

Industrial ecology exam questions

1. Purpose and development of industrial ecology
2. Biosphere and its anthropogenic impact, global environmental problems
3. Sources of environmental pollution
4. Industrial production and eco-friendly technology
5. Non-waste production
6. Principles of zero-waste and waste hierarchy
7. Environmental factor and industrial metabolism
8. Dispersion of air pollutants
9. Man-made gas emissions, classification of pollutants
10. Greenhouse effect and greenhouse gases
11. London smog and Los-Angeles smog
12. Purification methods of gas waste
13. Biological methods of waste gas treatment
14. Absorption process in waste gas treatment technology
15. Adsorption process in waste gas treatment technology
16. Purification methods of waste gases with reagents
17. Characteristics of wastewater
18. Wastewater treatment methods
19. Mechanical treatment of wastewater
20. Biological treatment method of industrial wastewater
21. Physicochemical treatment method of wastewater
22. Characteristics of industrial and consumer solid wastes
23. Incineration and pyrolysis thermal treatment methods of solid wastes
24. Municipal solid wastes and its 5R management principles
25. Purification methods of drinking water
26. General principles of operation of the thermal power stations
27. Wastes received from fossil fueled power stations
28. Cooling towers. Open and closed cycle cooling in thermal power plant
29. Advantages and disadvantages of thermal power plant
30. Nuclear power station
31. Principles and types of operation of nuclear reactors at Nuclear Power Plants
32. Gas and liquid waste treatment at the Nuclear Power Plant
33. Characteristics of solid wastes of the Nuclear Power Plant
34. Advantages and disadvantages of the Nuclear Power Plant
35. Radioactive waste and characterizations of different radiation types
36. Chernobyl accident
37. Oil and gas extraction industry, oil characteristics
38. Environmental impact of petroleum
39. Azerbaijani oil
40. Gas deposits, biogeochemical and eco-toxicological characteristics
41. Sources and types of natural gas
42. Gas fields in Azerbaijan

43. Waste collection and classification in the oil and gas extraction industry
44. Methods to prevent oil spills
45. Characteristics of the oil refining industry and its impact on the environment
46. Oil refining, primary and secondary processing
47. Classification and treatment methods of waste in the oil refining industry
48. Characteristics and types of cracking processes
49. Petroleum-derived pollution
50. Main directions of the petrochemical industry
51. Methods for the treatment of industrial wastewater generated in the petrochemical industry
52. Pollution and hazards from plastic manufacturing
53. Products, chemical aspects of the chemical industry
54. Production of sulfuric acid and management of its waste
55. Environmental effects of fertilizers
56. Waste types of fertilizers
57. Impact of the mining industry on the environment
58. Metallurgy in Azerbaijan
59. Transport and its impact on the environment
60. Environmental impact forms of transport