**System Identification Homework - Final Report**

**John Smith** [123456] **Answer to question #1**

This is the template for the final report of the Homework. There are no specific limitations to the length of the answers to each question or to the number of figures to be inserted. In any case, the entire report should not exceed *8 pages*.

In every answer, you have to:

- explain in a concise way the method you adopted;
- motivate the choices you made;
- report the results;
- discuss them from both a qualitative and quantitative point of view.

The best way to illustrate the results is through figures. To include a Matlab figure, the following commands are suggested:

```
print -depsc2 figure_name.eps  % if you are using LaTeX
print -dpdf figure_name.pdf    % if you are using PDFLaTeX
```

The content of the figures must be explained precisely in the text or in the caption, like in the following example:

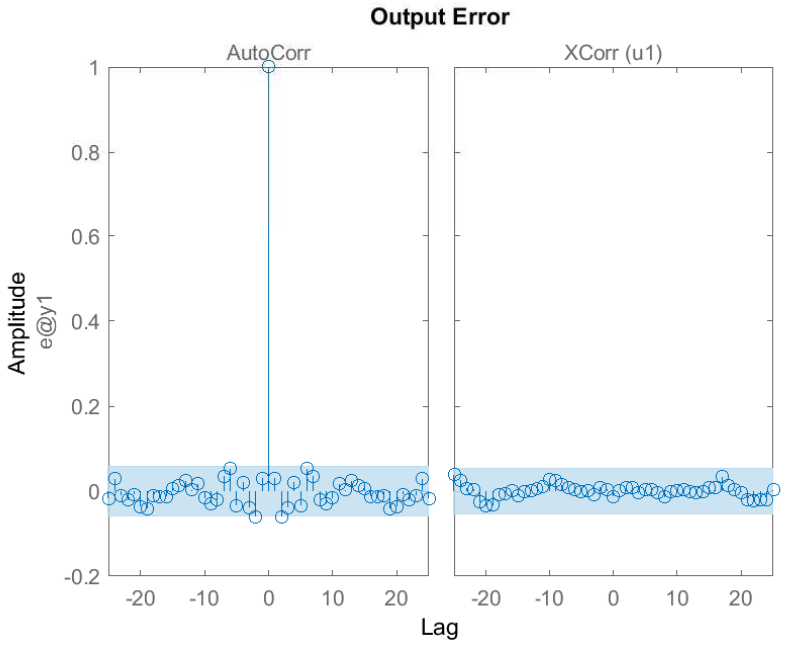



Figure 1: Residual analysis of an output error model with $n_b = 1$, $n_f = 2$, $n_k = 3$.

When you have finished to answer the first question, proceed with the others (the answer will start in a new page).

Please, write here the answer to the second question, and so on...