

Marking scheme for [REDACTED]

# BE / Insem. - 63

BE (Information Technology) (Semester-I)

In-Sem Examination

Elective-I: Soft Computing

(2012 Pattern: Subject Code - 414456)

Time : 1 Hour

Max. Marks :30

Instructions to Candidate:-

1. Neat diagram must be drawn whenever necessary.
2. Figures to the right indicate full marks.
3. All questions carry equal marks.
4. Assume suitable data if necessary.

Q1.	a)	Soft computing gives "Approximate solutions"	5
	b)	SC is used to solve questions where deterministic methods fails. SC deals with complex problems.	5
Q2.	a)	Symbols & frames - processing with LISP & Prolog.	5
	b)	"multilevel logic to obtain approximate acceptable solution."	5
Q3.	a)	Weights are updated proportional to positive or negative error at the output.	4
	b)	1. To normalise the output. 2. continuous activation function - reglin 3. discrete AF - classification.	6
		dimension	
Q4.	a)	1. Size of input pattern - no. of input output units 2. Hidden layer decided empirically	5
	b)	1. Function Approximation and pattern classification. 2. Slow convergence, local minima	5
Q5.	a)	1. Hebbian - Def 2. Competitive Learning - winner take all	6
	b)	Hopfield Net capacity - size of mem	4
Q6.	a)	Diagram & operation	6
	b)	1. Architecture - FF network 2. Learning - parallel relaxation	4