Chapter 7

1. Active and passive immunity:

A. are both long-term immunities
B. are both associated with intramuscular injections
C. both eventually involve the use of antibodies
D. are both natural means the body uses when it detects disease-causing agents
E. are both dependent upon the presence of vaccines

2. A vaccine contains:

A. penicillin
B. horse serum
C. treated antigens
D. antibodies

3. In what disease do antibodies attack the neuromuscular junctions, producing muscle weakness?

A. rheumatic fever
B. myasthenia gravis
C. multiple sclerosis
D. rheumatoid arthritis

4. When a person is exposed to a disease for which they have been vaccinated, it is likely:

A. they will never come in contact with the disease agent
B. they will show immediate symptoms of the disease
C. they will fight off the disease quickly
D. they will die
5. Kathy came down with the measles at college. Her roommates were given ____ to provide passive immunity.

A. a vaccine  
B. gamma globulin  
C. monoclonal antibodies  
D. interleukins

6. Which allergic reaction describes anaphylactic shock?

A. immediate  
B. delayed

7. Identical antibodies taken from hybridomas are called:

A. monoantibodies  
B. monoclonal antibodies  
C. hybridomal antibodies  
D. anti-antibodies

8. Which of the following is not an autoimmune disease?

A. lupus erythematosus  
B. apoptosis  
C. multiple sclerosis  
D. rheumatoid arthritis

9. Which of the following is NOT considered a lymphoid organ?

A. bone marrow  
B. thymus  
C. spleen  
D. lymph node  
E. kidney
10. Plasma cells are most closely related to which of the following?

A. T lymphocytes  
B. macrophages  
C. neutrophils  
D. B lymphocytes  
E. platelets

11. APCs:

A. can be macrophages  
B. help B cells recognize a specific antigen  
C. are types of antigens  
D. are types of receptors on B and T cells

12. Interferon is a protection against:

A. the flu vaccine  
B. viral infections  
C. all types of infections  
D. all types of allergies

13. Which of the following produces perforin?

A. plasma cells  
B. B lymphocytes  
C. complement  
D. cytotoxic T cells  
E. suppressor T cells

14. Choose the following that is NOT included as a lymphatic organ.

A. lymph node, spleen  
B. tonsils, red bone marrow  
C. thymus gland, Peyer's patches  
D. liver, kidney  
E. All of the choices are considered lymphatic organs.
15. Xenotransplantation is:
   A. use of vaccines developed from pig viruses
   B. development of antibiotics to prevent pathogens from jumping from bird to human hosts
   C. use of non-human animal organs for transplant into humans
   D. None of the choices are correct.

16. Prepared antibodies give temporary immunity. This is part of
   A. passive immunity
   B. active immunity

17. John was immunized against (vaccinated for) most of the childhood diseases. What type of immunity is this?
   A. active immunity
   B. passive immunity
   C. nonspecific immunity
   D. general immunity
   E. This is not considered an example of immunity.

18. Which of the following is NOT considered a nonspecific defense mechanism against infection?
   A. stomach acids
   B. skin
   C. mucus in respiratory tract
   D. normal bacteria in intestine
   E. antibodies in mother's milk

19. Which allergic reaction describes contact dermatitis?
   A. immediate
   B. delayed

20. BCRs:
   A. activate a B cell when it binds to a specific antigen
   B. are B cell receptors
   C. are found in the plasma membrane
   D. All of the choices are correct.
21. Which of the following is a classic example of delayed allergic response?

A. anaphylaxis  
B. skin test for tuberculosis  
C. sneezing  
D. hay fever

22. Loss of the spleen means that a person:

A. will not reject foreign tissues  
B. will not respond well to most antigens  
C. is more susceptible to infection  
D. has reduced lymphocyte levels

23. Where do lymphocytes travel to become mature T lymphocytes?

A. thyroid  
B. tonsils  
C. thymus  
D. transverse colon  
E. tibia

24. Any foreign substance that stimulates the immune system is called:

A. antibody  
B. antigen  
C. complement  
D. None of the choices are correct.

25. The body cells' internal environment is provided for and maintained by:

A. tissue fluid  
B. blood  
C. lymph  
D. All of the choices are correct.
26. Larger lymphatic vessels are most like:
   A. arteries because of their thick muscle wall
   B. veins because of their thick muscle wall
   C. arteries because of the presence of valves
   D. veins because of the presence of valves

27. Before a virus can enter a host cell, it must:
   A. lose its capsid
   B. attach to the host cell with fimbriae
   C. bind with a receptor on the outer surface of the host cell
   D. digest a hole in the host cell using lysozymes

