

THE HONG KONG POLYTECHNIC UNIVERSITY
HONG KONG COMMUNITY COLLEGE

Subject Title : Engineering Design Fundamentals **Subject Code** : CCN2248

Session : Semester Two, 2015/16

Numerical Answers

Question C1

- (b) 0.25
- (c) 202.2 kN
- (d) 1,494 kN

Question C2

- (c) $F = 277.1 \text{ kN}$
 $F_h = 103.9 \text{ kN}$

Question C3

- (d)(i) $V_B = V_C = 500 \text{ rpm}$
 $V_D = 409.1 \text{ rpm}$
 $V_E = 166.7 \text{ rpm}$
- (d)(ii) 40 mm