BAMS1613 June 2023 Answers

Q1. a) Population: All the citizens in a large city

Sample: A group of 58 citizens selected from the large city.

Variable of interest: Time spend on browsing the internet.

Type of variable: Quantitative continuous

- b) (i) $Q_1 = 4$, $Q_3 = 7.4$, Quartile deviation = 1.7 (ii) 41.38%
- c) Mean = 5.6207, Mode = 5.1, Standard deviation = 2.4625
- Q2. a) (i) 0.36708
 - (ii) 2, 1.2247
 - (iii) 0.9222
 - b) (i) 0.00023
 - (ii) 0.0668
 - c) (i) 0.59399
 - (ii) 0.018316
- Q3. a) (i) $37.45 \approx 38$
 - (ii) 0.0537
 - b) (1952.61, 2477.39) (RM)
 - c) Z= 1.455, do not reject H_0 .
 - d) Z=0.4, do not reject H_0 .
- Q4. a) (ii) 0.8
 - (iii) 0.4
 - b) (i) Independent variable: number of pages of the text book Dependent variable: Price (RM)
 - (ii) r = 0.9483
 - (iii) y = -6.7237 + 0.0991x
 - (iv) RM34.40

This is an extrapolation estimate, the prediction is not reliable and not accurate.