

Engineering Tripos Part IIA - Module 3C2
Manufacturing Engineering Tripos Part I - Paper P4B
May 2007

Numerical answers

1. (b) (ii) Ratio of heat inputs = 0.876
(iii) Ratio of HAZ radii = 1.085
(iv) Ratio of Δt_{8-5} values = 1.82

3. (b) $b \gg h$: $p/2k = 1$; $b \ll h$: $p/2k \approx 3$.
(c) Maximum thickness = 26.2mm.