

Student Program:

Student Name:

Student ID:

Marks:

| <i>Q1</i> | <i>Q2</i> | <i>Total(10)</i> |
|------------------|------------------|-------------------------|
| | | |

Question 1[5 marks]

A) Compare between the following [2 marks]

| | Frames | Semantic Net |
|--|----------------|--------------|
| Knowledge Representation Key elements | 1- 2- 3- | 1- 2- |
| Inference Mechanisms | | |

B) State True/False (Correct the answer in case of false, Explain) [2 marks]

1. The semantic web is referred to as syntactic web

-
2. An instance of a superclass is also an instance of its subclasses.
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c) Give one use for equivalent classes. You can explain using example(s). (1 Mark)

Question 2[5 marks]

Describe the following in terms of ontology

Company ABC is a software development company. The three Departments within this company are: Sales, Administration, and Programming. Mohamed is the manager of programming department. Ahmed and Aly are programmers. Ahmed and Aly are brothers. They have only one sister, called Eman. They live in Cairo. Eman works as a sales person in XYZ company.

A. Describe required relationships between classes of the developed ontology [1marks]

B. Identify the type of used property [1marks]

C. Identify whether your developed ontology would contain the following: [3 marks]

1. disjoint classes

2. Cardinality

3. domain, range

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