

B.Tech. 7th Semester (Electronics and Communication
Engg.-III) Examination, December-2013

OPTICAL COMMUNICATION

Paper-ECE-415-F

Time allowed : 3 hours] [Maximum marks : 100

Note : (i) First question is compulsory. Attempt first question.

(ii) Attempt one question from each of four sections.

1. (a) Difference between fiber couplers and fiber connectors. 5
- (b) What is graded index fiber ? 5
- (c) Explain basic principle of LED. 5
- (d) Give definition of responsivity. 5

Section-A

2. Explain optical communication system with block diagram. 20
3. Give advantages of optical fiber communication and explain basics of transmission of light rays. 20

Section-B

4. Differentiate attenuation and absorption in optical fibers and also explain them. 20
5. Explain different types of optical fiber structures. 20

Section-C

6. What is LED and also discuss its characteristics ? 20
7. How laser is coupled to fiber ? 20

Section-D

8. What is APD and explain its design ? 20
9. What are basic principles of PIN photodetector ? 20