



Code: 9D08204

M.Tech II Semester Supplementary Examinations January/February 2017

**OPTICAL NETWORKS**

(Computer Networks)

Time: 3 hours

Max. Marks: 60

Answer any FIVE questions  
All questions carry equal marks

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- 1 Discuss the issues in wavelength routed network.
- 2 Explain wavelength reservation method. Explain limited alternate routing.
- 3 Explain analytical model of KovaCevic and Acampora.
- 4 (a) What are the routing strategies in an optical network? Give examples.  
(b) Explain about rerouting in WDM networks with sparse wavelength conversion.
- 5 Discuss limitations of virtual topology and explain its formulation.
- 6 (a) With necessary diagrams explain about backup – multiplexing based routing.  
(b) Discuss about restoration network design by Nagatsu et.al. with examples.
- 7 (a) Discuss about multicast tree generation in a network with full splitting capability.  
(b) Discuss about Steiner-based tree generation with examples.
- 8 Distinguish between IP over ATM, over SONET and IP over SONET.

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