

BOWEN UNIVERSITY
COLLEGE OF HEALTH SCIENCES
Department of Surgery
RADIOLOGY END OF POSTING EXAMINATION
2020 CLINICAL SET

- 1) The following are personnel monitoring devices except?
 - a. Contamination meter
 - b. Film badge
 - c. TLD badge
 - d. Pocket dosimeter
 - e. Ring dosimeter
- 2) **Genetic effects are examples of which of the following groups biological effects of radiation**
 - a. Dose-dependent effects
 - b. Deterministic effects
 - c. Stochastic effect
 - d. Predictable effects
 - e. Primary effects
- 3) **Which of the following imaging techniques gives maximum radiation exposure to the patient?**
 - a. Chest X-ray
 - b. MRI
 - c. CT scan
 - d. Bone scan
 - e. Radiowaves
- 4) **The procedure of choice for the evaluation of an aneurysm is:**
 - a. Doppler study
 - b. Arteriography
 - c. Magnetic resonance imaging

- d. Computed tomography
- e. B-mode ultrasonography

5) . Spalding's sign occurs in which of the following conditions?

- a. Birth of live foetus
- b. Overlapping of fetal skull bones during parturition
- c. Rigor mortis of infant
- d. Seen clinically after intrauterine fetal demise (IUFD)
- e. None of the above

6) Which of the following is responsible for the most significant radiation exposure?

- a. Medical exposure
- b. Occupational exposure
- c. Background exposure
- d. Public exposure
- e. Exposure from natural occurring radioactive elements.

7) Radiation energy is not deposited in the object by which of the following interaction of rays with matter?

- a. scattered rays
- b. Absorbed rays
- c. Transmitted rays
- d. Incident Photons
- e. Latent images

8) All of them use non- ionizing radiation, except:

- a. Lazer surgery
- b. Thermography

- c. Shock wave lithotripsy
- d. Contrast study
- e. Elastography

9) **Concerning hepatic adenoma, which of the following statements is true?**

- a. Common in young men.
- b. Typically multiple lesions.
- c. Heterogenous on ultrasonography.
- d. Poor enhancement on contrast enhanced computed tomography.
- e. Biopsy is indicated.

10. **Concerning ultrasound, which of the following is true?**

- a. Ultrasound is high frequency sound waves which are audible to human ear.
- b. Ultrasound is low frequency sound waves which are inaudible to human ear.
- c. Ultrasound is produced by deformity/vibration of piezoelectric crystal.
- d. Ultrasound does not require a medium for propagation.
- e. Ultrasound is a transverse wave.

11) **Which of the following examination does not require contrast agent?**

- a. Intravenous Urography.
- b. Angiography.
- c. Fistulography.
- d. Computed tomography angiography.
- e. Thermography

12) **Which of the following is true concerning X-ray?**

- a. It belongs to transverse wave category
- b. It has higher energy than gama rays

- c. Discovered intentionally while working on discharge tube
- d. Discovered in November 8th , 1985 by Wilhelm-Röntgen
- e. Non-ionizing in nature

13) Right side of mediastinal shadow is not formed by

- a. Superior vena cava
- b. Right innominate artery
- c. Right atrium
- d. Right ventricle
- e. Thymus

14) The following are advantages of radiography except?

- a- Cheap and readily available
- b- Temporary storage of information especially plain film radiography
- c- Fast image acquisition.
- d- Relatively low radiation to patient compared to CT.
- e- Can be used to image all parts of the body.

15) Concerning choledocal cyst, which of the following is true?

- a. Type I is fusiform dilatation of the intrahepatic bile ducts.
- b. Type II is diverticulum of the intrahepatic bile ducts
- c. Type III involve both intra and extrahepatic bile ducts
- d. Type V involves only intrahepatic bile ducts
- e. None of the above.

16) On plain skull radiographs, which of the following is correct?

- a. Vascular markings have constant positions/courses and decrease in size from above downwards

- b. Vascular markings and fractures are radiolucent
- c. Sutures appear as linear radio-opaque bands running from wide open fontanelles in neonates
- d. Sutures are recognized with their smooth appearance in adults
- e. None of the above.

17) Which of the following radiologic features is not associated with Arnold-Chiari malformation?

- a. Cystic dilatation of the fourth ventricle
- b. Cerebellar dysplasia
- c. Downward displacement of the cerebellum
- d. Syringomyelia
- e. Hydrocephalus

18) Which of the following is not a cause of obstructive hydrocephalus?

- a. Intracranial haemorrhage
- b. Meningitis
- c. Adhesion
- d. Colloid cyst
- e. Choroid plexus papilloma

19) Which of the following imaging modalities is best for imaging the brain?

- a. Plain radiography
- b. Computed tomography
- c. Magnetic resonance imaging
- d. Single photon emission tomography
- e. Positron emission tomography

20) **Which of the following is not a plain radiographic feature of intracranial/head and neck tumours?**

- a. Increased size of the pituitary fossa
- b. Prominent meningeal vascular markings
- c. Contrast enhancement
- d. Osteolytic defects
- e. Hydrocephalus