

Roll No. ....

**3351**

**B. Tech. 6th Semester (EE)  
Examination – May, 2023**

**ELECTRONICS DESIGN LABORATORY**

**Paper : LC-EE-310-G**

*Time : Three hours ]*

*[ Maximum Marks : 50*

*Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.*

**Note :** Attempt *five* questions in all, selecting *one* question from each Section. Question No. 1 is *compulsory*. All questions carry equal marks.

1. (a) Explain the term noise in electronic systems.
- (b) List various electronic instruments.
- (c) Define sensor conditioning.
- (d) Discuss applications of CRO. 2.5 × 4 = 10

**SECTION – A**

2. (a) Distinguish between direct and indirect method of measurement. Support your answer giving an example. 5
- (b) Discuss the Signal conditioning circuit in short. 5

3. Explain the elements of Generalized Measurement System. 10

**SECTION – B**

4. Explain the interfacing of analog and digital systems in detail. 10
5. Write a note on analog system design. 10

**SECTION – C**

6. Explain interfacing of LCD with 8051 microcontroller. 10
7. Write short notes on :
- (a) FPGAs 5
- (b) CPLDs 5

**SECTION – D**

8. Explain properties of ideal operational amplifier. 10
9. Describe the specifications of DACs with examples. 10
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