M.SC. - II (Computer Science) Fourth Semester old MSC241232 - Elective-II - Neutral Network Paper-III

P. P Tim	ages : 1 ne : Thro	2 ee Hours	* 1 8 4 2 *	GUG/W/18/2352 Max. Marks : 80	
	Notes	s: 1. 2. 3.	All the questions are compulsory and carry equal marks. Draw neat and labelled diagram wherever necessary. Avoid vague answers and write the answers relevant and specific only.	to questions	
1.		Either			
	a)	Explain	in detail Neuron signal functions.	8	
	b)	Discuss	the geometry of Binary Threshold Neurons.	8	
			OR		
2.	c)	Write in	detail about Non-linearly separable problem.	8	
	d)	Explain	in detail pattern Recognition.	8	
		Either			
	a)	Discuss	about perceptron learning algorithm.	8	
	b)	Explain	the Gradient Descent Rules.	8	
			OR		
3.	c)	Explain	in detail α -least mean square learning.	8	
	d)	Write in	detail the applications of LMS to Noise cancellation.	8	
		Either			
	a)	Explain	in detail structure Growing Algorithm.	8	
	b)	Describ	e Multilayered Network Architecture.	8	
			OR		
4.	c)	Explain	the Back propagation Learning Algorithm.	8	
	d)	Discuss	the universal function Approximation in detail.	8	
	a)	Either Explain	in detail Error functions for classification problems.	8	
	b)	Discuss	in detail about support vector Machine.	8	

OR

	c)	Write and explain Bayes Theorem.	8
	d)	Explain probabilistic Interpretation of a Neuron Discriminant function.	8
5.		Attempt all the questions.	
	a)	Write the salient features of neural network.	4
	b)	Write a short note on Approximate Gradient Descent.	4
	c)	Explain in brief about Reinforcement learning.	4
	d)	Write in short about posterior probabilities.	4
