


Philadelphia University		Faculty of Science
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Course Name: Microbiology Course Number: 240212		

Q1. Indicate whether the following statements are true or false; if false correct the statement scientifically.

1. In a continuous culture, no fresh medium is added during microbial growth and nutrients and wastes remain almost constant.
2. In binary fission, growth of microorganisms can be plotted as a logarithm of cells vs. incubation time and the curve will have 4 phases which are in sequence: stationary, lag , exponential and death phases.
3. Mean growth rate constant (K) is the number of generations per unit time or generations per hour.
4. In measuring cell mass, as cell number increases turbidity and transmittance increases.
5. Turbidostat differ from chemostat by lacking a limiting nutrient and by having a variable dilution rate.
6. Microorganisms living within a small range of temperature are known as Eurthermal.
7. Psychrotrophs are the major cause for the spoilage of refrigerated food.

8. Facultative anaerobes and microaerophiles can grow at the normal oxygen levels of atmosphere (ie. 20%).

9. Both sterilization and disinfection will result in the removal of all living cells, spores and viruses.

10. Pasteurization like fractional steam sterilization does kill all microorganisms including endospores.

Q.2. Matching. Choose the best answer in column B to fit the item in column A.

	A	B	No
1	Lag phase	haemocytometer	
2	Stationary phase	Increased atmospheric pressure	
3	Generation time	Microbial mass and nutrients	
4	Chemostat	Age of the inoculum	
-5	Halophils	Prevention of microbial growth	
6	Singlet oxygen	Chlorine and iodine	
7	Ultraviolet	55-65° C	
8	Bactericide	Oxygen depletion	
9	Continuous culture	Essential nutrient	
10	Ionizing radiation	Tissue culture	
11	Phenol coefficient test	Doubling time	
12	Biodeterioration	Bacterial killing	
13	Viruses	Exponential growth phase	
14	Archae	methanogenesis	
15	Cell number	High salinity	
16	Halogens	Fungi	
17	Barotolerant	<i>Salmonella typhi</i>	
18	Bacteriostatic	Antibiotics & hormones	
19	Growth yield	Oxidizing agent	
20	Hyperthermophiles	DNA	

Q3. Answer one of the following questions.

1. What are the possible effects that animal viruses may have on cell they infect?
2. Mention the beneficial effects of fungi in their environment.

Good luck