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الدرجة الكلية 2019  
نصف العام



**Menufiya University**  
1<sup>st</sup> Term – Final Exam  
Class: 3<sup>rd</sup> Year  
Subject: Artificial Intelligence



**Faculty of Electronic Engineering**  
Dept. of Computer Science and Engineering  
Time: 3.00 hours  
Date: 1/1/2020

**Answers all from following questions (in one page) [70 Marks]**

- 1-a) Write the short note about the Artificial Intelligence problem. [10 Marks]
- 1-b) State the various languages used with Artificial Intelligence. [5 Marks]
- 2-a) Describe the Problem Characteristics. [5 Marks]
- 2-b) What are the required steps for building a system to solve a problem? [5 Marks]
- 3-a) Define the search technique, illustrate its advantage and disadvantage? [5 Marks]
- 3-b) Illustrate the difference between uninformed and informed search strategies; state the different informed and uninformed search strategies. [10 Marks]
- 4-a) Define the knowledge representation, state the difference between Declarative and Procedural knowledge. [5 Marks]
- 4-b) Write a short note about the various methods for knowledge representation. [10 Marks]
- 5-a) What is the meaning of the machine learning; explain the difference between the most famous of machine learning algorithms? [10 Marks]
- 5-b) Show how to calculate the entropy's value of the attribute that has three goals values as (low= 5, medium = 3, large = 7). [5 marks]

With my best wishes

Assoc. Prof. Ahmed M. Elmahalawy