28. Peyer's patches are found:
   A. within the bone marrow
   B. within the thymus
   C. within the liver
   D. along the arterial walls
   E. within the intestinal wall

29. After being exposed to a contagious disease, Mrs. Jones has accumulated a high level of antibodies, yet shows no sign of illness. She is exhibiting:
   A. active immunity
   B. passive immunity
   C. an immune deficiency reaction
   D. an autoimmune disease

30. Viruses that have non-human animal reservoirs are difficult to control.
   A. True
   B. False

31. Bacteria reproduce by:
   A. fragmentation
   B. meiosis
   C. budding
   D. binary fission
32. Which type of T cell directs the immune response?
   A. helper T cell  
   B. suppressor T cell  
   C. cytotoxic T cell  
   D. memory T cell  
   E. T lymphocyte

33. Which of the following is in the correct order?
   A. antigen binds to BCR; B cell activated; B cell divides; plasma cells form  
   B. B cell activated; antigen binds to BCR; B cell divides; plasma cells form  
   C. plasma cells form; B cell activated; B cell divides; antigen binds to BCR  
   D. antigen binds to BCR; B cell divides; B cell activated; plasma cells form

34. Which of the following are immune barriers to entry?
   A. cilia  
   B. mucus  
   C. skin  
   D. acidic pH  
   E. All of the choices are correct.

35. New viral pathogens can emerge when:
   A. they are transported to different parts of the world  
   B. the virus mutates, allowing the virus to be transmitted by a new vector  
   C. the immune system cannot recognize a change in the virus  
   D. All of the choices are correct.

36. An additional ring of DNA found in some bacteria is called a:
   A. fimbriae  
   B. plasmid  
   C. prion  
   D. cytokine
37. How does complement kill foreign microbes?

A. by agglutinating them  
B. by causing them to burst  
C. by inactivating their ribosomes  
D. by creating perforins  
E. by destroying their nucleic acids  

38. Mr. Smith's infection was treated with monoclonal antibodies. What type of immunity is this?

A. active immunity  
B. passive immunity  
C. clonal immunity  
D. general immunity  
E. This is not an example of immunity.  

39. Allergies are associated with increases in the concentration of which type of antibody?

A. IgA  
B. IgD  
C. IgE  
D. IgG  
E. IgM  

40. In B cell cloning as a result of activation by a specific antigen:

A. antibody production is stimulated by apoptosis  
B. cytokines secreted by pathogens slow the process  
C. cytokines secreted by helper T cells stimulate the process  
D. certain clones are changed into helper T cells  

41. Decomposers:

A. break down dead organic matter in the environment by secreting digestive enzymes  
B. break down living organic matter by secreting digestive enzymes  
C. destroy living cells then break them down with digestive enzymes  
D. live in close association with another species
42. The lymphatic organ that battles pathogens that enter the body by way of the intestinal tract is the
   A. tonsil
   B. vermiform appendix
   C. lymph node
   D. spleen

43. It is possible to develop immunity to:
   A. all toxins
   B. any disease that can be cured by antibiotics
   C. infectious agents, foreign cells, and abnormal body cells
   D. any allergy

44. Tissue rejection is most likely to occur in individuals who:
   A. are unable to develop immunity
   B. have suppressed immunity due to illness
   C. have an active immune system
   D. need booster shots
   E. have compromised immune systems

45. Each human has a unique set of ___ on their body cells, marking cells as belonging to a particular
    individual.
   A. APC
   B. PCD
   C. TCR
   D. HLA

46. Active bone marrow is located in the adult:
   A. skull
   B. sternum
   C. ribs
   D. pelvic bones
   E. All of the choices are correct.
47. Immunity is based on the recognition of:

   A. antigens
   B. self
   C. foreign proteins
   D. All of the choices are correct.

48. Allergy shots increase the amount of which antibody in the bloodstream?

   A. IgE
   B. IgM
   C. IgG
   D. IgD
   E. IgA

49. Which of the following is NOT true regarding B cells?

   A. They always require an antigen-presenting cell.
   B. They represent a specific response.
   C. They are part of an antibody-mediated immunity.
   D. They form plasma cells that synthesize and release antibodies.

