



MZ-9007

Seat No. _____

Second Year B. Physiotherapy Examination

January - 2018

Electrotherapy - I

Time : 3 Hours]

[Total Marks : 100

SECTION - I

1 Long essay : (any two) 2×10=20

- (1) Discuss in detail about production of infrared and its therapeutic effects.
- (2) Describe microwave diathermy and its physiological effect.
- (3) Write indication and contra- indications of cryotherapy.
Write various methods of application of cryotherapy.

2 Short essay : (any two) 2×5=10

- (1) Contrast bath
- (2) Hydrocolleteral pack
- (3) Draw bloc diagram of SWD

3 Very short essay : (any five) 5×2=10

- (1) Latent heat
- (2) PEME
- (3) Contra-indication of SWD
- (4) Whirl pool bath
- (5) cavitation
- (6) phonophoresis

4 Multiple choice questions : (MCQ) 10×1=10

- (1) This is one of the danger of infrared
 - (a) unstable cavitation
 - (b) skin cancer
 - (c) constipation
 - (d) conjunctivitis

SECTION - II

- 5** Long essay (any **two**) **2×10=20**
- (1) Write in detail about methods of application of Paraffin wax bath and its physiological effect
 - (2) Write in detail about LASER and its therapeutic effect.
 - (3) Define SWD. Write indication and danger of SWD.
- 6** Short essay : (any **two**) **2×5=10**
- (1) Attenuation of ultrasound
 - (2) Dosage in UVR
 - (3) Spacing of electrode in SWD
- 7** Very short answer (any **five**) **5×2=10**
- (1) Checking of ultrasound apparatus
 - (2) Vapocoolant spray
 - (3) Hubbard tank
 - (4) Conduction and radiation
 - (5) Electromagnetic spectrum
 - (6) Coupling media
- 8** Multiple choice questions : (MCQ) **10×1=10**
- (1) The commonly used therapeutic frequency of SWD is
 - (a) 20.19 MHz
 - (b) 27.12 MHz
 - (c) 30.12 MHz
 - (d) 12.27 MHz
 - (2) What treatment should be used immediately after an injury like sprain?
 - (a) SWD
 - (b) Infrared rays
 - (c) hot packs
 - (d) cold pack
 - (3) Unit for ultrasound intensity is _____
 - (a) watts
 - (b) cm
 - (c) w/cm²
 - (d) Pascal
 - (4) The distance between Infra red lamps and part under treatment should be
 - (a) 20 - 25 cm
 - (b) 25 - 50 cm
 - (c) 50 - 75 cm
 - (d) 75 - 100 cm

- (5) Which is not type of LASER ?
- (a) Power (b) Soft
(c) Mid (d) Hard
- (6) Most commonly used therapeutic frequency of microwave diathermy is _____ MHz.
- (a) 230 (b) 2450
(c) 2000 (d) 400
- (7) Special type of valve used in microwave is called
- (a) magnetron (b) neutron
(c) diode (d) none of above
- (8) Device that measures electric resistance is
- (a) Ohmmeter (b) Potentiometer
(c) Voltmeter (d) Transformer
- (9) The electrode spacing material used in SWD should be of
- (a) high dielectric constant
(b) low dielectric constant
(c) good conductor
(d) none of above
- (10) Test dose of UVR can be done on
- (a) flexor aspect of the forearm
(b) abdomen
(c) medial aspect of thigh
(d) anterior aspect of thigh
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