

IT-603 (GS)
B.E. VI Semester Examination, June 2020
Grading System (GS)
Internet Technology and Network Management
Time : Three Hours

Maximum Marks : 70

- Note:** i) Attempt any five questions
ii) each question carries equal marks.
iii) Assume suitable data if missing.

1. A router with IP address 125.45.23.12 and Ethernet physical address 23:45:AB:4F:67:CD has received a packet for a host destination with IP address 125.11.78.10 and Ethernet physical address AA:BB:A2:4F:67:CD.
 - i) Show the entries in the ARP request packet sent by the router. Assume no subnetting.
 - ii) Show the entries of ARP packet sent in response to part (i).
2. What are the limitations of IPv4 protocol? How these can be overcome in IPv6? Also, make a comparison between IPv4 and IPv6.
3. Explain the following term:
 - a) TFTP
 - b) FTP
 - c) DHCP
4. An IP and ICMP packet comes back with the following information.
Original time stamp = 46
Receive time stamp = 59
Transmit time stamp = 60
Return time = 67
Calculate sending time, receiving time and round trip time.
5. Explain the UDP on the following points.
 - i) UDP header
 - ii) UDP check sum
 - iii) UDP server design
6. Write short notes on any two:
 - a) Distance vector routing
 - b) RIP
 - c) Subnet Mask
 - d) Report Management
7. Differentiate TCP and UDP. Why is TCP reliable and UDP unreliable protocol? Explain.
OR
What is the purpose of BGP? List the advantages and disadvantages of BGP.
8. Write a short notes (any two):
 - a) SMTP
 - b) Performance Management
 - c) Security Management
