

---

**RELIMINARY EXAMINATION 1ST YEAR BPTb 2018-19**  
**FUNDAMENTALS OF ELECTROTHERAPY**

**Total Duration: Section A+B = 3 hours**

**Date: 10/04/2019**

**Total Marks: 80**

**Instruction:**

1. Use blue/black ball point pen only.
  2. Do not write anything on the blank portion of the question Paper. If written anything, such type of act will be considered an attempt to resort to unfair means.
  3. All questions are compulsory.
  4. The number to the right indicates full marks.
  5. Draw diagrams wherever necessary.
  6. Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.
  7. Use a common answer book for all Section.
- 

**SECTION — A SAQ (50 Marks)**

**1. Short answer questions (Any five out of six) (5X3=15)**

1. Explain Lewis hunting reaction.
2. State cosine law with diagram.
3. Explain principle IFT.
4. Define capacitance & state its unit.
5. Define triode & diode valve.
6. Describe characteristics of laser.

**2. Short answer questions (Any five out of six) (5X7=35)**

1. Discuss luminous & non luminous generator in IR.
2. State & explain laws of Reflexion, refraction & absorption.
3. Differences between faradic & galvanic currents.
4. Describe the Kromayer lamp.
5. Explain in detail of Physiological & Therapeutic effect of short wave diathermy.
6. Describe production as Ultrasound.

**SECTION — B LAQ (30 Marks)****3. Long answer question (any 1 out of 2) (15 marks)**

1. Explain in detail about physiological & therapeutic effects of paraffin wax bath (PWB).

Describe various methods of application of paraffin wax bath.

Add note on its contra-indication. (5+8+2)

2. Describe various methods of heat transfer. Describe physiological effects of Hydrocollateral Pack. Describe the Indications & Contraindication. (5+5+5)

**4. Long answer question (any 1 out of 2) (15 marks)**

1. Discuss therapeutic & physiological effects of contrast bath.

Write about its indication & contra-Indication. (10+5)

2. Describe different type of electrodes used for low frequency currents.

Discuss different wave form of interrupted direct current.

Draw & label panel diagram of multi-stimulator. (5+5+5)

-X-X-X-X-X-X-X-X-X-