

DEPARTMENT: MECHANICAL SEMESTER: 4TH

SUBJECT NAME: MECHANICAL MEASUREMENT AND METROLOGY

SUBJECT CODE: 3141901

FACULTY NAME: PROF. CHIRAG MEVADA

ASSIGNMENT - 1

Chapter 1: Introduction to Metrology, Linear and Angular Measurement:

- 1) Differentiate following terms:
 - i. Accuracy and precision
 - ii. Line standard and End standard
- 2) Distinguish between Primary, Secondary, Tertiary and working standards of length
- 3) State necessity and objectives of metrology.
- 4) Describe errors and sources of errors.
- 5) Enlist methods of measurements. Explain Slip gauges with wringing process.
- 6) Explain with the help of neat sketches the principle and construction of an auto-Collimator
- 7) Why sine bar is not preferred for angles greater than 45°? Explain.
- 8) State the use of (i) Slip gauges, (ii) Dial indicator
- 9) Explain use of sine bar with neat sketch; also write advantages and limitations of sine bar.
- 10) Explain Indian Standards of Slip gauges.

