

APPENDIX J

AUTHORIZED ASSISTANT EXAM

UNIVERSITY OF NORTH FLORIDA RADIATION SAFETY PROGRAM

Part 1: Basic Principles and Fundamental Examination for the Authorized Assistant

NAME: _____ DATE: _____

1. Describe the common type of radioactive emissions and the characteristics of each.
2. Define the term ionization as it relates to radiation.
3. Define the term radioactive half-life.
4. Given 50 mCi of ^{32}P , calculate the activity left after 43 days.
(Half life of: ^{32}P = 14.3 days)
5. List three basic principles that decrease exposure to radiation.

Part 1: Basic Principles and Fundamental Examination for the Authorized Assistant

6. If two half-lives elapsed, what fraction of activity would remain in the sample?

7. Your radiation survey meter reads 100 mR/hr at some distance. What dose would you receive standing at that distance in (a) 1 hour, (b) 30 minutes, and (c) 15 minutes?

8. What instrument is used to measure the amount of ^{32}P , ^{32}S and ^{125}I radiation in an area?

9. What instrument is used to sample for H^3 and C^{14} ?

10. The prompt effects of radiation doses greater than 100 rems are collectively known as?