MULTIPLE CHOICE

1. The film record produced to visualize the internal structures of the body is called:
   a. x-rays
   b. roentgen
   c. radiography
   d. radiograph
   ANS: D

2. A discipline that involves visualizing a patient’s organs by the introduction of a radiopharmaceutical is called:
   a. computed tomography
   b. cardiovascular interventional technology
   c. nuclear medicine technology
   d. radiation therapy
   ANS: C

3. Which of the following are forms of energy?
   a. mechanical
   b. nuclear
   c. electromagnetic
   d. heat
   e. all of the above
   ANS: E

4. Any process by which a neutral atom gains or loses an electron is called:
   a. ionization
   b. polarization
   c. electrolysis
   d. neutralization
   ANS: A
5. Which discipline uses high-energy ionizing radiation to treat malignant diseases?
   a. nuclear medicine
   b. computed tomography
   c. cardiovascular interventional technology
   d. radiation therapy
   e. medical sonography
   ANS:  D

6. An example of a use of electrical energy is:
   a. EEG
   b. sonography
   c. thermograms
   d. x-rays
   ANS:  A

7. Radiography images what part of the body?
   a. chest
   b. abdomen
   c. skeletal structure
   d. gastrointestinal tract
   e. all of the above
   ANS:  E

8. To image the blood vessels in the body, the physician must:
   a. order a nuclear medicine scan
   b. inject a contrast medium
   c. use special film/screen combinations
   d. none of the above
   ANS:  B

9. The branch of medicine that studies diseases of internal organs of the chest and abdomen is called:
   a. family practice
   b. internal medicine
   c. orthopedics
   d. gynecology
   e. oncology
   ANS:  B
10. Which of these radiography departments uses ionizing radiation?
   a. magnetic resonance imaging
   b. diagnostic medical sonography
   c. radiation therapy
   d. all of the above
   e. none of the above

   ANS: C

11. Mammography was established:
   a. to detect breast cancer early
   b. to visualize the blood vessels
   c. to view patient anatomy from sectional planes
   d. to treat early breast cancers

   ANS: A

12. What is the relationship between MRI and CT?
   a. Both use ionizing radiation.
   b. Radiographers in these areas have advanced educational degrees.
   c. Cardiologists perform the exams in MRI.
   d. Both visualize anatomy in sectional planes.

   ANS: D

13. What is the difference between a technician and a technologist?
   a. A technician has a higher educational level.
   b. A technologist applies knowledge to problems encountered on the job.
   c. Technicians learn their skills on the job.
   d. Both work under the direction of a nurse.

   ANS: B

14. Which of the following is an example of a person who provides direct patient care under the supervision of a physician?
   a. registered nurse
   b. surgeon
   c. health information technologist
   d. medical technologist

   ANS: A

15. Who was responsible for the discovery of x-rays?
   a. Anna Bertha Ludwig
   b. Sir William Crooks
   c. Wilhelm K. Roentgen

   ANS: C
   a. true
   b. false
   
   ANS: A

17. Sound is a form of nonionizing radiation.
   a. true
   b. false
   
   ANS: A

18. The first radiographic image was of Wilhelm K. Roentgen’s chest.
   a. true
   b. false
   
   ANS: B

19. A physician whose job includes interpreting a radiograph for purposes of diagnosis is called a radiographer.
   a. true
   b. false
   
   ANS: B

20. Diagnostic imaging of the breast is called mammography.
   a. true
   b. false
   
   ANS: A