



Roll No.

Answer Sheet No. 87

Sig. of Candidate. \_\_\_\_\_

Sig. of Invigilator. \_\_\_\_\_

## PHYSIOTHERAPY TECHNIQUES HSSC-I

### SECTION – A (Marks 20)

**Time allowed: 25 Minutes**

**NOTE:** Section-A is compulsory and comprises pages 1-2. All parts of this section are to be answered on the question paper itself. It should be completed in the first 25 minutes and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

- Q. 1 Circle the correct option i.e. A / B / C / D. Each part carries one mark.
- (i) Frequency of infrared radiation is:
- A.  $4 \times 10^{14} \text{ Hz}$  to  $7.5 \times 10^{11} \text{ Hz}$       B.  $5 \times 10^{14} \text{ Hz}$  to  $8.5 \times 10^{12} \text{ Hz}$   
C.  $4 \times 10^{15} \text{ Hz}$  to  $6.5 \times 10^{11} \text{ Hz}$       D.  $2 \times 10^{14} \text{ Hz}$  to  $7.5 \times 10^{11} \text{ Hz}$
- (ii) It is used to stimulate the repair of soft tissue injuries and to relieve of pain:
- A. Short wave diathermy      B. Infrared rays  
C. Ultra sound      D. TENS
- (iii) Common positioning of electrodes used in short wave diathermy are all except one:
- A. Co-planar electrode      B. Co-axial electrode  
C. Mono polar method      D. Cross fire method
- (iv) Therapeutic effects of infrared rays are all except:
- A. Relief of pain      B. Muscle relaxation  
C. Increase body temperature      D. Gangrene
- (v) Mechanical effects of ultrasound are all except:
- A. Acoustic streaming      B. Micro massage  
C. Cavitation      D. Sound waves
- (vi) The electromagnetic energy which falls between visible rays and x-rays and have wavelength between 10 nm and 400 nm is called:
- A. Infrared rays      B. Ultraviolet rays  
C. Short wave diathermy      D. Ultrasound
- (vii) Dosages of infrared radiation for acute cases are:
- A. 10 – 15 minutes daily for 1 – 3 times      B. 15 – 30 minutes once daily  
C. 30 – 40 minutes once weekly      D. 10 – 15 minutes monthly
- (viii) The amount of heat produced in ultrasound depends on all factors except:
- A. Intensity      B. Mode  
C. Space ratio      D. Temperature
- (ix) Method of application of short wave diathermy is:
- A. Condenser field method      B. Magnetic field method  
C. Magnetism      D. Conduction field method
- (x) Air will not transmit:
- A. Infrared rays      B. Ultrasonic waves  
C. Electromagnetic waves      D. Microwaves
- (xi) The resistance of a body such that 1 volt potential difference across the body results in a current of 1 ampere through it is called:
- A. Newton's Law      B. Boyle's Law  
C. Ohm's Law      D. Charle's Law

DO NOT WRITE ANYTHING HERE

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- (xii) Ultrasonic generators are set at a frequency of:
- A. 1 MHz and 3 MHz                      B. 1 MHz and 2 MHz  
C. 4 MHz and 5 MHz                      D. 1 MHz and 5 MHz
- (xiii) Currents are evenly alternating sine wave currents of 50 Hz are called:
- A. Sinusoidal currents                      B. Faradic current  
C. Galvanic current                      D. Direct current
- (xiv) Types of electric shock are:
- A. Minor electric shock                      B. Minor and major electric shock  
C. Major electric shock                      D. None of these
- (xv) A wave that is formed when a sound is made and that moves through the air and carries the sound to ear is called:
- A. Microwave                      B. Sound wave  
C. Short wave                      D. Com wave
- (xvi) Faradic type current is:
- A. Short duration direct current                      B. Short duration interrupted direct current  
C. Long duration continuous direct current                      D. Short duration interrupted indirect current
- (xvii) Motor points of arm are all except one:
- A. Deltoid                      B. Triceps  
C. Biceps                      D. Buccinator
- (xviii) Nerve stimulation is contraindicated in:
- A. Unconscious patient                      B. Bell's palsy  
C. Erb's palsy                      D. Wrist drop
- (xix) The resultant current produced when two or more alternating currents are applied simultaneously at the point of intersection is called:
- A. Interferential therapy                      B. Radiotherapy  
C. Magnetic therapy                      D. Hydrotherapy
- (xx) Sources of Infrared rays are all except one:
- A. Sun                      B. Coal fire  
C. Electric bulb                      D. Fan

For Examiner's use only:

Total Marks:

20

Marks Obtained:

— 1HS 1747 —



# PHYSIOTHERAPY TECHNIQUES HSSC-I

88

**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 Answer any TEN parts. The answer to each part should not exceed 2 to 5 lines. (10 x 5 = 50)**

- (i) Define TENS. What are its types?
- (ii) What are the sources of Infrared rays and Ultraviolet rays?
- (iii) What are the contraindications of infrared radiations?
- (iv) Name five motor points of leg muscles.
- (v) What is faradic current?
- (vi) Define interferential therapy, and its physiological effects.
- (vii) Define frequency and Ohm's law.
- (viii) How many types of Infrared generators are there? Describe any one of them.
- (ix) Describe indications of short wave diathermy.
- (x) Name common positioning of electrodes used in short wave diathermy.
- (xi) Describe therapeutic effects of Ultrasound.
- (xii) What is high frequency current?
- (xiii) Describe causes of electric shock.
- (xiv) Define sound wave.
- (xv) Describe advantages of cable method of short wave diathermy.

## SECTION – C (Marks 30)

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

- Q. 3** What is the technique of application of Ultrasound?
- Q. 4** What is Infrared radiation? Describe its conditions, therapeutic effects in detail.
- Q. 5** Describe short wave diathermy. Describe condenser field method in detail.
- Q. 6** What is Ultraviolet radiations? Describe its indications and contra indications in detail.
- Q. 7** What is interferential therapy? Describe its methods of treatment.