E **Reg. No. :** | | | | | | | | | | |

Question Paper Code: 51Q02

M.E. DEGREE EXAMINATION, NOV 2018

First Semester

Computer Science and Engineering

15PCS102- MACHINE LEARNING TECHNIQUES

(Regulation 2015)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART - A (5 x 20 = 100 Marks)

1.	(a)	What is learning? Write any four learning techniques and in each case give the expression for weight- updating.	CO1- U	(20)
		Or		
	(b)	Define learning. Explain the concept of learning task.	CO1- U	(20)
2.	(a)	Explain Support Vector Classification in details.	CO2- U	(20)
		Or		
	(b)	Illustrate the gradient search to maximize likelihood in a neural net.	CO2- U	(20)
3.	(a)	Explain the distance weighted nearest neighbor algorithm.	CO3- U	(20)
		Or		
	(b)	Explain detail about K-nearest neighbor algorithm.	CO3- U	(20)
4.	(a)	Explain detail about Variance decomposition of error.	CO4- U	(20)
		Or		
	(b)	Explain details about Clustering Methods.	CO4- U	(20)

5. (a) Identify what are the machine learning applications in robotics. CO5- Ana (20)

Or

(b) Identify Why Game Theory at COLT. CO5- Ana (20)