

THE HONG KONG POLYTECHNIC UNIVERSITY
HONG KONG COMMUNITY COLLEGE

Subject Title : Regression Analysis

Subject Code : CCN2313

Session : Semester One, 2018/19

Numerical Answers

Question 1

(a) $\hat{y} = 6.4074 + 2.9630x$

(b) 9.4222

(d)(ii) 90% confidence interval for α_1 : (4.7621, 15.9801)

90% confidence interval for α_2 : (-1.4243, -0.2086)

Question 2

(a)(i) $\hat{\beta}_0 \approx 54.5492$, $\hat{\beta}_1 \approx 0.6939$ and $\hat{\beta}_2 \approx -1.6745$

(a)(ii) 0.8231

Question 3

(b) 0.3367

Question 4

(c)(ii) (-3.7580, 7.6884)

Question 5

(b)(ii) 1.5838

(b)(iii) 0.9168