

ENGINEERING TRIPOS PART IIA 2009

ANSWRES: MODULE 3A3: FLUID MECHANICS II

Q1: 2.6 kPa

Q2: (b) 0.147, 0.601
(c) 41% of distance from throat to exit of nozzle

Q3 (a) 0.378 0.845
(c) 417 kJ/kg

Q5 (b) 2.2

Q6 (b) a=1.5 b= -0.5

Q7 (c) -45 deg -59 deg
(e) 0.338
(f) 0.885
(g) 1.194