BTS (C) – VII- (S) – 06 – 037 (C)

B. Tech Degree VII Semester (Supplementary) Examination June 2006

IT/CS/EC/EB/EI 705 (C) ARTIFICIAL NEURAL NETWORKS
(2002 Admissions Onwards)

Time : 3 Hours   Maximum Marks : 100

I.	(a)	Explain the biological model of a neuron.	(8)
	(b)	Explain exclusive - OR problem	(12)
		OR	
II.	(a)	Define linear seperability. What are the methods used to overcome the limitations of linear seperability?	(12)
	(b)	Explain the perception training algorithms.	(8)
III.	(a)	Give the back propagation algorithm.	(14)
	(b)	Discuss any 3 applications of back propagation.	(6)
		OR	
IV.	(a)	Explain the terms local minima and temporal instability.	(10)
	(b)	What are the significance of momentum and learning rate in back propagation algorithms.	(10)
V.	(a)	Explain the architecture of counter propagation networks.	(10)
	(b)	Explain the training of Kohonen layer.	(10)
		OR	
VI.	(a)	Discuss any two applications of counter propagation network	(10)
	(b)	Explain the training of Gross berg layer.	(10)
VII.	(a)	Explain simulated annealing in detail.	(8)
	(b)	How Boltzman training is different from Cauchy training.	(12)
		OR	
VIII.	(a)	Illustrate the use of Artificial neural network for solving a non-linear optimization problem.	(10)
	(b)	Explain the term network paralysis. Discuss any one method to overcome it.	(10)
IX.	(a)	Discuss the architecture of ART network.	(14)
	(b)	Discuss any one application of Hope field network.	(6)
		OR	
X.	(a)	What is Bi-directional Associative memory? Explain.	(12)
	(b)	Write short notes on continuous BAM and Adaptive BAM.	(8)

***