

## **Bot PG 4th Sem**

### **PAPER-XVII (ENVIRONMENTAL BIOTECHNOLOGY-II)**

#### **SHORT NOTES/ Short Questions**

- 1 How biodegradability is measured
- 2 Differentiate between aerobic and anaerobic degradation
- 3 Degradation of pesticides
- 4 Molecular basis of pesticide removal
- 5 Define bioaccumulation.
- 6 Define biomining
- 7 Define bioleaching,
- 8 What does u mean by biosorption,
- 9 Define phytochelation,
- 10 Define phytoextraction,
- 11 Define rhizofiltration,
- 12 Define phytovolatilization
- 13 What are biosphere reserves,
- 14 Define biomass,
- 15 Define phytoremediation
- 16 Bioethanol
- 17 National parks
- 18 Sanctuaries
- 19 Gene bank
- 20 Cryopreservation

21 Seed bank

22 Botanical gardens

23. Ramsar Wetlands

## **LONG QUESTIONS**

1. What do you mean by bio energy and biofuels. Briefly describe about different hydrocarbon from higher plants.
2. How bioethanol is produced and briefly discuss about biohydrogen generation.
3. Briefly analyse about in situ and ex situ conservation measures
4. What are metalophores ,briefly describe the roles of metalophores,
5. Describe how biotransformation of toxic metal pollution takes place. Explain with examples.
6. Briefly describe the use of biotechnology for biodiversity conservation.
7. Discuss about forest resources,its types and management.
8. List any two factors leads to recalcitrance of an organic molecule discharged to soil
9. Explain biobeneficiation
- 10.Explain carbon dioxide sequestration
- 11.Describe phytovolatilization
- 12.Discuss the environmental significance of bacteria and algae
13. Explain the insitu and exsitu bioremediation with their merits and limitation. Describe a biotreatment technology for industrial wastewater and surface water
- 14 Show how biosensors used for environmental monitoring and biomonitoring
- 15 Write a note on phytoremediation. Outline the biodegradation of lignocelluloses.

16 Give an account of forest resource of our country. Discuss various causes behind the depletion of this resource.

17 Discuss various types of forest resources and their management.

18 Discuss the role of an individual in conservation of natural resources.

19 Give an account of different method for conservation of biodiversity

20 Why conservation of biodiversity is necessary? Describe methods adopted through in-situ and ex-situ conservation.