BT2022 | QUIZ III | FEB-MAY 2021 |20 marks

Consider the dataset on X1, X2, X3, X4 vs. Y. Fit into a multiple linear regression model as follows.

$Y = B_0 + B_1 X_1 + B_2 X_2^2 X_1 + B_3 X_3 X_2^2 + B_4 X_1 X_3 X_4$

Obtain the parameter values B0, B1, B2, B3 and B4 (5 X 2 = 10 marks) along with their standard errors at alpha = 0.0145 (5 X 2 = 10 marks).