

**IV B.Tech I Semester Supplementary Examinations, April/May 2005**  
**LASER AND FIBER OPTICS IN MEDICINE**  
**(Bio-Medical Engineering)**

**Time: 3 hours**

**Max Marks: 80**

**Answer any FIVE Questions**  
**All Questions carry equal marks**

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1. In detail discuss the characteristics of laser. Explain its principle.
2. Explain in detail the application of laser in ophthalmology.
3. Discuss the application of laser in dermatology.
4. Explain the terms (regarding laser treatment)
  - (a) Energy levels.
  - (b) Advance reactions.
  - (c) Effects of agents.
5. Describe the use of lasers in Dc field of dentistry.
6. Explain the following
  - (a) ND-YAG.
  - (b) Bronchoscope.
7. Write short notes on:
  - (a) Medical Surveillance
  - (b) Laser accuracy
  - (c) Laser radiation.
8. Explain the terms:
  - (a) Fibre optics.
  - (b)  $CO_2$  laser.

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