

Microbiology Terminology List (based on quizzes given throughout the semester)

QUIZ 1 Lectures 1 – 4

1. Gram-positive bacteria have a thinner layer of peptidoglycan than Gram-negative bacteria. **False**
2. Cell with a relatively simple cell morphology that do not have a true membrane-delimited nucleus are called PROKARYOTES
3. The term COCCUS is used to describe bacteria that have a spherical shape
4. INCLUSION BODIES are intercellular granules of organic or inorganic material that are stockpiled by bacteria for future use
5. HETEROTROPHS are organisms that use reduced, performed organic molecules as carbon sources
6. Microorganisms placed in a HYPOTONIC SOLUTION will cause the cell to burst because of water entering in
7. A SLIME layer consists of diffuse unorganized polysaccharide material that lies outside the cell wall and is easily removed
8. IODINE is the MORDANT in the gram staining procedure
9. Type III bacterial protein secretion machinery directly injects protein virulence factors in susceptible host cells. T
10. Generation time of bacteria is measured in the EXPONENTIAL GROWTH PHASE
11. EUKARYOTES are cells with a relatively complex morphology that have a true membrane-bound nucleus
12. COMPLEX MEDIA contain some ingredients of unknown chemical composition
13. Ribosomes are composed of RNA and PROTEIN
14. PHOTOTROPHS are microorganisms that require light as a source of energy
15. Microorganisms are heat-fixed prior to staining in order to ATTACH IT FIRMLY TO THE SLIDE
16. SELECTIVE MEDIA favors growth of some organisms over that of others, SUPPORTIVE MEDIA supports the growth of many organisms, DIFFERENTIAL MEDIA distinguishes some microorganisms from others, ENRICHED MEDIA favors the growth of fastidious organisms
17. ACTIVE TRANSPORT have characteristics such as a saturable uptake rate, uses ATP or proton motive force as a source of metabolic energy, and can move materials against the concentration gradient
18. BAROTOLERANT ORGANISMS are not drastically affected by increased pressure
19. VOLUTIN GRANULES, POLY-BETA-HYDROXYBUTARATE, PHOSPHATE, and MAGNETOSOMES can be found in inclusion bodies
20. AUTOTROPHS use carbon dioxide as a source of carbon
21. Some microorganisms are useful in BIOREMEDIATION processes that reduce the effects of pollution. **True**
22. PEPTIDOGLYCAN protects bacteria from lysis in dilute solutions and helps to determine cellular morphology
23. The LIPOPOLYSACCHARIDE of the CELL ENVELOPE is the endotoxin of Gram negative bacteria
24. DIFFERENTIAL MEDIUM distinguished among different group of bacteria on the basis of their biological characteristics
25. PSYCHOTROPHS grow well at 0 to 7 degrees Celsius and have optimum growth temperatures between 20 and 30 degrees Celsius
26. LITHOTROPHS are organisms that obtain electrons from the oxidation of inorganic compounds
27. The shape of microorganisms is never an aid in determining their taxonomy. **False**
28. GLYCOLYX/CAPSULE is a polysaccharide layer that lies outside the cell wall and is not easily removed
29. VIBRIOS are curved rod shaped bacteria
30. HYPERTHERMOPHILES are organisms with growth temperature maxima above 100 degrees Celsius
31. Endospores represent a challenge to the fields of industrial and medical microbiology because they are RESISTANT to HARSH ENVIRONMENTS
32. VNBC stands for VIABLE BUT NOT CULTURABLE
33. HETEROTROPHS are organisms that use preformed organic molecules as a source of carbon
34. GROWTH FACTORS are required organic compounds because they are essential cell components or precursors of such components that cannot be synthesized by the organism
35. NOT all cultures of an organism given a species name are identical
36. ORGANOTROPHS are organisms that obtain electrons from the oxidation of organic compounds
37. MAGNESIUM is a micronutrient
38. TYPE IV SECRETION PATHWAY secretes extracellular DNA which is biofilm
39. The earliest prokaryotes were anaerobic. **True**
40. OSMOTOLERANT organisms can grow in habitats with low water availability (high osmotic pressure) by maintaining a high internal salt concentration
41. The primary mechanism by which DNA is damaged by ultraviolet radiation involves the formation of thymine dimers. **True**
42. The trace amounts of micronutrients needed by microorganisms are usually supplied as inadvertent contaminants in water and regular media components. **True**