

## Chapter 20: Book Questions

Review: pg 574

7) Broth dilution tests the minimum concentration of antibiotic to be used.

} Both require a subculture to determine if they are bacteriocidal

} Disk Diffusion tests whether a given concentration of antibiotic is effective against bacterial growth

8) Disk diffusion test the effectiveness of various antibiotics when treating bacterial infections. You can obtain whether a drug would be appropriate to prescribe depending on the zone of inhibition when compared to a table.

9). Drug resistance = when microbes evolve to render antibiotics/treatments ineffective.

- can be produced naturally by bacteria or through human actions.

- minimize by:

- 1) only using prescribed antibiotics
- 2) taking full prescriptions
- 3) never using old/left over antibiotics
- 4) never sharing antibiotics
- 5) preventing infections.

10). The combined effects of synergism can make antibiotics more effective in smaller concentrations while decreasing chances of resistance building.

- cons: increased risk of side-effects + allergies →

10) as well as destruction of normal flora due to increased chances of broad spectrum effect.

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5) A

6) D

8) A

CT pg 575

4) a) Can't tell, you need a chart to compare zone of inhibition sizes to determine S, I, or R.

b) same as a.

c) you don't know unless a 2nd test, sub-culture, is performed.

6) a) 50 μg

b) 100 μg