

MANAGEMENT OF MARINE ENVIRONMENT - PBBT304
UNIT-1 MARINE POLLUTION

PART-A (2 Marks)

1. What is pollution?
2. What is marine pollution?
3. What are the major pollutants?
4. What are the minor pollutants?
5. List out the marine pollution?
6. What is Hydrocarbon Pollution?
7. What is anthropogenic?
8. Explain Oxygen depletion?
9. What is Oil spillage?
10. Name the act and regulation of marine pollution?
11. Role of Environmental Protection Agency?
12. Define eutrophication?
13. Define acidification?
14. What is ballast water?
15. Explain marine ecosystem?
16. Define BOD?
17. Define COD?
18. Explain bioaccumulation?
19. Define bioremediation?
20. What is phytoplankton?

PART-B (5 Marks)

1. Provide the types of bioremediation?
2. Give outline the bioremediation process?
3. Explain the advantage and disadvantage of bioremediation?
4. Summarize the bioremediation strategies?
5. Give an account on application of bioremediation.
6. Write a short note on eutrophication.
7. What are the parameters are used to assess the marine pollution?
8. Investigate the means of keeping marine environment intact from pollution?
9. Describe the effect of marine pollution cause to the plants and animals
10. How does ocean pollution affect phytoplankton diversity?

PART-C (10 Marks)

1. Explain detail in bioremediation relation technologies?
2. Define bioremediation? How its work, explain the essential factors of microbial bioremediation?
3. Define marine pollution? Describe the types and causes of marine pollution?
4. Describe the types of toxic mechanisms, and factors affecting action of poison?
5. Give an account of general impact factors of pollution
6. Write a review of the potential and actual sources of pollution
7. How to protect marine life, explain in detail.
8. Explain the act and regulations of marine pollution
9. What are the technologies used to remove contaminants from environmental pollution?
10. Discuss briefly In-situ and Ex-situ bioremediation?

UNIT – 2 MARINE DISASTERS AND MANAGEMENT

PART- A (2 Marks)

1. What is disaster?
2. What does disaster stand for?
3. What is an earthquake?
4. How do cyclones form?
5. Why do earthquakes occur?
6. What damage is produced?
7. What is nuclear disaster?
8. Explain the risk factors of disaster?
9. What are volcanic eruptions?
10. What is a “Geohazard”?
11. What does vulnerability means?
12. What does hazard means?
13. How does an earthquake form a tsunami?
14. What is EIA?
15. Why do EIA?
16. Define hazards?

17. What is ecological disruption?
18. Define the process of vaccination.
19. List out the policy development in disasters?
20. Define oilspill.

PART-B (5 Marks)

1. What Public Expect From Media?
2. What is the Strengths of Media Reporting Crisis & Disaster?
3. How do we mitigate the hazard from earthquakes?
4. How do we mitigate the hazard from tsunamis?
5. Describe the disaster terminology?
6. List out types of risk assessment?
7. Write short notes on economical damage in disaster?
8. Discuss the disasters management?
9. What is the role of media in disaster management?
10. Summarize the environmental impact and risk assessment.

PART-C (10 Marks)

1. Explain detail types of manmade disaster?
2. Write detail notes on disaster management cycles?
3. Explain detail types of natural disaster?
4. Classify the types of disaster and give detail information about that?
5. How does the country cope with the challenges of disasters and climate change?
6. Explain the role social media in disaster management?
7. Write a short note on prevention and mitigation from flood?
8. Explain the history of comparative risk assessment?
9. Write short notes on economical damage in disaster?
10. Give an account on marine disasters and management.

UNIT-3 IMPACT OF GLOBAL WARMING ON MARINE ENVIRONMENT

PART-A (2 Marks)

1. What is oil spill?
2. Define marine biodiversity?
3. Define ecological systems?
4. What is phytoplankton?
5. What is red tide?
6. Define marine eutrophication?
7. List out the ecosystems effects?
8. Which genes to select molecular detection of changes?
9. How to generate sequence data?
10. Define biofouling?
11. What is ocean acidification?
12. Define microarray?
13. What is the greenhouse effect?
14. What is global warming?
15. What is global warming doing to the environment?
16. What are people doing to stop global warming?
17. What causes the earth's climate to change?
18. What are the effects of Global Warming to humanity?
19. What is the meaning of sea level rising?
20. How the global warming effects on the rising sea level

PART-B (5 Marks)

1. Outline the Direct human impact.
2. Summarize the causes coastal marine pollution?
3. Compare the natural eutrophication and anthropogenic eutrophication?
4. Write a short note on disasters and damage of sea levels rising?
5. Explain the future impact of sea level rise.

