



## PHYSIOTHERAPY TECHNIQUES HSSC-I

### SECTION – A (Marks 20)

Time allowed: 25 Minutes

Version Number	1	8	5	5
----------------	---	---	---	---

**Note:** Section – A is compulsory. All parts of this section are to be answered on the separately provided OMR Answer Sheet which 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** Choose the correct answer A / B / C / D by filling the relevant bubble for each question on the OMR Answer Sheet according to the instructions given there. Each part carries one mark.

- 1) While using short wave diathermy (SWD) the material between skin and electrodes should be of low dielectric constant, \_\_\_\_\_ being most satisfactory.  
A. Air                      B. Water                      C. Ice                      D. Ultrasonic gel
- 2) The distance of IRR (Infrared Rays) lamp is kept usually at \_\_\_\_\_ from the patient depending on output of generator.  
A. 75 m or 50 m                      B. 75 mm or 55 mm  
C. 10 cm or 5 cm                      D. 10 cm or 50 cm
- 3) Sound waves are \_\_\_\_\_ waves in matter consisting of particles with to and fro movement  
A. Circular                      B. Spiral                      C. Longitudinal                      D. Transverse
- 4) Condenser filed and cable methods are used while dealing with:  
A. Ultrasound                      B. Microwave Diathermy  
C. Infrared Rays                      D. Short Wave Diathermy
- 5) Rise in temperature induces \_\_\_\_\_ of muscles and increases efficiency of their action.  
A. Relaxation                      B. Excitation                      C. Numbness                      D. Endurance
- 6) A Faradic type of current stimulates \_\_\_\_\_ nerves.  
A. Spinal                      B. Motor                      C. Cranial                      D. Sensory
- 7) Superficial heating effect in body tissues is possible with:  
A. Actin therapy                      B. Chemotherapy  
C. Radiotherapy                      D. IRR
- 8) Extensive exposure to Infrared Rays may cause faintness because of fall in blood pressure. It is because of physiological changes in:  
A. Kidney                      B. Liver                      C. Brain                      D. Heart
- 9) When a patient is unable to produce a muscle contraction after nerve injury, then \_\_\_\_\_ can assist action of muscle.  
A. Electrical stimulation                      B. Warm stimulation  
C. Cold stimulation                      D. Prickling stimulation
- 10) All atoms are built up of \_\_\_\_\_ basic types of particles.  
A. 3                      B. 4                      C. 5                      D. 6
- 11) Heat is transmitted by \_\_\_\_\_ between objects which are in contact with each other or between different parts of same object.  
A. Convection                      B. Conduction                      C. Radiation                      D. Osmosis
- 12) Unit of intensity of current is:  
A. Hertz                      B. Volts                      C. Ampere                      D. Watts
- 13) Direct application of Infrared Rays on eyes can prevent:  
A. Cataract                      B. Dry eyes                      C. Allergy                      D. None of these
- 14) The modality of choice for superficial heating effect is:  
A. Infrared Rays                      B. Traction  
C. Ultraviolet rays                      D. Transcutaneous electrical nerve stimulator
- 15) Human ear can detect sound waves with frequency between 30 and 20,000 cycles//second but not those of higher frequency. The inaudible sound waves are called:  
A. Ultra sonic waves                      B. Ultraviolet rays  
C. Magnetic waves                      D. Audible sound waves
- 16) In Radial Nerve Palsy, the appliance of choice in Physiotherapy department is:  
A. Electrical Nerve stimulator  
B. Magnetism  
C. Transcutaneous electrical nerve stimulator  
D. Pulley circuits
- 17) A static transformer is based on principles of \_\_\_\_\_ induction.  
A. Electromagnetic                      B. Electrostatic  
C. Electronic                      D. None of these
- 18) \_\_\_\_\_ is rate of doing work i.e amount of work done in unit time.  
A. Energy                      B. Force                      C. Work                      D. Power
- 19) \_\_\_\_\_ is a weak point in a circuit which blows if current of very high intensity is passed through it.  
A. Battery                      B. Cell                      C. Dielectric                      D. Fuse
- 20) \_\_\_\_\_ exist within the nucleus of an atom.  
A. Electron and proton                      B. Electron and proton  
C. Proton and Neutron                      D. Electron and Positron



# PHYSIOTHERAPY TECHNIQUES HSSC-I

104

**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 transformer.
- (ii) What are the dangers of IRR (Infrared Rays)?
- (iii) What is the difference between sensory and motor nerves?
- (iv) Discuss reflection of sound waves briefly.
- (v) Write about resonance.
- (vi) What is the significance of therapeutic ultrasound under water?
- (vii) Define resistances in series.
- (viii) Name any two heating modalities for superficial and deep heating effects.
- (ix) Define Interrupted Direct Current.
- (x) What do you understand by Patient Circuit while using Short Wave Diathermy?
- (xi) Name effects and uses of Galvanic Current.
- (xii) Define low frequency current.
- (xiii) Define physiotherapy.
- (xiv) What are the characteristics of sound?
- (xv) Write contraindications 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 do you understand by therapeutic ultrasound?
- Q. 4** Explain Galvanic Current in detail.
- Q. 5** Explain PHYSIOLOGICAL and therapeutic effects of Infrared Rays (IRR) when applied on 27 years old female patient with low backache.
- Q. 6** Explain structure and working of a diode.
- Q. 7** Explain any one high frequency current and write about the equipment used.