

**NOTES:**

The exam lasts **120 minutes**. It is composed of two parts. The first part consists of short-answer questions, which should not exceed half a page of text. The second part is composed of two questions for further development.

Please answer in ISEG answer sheets

**Part I**

1. Discuss briefly each of the following 5 topics (you may use the appropriate graphs to support your explanation) - **each topic 20 points**:
  - a. In which situation would it be profitable for a firm to pay for a worker's general training?
  - b. Describe what can happen to the demand for a given type of labour if the price of other input decreases and that type of labour and the other input are gross complements in production.
  - c. What characterizes a social insurance compensation program with zero net wage rates?
  - d. How do randomized experiments may help to solve the fundamental problem of identification that is present in most labour market analyses?
  - e. What can policymakers do to minimize the severe work disincentive problems associated to a program that pay injured workers their pre injury earnings for as long as they are off work and that once they work even one hour does not pay anything?

**Part II**

1. Answer the following questions (**each question 50 points**):
  - a. Discuss to what extent efficiency wages can cause Structural Unemployment.
  - b. Consider the model presented to explain the decision to make human capital investments. How the trend in the labour force participation rate of women may explain the evolution of human capital investment and of on the job training for women?