

S.B. Roll No.....

**ELECTRONIC INSTRUMENTS AND MEASUREMENT**  
**3<sup>rd</sup> Exam/ECE/4361/Feb'2021**  
**(For 2018 batch onwards)**

**Duration: 1.15Hrs.**

**M.Marks:25**

**SECTION-A**

**Q1. Attempt any three questions.**

**3x5=15**

- i. List the different types of errors in measurement.
- ii. Explain the working principle of D.S.O with its block diagram.
- iii. Differentiate between analog and digital instruments.
- iv. Discuss in brief the working of CRT.
- v. Explain the characteristics of instrumentation amplifier and its need.
- vi. Explain principle and operation of strain gauge transducer.
- vii. Discuss in brief the working of moving iron type instruments.

**SECTION-B**

**Q2. Attempt any one question.**

**1x10=10**

- a. Draw the block diagram of C.R.O and explain the function of each block in detail.
- b. Write down the working and Operation of LVDT in detail.
- c. Write a short note on
  - i) Loading effect.
  - ii) Precision
  - iii) Accuracy
  - iv) Sensitivity.
- d. Explain in detail the working of digital multi-meter and its applications.