

D.K.M.COLLEGE FOR WOMEN (AUTONOMOUS), VELLORE-1.
ENVIRONMENTAL BIOTECHNOLOGY

SECTION-A

2 MARKS

1. Acidification
2. Eutrophication
3. Water pollution
4. Soil pollution
5. Pollutants
6. Pollution
7. Aeration
8. Sedimentation
9. Flotation
10. Coagulation
11. Adsorption
12. Trickling filter
13. Oxidation pond
14. Pesticide
15. Chlorofluorocarbons
16. Noise pollution
17. Biochemical oxygen demand
18. Bioreactors
19. Sludge
20. phytoremediation
21. Incineration
22. Bioaugmentation
23. Biostimulation
24. Composting
25. Biofuel
26. Bioplastics
27. Vermicomposting
28. Acid rain

29. Green house gases
30. Polycyclic compounds
31. Solid waste
32. Biosorption
33. Biomining
34. Bioleaching
35. Xenobiotics
36. Sewage
37. Domestic waste water
38. Minamata
39. Biodegradable waste
40. Ozone depletion
41. Alum
42. Sludge blanket
43. Biofilm
44. Microbes employed in Bioleaching
45. Degradation of aromatic compounds

SECTION-B 5 MARKS

1. What are the limitations in the usage of chlorine in disinfection?
2. Explain the activated sludge process with a flow diagram?
3. What are the main steps of metabolism in anaerobic digestion?
4. How do you differentiate microfiltration and nanofiltration?
5. Write short note on rhizofiltration and COD.
6. Explain use of immobilised cells or enzymes for treatment of waste water.
7. Write short notes on sludge digestion and sludge thickening
8. Distinguish between acetogenic, acetoclastic and hydrogenophilic bacteria
9. What are the measures to control soil pollution?
10. What are the methods in the remediation of soil contamination?
11. Discuss the various sources of soil pollutants.
12. What are the sources of air pollution?
13. Write short notes on biodegradation of halogenated compounds.

14. Explain how microbes are useful in recovery of oil from oil wells.
15. What are the advantages and disadvantages of using microbes in metal recovery?
16. What are the air pollution control measures adopted in industry?
17. What are the properties of noise?
18. How do you control noise pollution?
19. What is biological detoxification? Explain its significance with examples?
20. What are the biological agents used in hazardous management?
21. What are the measures adopted in the management of solid waste?
22. What are the causes and effects of solid waste dumping?
23. What are the factors affecting the process of composting?
24. What are the wastes considered as hazardous?
25. How do you characterize hazardous wastes?
26. What are the types of infectious wastes?
27. Draw a schematic to explain the structure of the atmosphere.
28. What are the reactions that bring about the formation of ozone?
29. What are the causes and effects of acid rain?
30. What are the effects of acid rain on terrestrial and aquatic life?
31. What are the processes that deplete the ozone in the stratosphere?
32. What is the role of green house gas and its influence on global warming?
33. What are the impacts of ozone on the terrestrial and aquatic life?
34. How does fossil fuel use lead to serious environmental problems/
35. Write a short note on green house effect.
36. Discuss about the mechanism of ozone depletion and its cause
37. Give a short explanatory note on the microbial degradation of xenobiotics.
38. Write a short note on air pollution.
39. Discuss advantages and disadvantages of Bioremediation.
40. What are the biological agents used in hazardous waste management?

SECTION-C 10 MARKS

1. What are the environmental problems that we face now and list out in detail the causes?
2. Write about the scope of environmental Biotechnology.

3. Explain in detail about sewage waste water treatment.
4. Write in detail about the marine pollution.
5. Discuss about the various environmental components and add a note on green house gases.
6. Describe in brief the metabolism of pesticides and xenobiotics.
7. Write in detail about composting and the factors affecting it.
8. What is bioremediation? Differentiate between intrinsic and engineered bioremediation.
9. Write different types of xenobiotic compounds, their toxic effects caused in the ecosystem?
10. Discuss the characteristics of waste water? Explain the various biological processes used in the treatment of waste water.
11. Write a detailed account on biodegradation of xenobiotics?
12. Write a note on bioremediation and discuss its constraints and priorities.
13. Write in detail about the different types of bioreactors.
14. Describe in detail aerobic treatment of wastewater.
15. Describe the problems in biomethanation
16. Describe the physicochemical control parameters of biosensors for waste stabilization.
