

B.Sc. Semester - 1 (CBCS) Examination
Oct/Nov. -2019 (NEW COURSE)
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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Q.1 (A) Answer the following (One mark each) 4

1. Edward Jenner developed the vaccine for smallpox-True/False.
2. Contribution of Robert Koch.
3. Give an example of solidifying agent.
4. List out the applied area of microbiology?

Q.1 (B). Answer in detail (Any one out of two) 3

1. List out the important contribute of scientist in microbiology.
2. Explain distribution microbes in nature.

Q.1 (C). Write a note on (Any one out of two) 7

1. Write a note on spontaneous generation theory.
2. Explain the germ theory of disease.

Q.2 (A) Answer the following (One mark each) 4

1. Give an example of fluorescent dye.
2. Why use the mordent in staining?
3. What is fixative? Explain.
4. What is use of condenser?

Q.2 (B). Answer in detail (Any one out of two) 3

1. Write a short note on light microscopy.
2. Write about dark field microscopy and its importance.

Q.2 (C). Write a note on (Any one out of two) 7

1. Discuss types of electron microscopy.
2. Explain the principle of fluorescent microscopy.

Q.3 (A) Answer the following (One mark each) 4

1. Amphitrichous is the type of flagella-True/False?
2. What is the function of plasma membrane?
3. Cell wall composition of gram negative bacteria.
4. What is protoplast?

Q.3 (B). Answer in detail (Any one out of two) 3

1. Explain peptidoglycan layer.
2. Write short note on capsule.

Q.3 (C). Write a note on (Any one out of two)	7
1. Write note on sporogenesis.	
2. Discuss the cell wall of gram negative and gram positive.	
Q.4 (A) Answer the following (One mark each)	4
1. Role of pH in growth of microorganism.	
2. The term “Phototrophs” means use of light as their energy source– True/ False.	
3. What is Chemoorganotrophs?	
4. Explain growth factor.	
Q.4 (B). Answer in detail (Any one out of two)	3
1. Write a note on differential media.	
2. Explain complex media.	
Q.4 (C). Write a note on (Any one out of two)	7
1. Write a short note on selective methods.	
2. Explain the cultural characteristics.	
Q.5 (A) Answer the following (One mark each)	4
1. What is death phase?	
2. Cell division in bacteria occur by asexual mode- True/False.	
3. Explain term “generation time”.	
4. What is nonsynchronous growth?	
Q.5 (B). Answer in detail (Any one out of two)	3
1. Discuss the exponential phase.	
2. Write a note on continuous culture.	
Q.5 (C). Write a note on (Any one out of two)	7
1. Discuss bacterial growth curve with labeled diagram.	
2. Explain synchronous growth in detail.	
