

GATE 2020

Instrumentation Engineering
(Volume - II)

**TOPIC WISE GATE SOLUTIONS
1992 - 2019**

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GATE ACADEMY PUBLICATIONS®

...The Mentor for Engineers

CONTENTS

S. No. Topics

1. Electrical and Electronics Measurement

1. Error Analysis & Measurement
2. Basic Instruments
3. Measurement of Resistance & AC Bridges
4. Potentiometer
5. Measurement of Energy & Power
6. CRO & Electronic Measurement
7. Instrument Transformers

2. Sensor & Industrial Instrumentation

1. Basics of Transducers
2. Resistive, Inductive & Capacitive Transducers
3. Piezoelectric & Seismic Transducers
4. Temperature Measurement
5. Flow Measurement
6. Pressure Measurement
7. Miscellaneous

3. Optical Instrumentation & Communication

1. Analog Communication
2. Digital Communication
3. Fiber Optics
4. Interferometers
5. Optical Sources & Detectors
6. Miscellaneous

4. Engineering Mathematics

- 1.** Linear Algebra
- 2.** Differential Equations
- 3.** Integral & Differential Calculus
- 4.** Vector Calculus
- 5.** Maxima & Minima
- 6.** Mean Value Theorem
- 7.** Complex Variables
- 8.** Limits & Series Expansion
- 9.** Probability & Statistics
- 10.** Numerical Methods

5. General Aptitude (GA)

- 1.** Verbal Ability
- 2.** Numerical Ability

6. Process Control