50. The capsid of a virus is composed of:

   A. RNA
   B. protein
   C. DNA
   D. cellulose
Chapter 7 Key

1. Active and passive immunity:
   a. are both long-term immunities
   b. are both associated with intramuscular injections
   C both eventually involve the use of antibodies
   d. are both natural means the body uses when it detects disease-causing agents
   e. are both dependent upon the presence of vaccines

2. A vaccine contains:
   a. penicillin
   b. horse serum
   C treated antigens
   d. antibodies

3. In what disease do antibodies attack the neuromuscular junctions, producing muscle weakness?
   a. rheumatic fever
   B myasthenia gravis
   c. multiple sclerosis
   d. rheumatoid arthritis

4. When a person is exposed to a disease for which they have been vaccinated, it is likely:
   a. they will never come in contact with the disease agent
   b. they will show immediate symptoms of the disease
   C they will fight off the disease quickly
   d. they will die
5. Kathy came down with the measles at college. Her roommates were given ____ to provide passive immunity.

   a. a vaccine  
   B  gamma globulin  
   c. monoclonal antibodies  
   d. interleukins

6. Which allergic reaction describes anaphylactic shock?

   A  immediate  
   b. delayed

7. Identical antibodies taken from hybridomas are called:

   a. monoantibodies  
   B  monoclonal antibodies  
   c. hybridomal antibodies  
   d. anti-antibodies

8. Which of the following is not an autoimmune disease?

   a. lupus erythematosus  
   B  apoptosis  
   c. multiple sclerosis  
   d. rheumatoid arthritis

9. Which of the following is NOT considered a lymphoid organ?

   a. bone marrow  
   b. thymus  
   c. spleen  
   d. lymph node  
   E  kidney
10. Plasma cells are most closely related to which of the following?
   a. T lymphocytes
   b. macrophages
   c. neutrophils
   D B lymphocytes
   e. platelets

11. APCs:
   A can be macrophages
   b. help B cells recognize a specific antigen
   c. are types of antigens
   d. are types of receptors on B and T cells

12. Interferon is a protection against:
   a. the flu vaccine
   B viral infections
   c. all types of infections
   d. all types of allergies

13. Which of the following produces perforin?
   a. plasma cells
   b. B lymphocytes
   c. complement
   D cytotoxic T cells
   e. suppressor T cells
14. Choose the following that is NOT included as a lymphatic organ.

a. lymph node, spleen  
b. tonsils, red bone marrow  
c. thymus gland, Peyer's patches  
D. liver, kidney  
e. All of the choices are considered lymphatic organs.

15. Xenotransplantation is:

a. use of vaccines developed from pig viruses  
b. development of antibiotics to prevent pathogens from jumping from bird to human hosts  
C. use of non-human animal organs for transplant into humans  
d. None of the choices are correct.

16. Prepared antibodies give temporary immunity. This is part of

A. passive immunity  
b. active immunity

17. John was immunized against (vaccinated for) most of the childhood diseases. What type of immunity is this?

A. active immunity  
b. passive immunity  
c. nonspecific immunity  
d. general immunity  
e. This is not considered an example of immunity.
18. Which of the following is NOT considered a nonspecific defense mechanism against infection?

- a. stomach acids
- b. skin
- c. mucus in respiratory tract
- d. normal bacteria in intestine
- E. antibodies in mother's milk

19. Which allergic reaction describes contact dermatitis?

- a. immediate
- B. delayed

20. BCRs:

- a. activate a B cell when it binds to a specific antigen
- b. are B cell receptors
- c. are found in the plasma membrane
- D. All of the choices are correct.

21. Which of the following is a classic example of delayed allergic response?

- a. anaphylaxis
- B. skin test for tuberculosis
- c. sneezing
- d. hay fever

22. Loss of the spleen means that a person:

- a. will not reject foreign tissues
- b. will not respond well to most antigens
- C. is more susceptible to infection
- d. has reduced lymphocyte levels
23. Where do lymphocytes travel to become mature T lymphocytes?
   a. thyroid
   b. tonsils
   C thymus
   d. transverse colon
   e. tibia

24. Any foreign substance that stimulates the immune system is called:
   a. antibody
   B antigen
   c. complement
   d. None of the choices are correct.

25. The body cells' internal environment is provided for and maintained by:
   a. tissue fluid
   b. blood
   c. lymph
   D All of the choices are correct.

