

B.Sc. Semester - 1 (CBCS) Examination
Feb/Mar. -2021 (NEW COURSE)
MICRO-BIOLOGY(CORE)

Time: 1:30 Hours**Marks: 42****Instructions:**

1. Figures to the right indicate marks.
2. There are five questions in the question paper.
3. Answer any three of the following questions.

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- Q.1(A) Answer the following. (One mark each) (04)
1. What is Germ theory of disease?
 2. What is vaccine?
 3. What is exomicrobiology?
 4. What is Pasturization?
- Q.1(B) Answer in brief. (Any one out of two) (02)
1. What is the contribution of Fransisco reddy?
 2. Enlist applied areas of Microbiology.
- Q.1(C) Answer in detail. (Any one out of two) (03)
1. Comment on: Microorganisms are Omni Present.
 2. What is the Kingdom Monera and Kingdom Protista? How they differ?
- Q.1(D) Write a note on. (Any one out of two) (05)
1. Write a note on spontaneous generation Vs Biogenesis.
 2. Write a note on Koch`s Postulates
- Q.2(A) Answer the following. (One mark each) (04)
1. Define: Resolution.
 2. Define: Freeze eatching.
 3. Define: Auxochrome group.
 4. What is Fluorescent antibody technique?
- Q.2(B) Answer in brief. (Any one out of two) (02)
1. What is Phase contrast Microscopy?
 2. Explain specimen preparation for light microscope.
- Q.2(C) Answer in detail. (Any one out of two) (03)
1. What is Bright Microscopy? Explain in detail.
 2. What is confocal Microscopy?
- Q.2(D) Write a note on. (Any one out of two) (05)
1. Compare and contrast Bright field Microscopy and Dark field Microscopy.
 2. Compare and Contrast SEM and TEM.
- Q.3(A) Answer the following. (One mark each) (04)
1. Define: Capsule.
 2. Define: Mesosome.
 3. What is Cyst.
 4. What is Peptidoglycan.
- Q.3(B) Answer in brief. (Any one out of two) (02)
1. Define Protoplast and Sphaeroplast.
 2. Enlist Bacterial granules.
- Q.3(C) Answer in detail. (Any one out of two) (03)
1. Explain Pili in detail.
 2. Explain Cytoplamic content of Bacteria.

- Q.3(D) Write a note on. (Any one out of two) (05)
1. Bacterial Cell wall.
 2. Bacterial Endospore.
- Q.4(A) Answer the following. (One mark each) (04)
1. Define: Coenzymes.
 2. Define: Chemotrophs.
 3. Define: Microaerophilic organisms.
 4. Define: Acidophiles.
- Q.4(B) Answer in brief. (Any one out of two) (02)
1. Define: Mixotrophs.
 2. What is Oxygen Toxicity?
- Q.4(C) Answer in detail. (Any one out of two) (03)
1. What is role of Sun for phototrophic bacteria? Explain with example.
 2. How to grow obligate parasites?
- Q.4(D) Write a note on. (Any one out of two) (05)
1. What is the composition of N Agar? Explain synthetic and crude source present in it.
 2. Write a note on nutritional types of Bacteria.
- Q.5(A) Answer the following. (One mark each) (04)
1. Define: Growth.
 2. What is Continuous growth.
 3. Define: Generation time.
 4. What is Fragmentation?
- Q.5(B) Answer in brief. (Any one out of two) (02)
1. What is sporulation? Name the sporulating bacteria.
 2. What is Generation time? What is the generation time of E. coli?
- Q.5(C) Answer in detail. (Any one out of two) (03)
1. Synchronous growth.
 2. Binary fission and budding for cell division with example.
- Q.5(D) Write a note on. (Any one out of two) (05)
1. Bacteria Growth curve.
 2. How gram negative bacteria initiates cell division?
