

Cairo University  
Faculty of science  
Mathematics Department  
30 min.



Mid Term 2 Exam(Sum. 2019)  
Artificial Intelligence  
(Comp408)

Name:----- ID: -----

The Quiz is in **TWO** pages:

**Q1) Represent the following sentences in first-order logic**

- a. There are exactly one students studying A.I.
- b. There was a student who scored 100 on every quiz.
- c. For every quiz, there was two students who scored 100 on it.
- d. Everyone has some favorite food.
- e. Every person likes red apples.
- f. There is a person who likes all food.

**Q2) Put in the CNF Form**

- a.  $(A \wedge B) \Rightarrow (C \wedge D)$

**b.**  $\exists y \text{ course}(x) \wedge \text{std}(y) \Rightarrow \text{pass}(y,x)$

Best Wishes  
Areeg Abdalla