Question 11

- (a) What is the relationship between the precision and the uncertainty of a measurement?
- (b) What is the relationship between the accuracy and the discrepancy of a measurement?

Solution

Part (a)

Uncertainty is a number that indicates how far apart different measurements are. Precision refers to how close different measurements are to each other. If measurements are not precise, then the uncertainty will be very large.

Part (b)

Discrepancy is a number—the difference between a measured value and a reference value. Accuracy refers to how close a measurement is to the accepted reference value for that measurement. If a measurement is not accurate, then the discrepancy will be very large.