MMRI

MOLECULAR MEDICINE RESEARCH INSTITUTE

Employee Name: _____

Score out of 57 Questions: _____

Study Questions Answer Sheet

Class7Training: Radiation Safety Fundamentals Training Manual

Use this sheet to write your answers to the study questions. Do not write in the training manual.

1. _____, _____, _____
2. _____, _____
3. _____
4. A B C or D (circle one)
5. _____, _____

6. Complete the following tables:

Table 3 Curie Subunits

Unit	Abbr.	dps	dpm
curie	Ci	3.7×10^{10}	2.2×10^{12}
millicurie	mCi		2.2×10^{9}
microcurie	μCi	3.7×10^{4}	
nanocurie	nCi		2.2×10^{3}
picocurie	pCi	3.7×10^{-2}	

Table 4 Becquerel Subunits

Unit	Abbr.	dps	dpm
becquerel	Bq	1	60
kilobecquerel	kBq		6×10^4
megabecquerel	MBq	1×10^6	

7. _____

8._____, or the _____.

9. Circle One: A) 2.22×10^6 C) 6.25×10^7

B) 3.7×10^{10} D) 2.22×10^4

10. _____, _____, _____, _____, _____

11. Complete the following:

Type of Radiation	Alpha	Beta	Gamma/X-ray	Neutron
Mass				
Charge				
Range				
Shielding				
Hazard				

12. _____

13. 1. _____ 3. _____

2. _____ 4. _____

14. Complete the following:

	Source	Annual Dose (mrem/year)
Natural Background	terrestrial	
	cosmic	
	Internal Emitters	
	Inhaled (Radon)	
Man-made Background	Nuclear Fallout	
	Medical Exposures	
	Consumer Products	
	Nuclear Facilities	
	Rounded Total	

15. _____

16. A B C or D (circle one)

17. a. _____b._____ c._____d._____

18. _____

19. _____

20. _____

21. _____

22. _____, _____, and, _____

23. A B C or D (circle one)

24. A B C or D (circle one)

25. True or False (circle one)

26. A B C or D (circle one)

27. 1. _____2._____ 3._____

28. Whole Body _____, Eyes _____, Skin _____, Extremities_____

29. _____

30. ☐ Radiation exposures
☐ Contamination exposures
☐ Asbestos exposures
☐ Cosmic radiation exposures
☐ Chemical exposures
☐ Medical X-rays

31. _____, _____

32. _____

33. ☐ Maximizing time in an area
☐ Minimizing time in an area
☐ Maximizing distance in an area
☐ Minimizing distance in an area
☐ Maximizing shielding in an area
☐ Minimizing shielding in an area
☐ Maximizing contamination in an area
☐ Minimizing contamination in an area

34. _____

35. _____

_____

36. ☐ Poor housekeeping
☐ Receiving an X-ray
☐ Excessive movement in contamination areas
☐ Leaks of breaks in radioactive waste containers
☐ Over exposure to sunlight

37. _____, _____, _____

38. _____

39. ☐ Chewing gum in a contamination area
    ☐ Entering a radiation area without proper dosimetry.
    ☐ Not covering wounds prior to handing radioactive material
    ☐ Not using a fumehood when required by procedure
    ☐ Receiving a medical x-ray
    ☐ Working with radioactive materials that can be absorbed through the skin without protective equipment.

40. _____, _____, _____

41. 1. _____

    2. _____

    3. _____

42. _____

43. _____

44. ☐ Work area radiological conditions
    ☐ Hot work permit requirements
    ☐ Material safety data sheets
    ☐ Description of protocols
    ☐ Dosimetry requirements
    ☐ Protective clothing
    ☐ Lock out/ tag out permit number
    ☐ Authorizing signatures
    ☐ Fire sytsms check out
    ☐ Workers's current dose

45. ☐ Workers must read the RUA
    ☐ Workers must write the RUA
    ☐ Workers must comply with the RUA requirements
    ☐ Workers may substitute controls specified in the RUA

46. _____

47. Radiation Area _____

    Radioactive Materials Area_____

48. A) _____dpm

    B) _____Bq

    C) _____uCi

49. A, B, C or D (circle one)

50. A, B, C or D (circle one)

51. ☐ natural sources – food, soil, etc.
    ☐ man-made sources – medical
    ☐ occupational sources
    ☐ non-ionizing sources

52. True or False (circle one)

53. A, B, C or D (circle one)

54. True or False (circle one)

55. **S** _____

    W _____

    I _____

    M _____

56. _____ and _____

57. A, B, C or D (circle one)

Employee Signature: _____ Date: _____

RSO Signature: _____ Date: _____
Jan Rydzewski