

**THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY**

**[BPT 1123]**

**NOVEMBER 2023  
(AUGUST 2023 EXAM SESSION)**

**Sub. Code: 6275**

**BACHELOR OF PHYSIOTHERAPY DEGREE COURSE  
FIRST YEAR - (Regulation from 2017-2018 onwards)  
PAPER IV – BASIC AND APPLIED PHYSICS FOR PHYSIOTHERAPY**

*Q.P. Code: 746275*

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(2 x 15 = 30)**

1. Define springs. Write about its properties and about springs in parallel and series.
2. Define force. Explain briefly its classification and application in physiotherapy.

**II. Write notes on:**

**(10 x 5 = 50)**

1. Grothus Law.
2. Shunt Rheostat.
3. Fixation and Stabilization.
4. Smoothing circuits.
5. Difference between earth shock and electric shock.
6. Medium frequency currents.
7. Static electric charge.
8. Uses of Triode Valve.
9. Pulleys and its application.
10. Resistance in series and parallel.

**III. Short answers on:**

**(10 x 2 = 20)**

1. Uses of condenser.
2. Speed and Velocity.
3. Ohmmeter.
4. Kinetic Energy.
5. Types of motion.
6. Friction.
7. Rectifiers.
8. Electric Burns.
9. Movement arm.
10. Eddy currents.

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