



# Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination - 02-Feb-2021

Time: Three Hours

Max. Marks: 100 Marks

## ELECTROTHERAPY (RS3 & RS4)

**Q.P. CODE: 2712**

Your answers should be specific to the questions asked.  
Draw neat labeled diagrams wherever necessary.

### LONG ESSAYS (Second Question Choice)

**2 x 10 = 20 Marks**

1. What is latent heat? Explain the various techniques of application of cold therapy and its physiological effects.
2. Define pain. Mention various theories of pain and explain in detail about pain gate control theory.

**OR**

What is TENS? Describe various types of TENS, with its physiological and therapeutic effects.

### SHORT ESSAYS (Question No 3 & 12 choice)

**10 x 5 = 50 Marks**

3. Explain in detail about strength - duration (SD) curve.

**OR**

Explain about Kromayer lamp.

4. Explain the indication and procedure of faradic foot bath.
5. What is EMG? Explain its therapeutic uses.
6. What are the effects of electrical stimulation of healthy muscle and how electrical stimulation muscle contraction differs from normal voluntary muscle contraction?
7. Define Iontophoresis with its principles and indication.
8. Explain the mechanisms of heat production in tissues through short wave diathermy.
9. What is contrast bath? Explain its therapeutic uses.
10. Classify LASER's and explain its dosage parameters.
11. Explain the therapeutic uses of whirlpool bath.
12. What is dynamic and static interference system in interferential therapy?

**OR**

Physiological and therapeutic effects of galvanic current.

### SHORT ANSWERS

**10 x 3 = 30 Marks**

13. Penetration depth for different modalities.
14. Resting membrane potential.
15. Why tuning is required in short wave diathermy machine?
16. Inverse square law.
17. What is Russian current?
18. Fluidotherapy
19. Magnetron?
20. Danger of cryotherapy.
21. What are standing waves and its effects.
22. Types of electrodes used in short wave diathermy

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