

Total Pages—4

(Set-1)

M.Sc.-4th (AP)  
Laser Physics

*Full Marks : 70*

*Time : 3 hours*

**Q. No. 1 is compulsory and answer any five  
from the remaining questions**

*The figures in the right-hand margin indicate marks*

1. Briefly answer the following :  $2 \times 10$
- (a) Stimulated Emission
  - (b) Population inversion
  - (c) Coherence
  - (d) Basic principle of holography
  - (e) V parameter of an optical fiber
  - (f) Different types of dispersion in optical fiber
  - (g) MKS unit of  $A$  and  $B$ , where  $A$  and  $B$  are Einstein's coefficients

( Turn Over )