



Duration : 3 Hrs

Total Marks : 80

- N.B. : 1. Question No. 1 is Compulsory.
 2. Attempt **any three** questions, from remaining **five** questions.
 3. Figure to the right indicates full marks

- Q.1. A) What are guided and unguided transmission media. 5
 B) Compare various network topologies. 5
 C) Why subnetting is required and how it is done in classful IP addressing. 5
 D) Explain FTP and the two TCP Connections. 5
- Q.2. A) Explain TCP/IP model with neat diagram and the functions of each layer. 10
 B) Explain various Internetworking devices. 10
- Q.3. A) What is the difference between static and dynamic routing ? Explain Distance Vector Routing with example. 10
 B) What is framing? Explain various framing techniques. 10
- Q.4. A) What are Berkley socket primitives? Explain in brief. 10
 B) What is error detection and correction? Explain CRC with example. 10
- Q.5. A) What is congestion control ? Explain open loop and closed loop congestion control. 10
 B) Explain in brief – 10
 a) Telnet and SSH.
 b) TCP timers
- Q.6. Write Short Note on (Any four) 20
 (a) TCP segment header
 (b) Bluetooth Architecture
 (c) Aloha and its types
 (d) SNMP
 (e) Design issues for various layers