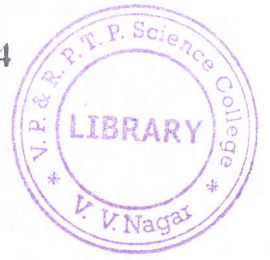


A Charutar Vidya Mandal's Institution
V.P. & R.P.T.P. SCIENCE COLLEGE
(AUTONOMOUS) (Grant-in-Aid)
Affiliated to Sardar Patel University
VALLABH VIDYANAGAR-388120

Bachelor of Science (Semester 1) External Examination - 2024

Subject Code: US01MAMIC01

Subject Name: Introduction to Microbiology



Date: 19/11/2024 (Tuesday)

Time: 11:00 AM to 1:30 PM

Total Marks: 50

NOTE: Figure to the right indicate full marks of the questions.

For MCQs: Answer both code & word in sequence is mandatory.

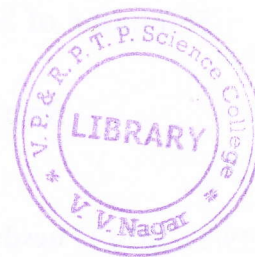
Q.1 Multiple Choice Questions:

10

1. According to the theory of biogenesis, where does life originate from?
 - a. From non-living matter
 - b. From pre-existing living organisms
 - c. From chemical reactions in the environment
 - d. From supernatural forces
2. Who conducted an experiment showing that maggots on decaying meat were not generated spontaneously but came from eggs laid by flies?
 - a. Louis Pasteur
 - b. Francesco Redi
 - c. John Needham
 - d. Lazzaro Spallanzani
3. Which experiment is often cited as the final evidence against spontaneous generation?
 - a. Redi's experiment
 - b. Needham's broth experiment
 - c. Pasteur's swan-neck flask experiment
 - d. Spallanzani's open flask experiment
4. Haeckel's Kingdom Protista primarily includes:
 - a. Multicellular animals
 - b. Plants
 - c. Unicellular organisms
 - d. Viruses
5. In Whittaker's Five-Kingdom Concept, which kingdom includes both unicellular and multicellular organisms that are primarily decomposers?
 - a. Plantae
 - b. Fungi
 - c. Protista
 - d. Animalia
6. Which area of microbiology is concerned with the control and prevention of infectious diseases?
 - a. Environmental microbiology
 - b. Medical microbiology
 - c. Food microbiology
 - d. Industrial microbiology
7. The bounce back of light from an object on which it strikes, is called
 - a. Absorption
 - b. Fluorescence
 - c. Transmission
 - d. Reflection

(P.T.O.)

8. Which of the following is not the type of light microscopy?
- a. Dark field microscopy
 - b. Phase contrast microscopy
 - c. Fluorescence microscopy
 - d. SEM & TEM
9. A hollow tube encloses the microbial chain, is called
- a. Prosthecae
 - b. Capsule
 - c. Pili
 - d. Sheaths
10. Peptidoglycan is also known as
- a. Murein
 - b. Glucosamine
 - c. Pseudomurein
 - d. Glycine



Q-2 Enlist all the experiments which supports the theory of Biogenesis and explain any two experiments in detail. 10

OR

Q.2 Explain germ theory of Diseases in detail. 10

Q.3 Describe Heackel's and Whitaker's Classification 10

OR

Q.3 Discuss about various applied areas of Microbiology 10

Q.4 Explain Principle, Procedure and advantages of Gram's staining method. 10

OR

Q.4 Explain Principle, Working and applications of Fluorescence microscopy. 10

Q.5 Describe in detail the structure and functions of the Cell wall. 10

OR

Q.5 Ultra Structure of Flagella and Types of Flagellar arrangement on the basis of their location on the bacterial cell. 10