

# Assignment-7

EE22BTECH11012-A.Chhatrapati

**Question 63.2023)** Suppose from the estimation of a linear regression model

$$Y_i = \beta_0 + \beta_1 X_i + e_i$$

the residual sum of squares and the total sum of squares are obtained as 44 and 80, respectively. The value of coefficient of determination is (round off to two decimal places).

**Solution:**

RSS=residual sum of squares

TSS=total sum of squares

Coefficient of determination

$$R^2 = 1 - \frac{RSS}{TSS} \quad (1)$$

$$= 1 - \frac{44}{80} \quad (2)$$

$$= 0.45 \quad (3)$$