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D Y PATIL UNIVERSITY

End Term Examinations (December 2018)

School : School of Engineering

Program: M.Tech. Bioengineering (Biotech)

Course: Studies of Microorganisms

Course Code: BEN509

Semester: I

Max Marks: 20

Duration (mins) : 60

Note : Attempt all questions. Each carry one mark.

Q1. Utilization of elemental carbon by microbes during bio-geochemical cycles is called?

- a) Dissimilation
- b) Mineralization
- c) Immobilization
- d) Neutralization

Q2. Kuru diseases is caused by?

- a) Virus
- b) Viroid
- c) Prions
- d) Prions and viriod

Q3. Reduction of virulence of microorganism is called?

- a) Exaltation
- b) Attenuation
- c) Hibernation
- d) Inactivation

Q4. Which of the following structure is absent in gram positive bacteria?

- a) Cell wall
- b) Murein
- c) Teichoic acid
- d) Outer membrane

Q5. Which of following is NOT possible to do by eukaryotic cells?

- a) Causing diseases
- b) Decomposition
- c) Nitrogen fixation
- d) Anaerobic respiration

Q6. Transfer of plasmid from one bacterium to another is a best example of:

- a) Vertical gene transfer
- b) Horizontal gene transfer
- c) Homozygous gene transfer
- d) Heterozygous gene transfer

Q7. Glucans, mannans and chitin are found on cell wall of?

- a) Plants
- b) Fungi
- c) Actinomycetes
- d) Eubacteria

Q8. Who isolated *Streptococcus pneumoniae* for the first time?

- a) Robert Koch
- b) Edward Jenner
- c) Antony Van Leuwenhoek
- d) Louis Pasteur

Q9. Tetanus vaccine is?

- a) Whole cell
- b) cell wall polysaccharide
- c) surface antigen
- d) Toxoid

Q10. Microorganisms which are able to grow over a wide range of temperatures are called?

- a) Stenotolerant
- b) Extremophiles
- c) Thermophilic
- d) All of above

Q11. Proof reading is done by which subunit of *E. coli* DNA Polymerase III:

- a) alpha
- b) epsilon
- c) tau
- d) chi

Q12. Mucopolysaccharide is component of cell wall of ?

- a) Brown algae
- b) Green algae
- c) Blue Green algae
- d) red algae

Q13. Mycorrhizal symbiotic association of fungi with plants helps in the absorption of which component of soil:

- a) Nitrate b) Nitrite
- c) Ammonia d) Phosphates

Q14. Carbohydrate binding proteins are called?

- a) Lectin b) Alexin
- c) Glycoprotein d) Polysacc-proteins

Q15. Medium for growing specific microorganism:

- a) Differential medium b) Selective medium
- c) Enrichment d) All of above

Q16. Growth of microbes in a solid media is identified by the formation of?

- a) pellicle at the top of media b) colonies
- c) sediment at the bottom d) turbidity

Q17. Which microorganism(s) among the following perform photosynthesis by utilizing light?

- a) Cyanobacteria b) Fungi
- c) Viruses d) Cyanobacteria, Fungi and Viruses

Q18. Which among the following are produced by microorganisms?

- a) Fermented dairy products b) Breads
- c) Alcoholic beverages d) Fermented dairy products, breads and alcoholic beverages

Q19. For the examination of microbial cells we require the use of?

- a) High-power microscope b) Low-power microscope
- c) High-power microscope at a magnification of about 1,000 diameters
- d) Low-power microscope at a magnification of about 1,000 diameters

Q20. Type strain is used for referring to?

- a) species b) genus
- c) family d) division