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Roll No.....

EC-703 (GS)**B.E. VII Semester**

Examination, December 2017

Grading System (GS)**Optical Communication**

Time : Three Hours

Maximum Marks : 70

Note: i) Attempt any five questions.

ii) All questions carry equal marks.

1. a) Discuss the merits of optical communication.
b) Discuss about the single mode fiber and graded index fiber.
2. a) Discuss about photonic crystal fibers.
b) Explain MCVD technique for fabricating fibers.
3. a) Discuss about the principle working of LED. Also explain quantum efficiency.
b) Discuss about Fiber Splicing techniques.
4. a) Explain the principle working of LASER source.
b) Discuss about different causes of attenuation in fibers.
5. a) Discuss the principle working of Avalanche photodiode.
b) Derive the expression of detector response time.

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6. a) Discuss about digital receiver performance and also explain eye diagram.
b) Discuss the principle of link power budget calculation.
7. a) Discuss the principle working of passive optical star coupler, isolator and circulators.
b) Explain the principle working of Erbium doped fiber amplifier.
8. Write short notes on any two of the following:
 - a) Burst mode receiver
 - b) MEMS technology
 - c) OTDR
