

R09

Code No: D6505

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

M.Tech II - Semester Examinations, March/April 2011

**OPTICAL NETWORKS
(WIRELESS AND MOBILE COMMUNICATIONS)**

Time: 3hours

Max. Marks: 60

**Answer any five questions
All questions carry equal marks**

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1. What is the importance / use of SONET/SDH in optical communications? Discuss in detail about SONET / SDH and give their transmission formats. Discuss also SONET/SDH Rings. [12]
2. Discuss the following in detail:
 - a) Add/Drop Multiplexers.
 - b) Wave length routing Networks. [6+6]
3. Discuss in detail about various layers with in Optical layer and also discuss their services. [12]
4. Discuss in detail of protection schemes (Protection in SONET/SDH and IP Networks). [12]
5. Write short notes on the following:
 - a) Photonic Packet Switching.
 - b) Burst Switching. [6+6]
6. What is Multiplexing? Discuss in detail about Wavelength division multiplexing. [12]
7. a) Discuss in detail about Optical Safety.
b) Explain in detail about Fiber To The Curb (FTTC). [6+6]
8. Discuss in detail about the following storage Area Networks:
 - a) ESCON.
 - b) HIPPI.
 - c) Gigabit Ethernet. [12]
