

## Unit IV

S.NO	Question
1	Write a notes on the semantics of First-Order Logic
2	Discuss about modus ponens and explain how it is used in forward and backward chaining?
3	Illustrate Description Logics with suitable examples
4	Give FOL translations for the following sentences: 1. Vegetarians do not eat meat. 2. Not all vegetarians eat eggs.
5	Give a set of facts and inferences necessary to prove the following assertions: 1. McDonald's is not a vegetarian restaurant. 2. Some vegetarians can eat at McDonald's. Don't just place these facts in your knowledge base. Show that they can be inferred from some more general facts about vegetarians and McDonald's.
6	$\forall x \text{VegetarianRestaurant}(x) \Rightarrow \text{Serves}(x, \text{VegetarianFood})$ Give a FOL rule that better defines vegetarian restaurants in terms of what they serve.
7	List Some of the noun and verb relations in WordNet
8	Discuss and explain about the Relations Between Senses
9	Define and discuss about Word Senses
10	Write the Hyponymy chains for two separate senses of the lemma <b>bass</b>
11	Write a short note on Unambiguous Representations and Canonical Form.
12	How to bridge the gap from formal representations to representations that tell us something about some state of affairs in the world? Explain?
13	What is Model-Theoretic Semantics? Discuss.
14	Write the FOL Representation for the following sentences.Explain I only have five dollars and I don't have a lot of time.

	if AyCaramba is a Mexican restaurant near ICSI All vegetarian restaurants serve vegetarian food.
15	Write the context-free grammar specification of the syntax of First-Order Logic representations.
16	Discuss in detail about lambda notation.
17	What is inference? Explain modus ponens in detail?
18	Write a short notes on Event and State representations.
19	Write the detailed model for the restaurant world.