

THE HONG KONG POLYTECHNIC UNIVERSITY
HONG KONG COMMUNITY COLLEGE

Subject Title : Quality Engineering

Subject Code : CCN3141

Session : Semester One, 2015/16

Numerical Answers

Question B1

- (a) 641; 12.4
- (b) 25, 0; 647, 635
- (e) 640.6579, 12.5263; 646.7134, 634.6024

Question B2

- (b) 2
- (c) 12.5%
- (f)(i) 72
- (f)(ii) 16.24%

Question B4

(c) and (d)

no.	temp (x)	hardness (y)	x^2	y^2	$x*y$
1	96	904	9216	817216	86784
2	108	820	11664	672400	88560
3	120	796	14400	633616	95520
4	144	788	20736	620944	113472
5	148	740	21904	547600	109520
6	156	712	24336	506944	111072
7	180	688	32400	473344	123840
8	192	612	36864	374544	117504
total	1144	6060	171520	4646608	846272

(e) $y=1123.8022-2.5616x$

(f) -0.9625

Question B5

- (c)(i) 0.8333; 1.924
- (c)(ii) 0.8333; 1.4438