Library 53

SC—1171

SECOND YEAR B.Sc. (RADIOGRAPHY) DEGREE EXAMINATION, 2000

RADIOGRAPHY TECHNIQUE—I

Time : Three Hours

Maximum : 80 Marks

Your answers shall be specific to the questions asked.
Draw neat and labelled diagrams wherever necessary.

I. Long Essays : (Answer any *two*)

1 Write briefly about relevant radiological techniques, views, projections required under mentioned clinical disorders (a) Ileo-caecal Tuberculosis (T.B. Abdomen) and (b) Carcinoma oesophagous and stomach.

2 Write various routine as well as special techniques/projections of shoulder girdle.

3 Describe various routine and special projections in dental practice [intra and extra oral X-ray] with special reference to orthopantomography.

(2 × 10 = 20 marks)

II. Short Essays : (Answer any *eight*)

4 What are grids ?

5 What are the methods of reducing radiation dose to the patient ?

6 What are supplementary projections for acute abdomen ?

7 What are supplementary projections for scaphoid ?

8 What is frog leg projection ?

9 What is teleroentgenogram ?

10 Explain various projection for tempero-mandibular joint.

11 Write briefly about routine projections for cranium.

12 Explain how K.U.B./K.U.B.U. radiograph is taken.

13 What is thoracic inlet view ?

MULLER CENTRAL LIBRARY

(8 × 5 = 40 marks)

III. Short Answers :

14 Radiographic cones.

15 Gonadal shield.

16 Skyline view.

17 Apilogram.

18 Towwe's view.

19 Caldwell's view.

20 Optic foramen view.

21 Erect abdomen.

22 Stenvers view.

23 X-ray tube housing.

(10 × 2 = 20 marks)

34

SC—1172

SECOND YEAR B.Sc. (RADIOGRAPHY) DEGREE EXAMINATION, 2000

RADIATION PHYSICS AND MEDICAL PHYSICS

(R.S.)

Time : Three Hours Maximum : 80 Marks

Your answers shall be specific to the questions asked.
Draw neat and labelled diagrams wherever necessary.

I. Long Essays : (Answer any *two*)

1 Describe any *one* type of air ionisation chamber used for X-ray exposure measurement and explain how exposure is measured.

2 Describe an X-ray exposure timer of your choice. Explain how, the timer accuracy can be checked (a) for a single-phase X-ray unit and (b) for a constant voltage (H.T.) X-ray unit.

(6 + 2 + 2 = 10 marks)

3 Describe the construction of an X-ray tube used for mammography. Compare this with the conventional X-ray tube in respect of the target used, type of X-ray spectrum used and the kV range.

(7 + 3 = 10 marks)

[2 × 10 = 20 marks]

II. Short Essays : (Answer any *ten*)

4 Television camera tube (any *one* type).
5 Maximum permissible dose.
6 6 pulse or 12 pulse high tension supply.
7 Subtraction radiography.
8 A circuit arrangement to keep mA constant when the kVp setting is changed.
9 X-ray tube for mammography.
10 Use of grids to control scattered radiation.
11 Electromagnetic relay.
12 Conventional tomography.
13 Relative ratings for self rectified, half wave rectified, full-wave rectified and three-phase power supplied X-ray tubes and also the relative ratings for fine focus and broad focus.
14 Stochastic and nonstochastic effects.
15 An interlock system to protect the X-ray tube when the anode is not rotating.

(10 × 5 = 50 marks)

III. Short Answers :

16 Voltages and relative currents that can be obtained using star and delta connections.
17 What is transformer regulation ?
18 Why filament voltage in an X-ray tube circuit must be stabilized ?
19 What happens when a focussed grid is inserted in reverse order ?
20 What symptom will indicate a gassy X-ray tube ?

(5 × 2 = 10 marks)

ER. MULLER CENTRAL LIBRARY