

B.Sc. Semester - 1 (CBCS) Examination
Oct/Nov-2023 (Syllabus Year - 2016)
MICRO BIOLOGY(CORE)

Time: 2:30 Hours**Marks: 70****Instructions:**

1. All questions are compulsory.
 2. Figures to the right indicate marks.
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- Que.1(A) Objective type questions. (04)
1. Define: Microbiology.
2. Write the contributions of Richard Petri.
3. Father of Medical Microbiology is _____.
4.Scientist suggested a five-kingdom classification.?
- Que.1(B) Answer in brief. (Any 1 out of 2) (02)
1. Write various of field of Microbiology.
2. Antonie van Leeuwenhoek and his Microscope.
- Que.1(C) Answer in detail. (Any 1 out of 2) (03)
1. Discuss Louis Pasteur's vaccine theory.
2. How can you difference procaryote and eucaryote?
- Que.1(D) Write a note on. (Any 1 out of 2) (05)
1. Short note on: Introduction to Groups of Microorganisms.
2. Short note on Louis Pasteur experiment to disprove of spontaneous theory.
- Que.2(A) Objective type questions. (04)
1. Define: Microscope.
2. Explain: Resolution.
3. What are decolourizers?
4. Write the Full form of SEM.
- Que.2(B) Answer in brief. (Any 1 out of 2) (02)
1. Write the difference between stains and Mordents.
2. Write any two name of dye use in Fluorescent Microscopy.
- Que.2(C) Answer in detail. (Any 1 out of 2) (03)
1. Discuss: Dark field Microscopy.
2. Give the basic information of Confocal Microscopy.
- Que.2(D) Write a note on. (Any 1 out of 2) (05)
1. TEM
2. Draw the well labelled diagram of Bright field Microscope.
- Que.3(A) Objective type questions. (04)
1. Full form of PHA.
2. Define: Pleomorphic.
3. What is Sporogenesis?
4. Flagella is made up of Carbohydrate. (True/False)
- Que.3(B) Answer in brief. (Any 1 out of 2) (02)
1. Write function of Vacuoles.
2. Explain: Protoplast and Spheroplast.
- Que.3(C) Answer in detail. (Any 1 out of 2) (03)
1. Short note on: Nuclear Material.
2. Difference between cell wall and cell membrane.
- Que.3(D) Write a note on. (Any 1 out of 2) (05)
1. Structure and formation of Endospores.
2. Gram negative and Gram-positive Bacterial cell wall.
- Que.4(A) Objective type questions. (04)
1. Explain: Autotrophs.
2. What is pure culture?
3. Define: Anaerobic Organism.
4. Write name of any two selective media.

- Que.4(B) Answer in brief. (Any 1 out of 2) (02)
1. Enlist Physical conditions required for growth.
 2. Write the name of selective method for cultivation of bacteria.
- Que.4(C) Answer in detail. (Any 1 out of 2) (03)
1. Short note on: Cultural characteristics.
 2. Various Gaseous requirements need for bacterial growth.
- Que.4(D) Write a note on. (Any 1 out of 2) (05)
1. Bacteriological media.
 2. Nutritional types of Bacteria.
- Que.5(A) Objective type questions. (04)
1. What is cell Reproduction?
 2. Define: Microbial cell division.
 3. Number of microorganisms are zero in log phase. (True/False)
 4. Most of the secondary metabolites are produce in.....phase.
- Que.5(B) Answer in brief. (Any 1 out of 2) (02)
1. Short note on Generation time.
 2. Give the brief of Synchronous growth.
- Que.5(C) Answer in detail. (Any 1 out of 2) (03)
1. Elaborate: Growth rate.
 2. Short note on: Continuous culture of Bacteria.
- Que.5(D) Write a note on. (Any 1 out of 2) (05)
1. Bacterial Growth Curve.
 2. Various Modes of cell division.
