Example 2.2.6

Figure 1a shows the cross-section of a heavy structural beam which is fabricated by joining together three identical I-sections shown in Figure 1b. Determine the second moments of area of the compound cross-section about the axes of symmetry A-A and B-B.



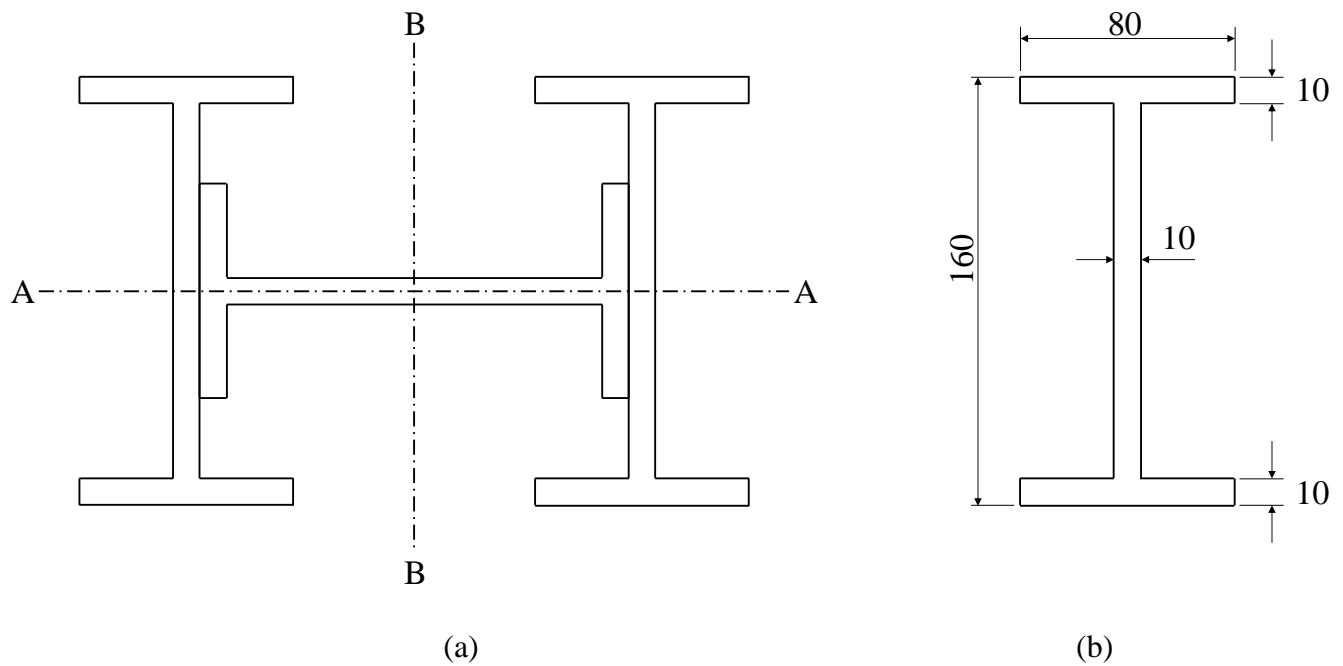(a)                                                                  (b)

Figure 1: (a) Assembled compound cross-section and (b) dimensions of each component I-section (in millimetres).