ASSIGNMENT

Q1. State clearly classical K variate general linear model with its basic assumptions

Q2. Explain clearly as to what will happen when the basic assumptions about uniformity of variance of disturbance terms and rank condition for data matrix are violated one by one.

Q3. Give a very general bird eye view for the studies in econometrics methods.

Q4. Explain clearly the following terms

1. Partial correlation coefficients
2. Multiple correlation coefficient
3. Adjusted R square

Also state how they can be measured by the formulae, illustrating the case of trivariate linear model

Q5. What is Gauss Markov theorem? How would you estimate the regression coefficients for K variate GLM? Also State the formulae to find standard error of these estimates.

How OLSE of $\underline{\beta}$ and σ^2 are related to their MLE?

Q6. Give ANOVA for testing the regression coefficient of classical K variate GLM and also for testing the significance of multiple coefficient of determination.

Q7. Interpret the following computer output for 4 variable GLM

$Y = 0.36 + 1.2X_2 - 0.70X_3 + 3.89X_4$

SE	(0.01)	(0.17)	(0.32)	(0.08)
t	1.84	3.97	0.79	3.85

n=30 $R^2 = 0.9371$ $\bar{R}^2 = 0.9017$