Code: 9D08204

M.Tech II Semester Supplementary Examinations February 2018

OPTICAL NETWORKS

(Computer Networks)

(For students admitted in 2012, 2013, 2014, 2015 & 2016 only)

Time: 3 hours Max. Marks: 60

Answer any FIVE questions

All questions carry equal marks

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1 (a) Explain with neat diagram, the elements of an optical fiber transmission link.
(b) Discuss the evolution of fiber optic communication system.

2 (a) Discuss the online and offline RMA for ring networks.
(b) Discuss the effect of alternate mutes and wavelength conversion on RMA.

3 (a) Explain about the analytical model illustrated by Kovacevic and Acampora.
(b) Present a model for networks with no conversion.

4 (a) Explain about the maintenance of Returnability status information.
(b) Present the rerouting process in WDM networks with sparse wavelength conversion.

5 (a) Explain the limitations of virtual topology.
(b) Highlight about the network topology problem formulation.

6 Explain about:
(a) PDBWA method.
(b) Restoration network design by Nagatsu.

7 (a) Explain about the Steiner-Based tree generation.
(b) Explain about Virtual source-Based trees.

8 (a) Explain about MPLS in WDM networks.
(b) Present the overlay and integrated models for IP/WDM networks.

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