

THE HONG KONG POLYTECHNIC UNIVERSITY  
HONG KONG COMMUNITY COLLEGE

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**Subject Title** : Introduction to Probability and  
Statistics

**Subject Code** : CCN1050

**Session** : Semester One, 2017/18

**Numerical Answers**

**Question B1**

- (a)(i) 8.49
- (a)(ii) 35.45
- (a)(iii) 52.425
- (a)(iv) 2
- (a)(v) 48.18
- (b) 328.9

**Question B2**

- (a) 0.86
- (b) 0.47
- (c) -6.8

**Question B3**

- (a)(i) range = 28  
median = 14  
interquartile range = 13
- (b) (36.65, 75.35)

**Question B4**

- (a) 0.48
- (b)(i) 0.36
- (b)(ii) 4.39
- (c)  $E(Y) = 1.4$   
 $Var(Y) = 0.24$

**Question B5**

- (a)(i) Expected number = 3.75  
Standard deviation = 0.97
- (a)(ii) 0.942
- (b) 0.1024

**Question B6**

- (a) 0.0501
- (b) 0.9

**Question C1**

- (a)(i) 41
- (a)(ii) 34.1
- (a)(iii) 13.3
- (b)(i) 19.7
- (b)(ii) 0.9713
- (c)(i) (7812, 8188)
- (c)(ii) 201
- (c)(iii) 385.6

**Question C2**

- (a)(ii) 21.6
- (a)(iii) 468.3
- (b)(i) 0.095
- (b)(ii) 15.1
- (c)(i) (614.8, 785.2)
- (c)(ii) 68
- (c)(iii) (136.8, 324.8)