26. Larger lymphatic vessels are most like:
   a. arteries because of their thick muscle wall
   b. veins because of their thick muscle wall
   c. arteries because of the presence of valves
   D veins because of the presence of valves

27. Before a virus can enter a host cell, it must:
   a. lose its capsid
   b. attach to the host cell with fimbriae
   C bind with a receptor on the outer surface of the host cell
   d. digest a hole in the host cell using lysozymes
28. Peyer's patches are found:
   a. within the bone marrow
   b. within the thymus
   c. within the liver
   d. along the arterial walls
   E. within the intestinal wall

29. After being exposed to a contagious disease, Mrs. Jones has accumulated a high level of antibodies, yet shows no sign of illness. She is exhibiting:

   A. active immunity
   b. passive immunity
   c. an immune deficiency reaction
   d. an autoimmune disease

30. Viruses that have non-human animal reservoirs are difficult to control.

   A. True
   b. False

31. Bacteria reproduce by:

   a. fragmentation
   b. meiosis
   c. budding
   D. binary fission
32. Which type of T cell directs the immune response?
   A helper T cell  
   b. suppressor T cell  
   c. cytotoxic T cell  
   d. memory T cell  
   e. T lymphocyte  

33. Which of the following is in the correct order?
   A antigen binds to BCR; B cell activated; B cell divides; plasma cells form  
   b. B cell activated; antigen binds to BCR; B cell divides; plasma cells form  
   c. plasma cells form; B cell activated; B cell divides; antigen binds to BCR  
   d. antigen binds to BCR; B cell divides; B cell activated; plasma cells form  

34. Which of the following are immune barriers to entry?
   a. cilia  
   b. mucus  
   c. skin  
   d. acidic pH  
   E All of the choices are correct.  

35. New viral pathogens can emerge when:
   a. they are transported to different parts of the world  
   b. the virus mutates, allowing the virus to be transmitted by a new vector  
   c. the immune system cannot recognize a change in the virus  
   D All of the choices are correct.
36. An additional ring of DNA found in some bacteria is called a:
   
   a. fimbriae  
   **B** plasmid  
   c. prion  
   d. cytokine

37. How does complement kill foreign microbes?
   
   a. by agglutinating them  
   **B** by causing them to burst  
   c. by inactivating their ribosomes  
   d. by creating perforins  
   e. by destroying their nucleic acids

38. Mr. Smith's infection was treated with monoclonal antibodies. What type of immunity is this?
   
   a. active immunity  
   **B** passive immunity  
   c. clonal immunity  
   d. general immunity  
   e. This is not an example of immunity.

39. Allergies are associated with increases in the concentration of which type of antibody?
   
   a. IgA  
   b. IgD  
   **C** IgE  
   d. IgG  
   e. IgM
40. In B cell cloning as a result of activation by a specific antigen:
   a. antibody production is stimulated by apoptosis
   b. cytokines secreted by pathogens slow the process
   C. cytokines secreted by helper T cells stimulate the process
   d. certain clones are changed into helper T cells

41. Decomposers:
   A. break down dead organic matter in the environment by secreting digestive enzymes
   b. break down living organic matter by secreting digestive enzymes
   c. destroy living cells then break them down with digestive enzymes
   d. live in close association with another species

42. The lymphatic organ that battles pathogens that enter the body by way of the intestinal tract is the
   a. tonsil
   B. vermiform appendix
   c. lymph node
   d. spleen

43. It is possible to develop immunity to:
   a. all toxins
   b. any disease that can be cured by antibiotics
   C. infectious agents, foreign cells, and abnormal body cells
   d. any allergy
44. Tissue rejection is most likely to occur in individuals who:

a. are unable to develop immunity
b. have suppressed immunity due to illness
C. have an active immune system
d. need booster shots
e. have compromised immune systems

45. Each human has a unique set of ____ on their body cells, marking cells as belonging to a particular individual.

a. APC
b. PCD
c. TCR
D. HLA

46. Active bone marrow is located in the adult:

a. skull
b. sternum
c. ribs
d. pelvic bones
E. All of the choices are correct.

47. Immunity is based on the recognition of:

a. antigens
b. self
c. foreign proteins
D. All of the choices are correct.
48. Allergy shots increase the amount of which antibody in the bloodstream?
   a. IgE
   b. IgM
   C. IgG
   d. IgD
   e. IgA

49. Which of the following is NOT true regarding B cells?
   A. They always require an antigen-presenting cell.
   b. They represent a specific response.
   c. They are part of an antibody-mediated immunity.
   d. They form plasma cells that synthesize and release antibodies.

50. The capsid of a virus is composed of:
   a. RNA
   B. protein
   c. DNA
   d. cellulose
Chapter 7 **Summary**

<table>
<thead>
<tr>
<th>Category</th>
<th># of Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mader - 007 Chapter...</td>
<td>50</td>
</tr>
</tbody>
</table>