S.Y. B.Sc. Examination – April 2016 Microbiology

Paper: MI-203 Applied and Environmental Microbiology Paper Code: 8399 Time: 2 Hours Total Marks: 75 Instructions: (a) Figures to the right indicate total marks of respective questions. (b) Draw neat, clean and labeled diagram wherever necessary. (a) Discuss: Microbial flora of extreme environments and their adaptations. 09 (b) Explain any three secondary waste water treatments in detail. 09 OR (a) Write on: Spoilage of milk constituents by various microorganisms. 1 09 (b) Explain: Industrial production of butter. 09 2 (a) Discuss sources and effects of air pollution with preventive measures. 09 (b) Compare and contrast: Food poisoning and food infection. 09 OR 2 (a) Explain: Food spoilage by radiation, freezing and pressure. 09 (b) Discuss: Origin, types and number of air microflora. 09 3 (a) Write on: Microbial flora of fresh fruits and vegetables. 09 (b) Explain any three water borne diseases. 09 OR. 3 (a) Discuss: Sources of microbial contamination in milk. 09 (b) Explain: Temperature as an environmental extreme. 09 Write notes on: 21(a) BOD and COD (b) Post pasteurization test (c) Heavy metal pollution OR Write notes on: 21(a) Food spoilage by microbes

(b) Sauerkraut

(c) Plant - microbe interactions above the ground