

# Modern Physics

3rd Semester

Paper - PHSA-A-CC-3-7TH.

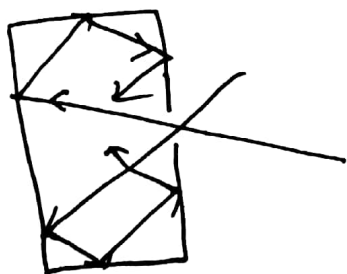
Reference Books :

- i) S.N. Ghoshal Atomic Physics Vol-1
- ii) A.B. Gupta, Dipak Ghosh - Atomic and Nuclear Physics.

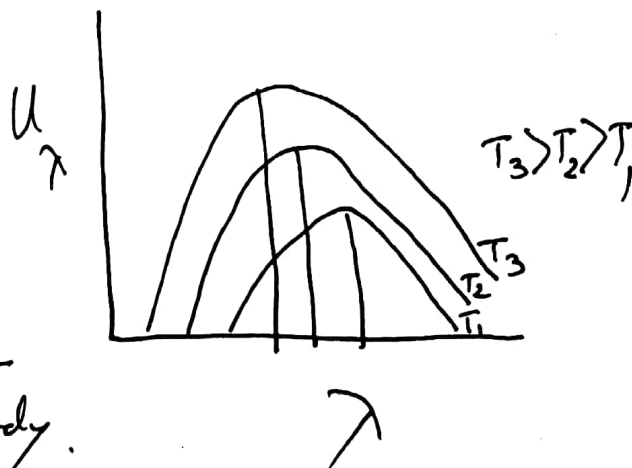
1. Radiation and its Nature, (a), (b) (c)

Interference, diffraction and polarization led to the development of the wave theory of light.

On the other hand, the line spectrum emitted by element in gaseous state, the photoelectric effect, the distribution of energy in the spectrum of a black body radiation led to the development of quantum theory of radiation.



A cavity with a small hole in it acts like a black body.



Absorptivity of a body is defined as the fraction of radiant energy incident on the body.