

**Duration: 3 hrs**

**[Max Marks: 80]**

- N.B. : (1) Question No 1 is Compulsory.  
(2) Attempt any three questions out of the remaining five.  
(3) All questions carry equal marks.  
(4) Assume suitable data, if required and state it clearly.

- 1 Attempt any FOUR [20]
- a Explain different QOS parameters in ATM.
  - b Draw and explain frame format of SONET.
  - c What is the role of VPI and VCI in ATM?
  - d What are the drawbacks of traditional routing methods? Explain in brief.
  - e Write short note on IPTABLES
- 2 a Explain IEEE 802.11 architecture in detail. [10]
- b What is the need of DWDM Explain working principle of DWDM along with advantages and disadvantages? [10]
- 3 a Compare Infrastructure networks and Ad-hoc networks. Also give example of both types. [10]
- b Classify unicast routing protocol. Explain exterior routing protocol in brief. [10]
- 4 a Explain RIP in detail. Compare RIP and OSPF. [10]
- b What are network security threats and safeguards? Explain in detail. [10]
- 5 a Write a note on Internet Security. [10]
- b What is need of compression? Explain different compression techniques in detail. [10]
- 6 a Explain in detail the architecture of H.323. [10]
- b Write a note on Network design layers. [10]