Section A (2015)

1.
(a) 0.6 (b) 0.1 (c) 0.6 (d) 0.8

2.
(a) B(20,0.34) (b) 6.8 (c) 2.118 (d) 0.276 (e) 0.103

3.
(a) P(2.5) (b) 0.082 (c) 0.214 (d) 0.242

4.
(a) 0.6915 (b) 0.8682 (using interpolation)

5.
(a) (171.9, 215.2) (b) (1582.6, 5155.2)

6.
(a) 0.7 (b) Reject

7.
(a) (37.6, 25.1, 31.3,
    82.4, 54.9, 68.7)
(b) No evidence of association

8.
(a) Reject

Part B

9.
(a) [see lecture notes]
(b) (i) 0.2481
(ii) 0.9998
(iii) [long explaination]

10.
(a) 1/3
(b) 2
(c) (1 + 2x) / 12
(d) 15 / 8
(e) 39/64

11.
(a) (i) [see lecture notes] (ii) [see lecture notes]
(b) paired
(c) Do not Reject

12.
(a) (i) [see lecture notes] (ii) Do not Reject
(b) (i) [see lecture notes] (ii) Do not Reject
(c) (i) [see lecture notes] (ii) [see lecture notes] (iii) Do Not Reject