

**Duration: 3 Hours**

**[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 What is a proxy firewall? Explain.  
b Explain with diagram DWDM.  
c Explain flooding in routing protocol.  
d Explain Network security safeguards.  
e Write a short note on RTP.
- 2 a Explain the different IEEE 802.11 services. [10]  
b List the advantages and disadvantages of optical networking. Draw and explain the frame format of SONET. [10]
- 3 a Compare all ATM adaptation layers: AAL1, AAL2, AAL3/4 and AAL5 [10]  
b What is Intradomain and Interdomain Routing? Explain RIP in detail [10]
- 4 a Explain Multicast routing in detail. [10]  
b Write a note on NAT, SNAT and DNAT. [10]
- 5 a Write a short note on CSMA/CA. [10]  
b what is need of compression? explain different compression techniques in detail. [10]
- 6 a Compare Ubiquitous and Hierarchical Access and explain the steps for completing the access network design in detail. [10]  
b Explain in detail the architecture of H.323. [10]
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