

2123

B.A./B.Sc. (General) Fifth Semester
Industrial Microbiology
IMB-501: Biodegradation of Wastes and Pollutants

Time allowed: 3 Hours

Max. Marks: 33

NOTE: Attempt five questions in all, including Question No. I which is compulsory and selecting one question from each Unit.

x-x-x

I. Answer the following:-

- a) What are the advantages of solid waste disposal employing sanitary landfill method?
- b) Discuss in brief the secondary water treatment.
- c) Enlist the microorganisms commonly present in the water contaminated with faecal matter?
- d) Discuss in brief the biodegradation of benzyl sulphonates. (2,2,2,3)

UNIT - I

- II. Discuss in detail the method of incineration for solid waste disposal. Also explain its advantages and disadvantages. (6)
- III. What are the different composting methods employed for solid waste disposal? (6)

UNIT - II

- IV. Describe the process of tertiary treatment of sewage. (6)
- V. a) Differentiate between primary and secondary treatment of sewage.
b) Discuss various disinfection techniques for liquid waste. (4,2)

UNIT - III

- VI. Describe different bacterial indicators of water safety? (6)
- VII. What are the various methods employed for the disinfection of potable water supply? (6)

UNIT - IV

- VIII. What are the various reasons for oil pollution? How can it be prevented? (6)
- IX. Discuss about oil spillage and its potential risk to the environment. (6)

x-x-x