

THE HONG KONG POLYTECHNIC UNIVERSITY
HONG KONG COMMUNITY COLLEGE

Subject Title : Thermofluids

Subject Code : CCN3129

Session : Semester One, 2018/19

Numerical Answers

Question 1

- (a) $0.030569\text{m}^3/\text{kg}$, 217.08 kPa , 0.3255
- (b) $0.036925\text{m}^3/\text{kg}$, 275.70 kJ/kg
- (d) 10.96 kJ
- (e) 101.12 kJ/kg , 253.54 kJ/kg , 4.78 A

Question 2

- (a)(i) 3166.1 kJ/kg , 1.202 kg/s
- (a)(ii) 0.400 kg/s
- (b)(i) 36.6 kW
- (b)(ii) 59.1 m/s

Question 3

- (a)(i) 6.79 kW
- (a)(ii) 15.03 kW

Question 5

- (a)(i) 982 kg/m^3 , 55.1 m/s

Question 6

- (a)(i) 215 L/s , 55.9 m/s