**Statistics-I. Continuous Evaluation (December 2022)**

We have the following database <http://www.uv.es/mperea/Rosenberg_Example.sav> (you can also use <http://www.uv.es/mperea/Rosenberg_Example.jasp>) that is composed of the following variables: A) Score\_P in Rosenberg’s self-esteem questionnaire; B) Score\_S in Rosenberg’s self-esteem questionnaire; C) IQ, and D) Age

(1) In the sample, what is the relationship between the Score\_P in Rosenberg’s self-esteem questionnaire and the Score\_S in Rosenberg’s self-esteem questionnaire when controlling for the influence of IQ? Copy/paste the appropriate table from SPSS/JASP and indicate the conclusions.

(2) We want to predict Score\_P as a function of Score\_S, IQ, and Age as predictors. A) What is the percentage of Score\_P that can be explained by the regression equation?; B) Which is the worst predictor and why? Justify your answers (also copy/paste from SPSS/JASP)

(3) We have been offered to play in the following game. We throw a six-sided die. With a “six”, we get 100 euros; with a “one”, we get 80 euros; otherwise, we don’t receive any money. We have to pay 50 euros to play each time. Is it worth playing this game in the long run? Justify your answer.

(4) In a computer company, we want to select the 25% of individuals with less neuroticism. If we assume that the neuroticism test follows (approximately) a normal distribution with a mean of 50 and a standard deviation of 10, which will be the cutoff value? Please copy/paste the appropriate information.