Memory Test - Immunology_Class Test_Foundation_1

Total Mark: 100
Time: 90 Min

1. Active immunity is induced by
A) Placental transfer of antibody
B) Contracting specific infection
C) Viral infection
D) Conjugate vaccination
E) Injection of monoclonal antibody
Answer: F, T, T, T, F
Discussion:
Reference: [Ref: Lange/Ed-15th/P-478]

2. Antibodies of Rh system include
A) Anti C
B) Anti B
C) Anti A
D) Anti D
E) Anti E
Answer: T, F, F, T, T
Discussion:
Reference:

3. Autoimmune diseases associated with HLA B27 are
A) Ankylosing spondylitis
B) Postgonococcal arthritis
C) Acute anterior uveitis
D) 21-hydroxylase deficiency
E) Systemic lupus erythematosus
Answer: T, T, T, F, F
Discussion:
Reference: [Ref: Lange/Ed-15th/P-563]

4. C Reactive Protein-
A) Is an acute phase protein
B) Normal level 6mg/L
C) Normal level rules out rheumatic activity
D) Increased in Ischemic heart diseases
E) Always rise and fall with ESR
Answer: T, T, T, F, F
Discussion:
Reference: (Khaleque 302)

5. Complement component C3b
A) Directly kill bacteria
B) Is an anaphylatoxin
C) Is chemotactic
D) Opsonizes bacteria
E) Is derived from C3
Answer: F, F, F, T, T
Discussion:
Reference: [Ref: Lange/Ed-15th/P-537-539]

6. Components of cell mediated immunity include
A) CD4- lymphocyte
B) Memory T cell
C) Platelet
D) Basophil
E) Macrophage
Answer: T, T, F, F, T
Discussion:
Reference: [Ref: Lange/Ed-15th/P-475]

7. Direct Coomb's test is positive in
A) Systemic lupus erythematosus
B) Hemolytic transfusion reaction
C) Hemolytic disease of newborn
D) Microangiopathic haemolyticanaemia
E) Paroxysmal nocturnal haemoglobinuria
Answer: F, T, T, F, F
Discussion:
Reference: [Ref: LANGE/14th/551]

8. Diseases mediated by type –III hypersensitivity
A) Rheumatic fever
B) Systemic lupus erythometosus
C) Hashimoto' thyroiditis
D) Vasculitis
E) Grave's disease
Answer: F, T, F, F, F
Discussion:
Reference: [Ref: Lange/Ed-15th/P-537,538]

9. Following are congenital T cell immune deficiencies
A) DiGeorge's syndrome
B) Bruton's agammaglobulinemia
C) Chronic mucocutaneous candidiasis
D) IL-12 receptor deficiency
E) Selective IgA deficiency
Answer: T, F, T, T, F
Discussion:
Reference: [Ref: Lange/Ed-15th/P-573]

10. Following are the statements about primary immune response:
A) Responding B cell is memory B cell
B) IgG predominates
C) Time of peak response generally 7-10 days
D) Antibody affinity is lower
E) Antibody affinity is higher
Answer: F, F, T, T, F
Discussion: F(Memory cell response occurs in secondary response)F (IgM predominant)T TF (Antibody affinity & production is less in primary response)
Reference: [Ref: Lange/15th/P-516]

11. Immune component that reacts with Fc portion of Ab are
A) Macrophages
B) NK cells
C) B cells
D) Immunoglobulin E
E) C3a
Answer: T, T, T, F, F
Discussion:
Reference: [Ref: Lange/Ed-15th/P-523]

12. Phagocyte deficiency occur in
A) Chronic Granulomatous diseases
B) Leukocute adhesion deficiency syndrome
C) Recurrent Infection
D) IL12 receptor deficiency
E) Interferon gamma receptor deficiency
Answer: T, T, F, F, T
Discussion:
Reference: [Ref: Lange/Ed-15th/P-578]

