



Roll No.

Answer Sheet No. 95

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) For application of iontophoresis, what type of current can be used preferably?
- A. High frequency current                      B. Low frequency current  
C. Medium frequency current                  D. All of these
- (ii) What type of stimulation is used to stimulate innervated muscles?
- A. TENS    B. Faradic type current  
C. IDC    D. All of these
- (iii) \_\_\_\_\_ is the duration of the short impulse that will produce a response with a current of double the rheobase.
- A. Chronaxie                                        B. Rheobase  
C. IDC current                                      D. Accommodation Quotient
- (iv) Which electrode has high potential?
- A. Anode  
B. Cathode  
C. Both Anode and Cathode have the same potential  
D. None of these
- (v) What is the principle of iontophoresis?
- A. Like charges attract each other              B. Opposite charges repel each other  
C. Both A and B                                  D. None of these
- (vi) How much frequency results in full tetany?
- A. Frequency more than 60 Hertz              B. Frequency more than 20 Hertz  
C. Frequency more than 40 Hertz              D. Frequency more than 50 Hertz
- (vii) Which of the following is **NOT** a danger of iontophoresis?
- A. Shock    B. Chemical burn  
C. Ventricular Fibrillation                      D. Both A and B
- (viii) Which of the following is a disadvantage of Surging?
- A. It avoids fatigue  
B. It does not give surprise to patient as current is decreased sharply  
C. Both A and D  
D. It does not give surprise to patient as current is increased slowly
- (ix) In what type of TENS the pulse shape is bipolar, asymmetric and spike potential?
- A. Low rate TENS                                  B. High rate TENS  
C. Brief Intense TENS                              D. Burst Mode TENS
- (x) What is the frequency range for Sinusoidal current?
- A. 0-20Hz    B. 20-50Hz  
C. 50-100Hz    D. 60-80Hz

- (xi) What is the relationship between wavelength and frequency?  
A. Both are inversely proportional to each other  
B. Both are directly proportional to each other  
C. There is no relationship between wavelength and frequency  
D. None of these
- (xii) Which physical agent gives best results in acute ankle sprain?  
A. Short Wave Diathermy  
B. Cold pack  
C. Infra-red rays  
D. Moist Heat Pack
- (xiii) Pulsed Ultrasound means:  
A. Continuous passage of sound waves  
B. No passage of sound waves  
C. Passage of sound waves with pauses  
D. None of these
- (xiv) Ultrasound is contraindicated in:  
A. Malignancies  
B. Over specialized tissues like eyes, ears etc  
C. Growing erfds of bones  
D. All of these
- (xv) Ultrasound cannot be transmitted through:  
A. Air  
B. Water  
C. Gel  
D. Oil
- (xvi) Short Wave Diathermy is contraindicated in:  
A. Tuberculosis  
B. Circulatory defects  
C. Malignant growths  
D. All of these
- (xvii) Therapeutic effect of Infra-red Rays is:  
A. Relief of pain  
B. Increased blood supply  
C. Muscle relaxation  
D. All of these
- (xviii) Non-Luminous Infra Red Ray elements:  
A. Heat up immediately  
B. Take some time to heat up  
C. Emit maximum rays on switching on  
D. None of these
- (xix) Infra-red rays are:  
A. Electromagnetic waves  
B. Sound waves  
C. Low frequency currents  
D. High frequency current
- (xx) Ultraviolet rays are:  
A. Electromagnetic waves  
B. Sound waves  
C. High frequency currents  
D. Low frequency currents

For Examiner's use only:

Total Marks:

20

Marks Obtained:



# PHYSIOTHERAPY TECHNIQUES HSSC-I

96

**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) What is Faradic current?
- (ii) How many degrees of erythema are observed in case of ultraviolet rays?
- (iii) Define the groups of Infra-red generators.
- (iv) What are the contraindications of Infra-Red Rays?
- (v) What is High frequency current?
- (vi) What is Low frequency current?
- (vii) What are the contraindications in case of Ultrasound?
- (viii) In what conditions is interferential therapy applied?
- (ix) What are motor points?
- (x) Define TENS.
- (xi) What are indications for Galvanic current?
- (xii) What is axonotmesis?
- (xiii) Give three physical effects of heat.
- (xiv) Define Ultraviolet Rays.
- (xv) Define Short wave Diathermy.

## SECTION – C (Marks 30)

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

- Q. 3** Define Magnets and give a detailed account of Mutual and Self Induction.
- Q. 4** Explain therapeutic effects and uses of Infra-Red Rays.
- Q. 5** Explain physiological effects of Ultraviolet Rays.
- Q. 6** What is the Condenser Field Method? Give a detailed account of its application.
- Q. 7** What are the causes of Electrical Shocks? What precautions should be taken to avoid occurrence of electrical shocks?