Dalhousie Radiation Safety Refresher Quiz

Nuclear substance workers are required to review the Radiation Safety Refresher module and complete the following quiz with at least an 80% grade to maintain their approved worker status.

Name: ______________________________     Supervisor: ______________________________
Department: _________________________     Email: ______________________________
Date: ________________________________

Please indicate the purpose for completing this Radiation Safety Refresher Training Quiz:

____________________________________________________________________________________

(ie. full radiation safety refresher, sealed sources only initial training, sealed sources only refresher training)

____________________________________________________________________________________

Please circle or use the space provided to indicate the correct answer.

1. The governing body that oversees the use of nuclear substances in Canada is:
   
   a) Nuclear Regulatory Commission
   b) Atomic Energy of Canada Ltd
   c) Canadian Nuclear Safety Commission
   d) Canadian Radiation Protection Association

2. Dalhousie University requires that laboratories have a hazard identification sign posted on the main corridor door of the lab, to specify the type of custodial access that is permitted. Which of the following is true of nuclear substance labs?
   
   a) Entry of custodial services is only allowed with an escort
   b) Entry of custodial services is allowed without an escort
   c) Entry of custodial services is always prohibited

3. Who is responsible for maintaining radiation safety records?
   
   a) RSO
   b) Radiation worker
   c) Principal Investigator
   d) All of the above

4. What is the maximum allowable exposure limit for NEW’s.
   
   a) 10mSv/year
   b) 1mSv/month
   c) 1 mSv/year
   d) 20 mSv/year
5. During which of the following events are you not required to report to the RSO?
   a) A staff member has become contaminated
   b) A staff member spills more than 10 Exemptions Quantities of activity
   c) A spill involving the release of volatile material
   d) When efforts to decontaminate are not successful in decreasing the activity to less than 2 times the background count.

6. How often should spill kits be checked for completeness and expiry dates?
   a) Annually
   b) Semi-annually
   c) Every 3 years

7. The use of which radioisotope would require the use of Plexiglas for shielding?
   a) I-123
   b) F-18
   c) P-32
   d) Tc99m

8. What unit of radiation is used to measure the amount of radionuclide present?
   a) Bq
   b) Sv
   c) rem
   d) mSv

9. You need to purchase a new radioisotope. After you have completed the Purchase Requisition, the next step is to:
   a) Send the Purchase Requisition directly to Procurement.
   b) Send the Purchase Requisition directly to the RSO for authorization.
   c) Ask the RSO for a copy of the licence and then send both the licence and Purchase Requisition to Procurement.

10. Under what circumstances would eye protection be required when working with nuclear substances? ________________________________

11. Where must operations involving work with volatile nuclear substances be carried out? ________________________________

12. List six required sets of records that individual research groups must maintain:
    1) ____________________________________________
    2) ____________________________________________
    3) ____________________________________________
    4) ____________________________________________
    5) ____________________________________________
    6) ____________________________________________
13. Who would you call in the event of a true radiation emergency and what is the phone number?

14. Where in the laboratory is it permissible to eat your lunch?

15. List 3 different responsibilities that you have as a nuclear substance worker.

16. What two indicators are used at Dalhousie to identify nuclear substance equipment and work areas, so to avoid frivolous use of signage?

17. Where must your whole body TLD be worn?

18. List the three principles of ALARA:
   1. 
   2. 
   3. 

19. T or F You are using ionizing radiation to conduct your research.

20. T or F Alpha particles present an external hazard.

21. T or F PI’s are responsible for all research activities and personnel in their lab space.

22. T or F All radiation workers are classified as NEW’s.

23. T or F Open toed shoes are permitted in a nuclear substance laboratory.

24. T or F A contamination meter is used to detect “fixed” contamination.

25. T or F Wipe testing is only able to detect “loose” contamination.

26. T or F It is fine to purchase radioisotopes on my P-Card.

27. T or F If a nuclear substance worker becomes pregnant, she is obligated to advise the RSO as soon as possible.

28. T or F Dosimeter use is required by all radiation workers
29. T or F It is acceptable to dispose of an empty coffee cup in the lab, even though it wasn’t consumed in the lab.

30. T or F Only internal transfers of radioisotope are permitted without the authorization of the RSO.

31. T or F It is a requirement of the CNSC to secure all radioisotopes against unauthorized removal.

I acknowledge that I have reviewed the Radiation Safety refresher module and understand the content.

Worker Signature: ____________________________________________________________

RSO Signature: _____________________________________________________________