Exam.Code:0436
Sub. Code: 3476

2072

M.Sc. (Biotechnology) Second Semester

MBIO-205: Environmental Biotechnology

Time allowed: 3 Hours Max. Marks: 80

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) What was London smog?

b) What is biotransformation?

c) What are Problem soil types in coastal areas?

d) Give names of anaerobes involved in wastewater treatment.

e) What are bioplastics? Give examples.

f) Define Sanitary landfills.

g) What is Bioamplification and Bioaccumulation?

h) Differentiate between TSS and TDS. Give example. (8x2)

UNIT - I

II. a) List types of air pollutants. Discuss methods to monitor and control air Pollution.

b) List indices of Noise Pollution. (10,6)

III. a) Elaborate on problems associated with Acidic and Alkaline soils.

b) Write a note on Bacteriological analysis of soil. (2x8)

UNIT - II

IV. Elaborate on design and working of UASBR for wastewater treatment (16)

V. Describe treatment strategies for Effluents of Dairy, Tannery and antibiotic industry. (16)

UNIT - III

VI. a) Discuss the Degradation of Complex Hydrocarbons in environment.

b) Write a note on Degradative plasmids. (10,6)

P.T.O.

VII. Elaborate on the principle and methodology of Integrated Pest Management. (16)

UNIT - IV

VIII. a) What is the principle of remote sensing and GIS? Discuss application in Ecological mapping.

b) Write a note on EIA guidelines. (10,6)

IX. a) Discuss the characteristics and composition of Municipal Solid Waste.

b) Write a note on Bioindicators and their Mode of Action. (2x8)

x-x-x