

B.Sc. Semester - 3 (CBCS) Examination
Oct/Nov. -2019 (Old Course)
MICRO-BIOLOGY (CORE)

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

1. All questions are compulsory.
 2. Figures to the right indicate marks.
-

- Que1 A: Write a note on (Any One out of Two)** **7**
1. Explain domain and kingdom classification systems
 2. Describe major characteristics used in taxonomy
- Que1 B : Answer in brief (Any One out of Two)** **4**
1. What is metagenomics?
 2. Explain : Archezoa and Chromista in brief
- Que1 C: Objective type question (Any Three out of Five)** **3**
1. What is Jaccard's coefficient ?
 2. What is the contribution of Cavalier Smith ?
 3. Who proposed endosymbiosis ?
 4. Give names of few members of Protozoa and Archea
 5. What is molecular chronometer ?
- Que2 A: Write a note on (Any One out of Two)** **7**
1. What are dissimilatory sulfate reducers ? Explain
 2. Describe photosynthetic prokaryotes and their metabolic peculiarities.
- Que2 B : Answer in brief (Any One out of Two)** **4**
1. What are biochemical properties of archaea?
 2. Discuss anaerobic cocci.
- Que2 C: Objective type question (Any Three out of Five)** **3**
1. What is bacteriorhodopsin?
 2. What is the importance of Rickettsia?
 3. Give examples of asporogenous rods.
 4. What are actinomycetes?
 5. Give names of barophile and halophile species you know.
- Que3 A: Write a note on (Any One out of Two)** **7**
1. Discuss economic importance of fungi.
 2. Describe Pathogenesis of Protozoa and add note on their ultrastructure.
- Que3 B : Answer in brief (Any One out of Two)** **4**
1. Discuss the important molecules obtained from Algae.
 2. Discuss fungal classification in brief.
- Que3 C: Objective type question (Any Three out of Five)** **3**
1. What is carrageenan ?
 2. Name the causative agent of Chagas Disease and Sleeping Sickness.
 3. What is importance of Diatoms in Microbiology Laboratory?
 4. What are Phycomyces?
 5. What is Amoebiasis?

- Que4 A: Write a note on (Any One out of Two)** 7
1. Write a detailed note on Viroids and Prions.
 2. Describe Life cycle of T even Phages.
- Que4 B : Answer in brief (Any One out of Two)** 4
1. Discuss LHT classification of viruses
 2. Write a note on any two methods of viral cultivation.
- Que4 C: Objective type question (Any Three out of Five)** 3
1. What are retroviruses?
 2. Who is father of virology
 3. Which cancer is caused by EBV
 4. What are CPE?
 5. What is plaque assay?
- Que5 A: Write a note on (Any One out of Two)** 7
1. Write a detailed note Bio mining.
 2. Describe biodeterioration of paper, paints and metal.
- Que5 B : Answer in brief (Any One out of Two)** 4
1. Discuss scope of bioremediation.
 2. Explain ethanol as biofuel.
- Que5 C: Objective type question (Any Three out of Five)** 3
1. What is metal corrosion?
 2. What is air sanitation?
 3. What are bioplastics?
 4. Mention name of microbial species useful in copper bioleaching.
 5. What is tertiary recovery of oil?
