Lymphatic--Immune System

Required:

1. Describe the major functions of the lymphatic system in maintaining body homeostasis.

2. Briefly describe the structure and functions of the lymph nodes, thymus, spleen and bone marrow with regard to immunity.

3. Describe the origin of lymph and how it relates to tissue fluid balance

4. Describe how lymph is returned to the blood.

5. Briefly describe the different types of nonspecific immunity.

6. Describe the process of phagocytosis.

7. Describe the function of Natural Killer Cells.

8. Be able to describe the events that occur during an inflammation response and relate these events to the symptoms of inflammation.

9. Distinguish between nonspecific and specific immunity.

10. Know the origin and sites of maturation of B-lymphocytes and T-lymphocytes and describe the basic difference in their ability to recognize pathogens.

11. Define the terms antibody and antigen and describe how they are related.

12. Describe the role of the major histocompatibility proteins in “recognition of self”.

13. Describe the mechanisms by which antibodies help to destroy pathogens.

14. Briefly describe the functions of complement.

15. On the basis of specific immunity, describe why initial infection by a specific pathogen causes disease whereas one is "protected" during subsequent exposure to the same pathogen.

16. Distinguish cell- mediated immunity from antibody- mediated immunity.

17. Describe the central role of helper T-lymphocytes in the immune response.

18. Describe how cell - mediated immunity and antibody - mediated immunity interact with the non-specific process of phagocytosis.

19. Describe how killer (cytotoxic) T-lymphocytes destroy pathogens.

20. Distinguish between active and passive immunity.