

# Prova teorico-pratica A

## Question 1

What characterizes the oversteer/understeer behaviour of a vehicle? Which parameters of the vehicle or of the manoeuvre influence the grade of oversteer/understeer?

## Question 2

Describe the phenomenon of mechanical resonance with focus on 1dof systems.

# Prova teorico-pratica B

## Question 1

Which are the goals of an ABS (Anti-Lock-Braking System)? How does it work and why is it so important for safety.

## Question 2

Describe the features of a PID controller and explain its functioning.

# Prova teorico-pratica C

## Question 1

What are the targets of the stability control ESP (Electronic Stability Program)? How does it work and why is it important for running safety?

## Question 2

Choose a drive for mechanical systems (electric, pneumatic or hydraulic) and describe its functioning.