## **BAMS1613 Answers**

## May 2021

Q1. a) Mode = 33 minutes

- b) (i)  $Q_1 = 23$ ,  $Q_3 = 34.25$ , Quartile deviation = 5.625
  - (ii) 42%
- c) mean = 27.775 minutes

standard deviation = 8.8968 minutes

- Q2. a) (i) 0.0918
  - (ii) 0.8164
  - (iii) 0.0918, 2.8458
  - b) (i) 0.09763
    - (ii) 0.09678
  - c) (i) 0.9953
    - (ii) 0.1813
- Q3. a) (i) mean = 5.7, standard deviation = 0.2874
  - (ii) 0.1492
  - b) (113.52, 126.68)
  - c) z=4.472, reject  $H_0$ .
  - d) z=-1.76, do not reject  $H_0$ .
- Q4. a) (i) 0.08333
  - (ii) Not mutually exclusive
  - b) (i) Y = -2726.15 + 86.8X
    - (ii) 0.9649
    - (iii) 0.9940