

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

- 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.
