MEDC - 204

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

Examination, December 2014

Optical Network

Time : Three Hours

Maximum Marks : 70

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

1. a) Discuss about the multiplexing techniques used in optical networks.

   b) Discuss about the virtual circuit Services and data gram.

2. a) Discuss the Principle working of Fiber bragg grating based add drop multiplexer.

   b) Discuss the Principle working of acoustic optical Tunable filters.

3. a) Explain the working Principle of couplers and Isolators.

   b) Discuss the Principle working of electro optic and thermo optic switches.

4. a) How is multiplexing done in SONET networks?

   b) Explain the IP layered architecture.

5. a) Discuss about the MAC protocols.

   b) Discuss the principle of aloha and slotted aloha.

6. a) Discuss about the virtual topology and circuit switching and node design in wavelength routing network.

   b) Discuss about the static and reconfigurable network.

7. a) Explain about the OTDM networks.

   b) Discuss the working of terahertz optical asymmetric demultiplexer.

8. Write short notes on any two of the following.

   a) FDDI.

   b) LAMBDANET.

   c) Photonic Packet Switching.

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