**MODEL QUESTIONS**

**PAPER ECIII: BIOINFORMATICS, FOOD AND DAIRY MICROBIOLOGY**

**M.Sc. MICROBIOLOGY, SEMESTER-IV**

**I. Short answer type questions.**

1. What are the starter cultures? Explain starter culture types and function?
2. What are the three stages in curing of soy sauce fermentation?
3. What are leavening agent and its role? What are good manufacturing practices?
4. Define asepsis. What are the principles of food preservation?
5. What is the difference between “Chilling or Cold Storage” and “Freezing or Frozen Storage”?
6. What is alignment in Bioinformatics? Explain the concept of global and local alignment.
7. Define biological databases and discuss its different types.

**II. Long answer type questions.**

1. What is HACCP and explain its principle?
2. How Baker ’s yeast is produced and its application?
3. Write in brief about different methods for preserving and removal of microorganisms from vegetables?
4. Write short note on FDA.
5. Write in brief about Shigellosis.
6. Write a short note on Staphylococcus food intoxication
7. What is phylogenetic analysis? Discuss the types and approaches for phylogenetic tree construction.
8. Give an account of methods of protein structure prediction.