

THE HONG KONG POLYTECHNIC UNIVERSITY
HONG KONG COMMUNITY COLLEGE

Subject Title : Survey Design and Analysis

Subject Code : CCN2277

Session : Semester One, 2015/16

Numerical Answers

Question A2

- (a) 146, 3.145
- (b) 1.3
- (c) 7.607

Question A3

- (b) 12.5, 2.173
- (c) 112, 14

Question A4

- (b) 0.4, 0.112
- (c) 0.333, 0.087

Question A5

- (a) 0.6, 0.146
- (b) 6.833, 0.537

Question A6

- (a) 24.759, 2.361
- (b) 24.339, 0.436

Question B1

(a)(i)

ID	Sample mean \bar{y}	Probability of the selected sample
1,2,3	8	1/6
1,2,4	6	1/6
1,2,5	4	1/6
1,3,4	9	1/6
1,3,5	7	1/6
1,4,5	5	1/6

- (b)(i) 0.51, 0.36
- (b)(ii) 0.12
- (b)(iii) 21.732, 6.175

Question B2

- (a)(i) 2866.007, 53.535
- (a)(ii) 966, 10.897
- (b)(i) $n_1=26, n_2=33, n_3=11, n=70$
- (b)(ii) $n_1=18, n_2=18, n_3=9, n=45$

Question B3

- (b) 72000, 14872.794
- (c) 43.889, 0.299
- (d) 43.889, 3.204