### POLITECNICO DI MILANO - SEDE DI COMO

## MODEL IDENTIFICATION AND ADAPTIVE SYSTEMS

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## Answer the following questions:

- 1) Describe the implementation and initialization issues of the RLS.
- 2) Discuss and compare the main characteristics of FIR and IIR filters for adaptive filtering.
- 3) Describe the steady state Kalman predictor and explain how it is obtained.
- 4) Describe the model structure selection problem in the context of nonlinear identification.

### **Instructions:**

- Report your name and identification number on the top right corner of the first page.
- Use separate pages for answers to different questions (one page for each question).
- Books, course slides, notes are not allowed.