



PW-9537

Seat No. _____

Third Year B. Physiotherapy Examination

July - 2018

Electro Therapy - 2

Time : 3 Hours]

[Total Marks : 100

SECTION - I

- 1 LONG ESSAY (ANY Two) : 2×10=20**
1. What is biofeedback ? Describe in detail principles of biofeedback.
 2. Different tests used in electro diagnosis. Explain about S D curve.
 3. Define TENS. Write methods of application, indication, contraindication of TENS.
- 2 SHORT ESSAY (ANY two) : 2×5=10**
1. Explain diadynamic current and its type.
 2. Cathodal and anodal galvanism.
 3. Functional electrical stimulation.
- 3 VERY SHORT ESSAY (ANY FIVE) 2×5=10**
1. Synapse
 2. Motor point
 3. F.G. Test
 4. Inverse square law
 5. Rheobase
 6. Saltatory conduction.
- 4 Multiple choice question (MCQ) 10×1=10**
1. In wound care iontophoresis technique uses
 - (A) Direct current
 - (B) Alternating current
 - (C) Sinusoidal currents
 - (D) All of the above
 2. An important precaution against earth shock is :
 - (A) Use of switches breaks neutral wire
 - (B) Use of 2 pin plugs
 - (C) Use of 3 pin pluges
 - (D) All of above

3. The most effective modification of faradic type current is :
(A) Interruption (B) Surging
(C) Both (A) and (B) (D) None of above
4. For stimulation of denervated muscles a pulse duration is most effective
(A) 1 ms (B) 10 ms
(C) 100 ms (D) 300 ms
5. The frequency range of high TENS
(A) 1-5 Hz (B) 50-60 Hz
(C) 1-60 Hz (D) 100-150 Hz
6. Diaphoresis is :
(A) Absence of sweating
(B) Bladder dysfunction
(C) Excessive compensatory sweating above level of lesion
(D) none
7. The prognosis is good in this type of lesion.
(A) Neurotmesis (B) Neuropraxia
(C) Axonotmesis (D) All of the above
8. Metal oxide rectifiers are used for :
(A) High voltage currents
(B) Low voltage currents
(C) Both (A) and (B)
(D) None of the above
9. The beat frequency current in IFT is a :
(A) High frequency current
(B) Medium frequency current
(C) Low frequency current
(D) Rebox current
10. TENS is contraindicated in the region of
(A) Cardiac pacemaker
(B) Carotid sinus
(C) Hearing aid
(D) All of the above

SECTION - II

- 5 LONG ESSAY (ANY TWO) : 2×10=20**
1. Define IFT. Explain in detail about classical interference, vector scanning, therapeutic effect of IFT.
 2. Describe the management of lower limb edema by faradism under pressure.
 3. Define iontophoresis. Explain drugs used in iontophoresis. Write indications and contraindication of the same.
- 6 SHORT ESSAY (ANY TWO) : 2×5=10**
1. Indication of intermittent galvanic current.
 2. Combination therapy.
 3. Electrodes used in EMG.
- 7 VERY SHORT ESSAY (ANY FIVE) : 5×2=10**
1. Nerve accommodation
 2. Erb's palsy
 3. Types of nerve injuries
 4. Group stimulation
 5. Kink point
 6. Define faradic current.
- 8 Multiple choice question (MCQ) : 10×1=10**
1. As the frequency of current used increases, the impedance offered by the skin :
(A) Increases (B) Decreases
(C) Remains the same (D) None of above
 2. The advantage of rhythmic mode over the constant heat frequency is :
(A) Prevents unnecessary nerve stimulation
(B) Prevents nerve habituation
(C) Facilitation of nerve habituation
(D) All of the above
 3. The work done when a force of 1 Newton acts through a distance of 1 meter is :
(A) 1 Joule (B) 1 calorie
(C) 1 watt (D) 1 Newton

4. High voltage pulsed Galvanic current has :
 - (A) A twin peak monophasic waveform
 - (B) Voltage used is greater than 100 volts.
 - (C) Pulses lasts for 0.1 ms and few microsec
 - (D) None of the above
 5. Which is effective treatment for acute pain and muscle spasm
 - (A) Cathodal galvanism
 - (B) Constant direct current
 - (C) Anodal galvanism
 - (D) All of the above
 6. Sinusoidal currents are
 - (A) Unevenly alternating currents of 100 Hz
 - (B) Evenly alternating currents of 100 Hz
 - (C) Unevenly alternating currents of 10 Hz
 - (D) Evenly alternating currents of pulses duration of 10 ms
 7. In the event of shock immediately you should :
 - (A) Give hot fluids to drink
 - (B) Put down and allow rest
 - (C) Disconnect victim from source of supply.
 - (D) None of the above
 8. Following mastectomy the upper limb edema treated by.
 - (A) IFT
 - (B) TENS
 - (C) Hot packs
 - (D) Faradism under pressure
 9. Selective impulses are effective for :
 - (A) Reeducation of a muscle
 - (B) Pain relief
 - (C) Stimulating denervated muscle
 - (D) None of the above
 10. Interrupted direct current stimulation of dennervated muscle produce
 - (A) Brisk contraction
 - (B) Sluggish contraction
 - (C) No response
 - (D) All of the above
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