# Quiz # 5 Chapter 9 Suggested Answers Econometrics 06216

Name			
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- Choose the MOST CORRECT answer
- You have 5 minutes to solve out this quiz
- 1. We use an F-test when we want to::
  - a. Test joint significance
  - b. Test linear restrictions
  - c. Test hypothesis that involves more than one coefficient.
  - d. Test hypothesis that involves one coefficient.
  - e. All of the above

#### Answer: e

2. How many files will have the R matrix (number of linear constraints), if we want to prove the following

*Ho*: 
$$\alpha_0 = \alpha_1 = \alpha_2 = \alpha_3 = 0$$
.

hypothesis

- a. 1
- b. 2
- c. 3
- d. 4
- e. None of the above.

## Answer: d

- 3. If the disturbances are not normally distributed, and we have a small sample:
  - a. We still can use the F-test
  - b. We should use the F-statistic multiplied y the number of degrees of freedom.
  - c. We should use a chi-test
  - d. We can't use the F-test
  - e. None of the above.

#### Answer: d

- 4. To probe  $H_o: \beta_1 = \beta_2 = 0$  vs  $H_1: No\ Ho$  we use:
  - a. Two t-tests and if we reject one of the null hypothesis, then we reject this null hypothesis.
  - b. Two t-tests and if we accept one of the null hypothesis, then we accept this null hypothesis.
  - c. We can use an F-test or an T-test.
  - d. An F-test.
  - e. None of the above.

# Answer: d

- 5. The critical region, when we use an F-test:
  - a. It's always on the left side of the f-distribution.
  - b. Could be both, on the left or on the right side of the F-distribution.
  - c. It's <u>always</u> on the right side of the f-distribution.
  - d. If it's a two tailed test, then it'll be on the right and left side of the F-distribution.
  - e. None of the above.

### Answer: d