

Duration: 3hrs

[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 Draw and explain frame format of SONET.
 - b Compare Ad-hoc network and infrastructure network.
 - c What is Intra and inter domain Routing? Explain in brief.
 - d Write a short note on IPTABLES.
 - e Write a short note on SIP.
- 2 a What is the need of DWDM? Explain working principle of DWDM along with advantages and disadvantages? [10]**
- b Explain the different IEEE 802.11 services and write a short note on CSMA/CA. [10]**
- 3 a Write a note on congestion control and quality of service in ATM. Explain different QOS parameters in ATM. [10]**
- b Explain OSPF in detail. Compare RIP and OSPF. [10]**
- 4 a Write a note on Multicast Routing Protocols. [10]**
- b What is a firewall? Explain different types of firewalls in detail. [10]**
- 5 a What are network security threats and safeguards? Explain in detail. [10]**
- b Write a note on Network design layers. Differentiate Ubiquitous computing and Hierarchical computing. [10]**
- 6 a What is need for compression? Explain different compression techniques in detail [10]**
- b Classify unicast routing protocol. Explain exterior routing protocol in brief. [10]**
-