

BAMS1613 May 2022 Answers

- Q1. a) Population: All durian trees in the orchard.
Sample: None
Variable of interest: Quantitative continuous
- b) (i) 36.25 cm
31.82%
- c) Mean = 397.73 cm, Median = 391.25 cm, Standard deviation = 69.3795 cm
- Q2. a) (i) 0.087
(ii) 3.36, 1.396
(ii) 0.5714
- b) (i) 0.2327
(ii) 20.75076 ml
- c) (i) 0.1992
(ii) 1
- Q3. a) (i) 58700, 576.31
(ii) 0.01191
- b) (71.48, 78.92)
- c) $z = -4.6953$, reject H_0 .
- d) $z = -2.90474$, reject H_0 .
- Q4. a) (i) $x=36, y=29$
(ii) 0.7073
(iii) The two events are not mutually exclusive.
(iv) The two events are not independent.
- b) (i) Independent variable: Age (in year)
Dependent variable: Glucose level
(ii) $r = 0.5298$.
(iii) $y = 65.1426 + 0.3852x$
(iv) 82.4766
This is an interpolation estimate, the prediction is reliable and accurate.