

Class: II UG
Major: BPT

Time: 2 hours
Max. Marks: 60

22BPTC29 – Electrotherapy – High Frequency Current

CO1: Knowledge about various types of therapeutic currents and its physiological, therapeutic effects gained

CO2: Understand about pain and pain modulation mechanism gained.

CO3: Evaluate about different types of low and medium frequency currents. Its indication, contraindication, method of application gained.

CO4: Learn about Traction, external compression device, its indication, contraindication, method of application gained.

CO5: Diagnosis of neuromuscular dysfunctions by electro-diagnostic test. Practical application of electrotherapy modalities for various conditions gained.

Part A

Choose the correct answer

6x1=6

1. High-frequency currents are commonly used in physiotherapy for:
CO2K1

A) Pain management B) Tissue heating and muscle relaxation C) Electrical stimulation of nerves D) Bone fracture healing

2. High-frequency currents such as shortwave diathermy are contraindicated in which of the following situations
CO2K1A)

Over areas with acute inflammation B) Over areas with metal implants C) During sleep
D) In cases of chronic pain

3. The type of laser which is commonly used in physiotherapy is

CO1K1

A) Carbon dioxide laser B) Low-level laser (LLLT) C) Excimer laser D) Argon laser

4. The most common frequency range for high-frequency currents used in physiotherapy is
CO2K1

A) 1-10 Hz B) 20-50 Hz C) 100-200 Hz D) 1-3 MHz

5. The primary therapeutic effect of Infrared Radiation (IRR) therapy was

CO3K1

A) Muscle contraction B) Pain relief and tissue healing C) Tissue cooling D) Joint stabilization

6. The main benefit of using shockwave therapy for soft tissue injuries is

CO2K1

A) Reducing muscle spasms B) Stimulating healing by increasing blood flow and collagen production C) Increasing joint mobility D) Increasing the muscle strength of the affected area

Part – B

Answer the following

Answer should not exceed 400 words or two pages

3x6=18

7. a. Describe the properties of high frequency current (or)

CO2K2

b. Explain the physiological effects of IRR

CO3K2

8. a. Explain Condensers and its applications (or)

CO1K2

b. Describe types of generators in IRR

CO3K2

9. a. Explain the production of SWD (or)

CO2K1

b. Explain the types of electricity

CO1K2

Part C

Answer the following

Answer should not exceed 800 words or four pages

3 x 12 = 36

10 a. Explain in detail about the principle, construction and types of transformers (or)

CO1K2

b. Describe in detail about Pulsed Diathermy

CO2K2

11. a. Describe in detail about the physics and principles of magnetism (or)

CO1K2

b. Explain in detail about Shock Wave Therapy

CO2K2

12. a. Describe in detail about IRR techniques of irradiation, indications and contraindications (or)

CO3K2

b. Explain the production of High Frequency Current

CO2K2

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