

SARDAR PATEL UNIVERSITY

THIRD YEAR B.P.T. EXAMINATION

Tuesday, 07th January 2014

Time: 10.30 AM to 1.30 PM

Subject: Electrotherapy

Candidate Seat No:
Candidate Signature:
Supervisor Signature:

Total Marks: 80

20 marks

SECTION I (MCQ's)

Instructions:

1. Encircle the most appropriate answer
2. No negative marking
3. Each question carry one mark

1. Density of current in tissues close to the electrode while treating with diathermy is.
a. Least b. greatest c. moderate d. None of the above.
2. Acute inflammation is best treated by.
a. Luminous IR c. Nonluminous IR
b. Luminous IR with Short rays d. All of the above
3. High induction in the circuit can be incorporated in to a conducting coil by:
a. Using many turns of wire.
b. Placing the turns closer
c. Winding the coil into a soft iron core
d. Concentration of ions in the solution
4. Patient suffering from Peripheral vascular disorder has pain due to OA knee which modality should be chosen:
a. Iontophoresis b. UVR c. SWD. d. IR
5. The depth of the near field can be calculated using the formula :
a. r/λ
b. l/λ
c. r^2/λ
d. r/λ^2
6. Erythema obtained due to application of UVR is due to:
a. Release of chemical substances
b. Arterial dilatation
c. Venous dilatation
d. Damage to the RBC

7. Energy required to change the state of a substance is called as:
 a. Kinetic energy c. potential energy
 b. Latent heat d. chemical energy
8. The wave length of UVA is:
 a. 280-315nm b. 260-280nm c. 315-400nm d. 220-260nm
9. Gradual reduction in US beam in the tissue is known as.
 a. Cavitation. b. Attenuation. c. Refraction d. Reflection
10. Which of the following ion is used for treatment of arthritis by phonophoresis.
 a. Salicylate b. zinc oxide c. copper d. lignocain
11. The therapeutic application of heat is known as:
 a. Heliotherapy b. Thermotherapy c. Cryotherapy d. Short wave diathermy
12. The hydrocollator packs treatment time can be:
 a. 20-30mins b. 30-45mins c. 10-15mins d. 15-20mins
13. Patient having cardiac pacemaker suffering from left shoulder pain can be treated with:
 a. TENS b. IFT c. US d. none of the above.
14. Which of the following ion is best suited for adherent scar on the forearm:
 a. Magnesium b. copper c. Chloride d. Zinc
15. Which of the can be used in Iontophoresis for calcific deposits:
 a. Zinc b. Hyaluronidase. c. Chloride d. Acetate
16. Which law states that for electromagnetic waves to have an effect on the tissue, they must be absorbed:
 a. Joule's law b. Grouthus law c. Snell's Law d. None of the above
17. Tuning is done for
 a. Resonance b. Adjustments c. Increase the output d. All of the above
18. Microwaves are electromagnetic radiations that lie between radio waves and:
 a. X-rays b. IRR c. UVR d. Gamma rays
19. The progression of E2 dose in UVR therapy is:
 a. 25% b. 50% c. 75% d. 100%
20. Most common method of electrode placement for pain relief with TENS is.
 a. Over the site of pain c. Over same dermatomal distribution
 b. Proximal to the site of pain d. Distal to the site of pain.