

***Student Name:***

***Student ID:***

***Marks***

<b><i>Q1</i></b>	<b><i>Q2</i></b>	<b><i>Total(10)</i></b>

**Question 1[6 marks]**

***A) State True/False (Correct the answer in case of false, Explain)[2Marks]***

[1] The first step to develop an ontology is to identify the main terms of a domain (self\_standing\_entities)

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[2] Namespaces are used in RDF statement as reference to ontology where subjects are defined

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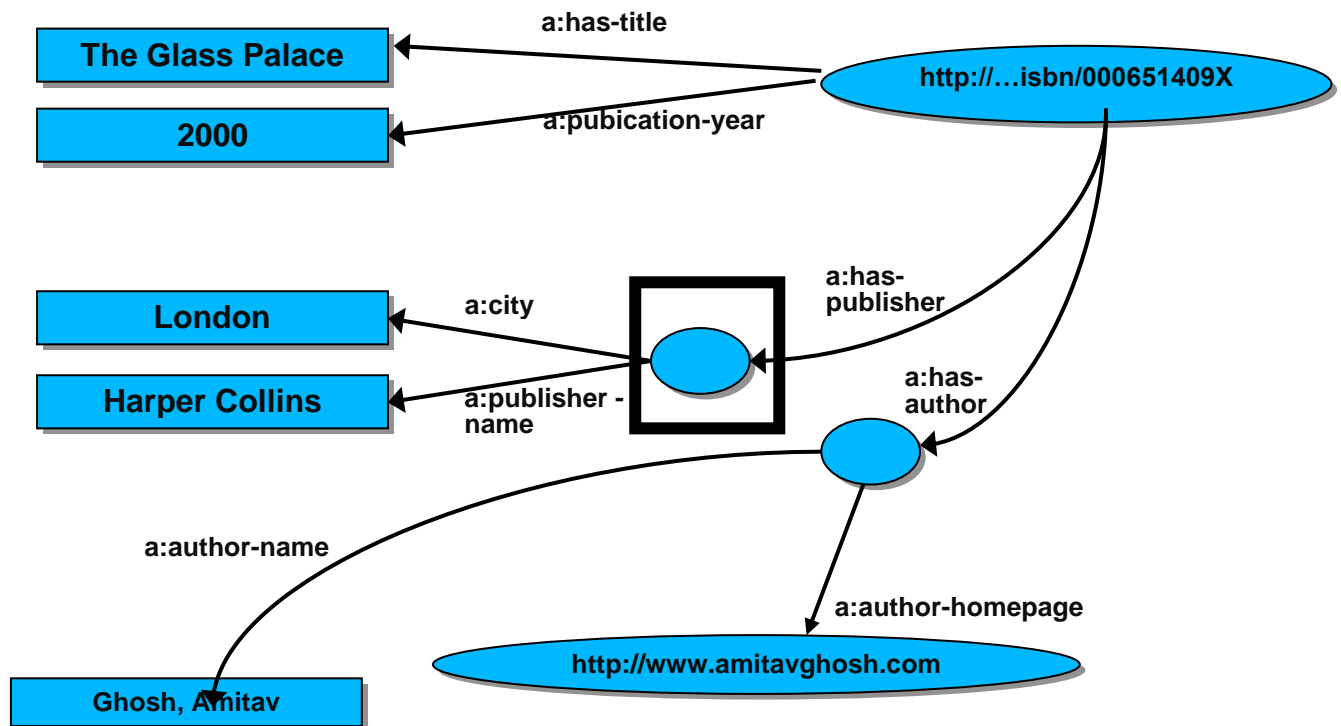
[3] An instance of a superclass is also an instance of its subclasses.

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[4] RDF statement is represented using graph only

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**B) Consider the following ontology that describes book entity and answer the following questions: [4 Marks]**



1. Identify the main classes of this ontology

2. For each of the identified classes, complete the following table:

	Class name1	Class name2	Class name3
Data property			
Object property			
Domain			
Range			

3) What are the usage of empty oval inside the black square

4) Give example of Cardinality of any property

## **Question 2[4 marks]**

*Consider the following RDF code and answer the following questions:*

```
<?xml version="1.0" encoding="UTF-8" ?>
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:dc="http://purl.org/dc/elements/1.1"
  xmlns:ex="http://example.org/stuff/1.0">
  <rdf:Description rdf:about="http://www.w3.org/TR/rdf-syntax-grammar"
    dc:title="RDF/XML Syntax Specification (Revised)">
    <ex:editor>
      <rdf:Description ex:fullName="Dave Beckett">
        <ex:homepage rdf:resource="http://purl.org/net/dajobe/" />
      </rdf:Description>
    </ex:editor>
  </rdf:Description>
</rdf:RDF>
```

1. Construct the RDF graph of this code?

2. What are the namespaces used in this example
3. Show that if this graph could contain a blank node, please explain your answer
4. Extract the main predicts of this code ?

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