

Q.P. Code : 19488

(3 Hours)

[ Total Marks : 80

N.B:

- (1) Q.I is compulsory.
- (2) Solve any four questions from remaining six questions.
- (3) Each question carries equal marks
- (4) Figures to right indicate marks.
- (5) Use of calculator is allowed.

- 1 (a) Explain the IEEE 802.11 Protocol Architecture and its Services. 10
- (b) An organization is granted a block of address starting with 143.87.49.53/18 Find the following 10
- (i) Subnet mask in dotted decimal:
  - (ii) Number of networks & Number of hosts
  - (iii) Subnet address
  - (iv) First usable host & Last usable host
  - (v) Broadcast address
- 2 (a) Explain the Domain Naming System. Explain its all rule and components. 8
- (b) Explain the ISO-OSI Reference Model in details. 7
- 3 (a) Explain the Unicast Routing Protocol and Explain OSPF and RIP 8
- (b) What is the difference between distance vector and link state routing protocol. Explain any link state routing algorithm. 7
- 4 (a) Explain 2-layer, 3-layer Switch and Bridge, Gateway. 8
- (b) Explain the concept of Redundancy used by Data Link Layer for Error Detection? Calculate the VRC for 111010,1101100,1110101011010 7
- 5 (a) What do you mean by ARP and PPP over the Internet Standard? Explain its features in details. 8
- (b) Explain the IP Addressing System along its classes. What do you mean by Subnet Masking? 7
- 9-91 92-123 124-193 194-222 224-247 248-256
- 6 (a) Explain the CRC and Checksum Error detecting algorithm with some example. 8
- (b) Write short note following (any two) 7
- (i) SMTP
  - (ii) MPLS
  - (iii) IP over ATM
7. (a) What is Quality of Service? What are the methods used to provide QoS? 8
- (b) Explain the concept of Network Address Translation? 7

