PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
Diploma Engineering, Mid semester Examination

Semester: 5th   **Date: (04/08/2022)**
Subject Code: (03609341)   **Time: (1hr: 30min)**
Subject Name: (Metrology and Instruments)   **Total Marks: 40**

Instructions:
1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. English version is considered to be Authentic.

Q.1 Answer any six out of Ten. (2 Marks Each)   **(12)**
   1. What is Linear Measurement?
   2. What is Angular Measurement?
   3. Definition of Inspection.
   4.   Give definition of Quality.
   5.   Give Principal of Vernier Scale.
   6. What is Geometrical Tolerance.
   7. Give definition of Straightness with symbol.
   8. Give definition of Flatness with symbol.
   9. What is use of Slip Gauge?
   10. What is least count of Bevel Protector.

Q.2 A) Explain Accuracy & Precision with proper figure.   **(03)**
                                    OR
A) Draw neat clean diagram of Vernier Scale & explain its parts.   **(03)**
B) Draw neat clean diagram of Autocollimator & explain how its works?   **(03)**
                                    OR
B) Explain Telescopic Gauge with figure.   **(03)**
C) Draw neat clean Dial Indicator with lable.   **(04)**
                                    OR
C) Explain wringing method of slip guage.   **(04)**
D) Explain Spirit level with figure.   **(04)**

Q.3 A) Explain Squareness with Geometrical Tolerance symbol.   **(03)**
                                    OR
A) Explain Sine bar with proper figure.   **(03)**
B) Explain Perpendicularity with Geometrical Tolerance symbol.   **(03)**
                                    OR
B) Explain Roundness with Geometrical Tolerance symbol.   **(03)**
C) Give Application of Dial Gauge.   **(04)**
                                    OR
C) Explain Height Gauge with neat clean figure.   **(04)**
D) Draw neat clean diagram of Micrometer & explain its parts.   **(04)**