

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

[BPT 0122]

**JANUARY 2022
(AUGUST 2021 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 Electric current. Explain in detail about thermal, chemical and magnetic effects of electric current.
2. Define Equilibrium. Explain about types of Equilibrium and its application in physiotherapy.

II. Write notes on:

(10 x 5 = 50)

1. Earth shock and its prevention.
2. Light Emitting Diodes.
3. Charging and discharging a capacitor.
4. Grotthus law and its implications.
5. Axes and planes.
6. Medium frequency currents.
7. Force.
8. Principle of momentum and its practical applications.
9. Define condenser and uses of condenser in electrotherapy.
10. Impedance.

III. Short answers on:

(10 x 2 = 20)

1. Define Elasticity.
2. Resistance.
3. Vant's Hoof's law.
4. Inertia.
5. Causes of earth shock.
6. Uses of thermionic valve.
7. Define power.
8. Angle of pull of a muscle.
9. Mechanical advantage of pulleys.
10. Uses of condenser.
