	InSem Examination-II Summer2024		
	Exam Seat No.:		
	Academic Year:2023-2024	Semester:II	
	Name of Programme: F.Y.M.Tech(E&TC)	Pattern:2022	
	Name of Course: VLSI for AI and Neural Networks	Course Code: ETC225109	
	Max. Marks:30	Duration:1 Hr	

Instructions: Candidates should read carefully the instructions printed on the Question Paper and on the cover page of the Answer Book, which is provided for their use. 1. This question paper contains 1 page(s). 2. Answer to each new question is to be started on a new page. 3. Assume suitable data wherever required, but justify it. 4. Draw the neat labelled diagrams, wherever necessary. 5. The last columns indicates the Course Outcome and level of Blooms Taxonomy of the Question/sub-question.	

Question No. 1 Attempt following Question

a)   Explain the learning objective for threshold logic neurons   (7)   CO1

OR

b)   Discuss pattern mode training and batch mode training in back propagation algorithm.   (7)   CO1

c)   List any four neuronal signal functions used in ANN   (8)   CO1

OR

d)   Explain the learning algorithms in neural network   (8)   CO1

Question No. 2 Attempt following Question

a)   what are the main problems with Back propagation learning Algorithms for Analog VLSI Implementation   (7)   CO2

OR

b)   What is Analog VLSI Neural Learning Circuit   (7)   CO2

c)   Explain Implemention of a Kohonen network using Analog CMOS   (8)   CO2

OR

d)   Describe an Analog Implementation of the Boltzmann machine with Programmable learning Algorithms   (8)   CO2

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