13. Post-exposure prophylaxis by vaccination is recommended for
A) Hepatitis A virus
B) Hepatitis B virus
C) Human immunodeficiency virus
D) Rubella virus
E) Rabies virus
Answer: F, T, F, F, T
Discussion:
Reference: [Ref: Lange/Ed-15th/P-273]

14. Professional antigen presenting cells are
A) Dendritic cell
B) Neutrophils
C) NK cells
D) Macrophages
E) B-lymphocytes
Answer: T, F, F, F, T
Discussion:
Reference: [Ref: Lange 14th P-486]

15. Regarding IgG
A) Most abundant antibody
B) All cross placenta
C) Produced in large amounts in primary immune response
D) Only intravascular distribution
E) Mediates allergic reaction
Answer: T, F, F, F, F
Discussion:
Reference: [Ref: Lange/Ed-15th/P-524]

16. The following cells express MHC II (MHC = major histocompatibility complex) antigens-
A) B lymphocytes
B) Reticulocytes
C) Activated T lymphocytes
D) Fibroblasts
E) Renal tubular epithelium
Answer: T, F, T, F, F
Discussion:
Reference:

17. The following conditions are associated with a polyclonal gammopathy
A) Waldenstrom'smacroglobulinaemia
B) Rheumatoid arthritis
C) Down's syndrome
D) Wiskott-Aldrich syndrome
E) Post-streptococcal glomerulonephritis
Answer: F, T, F, F, T
Discussion:
Reference:

18. The organ-specific autoimmune diseases are

A) Rheumatoid arthritis
B) Autoimmune haemolyticanaemia
C) Scleroderma
D) Myasthenia gravis
E) Systemic lupus erythematosus
Answer: F, T, F, T, F
Discussion:
Reference: [Ref: Lange/Ed-15th/P-563]

19. Vaccine contain sub-unit
A) Live influenza vaccine
B) Killed influenza vaccine
C) Hepatitis B vaccine
D) Polio vaccine
E) Hepatits A viral vaccine
Answer: F, T, T, F, F
Discussion:
Reference: [Ref: Lange/Ed-15th/P-273]

20. B cell function
A) Host defense against fungi
B) Tumor rejection
C) Transplant rejection
D) Allergy
E) Autoimmunity
Answer: F, F, F, T, T
Discussion:
Reference: [Ref: Lange 15th 477]

21. Following are features of acquired immunity
A) Develops upon contact with antigen
B) Highly specific
C) Effective immediately after exposure to microbe
D) Present in both vertebrates & invertebrates
E) There is always immunologic memory
Answer: T, T, F, F, T
Discussion:
Reference: [Ref: Lange/Ed-15th/P-477]

22. Following are the factors of innate immunity

A) Fatty acid of skin
B) Acid pH of sweat & sebaceous secretion
C) Interferons
D) Lysozyme in the tear, nasal secretion,&aliva

E) Complement
Answer: T, T, T, T, T
Discussion:
Reference: [Ref: Lange/Ed-15th/P-482]

23. Immunologically mediated diseases are
A) Parkinson's disease
B) Myasthenia gravis
C) Duchenne muscular dystrophy
D) Grave's disease
E) Multiple sclerosis
Answer: F, T, F, T, T
Discussion:
Reference: [Ref: Lange/Ed-15th/P-563]

24. Low serum complement is associated with
A) Post infectious glomerulonephritis
B) Diabetic nephropathy
C) Mesangiocapilary GN
D) SLE
E) Infective endocarditis
Answer: T, F, T, T, T
Discussion:
Reference: [Ref: Lange/Ed-15th/P-539]

25. Non-specific host defenses against viral infection are
A) Natural killer cells (NK cells)
B) IgM
C) Interferons
D) Anti-viral drugs
E) IgG
Answer: T, F, T, T, F
Discussion:
Reference: [Ref: Lange/Ed-15th/P-251]

26. A known case of CKD patient came to you with anemia. You are going to treat the patient by erythropoietin. Before starting erythropoietin therapy, which levels should you correct?
A) Vitamin B12
B) Thyroid hormone
C) Iron
D) Folic acid
E) Growth hormone
Answer: C
Discussion:
Reference: [Davidson 23th Edition Pg: 418]

