

DO NOT WRITE ANYTHING HERE

- (xi) Which of the following is the unit of Frequency?
A. Ohm B. Ampere
C. Watt D. Hertz
- (xii) Which of the following value of A.C is commonly used?
A. Average Value B. Peak Value
C. R.M.S. Value D. Resonance Value
- (xiii) Which of the following effect of current is used in thermionic emission?
A. Heating effect B. Mechanical effect
C. Lighting effect D. Magnetic effect
- (xiv) What is set up around the wire when current passes through it?
A. Magnetic field B. Electric field
C. Electromagnetic field D. Nothing happens
- (xv) In which of the following circuits, current remains the same through all the resistances?
A. Parallel circuit B. Series-Parallel circuit
C. Series circuit D. None of these
- (xvi) Which of the following films is used for chest X-Ray?
A. 14 x 16 B. 10 x 12
C. 10 x 10 D. 08 x 10
- (xvii) Which of the following is the unit of radiation exposure?
A. Rad B. Rem
C. Roentgen D. Curie
- (xviii) Which of the following units is used to measure the biologic effects of radiation?
A. Rad B. Rem
C. Roentgen D. Curie
- (xix) Which of the following is **TRUE** for definition of Ionization?
A. An electron is added to an atom B. A proton is added to an atom
C. Removal of an electron from an atom D. An electron is removed or added to an atom
- (xx) How many maximum electrons can occupy the third orbit?
A. 8 B. 18
C. 2 D. 32

For Examiner's use only:

Total Marks:

20

Marks Obtained:

— 1HA 1250 —



RADIOGRAPHIC TECHNIQUES HSSC-I

100

Time allowed: 2:35 Hours

Total Marks Sections B and C: 80

NOTE:- Answer any ten 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 Attempt any TEN parts. The answer to each part should not exceed 2 to 4 lines. (10 x 5 = 50)

- (i) What is Ohm's Law?
- (ii) What is Potential difference?
- (iii) Differentiate between Power and Energy.
- (iv) What is the difference between Series and Parallel circuit?
- (v) Define Laws of Resistance.
- (vi) What is Electromagnet?
- (vii) Differentiate between A.C and D.C.
- (viii) What is Farady's Law of electromagnetic induction?
- (ix) What is magnetic induction?
- (x) What is **Capacitor** and **Capacitance**?
- (xi) What is Transformer?
- (xii) What is the R.M.S. value of A.C?
- (xiii) What is Radiation?
- (xiv) List the types of films used in Radiology.
- (xv) How is a film processed?

SECTION – C (Marks 30)

Note: Attempt any THREE questions. All questions carry equal marks. (3 x 10 = 30)

- Q. 3** Write down the questions asked to a patient before any procedure.
- Q. 4** Discuss structure and working of Transformer.
- Q. 5** What is Rectification? Discuss with diagrams.
- Q. 6** Discuss the working of an Electric Generator.
- Q. 7** What is Radiation? Discuss its units and their use.