



### SECTION-B

2. Elaborate the working of a Linear Variable Differential Transformer for measurement of displacement.
3. Discuss the application of strain gauges for the measurement of torque.
4. Explain the different methods of measuring force. Explain the working of Proving ring and Mechanical Load cell in brief.
5. Explain in detail how a sine bar is used for angle measurement.
6. State different types of errors which can occur during the process of measurement. Discuss the methods to reduce/ remove such errors.

### SECTION-C

7. (a) Explain with the help of a neat sketch the working of a electromagnetic flux meter.  
(b) Discuss the application of optical pyrometer for temperature measurement.
8. (a) Explain the difference between a comparator and a measuring instrument. State the field of application of comparators.  
(b) Compare the relative advantages and disadvantages of mechanical and electrical instruments.
9. What are dynamometers? How are they classified? Explain the difference between absorption, transmission and driving dynamometers.