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No
Date

1.) diberikan, expected value = 100 cm = 1.000 mm
measurement value = 1017 mm

i. absolute error,
e = Yn - Xn = 1000 - 1017 = 17 mm

ii. % error
$= \frac{Yn - Xn}{Yn} \times 100 = \frac{1000 - 1017}{1000} \times 100 = 1{,}7\ \%$

iii. Relative accuracy = $A = 1 - \left|\frac{Yn - Xn}{Yn}\right| = 1 - \left|\frac{1000 - 1017}{1000}\right| = 1 - 0{,}017 = 0{,}983$

iv. % accuracy, $a = A \times 100\% = 0{,}983 \times 100\% = 98{,}3\ \%$

9. $\bar{x} = 10{,}23$
$Xa = 10{,}2$

$Xa = \text{Precision} = 1 - \left|\frac{10{,}2 - 10{,}23}{10{,}23}\right| = 1 - 0.002932555 13$
$= 0.997067449$

6. $\bar{x} = 10{,}23$
$X_6 = 10{,}3$

$X_6 = \text{Precision} = 1 - \left|\frac{10{,}3 - 10{,}23}{10{,}23}\right| = 1 - 0.006892619 75$
$= 0{,}993157738$

9. 100% - 97% = 3%
magnitude error = $\frac{3}{100} \times 1000V = 30$

Limiting error = $\frac{30}{360V} \times 100\% = 8.33$

12. i. absolute error $e = Yn - Xn$
bonus. $Yn = 30V$
$Xn = 35\% \times 30V = 33{,}25\ V$
sehingga absolute error = $e = 30 - 33{,}25 = 3.25$

ii. Persentase kesalahan $= \frac{Yn - Xn}{Yn} \times 100\%$
$= \frac{30 - 33{,}25}{30} = 10.83\ \%$