## EIGHTH SEMESTER B.TECH. (ENGINEERING) DEGR APRIL 2013

IT 09 802—HIGH SPEED NETWORKS

(2009 Admissions)

Time: Three Hours

Maximum: 70 Marks

## Part A

Answer all questions.

- 1. Differentiate the working of LAN and WAN.
- 2. Define congestion. When does it occur?
- 3. State the characteristics of BISDN.
- 4. Define Meta signalling in ATM networks.
- 5. Define Wavelength Division Multiplexing.

 $(5 \times 2 = 10 \text{ marks})$ 

## Part B

Answer any four questions.

- 6. Explain the working of SONET.
- 7. Write a note on ISDN Standards and Services.
- 8. Explain about the Traffic Management framework in ATM Networks.
- 9. Explain about the optical circuit switching mechanisms.
- 10. Write a note on optical network evolution.
- 11. Explain about the segmentation and reassembly mechanism in ATM networks.

 $(4 \times 5 = 20 \text{ marks})$ 

## Part C

Answer all questions.

12. Explain in detail about the Frame relay protocols and services.

Or

- 13. Explain about FDDI in detail.
- 14. With a neat sketch, explain the various layers of the ISDN network.

Or

- 15. Explain the architecture of the BISDN along with its functionalities.
- 16. Explain the working of the ATM networks in detail.

Or

- 17. Explain about the ABR traffic management and Protocol signalling in ATM networks.
- 18. Explain about the network architectures in optical networks.

Or

19. Write in detail about IP over ATM over SONET over WDM network.

 $(4 \times 10 = 40 \text{ marks})$