Name: _____ Block: ___ Date: _____ Microbiology Review: Ch 15 and 20



Average percentage of American adults reporting having a cold on any given day

Use the graph above to help answer the following questions.

- 1. In which months would the common cold be most likely to be found? _____
- 2. What is the definition of endemic? What percentage of the population would be endemic for the common cold?
- 3. If there were 16 cases reported of the common cold throughout the US during July, they would be considered?
- 4. If 15% of the population in Denver were experiencing the common cold in March this might be considered?
- 5. Flu viruses that can be carried by transcontinental organisms, like birds, can be categorized as?

Complete the following short answer and discussion questions.

- $6. \quad Differentiate \ between \ ID_{50} \ and \ LD_{50}.$
- 7. Differentiate between bacteriostatic and bacteriocidal.
- 8. List the three main methods of susceptibility testing and define.
 - a. _____
 - b. _____
 - c. _____

9. Differentiate between minimal bactericidal concentration and minimal inhibitory concentration.

10. Illustrate an example and describe how you would measure the zone of inhibition for a disk diffusion test.

11. Using the data table below determine the most likely source of the pathogen for the illness described. Seven friends spent the weekend hiking and camping together 4 of the seven developed the same rash.

Location	Betty	Peter	Mike	Tom	Ellen	Susie	April
Woodland Trail	Detty	X	X	10111	X	X	npin
Pond (swimming)	Х	Х		Х	Х	Х	Х
Rock climbing	х	Х	Х	Х			
White water rafting		Х	Х	Х		Х	Х
Picnic area	х	Х		Х	Х	Х	Х
Campsite tents	х	Х	Х	Х	Х		Х
Exhibited Rash		х	х		Х	Х	
Source:							

- 12. Using the data table from question 11, was the illness communicable or non-communicable? Defend your answer.
- 13. Discuss the difference between a biological vector and a mechanical vector.

14. Describe vehicle, fomite and droplet nuclei.