

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**  
**III B.TECH II SEM–REGULAR/SUPPLEMENTARY EXAMINATIONS MAY - 2010**  
**COMPUTER NETWORKS**

(Common to CSE, IT, CSSE, E.COMP.E)

**Time: 3hours**

**Max.Marks:80**

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

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- 1.a) Explain the frame format of Novell Netware IPx packet.
- b) What is an internet? What is Intranet?
- c) For n devices in a network, what is the number of cable links required for a mesh, ring, bus and star topology? [6+4+6]
  
2. Describe the classification of Transmission media. [16]
  
- 3.a) Explain about sliding window protocol using selective repeat.
- b) Explain about Error-Detecting codes. [8+8]
  
- 4.a) Explain about the Transparent bridge.
- b) Explain about collision –Free protocols. [8+8]
  
- 5.a) Explain about distance vector routing.
- b) Describe the design issues of Network layer. [8+8]
  
- 6.a) Explain about the congestion control for Multicasting.
- b) Explain the general principles of congestion control. [8+8]
  
- 7.a) Describe the basic structures of ATM Adaptation layer.
- b) Explain the TCP connection management Finite State machine. [8+8]
  
- 8.a) Explain about the components of SNMP Model.
- b) Describe about the Needham – Schroeder authentication protocol. [8+8]

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