

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

Semester: 5th
Subject Code: (03609341)
Subject Name: (Metrology and Instruments)

Date: (04/08/2022)
Time: (1hr: 30min)
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. Which type of Instruments used in Linear Measurement.
 2. Which type of Instruments used in Angular Measurement?
 3. Definition of Inspection.
 4. Give definition of Quality Control.
 5. Give Principal of Depth Gauge.
 6. What is Geometrical Tolerance.
 7. Give definition of Straightness with symbol.
 8. Give definition of Flatness with symbol.
 9. What is use of Angle 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 Depth gauge & explain its parts. (03)
B) Draw neat clean diagram of Autocollimator & explain how it works? (03)
- OR**
- B) Explain Telescopic Gauge with figure. (03)
C) Draw neat clean Dial Indicator with label. (04)
- OR**
- C) Explain wringing method of slip gauge. (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 P with Geometrical Tolerance symbol. (03)
- OR**
- B) Explain Roundness with Geometrical Tolerance symbol. (03)
C) Give Advantages of Dial Gauge. (04)
- OR**
- C) Explain Angle Dekkor. with neat clean figure. (04)
D) Draw neat clean diagram of Micrometer & explain its parts. (04)