Total Time: 35 Minutes   **Total Marks: 15**

Q1. Why multiplexing is classified into three categories?   **[2 marks]**

Q2. TCP is reliable and connection oriented but UDP is unreliable and connectionless

communication. Why?   **[3 marks]**

Q3. The following number is a dump of a UDP header in hexadecimal format.   **[4 marks]**

                        DC13057B55ABFD6C

(i) What is the source port number?   (iii) What is the total length of the UDP datagram?

(ii) What is the destination port number?   (iv) What is the length of the data?

Q4. Suppose you are given 100Mbps bandwidth. You have 15 customers who live in Dhanmondi area.
Each of them required at least 4Mbps bandwidth when they use. Which multiplexing technique will you
use to connect them? Why? Briefly describe the working procedure of that technique.   **[1+2+3=6 marks]**