

$$R^2 = \frac{SS_{reg}}{SST} = 0.225 = B$$

$$D = G + 1 = 39 + 1 = 40$$

$$\text{Adjusted } R^2, C = 1 - \frac{(1 - R^2)(N - 1)}{N - K - 1}$$

$$= 1 - \frac{(1 - 0.225)(40 - 1)}{40 - 4 - 1} = 0.1364$$

(b) P-value = 0.0258

It is significant at 5% significance level

$$\text{Test statistic} = 3.477$$

(c) Hours of exercise

$$\text{coefficient} = 1.79$$