

Pearl Matriculation Higher Secondary School, Therekalputhoo

Physics - 14 Oct 2025

Subject: Physics

Class: 12

Date: 14 Oct 2025

Total Marks: 25

I. Answer The Following 2M

$3 \times 2 = 6$ marks

1. Define work function of a metal. Give its units
2. How will you define threshold frequency?
3. Define stopping potential

II. Answer The Following 3M

$3 \times 3 = 9$ marks

1. List out laws of photostatic effect.
2. List out the characteristics of photons
3. Give the applications of photocell

III. Answer The Following 5M

$2 \times 5 = 10$ marks

1. Obtain Einstein's photoelectric equation with necessary explanation
2. Derive an expression for de Broglie wavelength of electron