

Tilak Maharashtra Vidyapeeth

Diploma in Engineering

SUB: METROLOGY & QUALITY CONTROL

Assignment No: I

(Write any five)

- Q.1 Explain the scope of metrology?
- Q.2 Differentiate between systematic errors and random errors.
- Q.3 Draw diagram of vernier caliper?
- Q.4 Draw only diagram of how you are measure parallelism of two axes?
- Q.5 What is wavelength standard? State advantages of wavelength standard
- Q.6 State the principle of vernier. Explain construction of vernier caliper ?
- Q.7 State the principle of micrometer. Explain construction of micrometer?

Assignment No: II

(Write any five)

- Q.1 Differentiate between Systematic error & Random error?
- Q.2 Differentiate between Tolerance & Allowance?
- Q.3 Describe with neat sketch construction and working of an instrument used for measurement of surface texture?
- Q.4 Define the term quality?
- Q.5 What do you understand by Limit, Fit, Tolerance & Allowance?
- Q.6 What is tolerance? Explain unilateral and bilateral system of tolerance?
- Q.7 Differentiate between hole basis & shaft basis system?

Assignment No: III

(Write any five)

- Q.1 Define the term "Quality control" and state its objectives.
- Q.2 Describe any one method of checking major diameter of an external straight thread?
- Q.3 Describe any one method of checking minor diameter of an external straight thread?
- Q.4 What is the meaning of quality of conformance? State the requirements for good quality of conformance.
- Q.5 What are limit gauges? Sketch any two types of limit gauges?
- Q.6 Write note on slip gauges? Explain wringing of slip gauge?
- Q.7 A 300mm Sine bar is to be set up to an angle of 32° . Determine the slip gauges needed from 87 pieces set