

# Digital Signal Processing and System Theory

Prof. Dr.-Ing. Gerhard Schmidt

## Communications Lab: Project 1 - Test Introduction to MATLAB - Test A

*There are 10 questions on 3 pages. If you miss one or more pages ask your supervisor for the missing pages.*

*Each correctly answered question gives 1 point. Some of the question might have multiple correct answers! Each wrong answer results in -0.5 points. Negative points of one question don't add up with points of other questions.*

*You need 5 out of the 10 points to pass the test.*

*This is an individual test so you must work by yourself only. You've got 15 minutes.*

1. Which of the examples for generating a vector in MATLAB is/are correct?
  - (a)  $\mathbf{x} = (1\ 2\ 3\ 4)$
  - (b)  $\mathbf{x} = \{1\ 2\ 3\ 4\}$
  - (c)  $\mathbf{x} = [1\ 2\ 3\ 4]$
  - (d)  $\mathbf{x} = 1\ 2\ 3\ 4$
2. Given a MATLAB vector  $\mathbf{x}$ . Which of the following MATLAB-instructions will transpose it?
  - (a)  $\hat{\mathbf{x}}$
  - (b)  $\mathbf{x}'$
  - (c)  $\tilde{\mathbf{x}}$
  - (d)  $\mathbf{x}^T$
3. Which character is used in MATLAB for a scalar product?
  - (a)  $\cdot^*$
  - (b)  $\cdot$  (just a dot)
  - (c)  $^\circ$
  - (d)  $*$