

Sem-5 DSEA I (b) 5.4 Laser & Fiber Optics.
 Paper: PHTSA-DSE-A2-TH.

3. Resonators.

Books

4. Transient effect

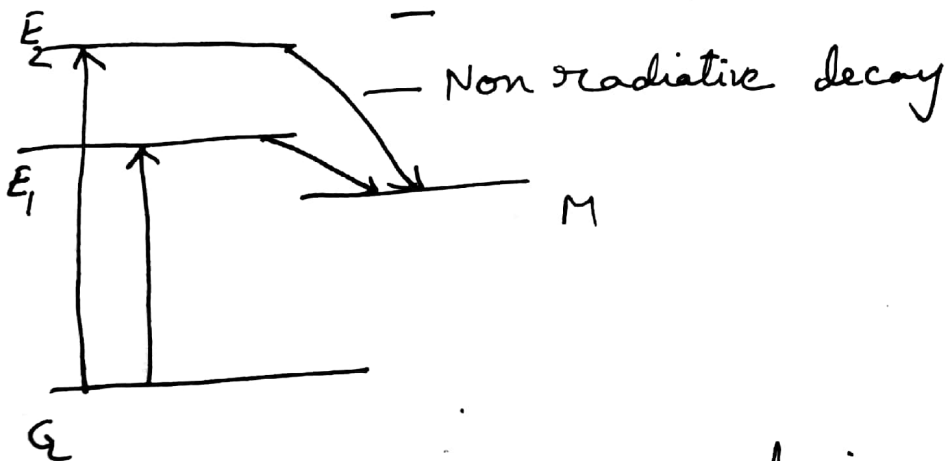
Lasers

5. Basic Laser System.

K. Thyagarajan

Ajoy Ghatak

LASER: Light Amplification by Stimulated
Emission of Radiation.



Let we have an atom having ground state G and two excited states E_1 & E_2 . An atom on absorption of energy raised to the excited states E_1 or E_2 depending on the frequency of absorbed energy. The life time of excited state is of the order 10^{-8} sec; the ion again comes back to the ground state and emits radiation. This process is called spontaneous emission. It might so happen that the excited atom or ion imparts some energy to the