Questions for CHAPTER 10

1. The organism of gonorrhea
   A) resists destruction during autoclaving.
   B) survives for long periods of time on a dry surface.
   C) occurs in spore and vegetative forms.
   D) is rarely contracted from a dry surface such as toilet seat.
   E) is a staphylococcus.

2. Cases of rat bite fever may be due to either
   A) staphylococcus or an anaerobic rod.
   B) streptobacillus or a streptococcus.
   C) mold or a spiral bacterium.
   D) rigid spiral bacterium or a streptobacillus.
   E) protozoan or an anaerobic rod.

3. The organism of leprosy
   A) may be cultivated in the laboratory on nutrient agar.
   B) grows only in blood culture medium.
   C) belongs to the same genus as the tubercle bacillus.
   D) is commonly found in raw milk.
   E) grows only at very high temperatures.

4. Mycoplasmal urethritis and granuloma inguinale are similar in that
   A) both are diseases caused by spirochetes.
   B) both diseases are transmitted by sexual contact.
   C) both diseases affect the groin and spinal cord.
   D) both are diseases primarily of children.
   E) both diseases are caused by anaerobic rods.

5. Trachoma is
   A) a foodborne disease of the intestine.
   B) a spirochetal disease of the lungs.
   C) a sexually-transmitted disease caused by a rickettsia.
   D) a chlamydial disease of the eyes.
   E) an airborne disease of the lungs.
6. All the following are characteristic signs of secondary syphilis except
   A) flat wart-like skin lesions.
   B) gummae.
   C) swollen lymph glands.
   D) patchy loss of hair and eyebrows.
   E) staphylococci from the vaginal tract.

7. Infection due to Haemophilus ducreyi may be identified by the isolation of
   A) staphylococci from skin lesions.
   B) diplococci from the spinal fluid.
   C) Gram-negative rods from the genital papules.
   D) Gram-positive rods from the feces.
   E) staphylococci from the vaginal tract.

8. A case of actinomycosis may be related to all the following except
   A) a dental extraction.
   B) consumption of canned food.
   C) an ulcer in the intestinal tissue.
   D) sinuses of the chest wall.

9. Recent years have witnessed the appearance of gonorrhea attributed to
   A) Gram-positive sporeforming rods.
   B) molds or yeasts.
   C) penicillin-resistant diplococci.
   D) anaerobic diplococci that produce coagulase.
   E) molds.

10. Nosocomial diseases are those
    A) acquired by the bite of an arthropod.
    B) which affect the reproductive organs.
    C) which are due exclusively to fungi.
    D) acquired during hospitalization.
    E) which are associated with the nose.

11. Species of Bacteroides
    A) inhabit the large intestines and feces of most individuals.
    B) cause nocardiosis.
    C) are acid-fast funguslike rods.
    D) are widely encountered as causes of dental cavities.
    E) cannot grow at human body temperatures.
12. The chancre is a painless, circular, purplish ulcer associated with
A) toxic shock syndrome.
B) the ulcers due to Haemophilus influenzae.
C) nosocomial diseases.
D) gonococcal pharyngitis.
E) primary syphilis.

13. The effects of Hutchinson's triad, a possible complication of congenital syphilis, are observed in the
A) teeth, eyes and ears.
B) brain, kidney and heart.
C) hands, feet and abdominal skin.
D) pancreas, duodenum and colon.
E) testes, scrotum and epididymis.

14. Salpingitis, a possible complication of gonorrhea, is observed as a(n):
A) set of ulcers in the colon.
B) outbreak of skin ulcers along the back.
C) blockage of fallopian tubes.
D) tumor of the brain.
E) infolding of the intestinal lining.

15. The similarities of organisms and symptoms have led many microbiologists to believe there is a relationship between
A) leprosy and conjunctivitis.
B) TSS and ANUG.
C) dental caries and impetigo.
D) Ritter's disease and Hansen's disease.
E) Yaws and syphilis.

16. In addition to lung disease, Nocardia asteroides may be responsible for
A) toxic shock syndrome.
B) abscesses and swelling of the foot.
C) cat scratch disease.
D) toxic shock syndrome.
E) mycoplasmal urethritis.
17. A typical triad of fever, arthritislike pain in the large joints and skin rash is generally associated with
   A) complications arising from gonorrhea.
   B) Ritter's disease.
   C) one form of rat bite fever.
   D) toxic shock syndrome.
   E) any of the endogenous diseases.