27. 45years old patient suffering from cough for 3months which is associated with purulent sputum production,fever and malaise.CT scan of chest shows thickened and dilated airways.Possible diagnosis?
A) AIDS
B) Bronchiectasis
C) Chronic bronchitis
D) Emphysema
E) Empyma
Answer: B
Discussion:
Reference: Ref: Davidson 23rd 579

28. A 35yrs old woman with renal transplant received antilymphocyte globulins. A week later she experienced fever and hypotension. Which of the following mechanisms is responsible for this manifestation?
A) Granuloma formation
B) Type-I hypersensitivity
C) Type-II hypersensitivity
D) Type-III hypersensitivity
E) Type-IV hypersensitivity
Answer: D
Discussion: Type III hypersensitivity In type III hypersensitivity, soluble immune complexes (aggregations of antigens and IgG and IgM antibodies) form in the blood and are deposited in various tissues (typically the skin, kidney and joints), where they can trigger an immune response according to the classical pathway of complement activation. The reaction takes hours to days to develop. Some clinical examples include: Immune-complex glomerulonephritis Rheumatoid arthritis Serum sickness Subacute bacterial endocarditis Systemic lupus erythematosus Arthus reaction.
Reference: (Ref: Pastest-2.8)

29. Anti- inflammatory cytokine is
A) IL1
B) IL4
C) IL5
D) TGF beta
E) IL10
Answer: E
Discussion:
Reference: [Ref: Lange/Ed-15th/P-491-492]

30. B cell markers are except
A) B7
B) Ig M
C) Ig D
D) CD 56
E) CD 20
Answer: D
Discussion:
Reference: [Ref: Lange/15th/P-518]

31. Classical pathway activators except
A) IgM
B) IgG1
C) IgG2
D) IgG3
E) IgG4
Answer: E
Discussion:
Reference: [Ref: Lange/Ed-15th/P-524]

32. Cytokines related with helper T cell except
A) IL 1
B) IL 2
C) IL 4
D) IL 5
E) IFN GAMMA
Answer: A
Discussion:
Reference: Ref: Lange/15th/P-505]

33. Following complement components, which one is the most important opsonin?
A) Cl
B) C3a
C) C3b
D) C5a
E) C5b
Answer: C
Discussion:
Reference: [Ref: Lange/Ed-15th/P-537]

34. Humoral immunity neutralizes
A) Virus
B) Intracellular bacteria
C) Toxins
D) Fungi
E) Tumor
Answer: C
Discussion:
Reference: [Ref: Lange/15th/P-518]

35. In Allergic condition, degranulation of which cell is responsible?
A) Neutrophil
B) Mast cell
C) Lymphocyte
D) Macrophage
E) Monocyte
Answer: B
Discussion:
Reference: [Ref: Lange/Ed-15th/P-553]

36. In graft versus host reaction which is not true -
A) Graft has to contain immunocompetent T cells
B) Host is usually immunocompromised
C) Recipient must express Ag
D) Host cytotoxic cells play a major role
E) MHC play an important role
Answer: D
Discussion:
Reference: (Ref:LANGE 13TH 524)

37. Live vaccines are except
A) Measle
B) Mumps
C) Rubella
D) Influenza
E) Polio
Answer: D
Discussion:
Reference: [Ref: Lange/Ed-15th/P-273]

38. Macrophages
A) Have phagocytic but not pinocytic capabilities
B) Are derived from blood neutrophil
C) Have a shorter life span than neutrophils
D) Contain acidic Proteases
E) Produce interleukin – I
Answer: E
Discussion:
Reference: [Ref: Lange/Ed-15th/P-586]

39. Most important feature of autoimmuno disease
A) Antibody mediated
B) Reactive cell
C) T- Lymphocyte
D) Alteration of normal proteins
E) Molecular mimicry
Answer: A
Discussion:
Reference: [Ref: Lange/Ed-15th/P-563]

