The University of Burdwan

M.Sc. 2nd Semester Examination, 2020(CBCS)

Subject: Computer Science and Application

Paper: MCSA-203

Full Marks: 40   Time 2 Hours

Answer any eight questions (All questions contain equal marks)   (8 X 5 =40)

1. **How does firewall work?**

2. **Write the process of TCP connection open.**

3. **Discuss the structure of DNS message.**

4. **Write down the function of DHCP and SMTP protocol.**

5. **Write a short note on NAT.**

6. **Explain the format of the SDLC frame.**

7. **What is the Manchester and Differential Manchester coding of the following? 110011010101**

8. **What is the code word of the data word 1100111 using Hamming code?**

9. **Using CRC technique calculate the code word of the message x^7+x^6+1 with the common devisor x^3+1**

10. **Suppose a router receives an IP address 192.56.43.0 /27. Using subnet mask calculate the class of the address.**