18. The special adherence qualities of Streptococcus mutans are enhanced by the presence of
   A) amino acids and fatty acids.
   B) adenine and cytosine.
   C) nucleic acids such as RNA and DNA.
   D) xylitol and fluorides.
   E) levans and glucans.

19. Among the most common opportunistic bacteria that can cause nosocomial disease are all the following except
   A) Enterobacter aerogenes.
   B) Mycobacterium leprae.
   C) Pseudomonas aeruginosa.
   D) Serratia marcescens.
   E) Enterobacter cloacae.

20. All the following bacteria are known to grow under anaerobic conditions and cause human disease except
   A) Clostridium difficile.
   B) Actinomyces israelii.
   C) Bacteroides fragilis.
   D) Nocardia asteroides.
   E) Neisseria gonorrhoeae.

21. All the following symptoms are associated with toxic shock syndrome except
   A) severe muscle aches.
   B) slurred speech and facial paralysis.
   C) watery diarrhea.
   D) skin peeling in the palms of the hands.
   E) sudden drop in blood pressure.
22. All the following apply to bacterial conjunctivitis (pinkeye) except
   A) copious discharge runs down the cheek.
   B) eyelids crust during sleeping hours.
   C) the eyes are swollen.
   D) pale, tiny nodules form on conjunctiva.
   E) vision in bright light is impaired.

23. Staphylococcus aureus has been linked to all the following conditions except
   A) impetigo contagiosum.
   B) toxic shock syndrome.
   C) bejel and pinta.
   D) the scalded skin syndrome.
   E) boils and carbuncles.

24. A sexually transmitted disease can be related to all the following organisms except
   A) Haemophilus influenzae biotype III.
   B) Gardnerella vaginalis.
   C) Chlamydia trachomatis.
   D) Treponema pallidum.
   E) Mycoplasma hominis.

25. The causative agent of actinomycosis, Actinomyces israelii,
   A) is acid-fast.
   B) is an anaerobic fungus-like rod.
   C) produces sulfur granules.
   D) moves by an external axial filament characteristic of spirochetes.

26. All of the following organisms are endogenous species that can produce urinary tract
    infections, except
   A) Escherichia coli.
   B) Treponema pallidum.
   C) Klebsiella pneumoniae.
   D) Proteus mirabilis.

27. Pseudomonas aeruginosa is a(n)
   A) endogenous organism that causes burn infections.
   B) sexually transmitted organism.
   C) Gram(+) rod.
   D) organism that does not exhibit resistance to antibiotics.
28. Staphylococcus aureus is associated with
   A) urinary tract infections.
   B) burn infections.
   C) venereal disease.
   D) toxic shock syndrome.

29. One of the difficulties in controlling gonorrhea is the fact that
   A) the male is asymptomatic.
   B) the causative organism is resistant to many antibiotics.
   C) 50% of female infections may be asymptomatic.
   D) penicillin is not effective against the organism because all strains produce
      penicillinase.

30. Gummas are
   A) the circular, purplish ulcers associated with primary syphilis.
   B) lesions, which destroy the elastic tissue and weaken major blood vessels.
   C) the "great pox."
   D) associated with the endogenous disease called lumpy jaw.

31. Chlamydia trachomatis causes
   A) gonorrhea.
   B) syphilis.
   C) nonspirochetal syphilis.
   D) nongonococcal urethritis.

32. Yaws is sometimes known as frambesia because
   A) it was first reported in the province of Frambesia in France.
   B) of the raspberry-like appearance that can be produced by the bursting of the mother
      yaw.
   C) it may deform the leg bones.
   D) of the permanent scars it produces.

33. Hansen's disease has an incubation period of 3 to 6
   A) days.
   B) weeks.
   C) months.
   D) years.
34. A draining abscess associated with actinomycosis is referred to a(n)
   A) sinus.
   B) sodoku.
   C) thorac.
   D) madura.

35. Acute necrotizing ulcerative gingivitis is another name for
   A) syphilis.
   B) toxic shock syndrome.
   C) trench mouth.
   D) yaws.

36. Pseudomonas aeruginosa is a severe problem in burn infections. This is due in part to the fact that
   A) the organism is normally associated with flammable materials such as wood.
   B) this bacterium has developed resistance to many antibiotics.
   C) P. aeruginosa is anaerobic.
   D) the organism is normally found on the skin and in the intestinal tract of almost all people.

