

SEM	SET	PAPER CODE	TITLE OF THE PAPER
II	2014	14PBC2107	MICROBIOLOGY

SECTION - A**Answer all the questions:****30 × 1 = 30****Choose the correct answer:**

- Which of the following is least likely to have rigid cell wall?
 - bacterium
 - archaeon
 - fungus
 - protozoan
- Sexual reproduction in the protozoa occurs most commonly by
 - conjugation
 - binary fission
 - binary fusion
 - none of the above
- All algae possess
 - nuclei
 - chloroplasts
 - both a & b
 - none of these
- Algae are classified into 6 groups, technically known as
 - categories
 - divisions
 - genera
 - domains
- Viruses largely lack metabolic machinery of their own to generate energy or to synthesize
 - protein
 - carbohydrate
 - alcohol
 - all of these
- Viruses require _____ for growth
 - bacteria
 - plants
 - animals
 - living cells

7. The nonsymbiotic bacteria which fix nitrogen live in the soil independently are
 - a) Azotobacter
 - b) Clostridium
 - c) both a & b
 - d) None of the above
8. Which of the following is capable of oxidizing sulfur to sulfates?
 - a) Thiobacillus thiooxidans
 - b) desulfotomaculum
 - c) Rhodospirillum
 - d) Rhodomicrobium
9. Bacteria, as a group, are responsible for
 - a) nitrogen oxidation
 - b) sulfur oxidation
 - c) nitrogen fixation
 - d) all of these
10. The physical structure of soil is improved by the accumulation of
 - a) mold mycelium
 - b) minerals
 - c) water
 - d) all of these
11. _____ play a key role in the transformation of rock to soil.
 - a) cyanobacteria
 - b) pectin decomposing bacteria
 - c) nitrifying bacteria
 - d) de-nitrifying bacteria
12. The concept of putting microbes to help clean up the environment is called
 - a) pasteurization
 - b) bioremediation
 - c) fermentation
 - d) biolistics
13. Most food spoilage bacteria grow at
 - a) acidic pH
 - b) alkaline pH
 - c) neutral pH
 - d) any of the pH
14. What are the intrinsic factors for the microbial growth?
 - a) pH
 - b) moisture
 - c) oxidation – reduction potential
 - d) all of these

15. Alcohol production from starch and raw sugar utilizes selected strains of
- a) *Saccharomyces cerevisiae*
 - b) *Candida pseudotropicalis*
 - c) *Candida utilis*
 - d) none of these
16. Which of the following is not an industrial product made by the fungus *Aspergillus niger*?
- a) Galactosidase
 - b) citric acid
 - c) gluconic acid
 - d) lysine
17. The sugar concentration of molasses used in alcohol fermentation should be
- a) 10 – 18%
 - b) 20 – 30%
 - c) 4 – 5%
 - d) 30 – 38%
18. The major organism used in the microbial production of citric acid is
- a) *Penicillin notatum*
 - b) *Rhizopus nigrificans*
 - c) *Aspergillus niger*
 - d) *Lactobacillus delbrueckii*
19. The toxins produced by bacteria
- a) kill viruses
 - b) encourage bacterial reproduction
 - c) interfere with physiological process in the body
 - d) all the above
20. Which of the following disease is not caused by microbial protein toxin?
- a) botulism
 - b) diphtheria
 - c) shigella dysentery
 - d) tuberculosis
21. In the human disease cholera, what is the factor that actually kills the victim?
- a) faulty carrier proteins
 - b) dehydration and loss of nutrients
 - c) too little water in the food stream
 - d) the toxin produced by the bacterium

