

		<b>Harcourt Butler Technical University Kanpur</b>		<b>MID SEM</b>	
Branch		<b>MCA</b>		Program	
Course Name		<b>Machine Learning</b>		Semester	
Course Code		<b>ECA 554</b>		Year	
Time: <b>1.00Hr</b>		<b>Answer All Questions</b>		Maximum Marks	
Knowledge Level (KL)	<b>K1: Remembering</b>		<b>K3: Applying</b>		<b>K5: Evaluating</b>
	<b>K2: Understanding</b>		<b>K4: Analyzing</b>		<b>K6: Creating</b>
<b>Q. No</b>	<b>Questions</b>			<b>Marks</b>	<b>COs</b>
<b>1</b>	What are the ingredients of Machine Learning? Discuss different types of tasks that could be accomplished with machine learning.			3	CO1 CO2
<b>2</b>	Discuss some important issues encountered during feature engineering.			3	CO1
<b>3</b>	Describe the Gradient descent algorithm for multivariate regression. What are its pros and cons?			3	CO1
<b>4</b>	Describe the cost function used for logistic regression.			3	CO2
<b>5</b>	Explain the regularization approach to overcome the problem of overfitting in machine learning. Write down the cost function with regularization term in multivariate regression. Show the effect of regularization over performance diagrammatically.			3	CO4

\*\*\*\*\* End of Question Paper \*\*\*\*\*