



**DO NOT WRITE ANYTHING HERE**

- (xii) Which of the following is wrong about Sialography?
- A. There are four pairs of salivary gland
  - B. Submandibular glands are located below tongue
  - C. Parotid gland is located at angle of mandible
  - D. None of these
- (xiii) Which of the following is incorrect about computed radiography (CR)?
- A. Special x-ray machine is used
  - B. Film is replaced by a phosphor plate
  - C. Also called filmless radiography
  - D. X-ray can be stored in the computers for long term
- (xiv) Which of the following is wrong about gamma rays?
- A. Are non-ionizing radiation
  - B. Energy is higher than x-ray
  - C. Wavelength is smaller than x-ray
  - D. Is emitted by radioactive elements
- (xv) Which of the following statement is Incorrect?
- A. Grids absorb scatter
  - B. Grids reduce radiation dose
  - C. Grids are of moving and stationary type
  - D. None of these
- (xvi) Which of the following is an incorrect statement about CT scan?
- A. Also known as computed tomography
  - B. It takes cross sectional images
  - C. Both A and B
  - D. None of these
- (xvii) Which of the following is wrong about x-ray film?
- A. Is painted on both sides with radio-graphic emulsion
  - B. Base is made of polyester of plastic
  - C. Different sizes are available
  - D. Film processing time in automatic processor is three minutes
- (xviii) Which of the following is wrong about dark room?
- A. No sunlight allowed
  - B. Amber color light is used
  - C. Cassettes are loaded and unloaded with films
  - D. Is located at a distance from x-ray room
- (xix) Which of the following is correct about CT?
- A. Takes long time than MRI
  - B. Claustro-phobia is common
  - C. Helical or spiral CT are modern CT
  - D. Is expensive than MRI
- (xx) Which is wrong about MRI?
- A. Is good for soft tissue imaging
  - B. Movement does not spoil the image
  - C. Shows better contrast than CT
  - D. Children may need anesthesia

**For Examiner's use only:**

**Total Marks:**

**20**

**Marks Obtained:**

— 2HA 1550 —



# RADIOGRAPHIC TECHNIQUES HSSC-II

Time allowed: 2:35 Hours

Total Marks Sections B and C: 80

**NOTE:** Sections B and C comprise pages 1-2. Answer any twenty-five parts from Section 'B' and any three questions from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet-B if required. Write your answers neatly and legibly.

## SECTION – B (Marks 50)

**Q. 2** Answer any TWENTY-FIVE parts. The answer to each part should not exceed 2 to 4 lines. (25x2=50)

- (i) Define Ionizing radiation.
- (ii) Write names of ionizing and nonionizing radiation.
- (iii) What is inverse square law?
- (iv) What is collimation?
- (v) What is attenuation?
- (vi) What is mammography?
- (vii) How is a mammographic machine different from common x-ray machine?
- (viii) What is the normal length of oesophagus? Write the names of normal curves seen in oesophagus.
- (ix) What is enteroclysis?
- (x) What is real time imaging? Which studies is real time?
- (xi) What is angiography?
- (xii) What is infertility? What are the studies done to investigate these problems?
- (xiii) What is nephrogram?
- (xiv) Write the names of films taken during IVU.
- (xv) Which part of GIT is studied during barium follow through? What are the films taken in this study?
- (xvi) What is skyline view?
- (xvii) What is orbito meatal line? What is its significance?
- (xviii) Write the names of para nasal sinuses. What are the views taken for these?
- (xix) What is high and low osmolar contrast media?
- (xx) What are the serious side effects of intravascular contrast media?
- (xxi) What are planes of imaging? What is the plain used by CT scan?
- (xxii) Write four main advantages of CT scan over MRI.
- (xxiii) What is MRI?
- (xxiv) Write four main differences between CT scan and MRI.
- (xxv) How will you define ultrasound?
- (xxvi) What is transducer?
- (xxvii) What are two basic principles of radiation protection?
- (xxviii) What are the objects of radiation protection available in the x-ray room?
- (xxix) What is transducer?
- (xxx) What is Apical view?
- (xxx) What is High Tension Generator?

## SECTION – C (Marks 30)

**Note:** Attempt any THREE questions. All questions carry equal marks.

(3 x 10 = 30)

- Q. 3** What is IVU? Describe its procedure.
- Q. 4** What is dysphagia? Which study is done for this problem? Write the procedure of doing barium swallow.
- Q. 5** What is HOCM and LOCM? Write side effects of ionic contrast media.
- Q. 6** What is inverse square law? Where is this law applied? Write down the basic fundamentals of radiation protection.
- Q. 7** Which parts of body are studied in Barium follow through and Barium enema tests? Name the series of views for Barium enema test.