

[LQ 6254]

FEBRUARY 2020

Sub. Code: 6254

**BPT DEGREE EXAMINATION  
FIRST YEAR  
PAPER IV – BASIC AND APPLIED PHYSICS FOR  
PHYSIOTHERAPY**

*Q.P. Code : 746254*

**Time: Three hours**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. Define Thermionic valves and Thermionic emission. List the types of valves and construction and application of Cathode ray oscilloscope.
2. Define Condenser. Describe in detail about principles, construction, factors determining capacity and use of condenser in electrotherapy.

**II. Write notes on:**

**(8 x 5 = 40)**

1. Anatomical pulleys.
2. Physical effect of heat.
3. Earth shock and its prevention.
4. Gravity.
5. Pendular movement.
6. Lenz's law and its application in physiotherapy.
7. Springs in series and parallel.
8. Charging and discharging a capacitor.

**III. Short answers on:**

**(10 x 2 = 20)**

1. Define force.
2. Define levers.
3. Define stress and strain.
4. Magnitude of current.
5. Reflection.
6. Dangers of radiation.
7. Types of motion.
8. Define mechanics.
9. Newton's Third law.
10. Define Friction.

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