

BT-201 Microbiology

Time: 2 Hours

Answer **FOUR** questions only

1. Write a concise account on the nature, structure and composition of plant viruses.
2. a) Draw a standard bacterial growth curve and label the various phases.
b) Explain the phases and discuss the factors which determine each phase.
c) How will you determine the generation time of a bacterial species?
3. Distinguish between the following;
 - a) Rhizomorphs and Haustoria
 - b) Cleistothecium and Apothecium
 - c) Virion and Viroids
 - d) Tyndallization and Pasteurization.
4. Write a brief account of the different methods of sterilization of materials in a laboratory and explain the principle in each method you mention.
5. Write short notes on the following;
 - a) Mycoplasma
 - b) Classification of bacteria
 - c) T4-bacteriophage
6. a) Outline the steps of municipal water treatment and comment on the objective of each step.
b) What is Eutrophication?
c) List the most important water borne diseases? Name the pathogen causing each.