

(ME5002)
(MECHANICAL MEASUREMENT & CONTROL)

1. (a) What is measurement?
 - (b) What are the General measurement systems?
 - (c) Differentiate between replication and repetition?
 - (d) What is dynamic calibration?
 - (e) Explain the response of a first-order system when subjected to step input signal?

2. (a) What is static calibration?
 - (b) What is replication?
 - (c) Define accuracy & precision?
 - (d) Define briefly semi-log?
 - (e) "If an engineer were to be deprived of all the measuring devices, he would be reduced to guessing and speculating". Comment on the validity of this statement?

3. (a) What is phase linearity?
 - (b) What are sequential and random tests?
 - (c) Differentiate between semi-log, full-log?
 - (d) Explain briefly phase linearity?
 - (e) How we find out determination of time?

4. (a) Explain zero order, first order, and second order system ?
 - (b) What is bias errors?
 - (c) What are Measurement errors?
 - (d) Define data acquisition, data reduction?
 - (e) Explain least square regression analysis