



**Abhinav Bindra Sports Medicine and Research Institute**  
**BPT 1st Internal Examination January 2026 (1st Sem)**

**Date:** 06. 01. 2026  
**Time:** 09:00 AM-12:00 PM

*Question code - IJT02*  
**Subject:** ELECTRO THERAPY  
**F.M.:** 80 marks  
*Subject code - 23ABP102*

**A) Long Questions- Answer Any 3 (3 × 15 Marks)**

1. Describe the structure of an atom and explain the properties of protons, neutrons and ions.
2. State and explain Joule's law and derive its clinical implication for heating effects during electrotherapy.
3. Discuss the physiological and therapeutic effects of heat.
4. Describe Faradic current: its waveform, physiological & therapeutic effects on nerve and muscle
5. Discuss electrical shock and earth shock: mechanisms, clinical consequences and immediate management

**B) Short Questions- Answer all (6 × 5 Marks)**

1. Define ion and give two examples relevant to membrane excitability.
2. Give two therapeutic indications for Faradic stimulation.
3. Name two safety checks to prevent earth shock in the clinic.
4. State Seddon's classification of nerve injury in brief.
5. Differentiate proton and neutron in one line.
6. List two contraindications for therapeutic heating.

**C) Objective type Questions- Answer all (5 × 1 Mark)**

1. Which ions are primarily responsible for action potential?
2. Seddon's most severe nerve injury is called \_\_\_\_\_.
3. Faradic current is primarily used for muscle \_\_\_\_\_.
4. A key prevention for earth shock is \_\_\_\_\_.
5. What is Faradic Coil?