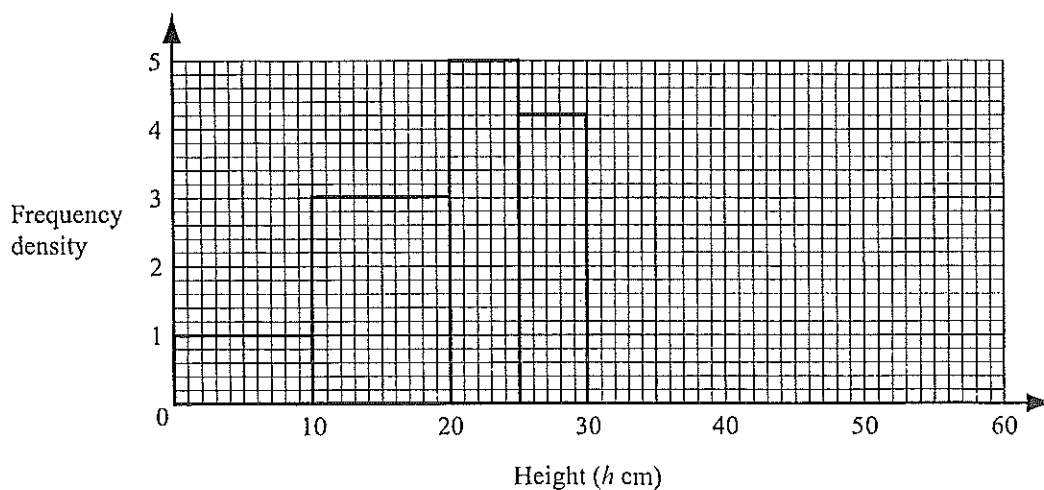# IGCSE – Estimated Mean and Histograms – 1

Oct 04 Paper 4

6 (a) Students are given marks 0, 1, 2, 3 or 4 for a piece of work.
The table shows the number of students getting each mark.

Mark	0	1	2	3	4
Frequency	3	10	12	9	x

(i) The mean mark is 2.125.
Find the value of x.   [4]

(ii) Write down the lower quartile mark.   [1]

(b) The heights (h centimetres) of flowers in a shop are shown in the histogram below.
All the flowers are less than 60 cm high.
One bar has not been drawn on the histogram.

Height (h cm)

(i) There are 25 flowers in the interval $20 < h \leqslant 25$.
How many flowers are there in the intervals

(a) $25 < h \leqslant 30$,   [1]

(b) $10 < h \leqslant 20$?   [1]

(ii) There are 42 flowers in the interval $30 < h \leqslant 60$.
This can be shown by a single bar on the histogram.
Calculate the height of this bar.   [2]

(iii) Calculate an estimate of the mean height of the flowers.   [3]