

CARLETON UNIVERSITY
School of Computer Science

COMP3203– Principles of Computer Networks
Assignment 6

Instructor: Prof. AbdelRahman Abdou

Winter 2022

The assignment is **worth 1.82%** of the total course grade. It is graded out of 10, so your mark will be scaled accordingly.

You should submit a PDF document with your solutions in the respective assignment dropbox on cuLearn. For example, if you use MS Word, save it as PDF and upload. Name the PDF file as:

“A#_FirstName.LastName_StudentNumber.pdf”

So if John Smith, whose number is 123456789, is uploading the solution for Assignment 3, John should name the file “A3_John_Smith_123456789.pdf”.

Make sure you upload your solution before the deadline, which is at **11:59pm EST on Apr 12th**. As usual, feel free to ask questions on our Brightspace forum.

Distribution of Marks

Question	Points	Score
1	6	
2	4	
Total:	10	

1. Answer the following questions on Ch.7.
 - (a) (3 points) Describe the role of the beacon frames in 802.11.
 - (b) (3 points) Discuss the hidden terminal problem, and how it can be avoided.
2. Answer the following question on Ch.8.
 - (a) (4 points) An adversary obtained the ciphertext of a message, and knows the message is a string of four characters encrypted by a public key using 4096-bit RSA. Explain how a computationally bounded adversary can efficiently recover (decipher) the message.