

STATISTICS APPLIED TO BUSINESS ADMINISTRATION
ACADEMIC YEAR 2021-2022
PRACTICAL EXERCISE 8 (30 MINUTES)

Date: _____

Complete name: _____ ID number: _____

EXERCISE 1 (10 POINTS)

1. **(6 Points)** Let X_1, \dots, X_n be a r.s. from a $N(\mu, \sigma^2)$ population. Obtain, **providing all relevant details**, the $100(1 - \alpha)\%$ confidence interval for the population variance σ^2 .

2. **(4 points)** An individual is interested in buying a tablet. Before doing so, s/he decides to ask for its price at 31 different stores, obtaining a mean sample price of 800 euros with a sample standard deviation of 55 euros. We assume normality. Obtain a 90% confidence interval for the standard deviation of the price for the tablet.