

THE HONG KONG POLYTECHNIC UNIVERSITY
HONG KONG COMMUNITY COLLEGE

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

Session : Semester One, 2017/18

Numerical Answers

Question 1

- (a) 0.21, 81.32 °C, 0.68128 m^3/kg
- (b) 50 kPa , 4.12295 m^3/kg
- (d) 241 kJ
- (e) 790.46 kJ/kg , 2622.85 kJ/kg , 2810 kJ

Question 2

- (a)(i) 0.0825 m^3/s
- (a)(ii) 193.0 kW
- (b)(i) 0.077303 m^3/kg , 42.4 m/s
- (b)(ii) 644 kW

Question 3

- (a)(i) 2.59
- (a)(ii) 40.0 °C, 37.5 °C
- (a)(iii) 14.14

Question 5

- (b)(i) 3.06 m/s , 5.78 m/s

Question 6

- (a)(i) 22.5 kg/s , 1.997 m/s
- (b)(i) 668 kN