Microbiology
Unit 4 Test Review

Name: KEY Date: _____ Hour: _____ Test #: _____

1. Define the following terms and give examples (when applicable):
   a. Infection: the invasion of the body by microorganisms. Not all infections cause disease (e.g. - body's flora)
   b. Disease: the interruption of normal body function
   c. Communicable Diseases: disease transmitted from one individual to another e.g. - contagious disease
   d. Pathogenicity: the ability of a microorganism to cause a disease
   e. Virulence: the degree of pathogenicity
   f. Endemic: a disease that is constantly present within a certain geographical area e.g. - colds
   g. Epidemic: a disease occurring at greater than expected frequency e.g. - flu, measles
   h. Pandemic: a disease that has reached epidemic proportions worldwide e.g. - AIDS
   i. Sporadic: a disease that occurs only occasionally, e.g. - mononucleosis, ebola
   j. Acute Infection: infection that develops rapidly, is of short duration, and results in high fever
   k. Chronic Infection: infection that develops slowly, with mild but long lasting
   l. Local: infection in which the causative microbe is limited to one locality in the body e.g. - boil, ear infection
   m. Systemic: infection in which the causative microbe spreads throughout the body
   n. Primary: inital infection causing the illness
   o. Secondary: infection caused by a microbe that is only able to invade the body after the primary infection
   p. Bacteremia: the presence of bacteria in the blood
   q. Septicemia (sepsis): when bacteria are multiplying in the bloodstream

2. Describe the three different stages of a communicable disease.
   a. Incubation Period - time interval between infection and first noticeable symptoms, varies by disease
   b. Illness - time interval during which disease symptoms are apparent

c. Convalesence - time interval during which disease symptoms decrease and body functions return to normal

3. Describe how an opportunistic infection works, using an example.
Microbes that cause secondary infections are opportunistic. Example: a person has AIDS as a primary infection and develops pneumonia as a secondary infection

4. What are the five microbial portals of entry? Give examples.
   a. Respiratory tract via nose and mouth → cold, flu, measles, pneumonia, TB
   b. Gastrointestinal tract via mouth → typhoid fever, dysentery, cholera, polio, hepatitis
   c. Skin and mucous membranes → staph and strep skin infections, tularemia
   d. Blood → malaria, bubonic plague, Lyme disease, viral encephalitis
   e. Genitourinary tract → syphilis, herpes

5. A disease agent's ability to cause a disease is determined by:
   a. Portal of Entry → must allow patnogen to cause disease
   b. Ability to flourish outside the body → some organisms survive longer than others
   c. vector → an agent that carries patnogens from one host to another
   d. # of patnogens → varies with type of patnogen and portal of entry

6. What do you call an infection that a person contracts while receiving medical care?
Healthcare-Associated infections

7. What is one of the most popular infections contracted while receiving medical care?
Clostridium difficle

8. How can you prevent the spread of the infection named in #7? Make sure all healthcare providers clean hands with soap/water, only take prescribed antibiotics, clean own hands often.

Refer to class notes presentations.

9. What causes the symptoms of food poisoning associated with *Clostridium botulinum* and *Bacillus cereus*? Exotoxins

10. Name some of the vectors used to carry pathogens from one host to another. Flea, mosquito, ticks, lice, rodents

11. What are some common sources of infectious agents in humans? infected humans, soil, dirty water, food not correctly prepared, wild and domestic animals

Be familiar with the bacteria from the class presentations!