

Exam.Code:0005

Sub. Code: 0478

1127

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. Attempt the following:-

- a) Define chemical oxygen demand. (2)
- b) Name any four species of pathogens that may be present in polluted water. (2)
- c) Briefly describe the principle of septic tank. (3)

UNIT – I

- II. Write a note on incineration of solid waste. (6½)
- III. What are the advantages and disadvantages of using landfills for solid waste management? (6½)

UNIT – II

- IV. Discuss primary treatment of waste water. (6½)
- V. Write a note on activated sludge treatment. (6½)

UNIT – III

- VI. Describe the advantages and disadvantages of membrane filtration technique for evaluation of water quality. (6½)
- VII. Discuss the methods for disinfection of potable water supplies. (6½)

UNIT – IV

- VIII. Describe beta-oxidation of alkyl chains during hydrolysis of linear alkyl benzene sulphonates. (6½)
- IX. Write a note on the application of bacteria for cleaning up of oil spills. (6½)

x-x-x