

160-04.

[REVISED COURSE]

MA-8067

(3 Hours)

[Total Marks : 100

- N.B. : (1) Question No.1 is compulsory.
(2) Attempt any four questions out of remaining six questions.
(3) Figures to the right indicate full marks.
(4) Illustrate answers with sketches wherever required.
(5) Use legible handwriting.

1. (a) Explain Network Design steps in brief. 10
(b) Discuss the genetic standardization process. 10
2. (a) Write short notes on : 15
(i) Repeaters (iv) Routers.
(ii) Hubs and LAN switches (v) Gateways.
(iii) Bridges
(b) Draw and explain the classic product to market life cycle curve. 5
3. (a) Draw and explain the SONET Architecture in brief. 10
(b) What are the benefits of Gigabit Ethernet ? Which options supported by Gigabit Ethernet for physical layer standard ? 10
4. (a) Write short note on : 10
(i) HDLC protocol (its modes and frame format).
(ii) FDDI (protocol stack and frame format).
(b) Discuss in brief about Frame Relay. It's advantages and disadvantages. 10
5. (a) Explain layered architecture of ATM as well as it's cell format. 10
(b) (i) What are the additions and enhancement of IPv6 over IPv4. 5
(ii) List some ICMP messages. 2
(iii) Draw TCP Frame Format. (Don't Explain) 3
6. (a) What is traffic sizing and traffic characteristics ? Discuss its need. 10
(b) (i) What is the queuing system notation ? 3
(ii) What are the causes of delay ? 4
(iii) Write the formula for poisson distribution. 3
7. (a) Compare the FR, ATM and Private lines by considering the WAN services. 10
(b) Write short note on : 10
(i) X-25
(ii) SMDS.