ARTIFICIAL INTELLIGENCE QUESTION BANK

Module-2

1. Define the following with examples

   (a)Objects (b)Functions   (c)Relations.

2. What are Mention the differences between ontological commitment and epistemological commitment.

3. What is domain?

4. what is tuple?

5. Define FOL.

6. What is knowledge base.

7. With an example, show objects, properties functions and relations. Example

8. What are domain elements.

9. Define syntax and semantics.

10. What are the 3 types of symbol which is used to indicate objects, relations and functions?

11. Define terms.

12. Define Atomic sentence and complex sentence.

13. Define Quantifier and it's types.

14. What are the words we use to query and answer in knowledge base?

15. Define skolem constant.

16. What are the basic Components of propositional logic.

17. Define Modus Ponen's rule in Propositional logic.

18. Describe the syntax of first order logic as specified in BNF.

19. Define the terms- variable, ground term.

20. With an example explain universal quantification and existential quantification.

21. What is equality with respect to terms in FOL?

22. Describe how first order logic is used in the following

   (a) Assertions and queries. (b) Kinship Domain.

23. Explain inference rules for quantifiers.

24. Explain Unification and lifting with an algorithm.

25. Explain forward chaining algorithm for propositional logic.

26. Explain backward chaining algorithm for first order logic.

27. Briefly explain resolution in FOL with an example.

28. a) Infer FOL for the following expressions using quantifiers

I.   For all x, if x is a king, then x is a person

II.   King John has a crown on his head

III. "Brothers are siblings

IV.   There is someone who is loved by everyone"

V.   everyone dislikes parsnips