

Clinical Laboratory Chemistry, 2e (Sunheimer)

Chapter 2 Safety in the Clinical Chemistry Laboratory

1) OSHA standards are written in which of the following documents?

- A) Codes of State Regulations (CSRs)
- B) Codes of Federal Regulations (CFRs)
- C) Safety Data Sheets (SDS)
- D) National Fire Protection Agency (NFPA)

Answer: B

2) A class A fire involves:

- A) Combustible metals such as magnesium.
- B) Flammable liquids, for example, methanol.
- C) Ordinary combustible material including paper and wood.
- D) Electrical equipment.

Answer: C

3) Which of the following practices is inappropriate when establishing quality controls ranges?

- A) Exclusion of any quality control results greater than ± 2 standard deviation from the mean
- B) Compare your data to the manufacturer of the quality control material.
- C) Gather quality control data for a long period of time if necessary.
- D) Using control results from all shifts on which the assay is performed

Answer: A

4) Liquid nitrogen is an example of which of the following?

- A) Carcinogen
- B) Mutagen
- C) Halogen
- D) Cryogen

Answer: D

5) The letters SDS represent which of the following?

- A) Safety design sheet
- B) Systems data sheets
- C) Safety devices schedule
- D) Safety data sheet

Answer: D

6) The label identification system designated NFPA 704-M represents which of the following warnings?

- A) Biohazard materials
- B) Mechanical devices
- C) Chemical hazards
- D) Laboratory safety hoods

Answer: C

7) Sources of nonionizing radiation include which of the following?

- A) Beta radiation emitting isotopes (e.g., tritium)
- B) Gamma radiation emitting isotopes (e.g., ¹²⁵Iodine)
- C) Microwaves, tungsten-halogen lamps, xenon lamps
- D) X-ray imaging devices

Answer: C

8) Which of the following statements describes the proper method of storing chemicals in the laboratory?

- A) According to their chemical properties and classifications
- B) Inside a chemical fume hood
- C) Alphabetically, for easy accessibility
- D) Inside a walk-in type refrigerator

Answer: A

9) Which of the following statements is correct when handling cryogenic liquids?

- A) It is not necessary to wear any personal protective equipment because there is no potential for injury to the body.
- B) Wear proper personal protective equipment, including a lab coat that is buttoned, heavy gloves and a face shield or safety goggles.
- C) Always pour cryogenic liquid into water not the reverse.
- D) Cryogenic liquids do not cause embrittlement of materials.

Answer: B

10) Which of the following statements is correct regarding safety cabinets?

- A) Safety cabinets are not required to be vented.
- B) Cryogenic liquids may be stored in safety cabinets.
- C) Large amounts of volatile solvents should be stored in a safety cabinet but are not required to be approved by NFPA and meets OSHA standards.
- D) Large amounts of volatile solvents must be stored in a safety cabinet that is approved by NFPA and meets OSHA standards.

Answer: D

11) Which of the following statements is correct regarding laboratories and waste material?

- A) Laboratories are not identified by Resource Conservation and Recovery Act (RCRA) as "waste generators."
- B) Laboratories are identified by Resource Conservation and Recovery Act (RCRA) as "waste generators."
- C) Laboratories are exempt from all state and Federal regulations regarding waste materials.
- D) Hydrocarbons, nitro compounds, mercaptan, Freon and concentrated acids can be pour down the sink drains according to Resource Conservation and Recovery Act (RCRA).

Answer: B

12) The CDC recommends vigorous rubbing together of all lathered surface for at least:

- A) 15 seconds.
- B) 60 seconds.
- C) 5 minutes.
- D) 15 minutes.

Answer: A

13) Which of the following statements describes "engineered control"?

- A) A technique used to provide optimum control for quality testing of patient specimens
- B) Represents an alarm systems that alerts everyone in the laboratory that there is a fire in the building
- C) Safety equipment that isolates or removes the bloodborne pathogen hazard from the workplace and represents the preferred method for controlling hazards
- D) Safety equipment that isolates or removes only radiation hazard from the workplace and represents the preferred method for controlling radioactive hazards

Answer: C