Mechanical Workshop

M2 Homework

**Q1) fill in the blanks, using the following words:**

**Fixed Metric thimble Micrometer Depth**

**Metrology Divisions Inside Imperial stem**

1. --------------------------is used to measure the smaller dimensions.
2. The Vernier callipers is used to carry out measurement for-----------------, -------------------------and depth dimensions.
3. The accuracy of any measuring tool depends on the number of -----------------in its scale.
4. The main scale in the vernier callipers is-------------------while the vernier scale is movable.
5. The main two system of measurements are------------------and-----------------.
6. The science that deals with the practical and theoretical aspects of measurements is called ---------------------------.
7. The part which used to measure the depth dimension in vernier caliper is the -------------------.
8. To close the micrometer jaws one millimetre we need to rotate the ---------------------two full turns.

**Q2) write (T) for true and (F) for false to the following statements:**

1. The bended ruler gives an accurate measurement. ( )
2. The rotating thimble in micrometer is subdivided into 50 equal divisions. ( )
3. We can use the steel ruler edges as a scriber. ( )
4. The vernier calipers are used to measure the depth dimension only. ( )
5. The Yard is the basic unit in the imperial system. ( )
6. One of the main parts of the vernier caliper is the sleeve. ( )
7. If we want to get an accurate measurement from any measuring instrument we have to look from the side. ( )
8. The Vernier caliper with 10 divisions in Vernier scale is accurate to ±0.1mm( )

**Q3) read the following measurements:**

|  |  |
| --- | --- |
| a) reading is: |  |
| b) reading is: |  |
| c) reading is: |  |
| d) reading is: |  |