6. How to manage the global sea level rise?
7. Explain the benefits of carbon trading?
8. Discuss the disadvantage of carbon trading?
9. What are the impacts of global warming?
10. Write short note on molecular biology and genetics techniques using marine environment?

PART-C (10 Marks)

1. Discuss about negative impact of sewage disposable?
2. Explain the conservation global oceanic environment?
3. Interpret about impact of global climate change on coastal and marine environment?
4. Determining Biodiversity in an Environmental Sample by Sequence Analysis.
5. What are the molecular techniques used in marine environment and explain the techniques?
6. Explain the importance of biodiversity research in the marine environment.
7. Evaluating marine biodiversity by sequence analysis and fingerprinting methods?
8. Interpret the carbon trading implementation mechanisms?
9. Explain in detail about Kyoto protocol.
10. Discuss the current status and research on global warming?

UNIT-4 BIOLOGICAL PROCESSES AFFECTING MARINE ENVIRONMENT

PART-A (2 Marks)

1. What is fouling?
2. What causes of fouling?
3. What are the preventive measures of biofouling?
4. What is bio deterioration?
5. What is boring?
6. Why does fouling and boring take place?
7. Define of crustacean.

8. What are the two types of boring organisms?
9. List out the bio fouling organisms?
10. What is Climate Change?
11. What is mean by PEGlyating.
12. Antifouling character
13. Give two biofilm organisms?
14. What is Pelagic?
15. Define bioreactor
16. What is Coral reefs
17. Define quorum sensing?
18. Define the term of corrosion?
19. What is marine borer?
20. What is Mangroves

PART-B (5 Marks)

1. Give a short note on types of biofouling?
2. Explain how various factors modify the action of toxicants.
3. Summarize the source of cultural eutrophication.
4. List out the ingredients to prepare biofilm
5. How to deal with the effects of eutrophication?
6. What are the impacts of borers?
7. Summarize the impact of fouling.
8. Explain the microfoulers and macrofoulers?
9. Write a short note on marine borers and interaction.
10. General approaches of interactions, prevention and control of marine toxicology.

PART-C (10 Marks)

1. Explain detail about types of corrosion?
2. Discuss about diffusion and its consequences and functional mechanisms.

3. Explain the various mechanisms by which toxicants act.
4. Give an account of the general line of treatment in a case of poisoning.
5. Criticize the environmental and cultural factors affecting biofilm?
6. Explain the steps in the formation of biofilm with diagram?
7. Write a detailed account of marine ecosystem?
8. Explain the various aspects of marine toxicology?
9. What is the mechanism of action of marine fouling?
10. Give a detailed account of basic characteristics of marine environment.

UNIT- 5 MARINE RESOURCES MANGEMENT

PART-A (2 Marks)

1. What is pollution indicator?
2. What is rocky beach?
3. Define marine biosphere.
4. What is seaweed?
5. What are marine parks?
6. Explain fish by product?
7. Give two benefit of coral reef?
8. Define marine biodiversity?
9. What are coral reefs?
10. Define bioaccumulation
11. What is bio magnification?
12. Explain deuterium.
13. What is the expansion of OTEC?
14. What soft coral.
15. How biosphere reserves are differ from protected area
16. Name the national marine parks in India?
17. Name the marine sanctuaries in India?
18. Define marine sanctuary.
19. Expansion of ICUN, MPAs, SBR.
20. What is mangrove ecosystem?

PART-B (5 Marks)

1. Write short notes on marine energy resources?
2. Write the application of marine resources
3. Importance of measures of marine management?
4. Justify the physical marine resource?
5. Predict the structure of the earth in marine environment.
6. What are characteristics of national park?
7. Simplify the functions of biosphere reserves.
8. Outline the biosphere reserve network in India.
9. How to conserve the marine resource? Justify
10. Explain the role of national and international agencies in marine management?

PART-C (10 Marks)

1. What are the best methods to encourage context-specific behavioral changes to important to change?
2. What are the best methods and tools available to engage citizens in marine conservation?
3. Give an detailed account of importance of coastal resources.
4. What is marine ecosystem? Discuss briefly.
5. What strategies can be used to promote long-term integrated multi-disciplinary collaborations?
6. What are the impacts of recreational fishing on marine ecosystems?
7. How can fishing gear and techniques be improved to minimize habitat damage?
8. Give an account of in-situ and ex-situ marine resources.
9. Explain the role of national and international agencies in marine management?
10. Theory of general marine resources and management?