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GIET UNIVERSITY, GUNUPUR – 765022

B. Tech (Third Semester – Regular) Examinations, December – 2020

BPCBT3040 – MICROBIOLOGY

(Biotechnology)

Time: 2 hrs

Maximum: 50 Marks

The figures in the right hand margin indicate marks.

PART – A: (Multiple Choice Questions)

(1 x 10 =10 Marks)

Q.1. Answer ALL questions

- a. Spontaneous generation was proposed by

(i) Edward Jenner	(ii) Louis Pasteur
(iii) Robert Koch	(iv) Linnaeous
- b. Chitin was found in the cell wall of

(i) Fungi	(ii) Algae
(iii) Bacteria	(iv) Virus
- c. How do you estimate the Colony forming unit

(i) Pure culture	(ii) Broth dilution
(iii) Roller tube Culture	(iv) MPN
- d. Multipartite is a class of virus that have segmented

(i) RNA Sequences	(ii) nucleic acid genomes
(iii) Amino acid Sequences	(iv) Glycolipids
- e. The viral genome does not incorporate into the host genome known as

(i) Lysogenic cycle	(ii) Glycolytic cycle
(iii) Lytic cycle,	(iv) Krebs cycle
- f. The staphylococcal intoxication refers to presence of

(i) Enterotoxin	(ii) Exotoxin
(iii) Mycotoxin	(iv) All these
- g. Which of the bacteria used for Ames test

(i) Klebsiella	(ii) Proteus
(iii) Salmonella	(iv) E.coli
- h. Malaria caused by which mosquito

(i)Ades	(ii) Culex
(iii) Mansonia	(iv) Anopheles
- i. Which of the following is water-borne disease

(i) Cholera	(ii) Influenza
(iii) HIV	(iv) Rabies
- j. Salinarchaeum belongs to the group of

(i) Bifidibacterium	(ii) Thermophytes
(iii) Halobacterium	(iv) Mesophytes

PART – B: (Short Answer Questions)

(2 x 5 = 10 Marks)

Q.2. Answer ALL questions

- a. Define Chemical sterilization
- b. Write notes on Transformation
- c. Explain growth kinetics
- d. What is Anaerobic bacterial toxins
- e. Define Thermophytes

PART – C: (Long Answer Questions)

(6 x 5 = 30 Marks)

Answer ANY FIVE questions

3. Outline the classification of bacteria. (6)
4. Describe the techniques of Gram's Staining (6)
5. Differentiate the synchronous and continuous growth (6)
6. Describe the nitrate reduction cycle (6)
7. Explain the medical importance of gram negative bacilli (6)
8. Describe the life cycle of Filariasis (6)
9. Discuss the structure and mode of action of Penicillin (6)
10. Write the technique of MPN analysis (6)

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