

- Q-5** **Attempt all questions** (14)
- (a) Explain the fiber optic communication system with a neat diagram. (07)
 - (b) Explain the principle on which holography works. Explain the process of constructing a hologram with appropriate diagram. (07)
- Q-6** **Attempt all questions** (14)
- (a) Give the application of optical fiber. (06)
 - (b) Explain the principle, construction and working of a Ruby Laser with a neat diagram. (08)
- Q-7** **Attempt all questions** (14)
- (a) Give the difference between single mode and multimode fiber. (07)
 - (b) Define a hologram. Explain the process of reconstruction of a hologram. (07)
- Q-8** **Attempt all questions** (14)
- (a) Explain the working of semiconductor Lasers. (07)
 - (b) Derive the formula for acceptance angle with a neat diagram. (07)

