

Pratik Dny ITITSB 22029

$$\textcircled{1} \text{ Mean} = \frac{5+11+9+5+10+15+6+10+5+10}{10} = 8.6$$

$$\text{Median} = 5, 5, 5, 6, \boxed{9, 10}, 10, 10, 11, 15$$

↓

$$= \frac{9+10}{2} = 9.5$$

$$\text{Mode} = 5, 10$$

$$\textcircled{2} \text{ a) Mean} = \frac{7.3 + 8.6 + 10.4 + 16.1 + 12.2 + 15.1 + 14.5 + 9.3}{8} = 11.475 \text{ miligram}$$

$$\text{b) } (7.3 - 11.475)^2 = 18.116$$

$$(8.6 - 11.475)^2 = 8.267$$

$$(10.4 - 11.475)^2 = 1.166$$

$$(16.1 - 11.475)^2 = 21.315$$

$$(12.2 - 11.475)^2 = 0.527$$

$$(15.1 - 11.475)^2 = 13.266$$

$$(14.5 - 11.475)^2 = 9.117$$

$$(9.3 - 11.475)^2 = 4.777$$

Variance

$$= \frac{18.116 + 8.267 + 1.166 + 21.315 +$$

$$0.527 + 13.266 + 9.117 + 4.777}{8}$$

$$= \frac{76.531}{8} = 9.566$$