Chapter 26 practice questions

1. Meningitis is a disease associated with inflammation of the meninges. What are the meninges?

a. Mucous membrane surrounding the colon

b. Membranes surrounding the brain and spinal cord

c. Part of the peripheral nervous system

d. None of the above

2. *Streptococcus pneumoniae* is a member of the normal microflora, but it can cause pneumococcal meningitis, which is a severe human disease. How is this bacterium capable of being non-harmful and disease causing in humans?

a. *Streptococcus pneumoniae* produce extra virulence factors that allow for movement into blood and then into the meninges.

b. *Streptococcus pneumoniae* take over when microbiota in our colon is in low numbers.

c. *Streptococcus pneumoniae* can evade phagocytosis through the production of capsules.

d. More than one of the above.

e. None of these show how *Streptococcus pneumoniae* can be both non-harmful and disease causing.

3. True or False. Meningococcal meningitis is caused by the bacterial pathogen *Neisseria meningitides.*

a. True

b. False

4. Hib meningitis was once one of the leading causes of meningitis in young children. What is the major reason for the decline of Hib meningitis in children?

a. Antibiotic treatment for Hib meningitis in children is highly effective.

b. Children over the years have developed higher levels of immunity to Hib meningitis.

c. A conjugate vaccine is administered to children at 2 months of age, which has almost eliminated Hib meningitis.

e. All of the above.

5. *Listeria monocytogenes* can cause meningitis in the elderly, and young children or the immunocompromised. Why is this bacterium also a problem for pregnant women?

a. *Listeria monocytogenes* is a Psychrotroph, and grows well in humans.

b. *Listeria monocytogenes* can cross the placenta, leading to abortion or stillbirth.

c. *Listeria monocytogenes* can be transmitted to fetus via bacteriophage

d. None of the above

6. True or False. Hansen’s disease ie Leprosy is caused by the bacterium *Mycobacterium tuberculosis*.

a. True

b. False

7. Tetanus and Botulism are caused by ingestion of bacteria that produce…

a. Enzymes

b. Antibodies

c. Neurotoxins

d. Lipopolysaccharides

8. Arboviral encephalitis is transmitted through insect bites ie mosquitoes. In Manitoba, there are two arboviruses that cause disease. What are these two viruses called?

a. Hantavirus and Influenza virus

b. Ebola and Polio virus

c. Western equine encephalitis, and West Nile virus

d. None of the above

9. Your friend’s dog suddenly shows behavioural changes such as biting, and an increase in accumulation of saliva after spending some time outdoors. Knowing what you know about viral diseases, which virus would you predict that your friend’s dog may have acquired?

a. Polio virus

b. Hantavirus

c. Rabies virus

d. Varicella-Zoster virus

e. None of the above.

10. True or False. The African sleeping sickness is caused by the protozoan Trypanosoma and is transmitted by mosquitoes.

a. True

b. False