

List of Figures

| | | |
|-----|--|----|
| 1.1 | Beberapa contoh pintu air di Indonesia: a) pintu air Bendung Pasar Baru [1], b) pintu air Jagir [11], c) pintu air Demangan [5]. | 2 |
| 2.1 | An illustration of a trapezoidal open channel cross-section. . . . | 3 |
| 2.2 | A plot diagram of the specific energy of a flow as a function of H . | 6 |
| 2.3 | An illustration of the uniform flow [2]. | 7 |
| 2.4 | The illustration of channels with: a) critical slope, b) mild slope, c) steep slope, d) horizontal slope, and e) adverse slope. | 10 |
| 2.5 | The surface profile behaviour at all three different zones on five different slopes [2]. | 12 |
| 2.6 | An illustration of a function $f(x)$ and has a root at $x = a$ | 13 |
| 2.7 | An illustration of False Position method for finding root at interval $[l, r]$ with two iteration. | 14 |
| 4.1 | Diagram of H and $E_s(H)$ of a flow with $Q = 1 \text{ m}^3/\text{s}$ on a rectangular channel with $b = 1 \text{ m}$, $s = 0.0005$, and $n_m = 0.015$. . . | 19 |
| 4.2 | The surface profile of $Q = 1 \text{ m}^3/\text{s}$ flow on a rectangular channel with $n_m = 0.015$, $b = 1 \text{ m}$, and $s = 0.0005$ | 20 |
| 4.3 | The surface profile sketch of: a) flow A, b) flow B, and c) flow C with H_{g1} setting, and d) flow A, e) flow B, and f) flow C with H_{g2} setting. | 22 |
| 4.4 | The surface profile sketch of: a) flow D, b) flow E, and c) flow F with H_{g3} setting, and d) flow D, e) flow E, and f) flow F with H_{g4} setting. | 24 |
| 4.5 | The surface profile sketch of: a) flow G with H_{g5} setting, b) flow H with H_{g3} setting, c) flow I with H_{g7} setting, d) flow G with H_{g6} setting, e) flow H with H_{g4} setting, and f) flow I with H_{g8} setting. | 25 |
| 4.6 | A plot diagram of data from Table 4.6 | 26 |