Microbiology Learning Objectives C19
Disorders Associated with the Immune System

1. Define hypersensitivity.
2. Are all immune responses beneficial?
3. What is anaphylaxis?
4. Where are mast cells located? Structure and function?
5. What form is more dangerous to life: systemic or localized anaphylaxis?
6. Define desensitization and blocking antibody. Which antibody types need to be blocked to desensitize a person subject to allergies?
7. What is a cytotoxic reaction and how can drugs induce them?
8. Describe the basis of the ABO and Rh blood group sytems.
9. Explain hemolytic disease of the newborn.
10. What is the mechanism of immune complex reactions?
11. What is the relationship between the major histocompatibility complex in humans and the human leukocyte antigen complex?
12. What immune system cells are involved in the rejection of nonself transplants?
13. What is a privileged site? Relate to a transplanted cornea.
14. What is a graft-versus-host disease?
15. Define: autograft, isograft, allograft, and xenotransplant.
16. How is rejection of a transplant prevented? What cytokine is usually the target of immunosuppressant drugs?
17. Describe how the immune system responds to cancer and how cells evade immune responses.
18. Give two examples of immunotherapy.
19. Is AIDS an acquired or a congenital immunodeficiency?
20. What is the primary receptor on host cells to which HIV attaches?

21. List two ways in which HIV avoids the host’s antibodies.

22. Describe the stages of HIV infection.

23. What is the effect of the HIV infection on the immune system?

24. What are the routes of HIV transmission?

25. What is the most common mode, worldwide, by which HIV is transmitted?

26. List the current methods of preventing and treating HIV infections.