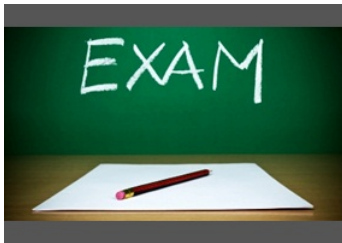# Discrete Structures: CMPSC 102

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Fall 2019
Week 8

- Given on Friday 18th during Class time (11am)
- Online format
- Two hours to complete
- Ten questions: Multi-choice, True/False, Essay

What to study
Same as during the quiz

- **Slides, notes, with chapters to add detail to class material**
- Main ideas behind mathematical subjects in class (again, study your slides)
- Python basics and code
  - Picking out bugs of code or determining output
  - Study the code from the practicals and material covered in class to understand the how programs worked.
  - Lambda functions, list comprehensions
  - `for` loops using `range()`
  - Iterations over sequences
  - Sequences, sets, lists, dictionaries, tuples
  - Conditional statements

- True and False Boolean values and equations
- `AND` statements
- `OR` statements
- Properties of Sequences: (i.e., Associativity, Commutative and others)
- Tautologies and Contradictions
- Truth tables:
  - What are they?, How used?, How to determine decisions using them?
- Conditional Implications ($A \rightarrow B$) and ($A \leftrightarrow B$)
  - Dynamic vs. Static Data Structures (Python code)
  - Streams, Iterators and generator functions (Python code)