

## Quiz\_4

Department of Computer Science and Engineering (CSE)

Daffodil International University

Student's ID: ..... Program: ..... Semester: ..... Year: .....

Course Code: ..... Course Title: ..... Section: ..... Date: .....

Class Test No: ..... Signature of the Course Teacher: ..... Set: B

Answer any one of the following questions.

### Question 1

(5+5+5) = 15 Marks

- a) Why *slotted ALOHA* is better than pure ALOHA? Justify your logic.
- b) A slotted ALOHA network transmits 200-bit frames on a shared channel of 200 kbps. What is the throughput if the system (all stations together) produces
  - i) 1000 frames per second
  - ii) 500 frames per second
  - iii) 250 frames per second.
- c) Compare *Polling* and *Token passing* with necessary diagram.

### Question 2

(7+4+4) = 15 Marks

- a) Suppose you have 4 stations (A, B, C and D).  
A is sending 1,  
C and D are sending 0 &  
B remains silent  
Examine the CDMA multiplexing values using the Walsh table.
- b) Which of the CSMA (CSMA/CD or CSMA/CA) is used in traditional ethernet?  
Explain that with proper figure.
- c) CSMA is based on the principle "listen before talk". Judge the statement.