37. There is evidence that women have more frequent urinary tract infections than men. Which of the following is NOT a probable cause of these infections:
   A) urethra opens in front of vaginal tract allowing for movement of organisms.
   B) Proximity of urethra to the anus permits passage of intestinal organisms.
   C) The long distance from the urethra to the bladder allows ample time for organisms to multiply.
   D) Sexual intercourse allows bacteria to enter during tissue manipulation.

38. Studies indicate that increased acidity inhibits urinary tract bacteria. Which of the following could increase the acidity of the urinary tract:
   A) green beans
   B) vitamin A
   C) lettuce
   D) vitamin C

39. Biofilms are clumps of bacteria in slimy conglomerates that are difficult to kill. All of the following relate to biofilms except:
   A) biofilms in urinary catheters are starting places for bladder infections
   B) biofilms adhere to macromolecules a liquid environment
   C) biofilms in males may cause prostate infections
   D) biofilms of P. aeruginosa are associated with a decline in respiratory function.
40. Select one of the following four choices for each of the phrases below:

- __________form of nongonococcal urethritis
- __________diagnosis depends on isolation of Gram-negative rods from pustules
- __________tertiary stage involves the gumma
- __________sometimes called "chlamydia"
- __________caused by a member of the genus Haemophilus
- __________organism has an unusually long generation time
- __________pneumonia possible in newborns
- __________causative organism too small for light microscope
- __________accompanied by substantial swelling of inguinal lymph nodes
- __________nervous system involved in final stage
- __________due to a spirochete
- __________Hutchinson's triad associated with congenital form
- __________due to a Gram-negative diplococcus
- __________ulcer has ragged edges and soft borders
- __________symptoms extremely similar to gonorrhea symptoms
- __________antibiotic resistance in PPNG strains
- __________endemic in undeveloped countries and tropical climates
- __________diagnosis with VDRL and rapid plasma reagin tests
- __________complicated by pharyngitis, proctitis, ophthalmia
- __________sometimes called "the clap"

a. chancroid  
b. chlamydial urethritis  
c. syphilis  
d. gonorrhea

41. Match each word or phrase with its correct characteristic.

- __________chancre  
- __________Donovan bodies  
- __________claw hand  
- __________carbuncle  
- __________dental plaque  
- __________lumpy jaw  
- __________trench mouth  
- __________conjunctivitis  
- __________salpingitis  
- __________pseudomembranous colitis  
- __________Chlamydia trachomatis  
- __________Mycobacterium leprae  
- __________Ureaplasma urealyticum  
- __________Haemophilus ducreyi  
- __________Calymmatobacterium granulomatis
**Treponema pallidum**

**Mycoplasma hominis**

**Gardnerella vaginalis**

**Staphylococcus aureus**

**Neisseria gonorrhoeae**

a. bacteria within phagocytes
b. deep skin abscess
c. painless ulcer; raised margin
d. lumpy, hard, swollen red jaw
e. periodontal disease
f. clostridial toxins induce condition
g. infection which causes blockage of Fallopian tubes
h. infection of conjunctiva
i. sign of leprosy
j. deposit of bacteria, protein, and the like on tooth surface

**a.** Gram-negative diplococcus

**b.** acid-fast rod

**c.** spirochete

**d.** mycoplasma

**e.** chlamydia; grows in living tissues

**f.** Gram-positive coccus; forms cell clusters

**g.** Gram-negative rod

42. *Streptococcus mutans* is of particular interest to public health specialists because it is an important cause of sexually transmitted disease.
   A) True
   B) False

43. *Pseudomembranous colitis* is accompanied by membranous lesions of the oral cavity and upper respiratory tract in a condition somewhat reminiscent of diphtheria.
   A) True
   B) False

44. *Pasteurellogenosis* is a disease of cats and dogs, transmissible to humans during an animal bite.
   A) True
   B) False
45. Among the many microorganisms that cause conjunctivitis is a Gram-negative rod named Haemophilus influenzae biotype III, formerly called Haemophilus.
   A) True
   B) False

46. Immunization to leprosy may be rendered with an injection of the killed spirochetes that cause the disease.
   A) True
   B) False

