



- (b) Define the term logic. What is the role of logic in developing Artificial Intelligence application? Compare Propositional logic with First order logic. Give appropriate examples. (13)

12. (a) Elaborate on forward and backward chaining process. (13)

Or

- (b) Design an ontology for representing the Educational, family and hostel details of Students in an university – Sketch and explain. (13)

13. (a) Elaborate of the formation of fuzzy rules using an example of your own. (13)

Or

- (b) How Fuzzy logic overcomes normal if – else statements? Give example and explain the process. (13)

14. (a) Describe about the Regression and Classification Process used for Linear datasets. (13)

Or

- (b) What is a Support Vector Machine? How is its useful for Machine learning domain? What are advantages and disadvantages of SVM. (13)

15. (a) Elaborate about the process involved in NLP. (13)

Or

- (b) Describe the process involved in Information Retrieval system. (13)

PART C — (1 × 15 = 15 marks)

16. (a) (i) Point out the importance of syntax and semantics in NLP. Construct a grammar and draw the parse tree for the sentence. (8)

(1) "The Crow is living in the Nest".

(2) "Sachin scored century"

- (ii) How Bayesian approach is used in developing Intelligent Approaches. (7)

Or

- (b) Elaborate about EM algorithm with appropriate use case. (15)