40. Regarding immunologic tolerance, which one of the following isthe most accurate?
A) Clonal deletion occurs with T cells but not with B cells.
B) Tolerance to certain self-antigens occurs by negative selectionof immature T cells in the thymus.
C) The presence of B7 on the surface of the antigen-presentingcell is one of the essential steps required to establishtolerance.
D) Tolerance is easier to establish in adults than in newbornsbecause more self-reactive T cells have undergone apoptosis inadults than in newborns.
E) Once tolerance is established to an antigen, it is permanent
Answer: B
Discussion:
Reference: [Ref: Lange/Ed-15th/P-579]

41. Regarding tumor immunity, which one of the following is themost accurate?
A) Both cytotoxic T cells and cytotoxic antibodies attack humancancer cells.
B) An elevated level of alpha-fetoprotein is a marker for carcinomaof the lung.
C) A declining level of carcinoembryonic antigen (CEA) is anindication that the patients colon cancer has recurred.
D) Cancer cells induced by chemicals have new antigens on thesurface, but cancer cells induced by viruses do not.
E) Natural killer (NK) cells do not participate in the cellmediatedresponse to cancer cells because they do not have anantigen-specific receptor on their surface.
Answer: A
Discussion:
Reference: [Ref: Lange/Ed-15th/P-572]

42. T-cell-mediated immunity is the main host defense against whichone of the following organisms?
A) Escherichia coli
B) Mycobacterium leprae
C) Pseudomonas aeruginosa
D) Staphylococcus aureus
E) Streptococcus pneumoniae
Answer: B
Discussion:
Reference: [Ref: Lange/Ed-15th/P-516]

43. The indicator of immune deficiency state includes:
A) More than 6 respiratory tract infections per year in an adult
B) Obesity
C) Infections with unusual organisms
D) Infections at unusual sites
E) Secondary hypertension
Answer: C
Discussion:
Reference: Ref: Lange/Ed-15th/P-573]

44. Transplant related immunosuppressive monoclonal antibody is
A) Basiliximab
B) Infliximab
C) Natalizumab
D) Rituximab
E) Palivizumab
Answer: A
Discussion:
Reference: [Ref: LANGE/11th/418]

45. Which laboratory test is the best to determine the CD4+ cells in the blood of a HIV positive patient?
A) Flow Cytometry
B) Agglutination
C) Complement fixation
D) ELISA
E) Immunoelectrophoresis
Answer: A
Discussion:
Reference: (Ref:LANGE/ 13th/P-540)

46. Which of the following is associated with hyperacute allograft rejection?
A) Cytotoxic T cells
B) Decay-accelerating factor
C) MHC class II
D) Natural killer (NK) cells
E) Pre-existing humoral antibodies
Answer: E
Discussion:
Reference: [Ref: B&L/27th/P-1535]

47. Which one is not always true about Major Histocompatibility Complex-
A) Located in virtually all cells
B) Situated in long arm of Chromosome 6
C) Also called HLA
D) Same in monozygotic twins
E) Associated with Coeliac disease
Answer: B
Discussion:
Reference: (Ref: LANGE 13TH 522-524)

48. which one of the following must be expressed by Antigen – presenting cells that activate helper T cell on their surfaces
A) IgM
B) TCR
C) Class I MHC antigen
D) Class II MHC antigen
E) CD28
Answer: D
Discussion:
Reference:

49. A cytokine produced by macrophage to induceliver production of acute phase proteinsis a

A) INF-□
B) IL-4
C) IL-6
D) IL-10
E) IL-17
Answer: C
Discussion: (Explanation: IL-6 stimulates hepatocytes to secrete acute phase proteins.)
Reference:

50. Chronic mucocutaneous candidiasis mostly occurs in
A) Acquired T cell deficiencies
B) Congenital T cell deficiencies
C) Congenital B cell deficiencies
D) Congenital phagocyte deficiencies
E) Acquired complements deficiencies
Answer: B
Discussion:
Reference: [Ref : Lange 15th/P-574]