PG CBCS

M.SC. Semester-II Examination, 2021 MEDICAL LABORATORY TECHNOLOGY

PAPER: MLT 203 (MEDICAL MICROBIOLOGY)

Full Marks: 40 Time: 2 Hours

Answer any **FOUR** questions of the following:

10X4=40

- 1. Define protoplast and spheroplasts. What is the importance of 16S rRNA? How does the endospore form? Classify the bacteria based on their endospore location and size.

 2+2+3+3
- 2. Briefly describe the life cycle of Ascomycetes. What is fungi imperfecti? What is YM shift? 6+2+2
- 3. How do you identify the fungal infection by staining procedure? Write a short note on Candidiasis.

 4+6
- 4. Briefly describe the lysogenic life cycle of bacteriophage? What is prophage? What do you mean by superimmunity of the bacteria in terms of bacteriophage infection?

 5+2+3
- 5. Write a short note chicken pox. State the name and function of each gene present in HIV genome. What is prion?

 4+4+2
- 6. Briefly describe the antigenic structure and pathophysiology of *Staphylococcus* and *Salmonella* sp. 5+5
- 7. How is *Plasmodium vivax* transmitted? Describe briefly the asexual life cycle of *Plasmodium*. Write the prophylaxis and treatment of malaria. 1+5+2
- 8. What are the causes of trypanosomiasis? Why is it called the sleeping sickness?

 Describe the life cycle of Trypanosoma.

 2+2+6