**REC 2312 – Econometria II, 1º semestre de 2023 – Prof. Daniel Santos**

**Teste 2**

**Nome:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ #USP: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**ATENÇÃO**

**Só considerarei o que estiver escrito no espaço designado para a questão. Use o rascunho para organizar suas ideias.**

Você pretende estimar o quanto espera que aumente após um incremento de . Seu grande problema, contudo, é que há uma segunda variável, , invariante no tempo, que é correlacionada com . Sabendo disso, você então decide estimar seu modelo em primeiras diferenças, . Seus pressupostos são os de que:

1. é completamente independente de e de , com .
2. , ou seja, você tem uma amostra aleatória.
3. é completamente independente de .
4. Qual sua interpretação para o parâmetro neste caso? Seria ele o mesmo que em um modelo do tipo ? Justifique.

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1. Com os pressupostos acima, você seria capaz de propor um estimador melhor do que o de primeiras diferenças? Justifique. Como sua resposta mudaria se por acaso seu painel tivesse apenas .

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