

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE  
NATIONAL AVIATION UNIVERSITY  
Faculty of Environmental Safety, Engineering and Technologies  
DEPARTMENT OF ENVIRONMENTAL SCIENCE**



**LIST OF THE QUESTIONS (TASKS) TO PREPARE TO THE MODULE  
TEST**

on the subject «Waste Utilization and Recuperation»

**Educational Professional Program:** Ecology and Environmental Protection

**Field of study:** 10 Natural Sciences

**Specialty:** 101 Ecology

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## MODULE TEST № 1

### on the subject «Waste Utilization and Recuperation»

1. Define the concept of "waste".
2. Give the classification of waste.
3. Describe the State classifier of waste.
4. What is the utilization of waste?
5. What is waste recovery?
6. What is industrial waste?
7. What are the main causes of industrial waste?
8. What can you say about foreign experience in the field of industrial waste management?
9. What methods, devices and technologies can you offer to protect water resources?
10. What industrial waste, in your opinion, is the most dangerous for the environment?
11. What is the impact of industrial waste on human health?
12. What is medical waste?
13. What types of medical waste do you know?
14. What are the methods of medical waste management and disposal?
15. What are the regulatory requirements for medical waste?
16. How is the problem of medical waste management solved in Ukraine?
17. What is clinical waste?
18. What are the functions of the biomedical waste management system (BMS)?
19. What control exists over the disposal of clinical waste?
20. What can you say about clinical waste generated in a private household?
21. How can clinical waste be disposed of?
22. What is the difference between the terms "hazardous" and "toxic" substance?
23. What is the impact of hazardous waste on the environment?
24. What are the health risks associated with hazardous waste?
25. What are the most effective methods of hazardous waste disposal in your opinion?
26. What are the main aspects of hazardous waste management?
27. Define the concept of "electronic waste"?
28. What hazardous or toxic substances are included in the composition of electronic waste?
29. What are the main aspects of e-waste management?
30. What is the impact of e-waste on the environment?
31. What is the structure and main stages of the e-waste recycling chain?
32. Are there any problems with e-waste management in Ukraine?
33. What is the processing of liquid radioactive waste (LRW)?
34. What is the system of solidified radioactive waste management in Ukraine?
35. What is the management of solid radioactive waste?
36. What are the aspects of the problem of space pollution?
37. What are the main sources of space debris formation and accumulation?
38. What is the role of the United States and the European Union in space debris management?
39. What are the main categories of space debris reduction?
40. How can satellites be protected from debris?
41. What is municipal solid waste? Analyze the stages of waste management.
42. Explain the difference between consumption and production waste.
43. What methods of solid waste disposal do you know?
44. What is the process of solid waste recycling?
45. Can you name the advantages of composting solid waste?
46. Analyze the recycling of waste as a source of energy?
47. What can you suggest to reduce the amount of waste?
48. Define the concept of "organic waste" and analyze the sources of its formation.
49. What are the types of organic waste?
50. How does organic waste affect the environment?
51. What can you say about composting organic waste?
52. Explain the main stages of organic waste management?
53. How is waste management related to the environmental performance of the enterprise?
54. Why has plastic become a global problem?
55. Describe the impact of plastic waste on the environment.

**MODULE TEST № 2**  
**on the subject « Waste Utilization and Recuperation»**

1. What categories of waste are generated most often?
2. Name the quantitative and qualitative features of solid waste generation in Ukraine.
3. What factors affect the accumulation and composition of municipal solid waste?
4. What is the composition of municipal solid waste?
5. Identify the main areas of waste management.
6. Define the process of waste collection?
7. Is there a difference between the concepts of "waste recycling" and "waste disposal"?
8. What is waste disposal?
9. What is waste disposal?
10. List the main technological processes and devices for solid waste disposal.
11. Explain the essence of the concept of "solid waste landfill".
12. What are the basic requirements for the location of solid waste landfills?
13. In what areas is the placement of landfills not allowed?
14. What is leachate? Determine the degree of its impact on the environment.
15. What methods of treatment and disposal of leachate you know?
16. What determines the choice of method of treatment and disposal of leachate?
17. Name the components of waste from which biogas can be obtained.
18. Describe the chemical processes that lead to the formation of biogas in landfills.
19. What special equipment is needed to organize the collection of biogas?
20. What factors affect the intensity and yield of biogas?
21. Describe the impact of landfill gas on the environment.
22. What are the most promising areas of landfill gas use?
23. What are the accumulation rates of solid waste, how are they calculated?
24. What is included in the scheme of sanitary cleaning of settlements?
25. For what period is the scheme of sanitary cleaning of settlements developed?
26. Why is one of the main tasks of local authorities to develop a Scheme of Sanitary Cleaning of Settlements?
27. Name the main sources of solid industrial waste.
28. What are the most common methods of utilization and disposal of industrial waste?
29. Describe the processes of grinding, grinding, enlargement, granulation, tableting, briquetting of waste.
30. Describe the methods of sorting and beneficiation of waste.
31. What is high temperature agglomeration?
32. Explain the essence of thermal methods of waste treatment and disposal.
33. Explain the essence of the methods of extraction of components from waste, mechanical dehydration.
34. Describe the gravitational, flotation, electrical and magnetic methods of waste beneficiation.
35. What types of pyrolysis as a thermal method of waste treatment and disposal do you know?
36. What methods of industrial waste storage do you know?
37. Describe the technology of storage of solid industrial waste.
38. Name the basic principles of EU policy in the field of solid waste management.
39. What is Green Dot? The main functions.
40. Describe the German experience of waste management.
41. Describe the Scandinavian experience of waste management.
42. Describe the Japanese experience of waste management.
43. Name the main regulatory documents in the field of waste management.
44. Suggest measures for an effective system of solid waste management in Ukraine.
45. In your opinion, what are the main obstacles to the implementation and functioning of an effective solid waste management system in Ukraine?