

THE HONG KONG POLYTECHNIC UNIVERSITY
HONG KONG COMMUNITY COLLEGE

Subject Title : Thermofluids **Subject Code** : CCN3129

Session : Semester One, 2016/17

Numerical Answers

Question 1

- (a) $0.292 \text{ m}^3/\text{s}$
- (b)(i) $0.40652 \text{ kg}/\text{s}$
- (b)(ii) $220 \text{ kJ}/\text{kg}$

Question 2

- (a) $0.024118 \text{ m}^3/\text{kg}, 0.2192, 185.37 \text{ kPa}$
- (b) $0.215 \text{ m}^3, 281.53 \text{ kJ}/\text{kg}$
- (d) 33.8 kJ
- (e) 164.7 kJ

Question 3

- (a)(i) 8.47 kW
- (a)(ii) 26.0 kW

Question 5

- (b)(i) $2.73 \text{ m}/\text{s}, 4.91 \text{ m}/\text{s}$