

Family Name (CAPITALS):

First Name:

Faculty of Veterinary Medicine Year of study: IV

Eng

Subject A1

(0.5 pc.) Create in your folder a new folder named Exam-Example.

A study has been conducted to investigate the hypothesis that the elevated blood cholesterol level is a risk factor for cardio-vascular diseases. The following data were collected in the A-Exam.xls file: Gender (M=male/F=female), Age (years), Blood level of HDL cholesterol (mg/dl), Blood level of LDL cholesterol (mg/dl), CardiacRisk (yes/no).

Requests:

1. **(1 pc.)** Open the A-Exam.xls file. Select all data and copy them into a new Excel file in the Sheet1. Save the new Excel file as *Data* in the *Exam-Example* folder.
2. **(1 pc.)** Create a new dichotomous variable (yes/no) named HDLChol-Risk using the following criterion:
IF the value of HDL cholesterol is lower than 60 mg/dl the patient is considered that have risk to develop cardiovascular diseases.
3. **(2 pc.)** Create the histogram of HDL Cholesterol (mg/dl) respecting the following classes: ≤ 32 , (32; 49], (49; 66], (66, 83] and (83; 100]. Save the results in a new sheet named *Histogram*.
4. **(2 pc.)** Compute descriptive statistics parameters (inclusive the 95% confidence interval) for HDL cholesterol variable for both feminine and masculine patients. Save the results in a new sheet named *Descriptive Statistics*.
5. **(1.5 pc.)** The mean of HDL cholesterol for feminine patients is different by the mean of HDL cholesterol for masculine patients? Specify the reasoning used to answer this question and the used data in a new spreadsheet called *Comparisons*.
6. **(1 pc.)** What can you say about the distribution of blood HDL levels? (Interpret the graphical representation from request 3 using also the proper descriptive statistics parameters).