

S.B. Roll No.....

**INDUSTRIAL METROLOGY AND SQC**  
**6<sup>th</sup>/PROD./5524/2055/May'16**

**Duration: 3 Hrs**

**M. Marks=75**

**SECTION A**

**Q1. Fill in the blanks:**

**10×1.5=15**

- a. The repeatability of measuring process is known as .....
- b. .... Comparators generally have plungers as sensitive elements.
- c. The process of making the blocks adhere is known as .....
- d. Sine bar should not be used for angle more than.....
- e. The stylus used to measure the roughness is made of.....
- f. The word "Kaizen" means change for .....
- g. The irregularities of small wavelength are called .....
- h. Krypton-86 isotope is used in .....standards.
- i. The smallest size measured by Vernier caliper is called it's .....
- j. The maximum amount by which the result differs from the true value is called.....

**SECTION B**

**Note: Attempt any FIVE questions.**

**5×6=30**

- a. Discuss the statement "Higher quality of design means higher costs and higher values".
- b. Distinguish clearly between accuracy and precision.
- c. What is Lay? Enumerate the various types of lay and give the symbol for each.
- d. Define the term "Quality Control" and enlist its objectives.
- e. What are standards and codes? What are their advantages?
- f. Write short notes on What to inspect? And When to inspect?
- g. Differentiate sampling inspection vs 100% inspection.
- h. Discuss the culture of TQM in modern industries.

**SECTION C**

**Note: Attempt any THREE questions.**

**3×10=30**

- a. What do you mean by sampling plan? Explain its types.
- b. Explain construction and working of a dial indicator with a neat sketch.
- c. Discuss the concept, evolution and implications of ISO-9000.
- d. Discuss various types of inspections with examples.
- e. Write down salient features of an instrument used for measuring surface texture with diagram.