ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

1. What is PEAS in AI? Write PEAS description for: a) Medical diagnosis system b) Part-Picking Robot
2. Define Agent. Explain model based reflex agent with the help of neat diagram.
3. Explain hill climbing algorithm. With the help of a neat diagram, explain plateau, ridge, local maxima and global maxima.
4. Describe the First order logic inference rules for quantifier.
5. Explain the Forward chaining and Backward Chaining and its properties.
6. What is a Bayesian Belief Network and explain how it can be used for building models.
7. How to represent AND Gate using linear classifiers.
8. Explain feed forward neural network.
9. Explain RBF neural network.
10. Explain multilayer neural network.
11. What is mean by back propagation? Explain. What are its advantages?
12. Explain linear regression with the help of example.
13. Explain strength and weakness of K means clustering.
14. Explain about hard margin SVM and soft margin SVM.
15. With the help of example explain different types of nodes used in decision tree algorithm. Discuss about any one problem of decision tree.