

## CHAPTER 4

### **BASIC MEASURING INSTRUMENTS**

#### **Questions**

1. Show the principles of dividing the vernier caliper to give 0.02 mm sensitivity.
2. Show the principles of dividing the vernier micrometer to give 0.02 mm sensitivity.
3. List three uses of dial indicators.
4. What is the hermaphrodite calipers used for?
5. State the principle of a dial indicator.
6. Using a line diagram, show a reading of 4.62 mm on an external micrometer.
7. Using a line diagram, show a reading of 22.24 mm on a depth micrometer, and vernier caliper.
8. Write the values displayed on the vernier scales in Fig. 4.17. (Ans. 102.34)
9. Write the values displayed on the external micrometer in Fig. 4.18.

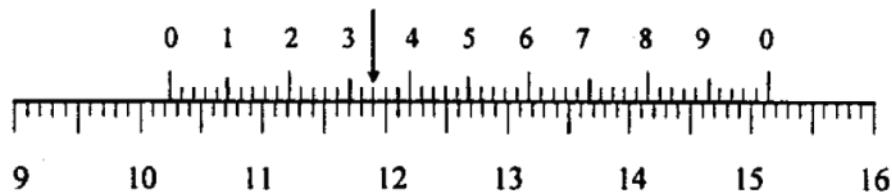


Fig. 4.17 Vernier scale.

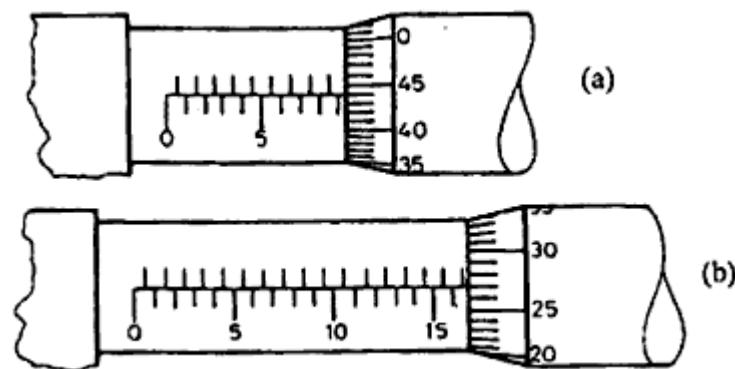


Fig. 4.18 External micrometer.