

Roll No

MEDC - 204

M.E./M.Tech., II Semester

Examination, June 2016

Optical Network

Time : Three Hours

Maximum Marks : 70

- Note :** i) Attempt any five questions.
ii) All questions carry equal marks.

1. a) Discuss briefly about the first generation optical network.
b) Discuss the multiplexing technique used in optical networks.
2. a) With the help of schematic diagram explain the working of optical circulators and optical multiplexer.
b) Discuss the principle working of Fabry Perot filters.
3. a) Explain the working of fiber bragg grating based Add/Drop multiplexer.
b) Discuss the working of mechanical and thermo-optic switches.
4. a) Discuss the architecture of SONET.
b) How is multiplexing done in SONET.
5. a) Explain and differentiate between Aloha and slotted aloha.
b) Discuss briefly about the different topologies for broadcast networks.

6. a) Discuss about the virtual topology and circuit switching.
b) What are static and reconfigurable networks?
7. a) Explain the principle of optical time domain multiplexing.
b) Explain about bit interleaving and packet interleaving.
8. Write short notes on any two of the following:
a) ATM
b) LAMBDANET
c) Terahertz optical asymmetric demultiplexer
