

**Dalhousie University Radiation Safety  
Class 7 Receiving of Nuclear Substances Refresher Quiz**

Employee Name (PRINT): \_\_\_\_\_ Date: \_\_\_\_\_  
PI Name (PRINT): \_\_\_\_\_ Department: \_\_\_\_\_

1. The \_\_\_\_\_ (Fill in the blank) principle minimizes dose exposure through the use of time, distance and shielding.
2. A radioactive package with a Category II Yellow label can have an external surface radiation exposure rate of (circle the correct letter):
  - a. 0.0 to 0.5 mR/hr
  - b. 5uSv/h to <500uSv/h
  - c. 33 dpm/cm<sup>2</sup>
  - d. <5uSv/h
3. The courier hands you a package of radioactive material, you notice that the shipping address is for a different company. What should you do?
  - a. Call the vendor to see if they want you to forward the package.
  - b. Receive the package and use the material if possible.
  - c. Refuse to accept the package from the courier.
  - d. Sign for the package and notify the Canadian Nuclear Safety Commission.
4. The courier arrives at the lab with a package of radioactive material. While you are looking over the shipping documents you notice that the package appears to have been dropped and is leaking slightly. You really need your product to complete your experiment, what do you do?
  - a. Accept the package; it's unlikely that the interior contents are damaged.
  - b. Refuse to accept the package from the courier and call the vendor for a replacement.
  - c. Accept the package and contact the RSO before opening, just in case it's contaminated.
  - d. Accept the package and ask your Supervisor to assist you with the contamination check.
5. The action level for the non-fixed contamination on your packing material is generally:
  - a. 4Bq/300cm<sup>2</sup>
  - b. 0.4Bq/cm<sup>2</sup>
  - c. 3Bq/cm<sup>2</sup>
  - d. 3Bq/10cm<sup>2</sup>

6. Select the standard personal protective equipment required when opening an  $^3\text{H}$  package:
- Lab coat, gloves, long pants, close toed shoes
  - Lab coat, gloves, Body badge
  - Lab coat, gloves, Body badge, face shield, ring badge
  - Gloves, eye protection, close toed shoes, long pants
7. After you have determined that your packing materials are not contaminated with radioactive material, you should do the following (choose all that may apply):
- Store the empty box in the cabinet in case you need it
  - Deface all "radioactive material" signs and trefoils
  - Keep the box and put you chocolate stash in it.
  - All of the above
8. Select the procedures that are appropriate for receiving Class 7 radioactive packages.
- Store the package in a secure location without delay.
  - Check the labels, shipping document and exterior of the package for damage
  - Only authorized personnel are permitted to open the package.
  - Open the package in a designated radiation use area.
  - Conduct a wipe test as soon as possible after receiving a package
9. What is the minimum number of wipe test samples you need to adequately test a package for contamination?
- 3
  - 6
  - 7
  - 4
10. Select all the events that must be reported to the Radiation Safety Officer (RSO):
- Incorrect address or delivery if the package was already received.
  - Radiation levels in excess of labeling or  $>2\text{mSv/hr}$  at surface
  - Wipe test reading was  $1\text{Bq/cm}^2$  of a Class B isotope
  - A duplicate order arrives, after you have already received your product
  - The shipper tape appears to have been replaced with different tape on a class 7 package

Employee Signature: \_\_\_\_\_ PI Signature: \_\_\_\_\_