

THE HONG KONG POLYTECHNIC UNIVERSITY  
HONG KONG COMMUNITY COLLEGE

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**Subject Title** : Introduction to Flight Performance    **Subject Code** : CCN2299

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

**Numerical Answers**

**Question B2**

- (i)  $\rho=0.46 \text{ kg/m}^3$
- (ii) 32429.66 Pa

**Question B4**

60,000N

**Question B5**

$x = 0.24 c$

**Question C1**

- (a)(i) -16,541.94 N
- (a)(ii) 197333.33 W
- (d)(i)  $V = 54.48 \text{ m/s}$

**Question C2**

- (d)(i) 4.19 m/s
- (d)(ii)  $1.37^\circ$

**Question C3**

- (c)(i) 66.67
- (c)(ii) 14,112N
- (c)(iii) 476.28N
- (c)(v)  $+1.36 @ 12^\circ$

**Question C4**

- (c)(i) 95.07m
- (c)(ii) 10497.67N
- (c)(iii) 14849.24N
- (c)(iv) 82.82°