2014   IIA   3D5 - Water Engineering   Dr D. Liang

Answers

1.
- (a.ii) $500 \text{ m}^3 \text{ s}^{-1}$
- (a.iv) $133 \text{ m}^3 \text{ s}^{-1}$

2.
- (a.i)   0.00167
- (c.i)   Water level starts to rise at 190s, and it takes 16 s to rise to 4.05 m
- (c.ii)   24 s

3.
- (a.i) $1.5 \text{ kg m}^{-1} \text{ s}^{-1}$
- (a.ii)   4.1 cm
- (b.i) $53.5 \text{ m}^2 \text{ s}^{-1}$, 21 kg
- (b.ii) $0.68 \text{ m}^2 \text{ s}^{-1}$

4.
- (iii)   2.9 m
- (iv) $0.49 \text{ m}^3 \text{ s}^{-1}$