

Witthalbhai Patel & Rajratna P.T.Patel Science College, V.V.Nagar

Internal Test: 2019(Semester V)

Date: 03-10-2019 Sub: Microbiology (USO5C MIC-02)

Total Marks: 25

Time: 11-00 a.m. to 12-15 p.m.

Q-1 Attempt the following multiple choice questions.

(05)

(1) Which of the following spectroscopic technique based on the principle of "Bond vibration"?

(a) L V visible (b) Atomic absorption (c) Infrared (d) Nephelometry

(2) Which marker dye is used in electrophoresis technique?

(a) Gention violet (b) Saffranin (c) Bromophenol blue (d) Nigrosine

(3) Which of the following ionic strength of buffer is used in electrophoresis?

(a) 0.03 to 0.09 M (b) 0.05 to 0.1 M (c) 0.1 to 0.5 M (d) 0.3 to 1.2 M

(4) Cation ion exchanger exchange _____.

(a) Cation (b) Anion (c) Both (a) & (b) (d) None of these

(5) The number of protons present in nucleus is known as _____

(a) Mass number (b) Atomic number (c) Molecular mass (d) none of these

Q-2 Explain principle, instrumentation and application of Atomic absorption spectroscopy.

(05)

OR

Q-2 Explain principle, instrumentation and application of Flame Photometry.

(05)

Q-3 Explain in brief: "Density Gradient Centrifugation"

(05)

OR

Q-3 Explain principle and application of Iso Electric Focusing Electrophoresis.

(05)

Q-4 Discuss the principle and working of Ion exchange chromatography.

(05)

OR

Q-4 Write a note on: High performance Liquid Chromatography.

(05)

Q-5 (A) Write three applications of Radioactivity in Biological Sciences.

(03)

(B) Explain Principle of Biosensor.

(02)

OR

Q-5 Enlist and Explain three two branches of Bioinformatics.

(05)

