

BAMS1613 Feb 2020 Answers

- Q1. a) (ii) (1) $Q_1 = 44.25$, $Q_3 = 54.75$, $QD=5.25$
(2) 38%
(iii) mean = 49.5 seconds, standard deviation = 6.8 seconds
b) (ii) 27/38
(iii) 91/190
- Q2. a) (i) 0.1949
(ii) 0.4572
(ii) 81.25
b) (i) 0.04395
(ii) 0.98926
(iii) 0.01074
c) (i) 0.1991
(ii) 0.98265
- Q3. a) (i) 172, 1.3
(ii) 0.9278, 186
b) (1.9368, 2.4632)
c) (0.173, 0.427)
d) $z=-8.376$, reject H_0 .
- Q4. a) (i) 1287
(ii) 700
(iii) 700
b) (i) $y = 119.51 + 42.02x$
(ii) $r = 0.8313$
(iii) $r_s = 0.8214$
(iv) The results obtained in part (ii) is more reliable than the results obtained in part (iii).
Spearman's rank correlation coefficient is only an approximation to the product moment correlation coefficient.