

Concepts: Quizzes and Practicals

1. What is prodigiosin, which organism produces, and under what conditions (i.e. at what temperature) does this organism produce it?
2. How does temperature affect the growth of organisms (i.e. what happens to the organism above and below its optimum temp for growth)?
3. Classify each of the following organisms as a psychrotroph, mesophile or thermophiles:
 - a. *Bacillus sterothermophilus*
 - b. *Escherichia coli*
 - c. *Serratia marcesens*
4. Know the optimum temperatures and temperature ranges for mesophiles, psychrophiles, psychrotrophs and thermophiles (make sure you use the temperatures from handout)
5. What is thioglycollate media and how does it help a person determine an organisms oxygen requirements?(what special properties does it have?)
6. Know the definitions for the following:
 - a. Obligate aerobe
 - b. Microaerophile
 - c. Obligate anaerobe
 - d. Facultative anaerobe
 - e. Aerotolerant
7. Can it grow in the presence of O₂? Can it grow without O₂?
 - a. Obligate aerobe
 - b. Microaerophile
 - c. Obligate anaerobe
 - d. Facultative anaerobe
 - e. Aerotolerant

Applications and Identification Skills: Practicals

1. What does each of the following looks like:
 - a. – growth
 - b. + growth
 - c. ++ growth
2. Be able to identify a psychrotroph, mesophile, and thermophile based on their growth patterns at different temperatures.
3. Be able to identify an obligate aerobe, a facultative anaerobe, an obligate anaerobe, a microaerophile and an aerotolerant organism in thioglycollate media.
4. Know how to inoculate Thioglycollate media.