



# THE AMERICAN COLLEGE, MADURAI

(An Autonomous Institution Affiliated to Madurai Kamaraj University)  
Re-accredited (2<sup>nd</sup> Cycle) by NAAC with Grade "A", CGPA – 3.46 on a 4-point scale

## Backlog Arrear Examination, March 2021

**Course Code: PGP 4429**

**Time: 3 Hrs**

**Course Title: Instrumentation**

**Max. Mark: 75**

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**Answer any Five of the following questions**

**5X15=75**

1. Discuss dynamic characteristics of a measurement system in detail.
2. Elaborate the theory of response of a second order system.
3. With suitable example discuss the method of least square fit.
4. Give the theory of strain gauges in detail.
5. Describe the construction and theory of piezo electric transducers.
6. Explain some of the operational amplifier circuits in instrumentation.
7. Elaborate binary weighted resistance D/A converter with circuit diagram.

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