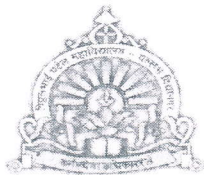


Sample Paper for B.Sc. / B.C.A./M.SC



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- III) External Examination - 2025
Subject Code: US03 MAMIC02
Microbial Diversity

Date: 07-10-2025 (Tuesday)

Time: 02:00 PM to 04:30 PM (2.5 hrs.)

Total marks: 50

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

Q-1 Write the most appropriate answer from the following multiple-choice questions. (10)

- (1) Which of the following is not a modification of hyphae?**
(a) Rhizoids (b) Appressoria (c) Haustoria (d) Chloroplast
- (2) Saprophytic fungi obtain nutrition from _____**
(a) Living Host (b) Dead Organic Matter (c) Both (a) & (b) (d) Sunlight
- (2) Ergot alkaloids are obtained from _____**
(a) *Aspergillus niger* (b) *Amanita phalloides* (c) *Claviceps purpurea* (d) *Candida albicans*
- (3) What is the study of Algae Called?**
(a) Mycology (b) Bacteriology (c) Virology (d) Phycology
- (4) Which of the following is not a characteristic of Protozoa?**
(b) Unicellular (b) Reproduce sexually by binary fission (c) Some contain Cilia (d) Eukaryotic
- (5) Who discovered virus?**
(c) Wendell Stanley (b) Onitri Ivanowsky (c) Edward Jenner (d) Walter reed
- (6) Tobacco Mosaic Virus (TMV) has _____ symmetry.**
(a) Helical (b) Icosahedral (c) Complex (d) None of these
- (6) Bacteriophage contain _____ as genetic material.**
(d) Single stranded DNA (b) Double stranded DNA
(c) Single stranded RNA (d) Double stranded RNA
- (7) Which of the following is known as Energy parasite?**
(a) *Chlamydia* (b) *Rickettsia* (c) *Spirochetes* (d) *Mycoplasma*
- (10) Which organism lacks cell wall & has cell membrane as outer most boundary?**
(a) *Spirochetes* (b) *Chlamydia* (c) *Rickettsia* (d) *Mycoplasma*



Q-2 Write a note on asexual reproduction in Fungi. (10)

OR

Q-2 Describe the economic importance of Fungi. (10)

Q-3 (A) Explain importance of Protozoa (04)

(B) Explain nutrition in Algae. (06)

OR

Q-3 (A) Describe locomotive organs of Protozoa. (06)

(B) Write a note on reproduction Algae. (04)

Q-4 Explain Lytic cycle in T- even bacteriophages. (10)

OR

Q-4(A) Define the structure of a virus with labelled diagrams. (04)

(B) Write in detail about the purification of virus and its methods. (06)

Q-5 Write a note on Actinomycetes. (10)

OR

Q-5 Write a note on Archaeobacteria. (10)

