

PART B — (5 × 13 = 65 marks)

11. (a) Elaborate on the following search technique
- (i) Greedy best-first search (5)
 - (ii) A* search (5)
 - (iii) Memory bounded heuristic search. (3)

Or

- (b) Explain Backtrack searching for Constraint Satisfaction Problem for Map Coloring Problem. (13)
12. (a) Relate first order logic with proposition logic and discuss in detail about the same. (13)

Or

- (b) Describe a procedure for converting a sentence to CNF with an example. (13)
13. (a) Discuss about the exact inference in Bayesian networks. (13)

Or

- (b) Explain forward chaining and Backward Chaining for Proportional Definite Clauses. (13)
14. (a) Explain in detail about STRIPS and write the components of STRIPS for the given scenario: "Consider a flight journey in a luxurious flight from India to US". (13)

Or

- (b) (i) Express your views about Rote Learning. (7)
- (ii) How would you express Formal learning theory? (6)
15. (a) Illustrate in detail about the expert system shells. (13)

Or

- (b) Explain in detail about General Learning Model. (13)