



**Avinashilingam Institute for Home Science and Higher Education for Women  
Coimbatore- 641043.**

**Continuous Internal Assessment Test –II April 2025  
Semester - VI**

**Class: III UG  
Major: BPT**

**Time: 2 hours  
Max. Marks: 60**

**22BPTC29 – Electrotherapy- High Frequency Current**

**Course Outcomes**

- CO1: Knowledge about various types of therapeutic high frequency currents and its physiological, therapeutic effects gained.  
CO2: Knowledge about LASER therapy and its uses gained.  
CO3: Effects of various types of heat therapy and method of applications  
CO4: Knowledge about Cryotherapy and its method of application, effect and uses gained.  
CO5: Knowledge about recent physical modalities and its method of application, effect and uses gained. Practical application of electrotherapy modalities for various conditions.

**Part A**

**Choose the correct answer**

**6 x 1 = 6**

1. Select the following is the primary therapeutic effect of ultraviolet (UV) radiation in physiotherapy? CO3 K5
  - a) increases the blood circulation
  - b) Promotion of tissue healing
  - c) increases the melanin
  - d) increases the venous drainage
2. Select the given conditions can be treated using UV radiation therapy ? CO3 K5
  - a) Psoriasis
  - b) Rheumatoid arthritis
  - c) Muscle strain
  - d) Bone fractures
3. The most common frequency used in therapeutic ultrasound for musculoskeletal condition CO4 K1
  - a) 0.5 MHz
  - b) 1 MHz
  - c) 3 MHz
  - d) 10 MHz
4. Cavitation in ultrasound therapy refers to CO4 K1
  - a) The formation of small gas bubbles in tissues that can help with tissue healing
  - b) The creation of deep heat in the tissue
  - c) The contraction of muscles during ultrasound treatment
  - d) The movement of fluid from one area of the body to another
5. The typical temperature range for the PARAFFIN WAX is CO5 K5
  - a) 40°C to 45°C
  - b) 50°C to 55°C
  - c) 60°C to 65°C
  - d) 30°C to 35°C
6. Select which of the following is a contraindication for using cryotherapy CO5 K5
  - a) Acute inflammation
  - b) Poor circulation or cold intolerance
  - c) Muscle spasm
  - d) Acute pain

**Part – B**

**Answer the following**

**Answer should not exceed 400 words or two pages**

**3 x 6 = 18**

7. a. Describe Electric arc-Process of ionization & Transmission of current. CO3 K2  
(or)
7. b. Explain the indications & contra-indications of IRR. CO3 K2
8. a. Explain the properties of Ultrasound. (or) CO4 K2
8. b. Describe Phonophoresis. CO4 K2
9. a. Explain Pulsed Ultrasound Therapy. (or) CO4 K1
9. b. Explain the methods of heating tissues using paraffin wax. CO5 K2

**Part C**

**Answer the following**

**Answer should not exceed 800 words or four pages**

**3 x 12 = 36**

- 10 .a. Explain Types of UV lamps, Construction of lamps and the Fluorescent tube for U.V. production. (or) CO3K2
10. b. Describe Physiological and therapeutic effects of UV radiation—in detail photosensitization. CO3K2
11. a. Describe the techniques of application of ultrasound: a. Methods –direct contact, waterbath, waterbag. (or) CO4K2
11. b. Explain the properties of ultrasonic fields: depth of penetration in relation to (a) Intensity and (b) frequency CO4K2
12. a. Describe in detail about the methods of heating tissues, Effects and indications, Circulatory effects of moist heat (or) CO5K2
12. b. Describe the effects of paraffin wax on sensory nerves, effects on skin, Indications & contraindications, its uses in various Conditions. CO5K2

**Copies: 31**

**NAME OF THE STAFF: Mrs.S.Venkatelaxmi**