

Radioactive Waste Characterization and Management Pre-Assessment Answer Key

1. What type of materials are typically found in low-level radioactive waste?
 - a. Unused medical isotopes
 - b. Clothing and cleaning rags
 - c. Expired radioactive liquids
 - d. Unexposed reactor fuel

Answer: B

2. T or F – The three classes of low-level nuclear waste are uranium tailings, transuranic waste, and sealed sources.
 - a. T
 - b. F

Answer: B

3. T or F – High-level radioactive waste may contain spent fuel rods from a nuclear reactor.
 - a. T
 - b. F

Answer: A

4. _____ is a common contributor to high-level radioactive waste
 - a. U-238
 - b. Cobalt-60
 - c. Plutonium-239
 - d. Technetium-99

Answer: B

5. Which government agency is responsible for radioactive waste management guidelines?
 - a. Department of Transportation
 - b. U.S. Atomic Energy Commission
 - c. Department of Homeland Security
 - d. Department of Energy

Answer: D

6. _____ is a common contributor to transuranic waste.
 - a. N-17
 - b. Cobalt-60
 - c. Plutonium-239
 - d. Technetium-99

Answer: C

7. What of the following is designed to establish a facility's overall culture?

- a. Safety Management System
- b. Conduct of Operations
- c. Business Management Program
- d. Ethics and Standards Policy

Answer: B

8. Which of the following radioactive isotopes are capable of undergoing fission?

- a. U-235
- b. Pu-242
- c. Th-232
- d. Cs-137

Answer: A

9. What does the term criticality mean in radioactive waste management?

- a. Improper location of fissionable materials
- b. Sustained high radioactivity
- c. Lethal dose limits
- d. Uncontrolled chain reaction

Answer: B

10. T or F - Fissionable Material Handlers are qualified as Radiation Protection Technicians.

- a. True
- b. False

Answer: B

11. In an Integrated Safety Management System, who is accountable for protection of the public, workers, and the environment?

- a. The company president
- b. Safety hygienists
- c. Line management
- d. Competent workers

Answer: C

12. Which type of radioactive packaging is the most secure?

- a. Type A
- b. Industrial
- c. Excepted
- d. Type B

Answer: D

13. This type of packaging, along with its radioactive contents, must meet standard testing requirements designed to ensure that the package retains its containment integrity and shielding under normal transport.

- a. Type A
- b. Type B
- c. Industrial
- d. Excepted

Answer: A