

Answers

1. (a.ii) $2.35 \times 10^5 \text{ m}^3$
(b) $31.76 \text{ m}^3/\text{s}$
2. (a.ii) 2.076 m
(a.iii) $\Delta x \approx 55 \text{ m}$; 2.1 m section is downstream of 2.2 m section.
(b.ii) 1.576 m
3. (b.i) 1006 rpm
(b.ii) 2.744 m
4. (b.i) $5.4 \times 10^{-5} \text{ kg/m}^3$
(c.ii) 0.85 Pa
(c.iii) 0.0045 kg/m^3