

Student ID : Program : Semester: Spring/Summer/Fall Year :

Course Code : Course Title : Section : Date :

Class Test No. : Signature of the Course Teacher :

Q1.	<p>Consider the following data points for a simple multiple linear regression problem of car price prediction. (Hints: $b_0 = 5.0, b_1 = 1; b_2 = 0$)</p> <p style="text-align: center;"><i>Price ($\times 10^6$) in BDT, $(y) = \{4.0, 3.0, 2.0, 1.0\}$</i></p> <p style="text-align: center;"><i>Age in years, $(x_1) = \{1, 2, 3, 4\}$</i></p> <p style="text-align: center;"><i>Milage ($\times 10^2$) in Km, $(x_2) = \{2.0, 3.0, 5.0, 7.0\}$</i></p>	
	a) Write the appropriate model equation for predicting the prices. Describe the effects of the equation parameters on predicted output.	(5)
	b) For the given dataset, predict each of the possible prices.	(5)
	c) Justify performance level of the designed model.	(5)