

If the mean of the distribution is 2.6, then the value of  $y$  is

Variate $x$	1	2	3	4	5
Frequency $f$ of $x$	4	5	$y$	1	2

- (a) 24      (b) 13      (c) 8      (d) 3

$$\text{(c) Mean} = \frac{\sum_{i=1}^n f_i x_i}{\sum_{i=1}^n f_i}$$

$$\therefore 2.6 = \frac{1 \times 4 + 2 \times 5 + 3 \times y + 4 \times 1 + 5 \times 2}{4 + 5 + y + 1 + 2}$$

$$\Rightarrow 31.2 + 2.6y = 28 + 3y \Rightarrow 0.4y = 3.2 \Rightarrow y = 8$$