AI   **10 MARKS**   -- -> both of 10 m and 5 m   @ -> repeated times

1. Explain Greedy Best-First Search. @
2. Explain Bayes' rule and its uses
3. Discuss on Breadth first search with an example.
4. Discuss on depth–first search method.
5. Explain AI as intelligent Agent.
6. Explain the clauses of Intelligent Agent.
7. Explain the foundations of AI.--
8. What is Robotics? Discuss. /Write in detail about robotics. @
9. Explain backward chaining.
10. Explain the forward chaining algorithm. /Explain forward–chaining rule system. @
11. Discuss on the concept of knowledge in learning.
12. Mention the various steps involved in Knowledge Engineering process.
13. Write short notes on Decision -Theoretic Expert Systems. @
14. Explain uniform search strategies.
15. What are the major tasks in Natural Language Processing? Explain them.--
16. What are Neural Networks? Explain the applications of Neural Networks.
17. Write short notes on the following terms.
    (a) Neural Network
    (b) Units in Neural Network
    (c) Network Structures.
18. Discuss on :
    (a) Memory bounded search,
    (b) Iterative improvement algorithms.
19. List out some of the prime application domains for Robotic Technology.
20. Illustrate image formation.
21. Explain back tracking search for CSPs.
22. Discuss on Genetic Algorithms.
23. Explain the general model of Learning Agent.
24. Discuss Hill climbing search method with an example. @
25. What are the points to define a logic in knowledge based agents?
26. Explain the method for constructing Bayesian Networks. / the semantics of Bayesian networks -- @
27. What are the Important points that allow Learning of relational models?
28. Explain the component steps of communication.
29. What are the basic representations for planning? Describe them.
30. Explain syntax and semantics
31. How to extract 3-D information using vision? Explain.
32. Explain constraint satisfaction with an example.
33. Discuss on control knowledge.
34. Explain forward vs backward reasoning. -- @
35. Describe minimalist reasoning.
36. Explain default reasoning
37. Discuss on learning in problem solving
38. Describe prepositional logic and it rules.
39. Explain the general Ontology of AI.
40. Describe about Heuristic functions.
41. What is partial -order planning? Explain.
42. Discuss about learning with complete data.
43. Discuss on the instance based learning.
44. Discuss on explanation - based learning
45. Explain adversarial search.

5 marks

1. What are the things you need to build a System?
2. Discuss Simple reflex agents with neat diagram.
3. Write short notes on Agent Function.
4. Discuss on Knowledge-Based Agents.
5. Write short notes on the Structure of Intelligent Agents.
6. Write short notes on Control Strategies.
7. Write the algorithm of local search.
8. Explain Learning in Online Search.
9. Write short notes on Sensors.
10. What is goal – directed reasoning? Explain.
11. Write about conditional planning.
12. What are the components of a planning system? Give a note. @
13. What are robot manipulators? Give a note.
14. Write short notes on Semantics. --
15. Write about procedure Versus declarative Knowledge.
16. What are the two types of learning in unknown environment? Give a note on them.
17. Describe logic Programming.
18. Write short notes on Goal-Based agents.
19. Write a short note on knowledge engineering for planning.
20. Describe role learning.
21. What is meant by Navigation?
22. Write about the characteristics of a problem.
23. How will you combine forward and backward reasoning? –
24. Explain complex decision
25. Describe conditional planning.
26. Write short notes on approaches to knowledge representation.
27. What are the steps in National Language Processing? –
28. Give a note on the major design issues in speech systems.
29. Write a brief note on Model-reflex agents.
30. Explain genetic algorithm.
31. Write briefly on knowledge engineering process.
32. Explain unification
33. Describe approximate inference in Bayesian networks. –
34. Write a brief note on kernel models. @
35. Discuss on early image processing operations.
36. How to form image using perception? Give a note.
37. Explain Alpha-Beta pruning
38. Discuss on conditional planning.
39. Describe about knowledge in learning
40. What is augmented grammar? Discuss
41. Write short notes on object recognition.
42. Write a short note on Ambiguity. @
43. Write about Decision networks. @
44. Explain the history of Artificial Intelligence. / Write a short note on foundations of AI. -- @
45. Write short notes on production system.
46. Describe Heuristic search technique.
47. Write about perception.
48. What are the extensions and notational variations? Give a note.
49. How to design electronic circuits domain? Describe the procedure.
50. Write short notes on Brightness–based recognition.
51. Compare STRIPS and ADL languages for representing planning problems. @
52. Discuss on Hybrid Architecture.

1 marks

1. 1.Expand PEAS.
2. Expand SLAM.
3. Expand KBIL.
4. Expand EBL and RBL. @
5. What is TMS?
6. What is MACROP?
7. What is goal test?
8. What is syntax?
9. What is best –first search strategy?
10. Define Agents. @
11. Define AI. @@
12. Define the term objects
13. Define terminal test.@
14. Define – Disambiguation.
15. Define terminal test.
16. Define Alpha cutoff.
17. Define game true.
18. Define speech act.
19. Define Macro–operator.
20. Define path cost.
21. Define goal states.
22. Define Belief networks.
23. Define Inductive Learning.
24. What is the difference between supervised and unsupervised learning?
25. What is Bayesian learning
26. What is Propositional Logic?
27. What is a transition model?
28. What are called phrases?
29. What is Total Turning Test?
30. What is Problem Formulation?
31. What is natural language understanding?
32. What is bidirectional search?
33. What is logic programming?
34. Define Unification.
35. Define procedural representation.
36. Define utility problem.
37. Define frame problem.
38. List out AI Languages.
39. What is Hybrid Bayesian Network?
40. What are the two kinds of execution monitoring?
41. Define Neuron. @
42. Define image understanding.
43. What is a speech act?
44. What is sensor fusion?
45. Define Information Retrieval.
46. What is statically stable Robot?
47. What is futility pruning?
48. What are called classic planning environments?
49. What is called regression planning?
50. What is called unsupervised Learning?
51. What are the elements of Learning agents?
52. What are the techniques used to overcome the uncertainty inherent?

53. What are the elements of a search-based problemsolver?
54. Who is called as knowledge engineer?
55. What are searching strategies?
56. Define problem solving agent.
57. What is knowledge acquisition?
58.