47. Yaws is a spirochetal disease of tropical regions of Africa, Southeast Asia, and South America, usually acquired by skin contact.
   A) True
   B) False

48. Among the symptoms of toxic shock syndrome are a series of tiny, pale nodules that form on the conjunctiva of the eye, giving it a rough appearance.
   A) True
   B) False

49. The agent of cat scratch fever has been found to be identical to the agent of rat bite fever.
   A) True
   B) False

50. Dental plaque is essentially a deposit of dense gelatinous material consisting of protein, polysaccharide, and an enormous mass of bacteria.
   A) True
   B) False

51. Endogenous bacterial diseases are a group of diseases caused by microorganisms that normally inhabit the body uneventfully, but invade the tissues when defenses are compromised.
   A) True
   B) False

52. Toxic shock syndrome is related to a toxin-producing strain of Staphylococcus that may infect the vaginal tract of menstruating women.
   A) True
   B) False
53. Patients with leprosy in the United States number less than a dozen annually, in large measure due to effective methods of detection and treatment.
   A) True
   B) False

54. The similarity of yaws symptoms to those in gonorrhea has led many public health officials to conclude that Yaws and gonorrhea are related.
   A) True
   B) False

55. The cause of trachoma is a variant of the organism responsible for mycoplasmal urethritis and lymphogranuloma venereum.
   A) True
   B) False

56. Conjunctivitis is a contagious disease, especially where people congregate.
   A) True
   B) False

57. Among the symptoms of cat scratch disease are a papular or pustular lesion at the site of entry, headache, malaise and low-grade fever.
   A) True
   B) False

58. Nocardiosis, trachoma, actinomycosis and toxic shock syndrome are examples of endogenous diseases that can occur in humans.
   A) True
   B) False

59. Diarrhea with watery stools and possible dehydration may signal the presence of impetigo contagiosum in the body.
   A) True
   B) False

60. The letters ANUG stand for a periodontal disease due to the invasion of the periodontal tissues by several bacteria.
   A) True
   B) False
61. The organisms that cause nosocomial diseases do not normally cause disease in competent individuals, but they are dangerous in compromised individuals.
   A) True
   B) False

62. Write an explanation of nosocomial disease indicating the conditions that lead to this outbreak, the organisms that may cause it, and how hospitals deal with it.

63. Both leprosy and tuberculosis are caused by members of the same genus of organisms. List other similarities between these two diseases, and show how the two diseases differ.

64. Compare the causative agents, symptoms, methods of diagnosis and treatments for gonorrhea and chlamydial urethritis.

65. Summarize the various diseases for which staphylococci may be responsible.

66. Cite three examples of bacterial diseases that may be transmitted from animals to humans by means of a bite. Explain each disease briefly.

67. Explain the meaning of "endogenous disease," and use several examples to indicate how an endogenous disease can take place in the human body.

68. Trachoma and bacterial conjunctivitis are both diseases of the eye. Continue this comparison by explaining similarities and differences between the diseases.

69. Write an explanatory paragraph on oral diseases with emphasis on dental caries and acute necrotizing ulcerative gingivitis (ANUG).

70. Both yaws and syphilis are caused by spirochetes. List other similarities and differences between these two diseases.

71. Summarize the important information known about the sexually transmitted diseases chancroid, ureaplasmal urethritis, granuloma inguinale, and lymphogranuloma venereum.
Answer Key -- Chapter 10

1. D
2. D
3. C
4. B
5. D
6. B
7. C
8. B
9. C
10. D
11. A
12. E
13. A
14. C
15. E
16. B
17. C
18. E
19. B
20. E
21. B
22. D
23. C
24. A
25. A
26. B
27. A
28. D
29. C
30. B
31. D
32. B
33. D
34. A
35. C
36. D
37. C
38. D
39. B
40. b,a,c,b,a,c,b,a,c,c,d,a,b,d,a,c,d,d
41. c,a,i,b,j,d,e,h,g,f,e,b,a,g,c,d,g,f,a
42. B
43. B
44. A
45. A
46. B
47. A
48. B
49. B
50. A
51. A
52. A
53. B
54. B
55. B
56. A
57. A
58. B
59. B
60. A
61. A
62. (No answer.)
63. (No answer.)
64. (No answer.)
65. (No answer.)
66. (No answer.)
67. (No answer.)
68. (No answer.)
69. (No answer.)
70. (No answer.)
71. (No answer.)