

Time: 3 Hours

Total Marks:80

N.B.: 1) Question No.1 is compulsory.

2) Attempt any THREE of the remaining questions.

3) Figures to the right indicate full marks

Q.1	Write short notes on any Four	
	(a) Activation Function	5
	(b) Expectation and Maximization Algorithm	5
	(c) Bagging and Boosting	5
	(d) Intelligent Agent	5
	(e) SVM	5
Q.2	A. Explain different basic neural network models with neat diagram.	10
	B. Explain how dimensionality can be reduced using Principal Components Analysis.	10
Q.3	A. Explain AO* algorithm with example	10
	B. Explain K- Nearest Neighbour algorithm with suitable example.	10
Q.4	A. Discuss various search strategies and explain un-informed Search.	10
	B. Explain First Order Logic with example.	10
Q.5	A. Explain Perceptron algorithm with a neat flowchart.	10
	B. Explain Decision Tree algorithm with example.	10
Q.6	A. Define the terms Bias and Variance and discuss Random Forest Algorithm in detail.	10
	B. Explain Hill Climbing algorithm with its disadvantages.	10
