

THE HONG KONG POLYTECHNIC UNIVERSITY  
HONG KONG COMMUNITY COLLEGE

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**Subject Title** : Physics I

**Subject Code** : CCN1049

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

**Numerical Answers**

**Question B1**

25.9°, 64.1°

**Question B2**

(b) 1.43 N, 0.478 m/s<sup>2</sup>

**Question B3**

(a) 0.867 m  
(b) 0.981 kg m<sup>2</sup>

**Question B4**

(a) 5.00 kJ  
(b) 13.0 kJ

**Question C1**

(a) 3.96 m/s, 3.13 m/s  
(b) 6.53 m/s  
(c) 13.5 kJ

**Question C2**

(a) -1.96 m/s<sup>2</sup>  
(b) -45.4 rad/s<sup>2</sup>  
(c) 1.31 s

**Question C3**

(a) 1.36 g/m  
(b) 147 Hz

**Question C4**

(d) 0.75