
816	2	Activation of Immune System
817	2	Helper T lymphocytes
818	2	Flocculation
819	1	Capsular polysaccharide in pneumococcus
820	3	Determine whether polymorphonuclear leucocytes can produce superoxide
821	4	Medullary

822	2	IgE
823	3	Lymphocyte
824	4	CD45 RO
825	1	All nucleated cells
826	2	Postcapillary venules
827	2	Deficiency in CD40 ligand or CD40
828	4	Order an HIV test which would include antibodies to HIV-1 and HIV-2
829	1	Thermostable at temperature at which DNA liquefies
830	2	Landsteiner
831	2	Erythema marginatum
832	4	Lens of the eye
833	4	B-cells
834	4	Xenograft: transplant from one species to another species
835	2	Excessive production of TNFa
836	2	Natural passive immunity
837	1	E.coli
838	3	C3
839	1	Ankylosing spondylitis
840	1	IgG and IgM
841	2	"type 2
842	4	For quantitative dectection of PCR material
843	4	Type IV
844	1	Virus
845	2	Decreased size of paracoical areas

846	1	Pernicious anaemia
847	3	Allograft
848	4	IgE mediated reaction
849	3	C3
850	1	HPLC
851	1	T cells
852	2	NK cells
853	2	IL2
854	2	Beta-1 globulin
855	2	2 Fab fragments
856	3	AIDS
857	3	Thymus
858	3	5-10%
859	1	IgE
860	1	Zinc finger
861	1	Defect in phagocytosis
862	2	Salk vaccine
863	1	SLE
864	2	RNA polymerase 11
865	4	Flocculation
866	1	T-cell
867	4	Covalent bond
868	3	IgE
869	4	Lymphocytes
870	2	Involve MHC antigen for killing micro-organisms

871	1	1983
872	4	RIA
873	1	16
874	3	Mitral stenosis
875	2	Secondary
876	3	IgM
877	3	Myasthenia gravis
878	2	Polyclonal activation of T-cells
879	4	CD 19
880	1	IgA
881	4	IgE
882	1	IgG
883	1	Weil Felix test
884	1	SLE
885	4	C56789
886	4	Independent of antibody
887	3	Enzyme-linked immunosorbent assay (ELISA)
888	1	IgA
889	1	Slide flocculation test
890	3	Type -3 hypersensitivity
891	4	Red blood cell
892	3	The chains are formed by genetic rearrangement after maturation
893	4	Type-IV hypersensitivity
894	3	Antibodies appear in sho time

895	3	Macrophages
896	1	C5a
897	3	C3b
898	4	Effective against viral infection
899	1	Acute Lyme disease
900	3	Follicular dendritic cell
901	4	Type 4
902	1	CD4 lymphocytes
903	1	B4
904	1	IgG
905	2	Lung
906	1	Positive selection during development
907	2	Sydenham chorea is a late manifestation
908	3	Kappa & Lambda chains
909	2	HLA DR4
910	4	Immunoglobulin light chain
911	4	Complement protects the host from pneumococcal and Haemophilus infection through complement components C1, C2, and C4
912	1	NK cells
913	2	All nucleated cells
914	2	Bone marrow
915	3	An HIV ELISA test
916	4	Elevated ESR
917	2	Agglutination test
918	3	Thymic hyperplasia

919	4	First line defense mechanism
920	2	image_question
921	2	Cell mediated hypersensitivity
922	3	McCallum patch
923	2	CSF
924	3	Immunoglobulin transfer
925	3	IgG
926	4	Sickle cell disease
927	2	B-cell
928	1	B cells
929	2	IgM
930	2	Sabin polio vaccine
931	2	T cells
932	2	CD 16
933	2	Short arm of chromosome 6
934	4	IgM
935	1	Cat scratch disease
936	2	Eosinophil
937	2	Adrenal
938	1	Chronic infectious mononucleosis
939	1	ds DNA
940	1	IgG1
941	1	Idiotype
942	4	Phospholipids
943	4	Decreased hydrostatic pressure

944	3	IgG
945	4	Neonatal lupus
946	4	IgE
947	3	Sabin polio
948	1	CD 34
949	2	T lymphocytes
950	2	Neutralizing antibodies against scarlet fever
951	1	IgA
952	3	HIV ELISA
953	2	Inactive MHC antigen for killing microorganisms
954	1	RIA
955	3	Bone marrow
956	3	TLR pathway
957	1	Type -1 hypersensitivity
958	1	I
959	3	Injection of lymphocytes
960	3	IgM
961	3	Kappa and Lambda chains
962	3	T suppressor cells
963	3	IL-2
964	3	Associated with both precipitation and agglutination

