

CE ARTICLE TEST

For each of the following twelve questions select the best answer. Then circle the number on the reader service card that corresponds to the answer you have selected. Keep a record of your responses so that you can compare them with the correct answers, which will be published in the next issue of the Journal.

A. The maximum amount of Mo-99 contamination allowed per mCi of Tc-99m by the USP-NF is:

- 151. 0.15 mCi.
 - 152. 0.15 μ Ci.
 - 153. 1.5 μ Ci.
 - 154. 15 μ Ci.
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B. The results of Mo-99 contamination assays must be recorded and kept on file for _____ years to meet NRC requirements.

- 155. one.
 - 156. three.
 - 157. five.
 - 158. seven.
-

C. What is the effect of a high Al^{3+} concentration in a Tc-99m eluate?

- 159. interference with the binding efficiency of Tc-99m.
 - 160. increased level of Mo-99 contamination.
 - 161. decreased level of Mo-99 contamination.
 - 162. reduced volume of Tc-99m.
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D. USP-NF specifications for Tc-99m eluate require that the pH be between _____-_____.

- 163. 4.5-7.5.
 - 164. 6.0-8.0.
 - 165. 4.0-7.0.
 - 166. 5.0-8.0.
-

E. The USP-NF requires _____ radiochemical purity for Tc-99m macroaggregated albumin, Tc-99m pentetate, Tc-99m glucoheptonate, and Tc-99m pyrophosphate.

- 167. 70%.
- 168. 80%.
- 169. 90%.
- 170. 100%.

F. Each of the following isotopes is acceptable for the daily constancy check on dose calibrators, except:

- 171. Cs-137.
 - 172. Co-57.
 - 173. Ra-226.
 - 174. I-125.
-

G. Which of the following is a good radionuclide to use to check the response of a dose calibrator to gamma energies in the range of Tc-99m?

- 175. Tc-99m.
 - 176. Cs-137.
 - 177. Xe-133.
 - 178. Co-57.
-

H. The NRC requires that linearity tests on dose calibrators be performed:

- 179. weekly.
 - 180. monthly.
 - 181. quarterly.
 - 182. annually.
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I. The accuracy readings for standards, traceable to the National Bureau of Standards and measured in a dose calibrator, should be within _____ of the labeled activity on the standard.

- 183. 1%.
 - 184. 2%.
 - 185. 3%.
 - 186. 5%.
-

J. The USP-NF limit for aluminum ion in eluate is _____ μ g/ml of Al^{3+} from fission generators.

- 187. 5.
- 188. 10.
- 189. 15.
- 190. 20

K. Fission generators cannot contain more than ___ μCi of other gamma-emitting radionuclides per mCi of Tc-99m .

- 191. 0.10.
- 192. 0.15.
- 193. 0.50.
- 194. 1.00.

L. The NRC requires that all sealed sources be checked for contamination or leakage at least _____.

- 195. once a year.
- 196. quarterly.
- 197. twice a year.
- 198. monthly.

Your answers to the above questions should be returned on a reader service card (found in the back of the Journal) no later than June 1, 1984. Remember to supply your name and address in the space provided on the card; also write your VOICE number following your name. Your VOICE number appears on the upper left hand corner of your Journal mailing label. No credit can be recorded without it.

**MIDEASTERN CHAPTER
SOCIETY OF NUCLEAR MEDICINE
14th ANNUAL MEETING**

April 12-14

Sheraton Inn and Conference Center

Fredericksburg, VA

The Scientific Program Committee of the Mideastern Chapter, SNM, announces its 14th Annual Meeting to be held April 12-14, 1984, in Fredericksburg, VA. The program will include submitted papers, invited speakers, and exhibits. An outstanding continuing education series will be offered:

- Renal Nuclear Medicine Symposium—Eva V. Dubovsky, MD, Norman D. LaFrance, MD, and W. Gordon Walker, MD
- Monoclonal Antibody Update—Steven M. Larson, MD
- Aerosol Lung Scintigraphy—Patrick J. Conte, MD
- Nuclear Cardiology Review—George A. Beller, MD, and Denny D. Watson, PhD

The program will be approved for credit toward the AMA Physician's Recognition Award under the Continuing Medical Education Category 1 through the Society of Nuclear Medicine.

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