Introduction to macroeconomics · M4 · 23 February 2017

1. In which case the first sentence is not true and the second one is not false?

- (a) Nominal GDP is never larger than real GDP. The GDP deflator is also known as nominal GDP at constant prices.
 (b) Definition of CDP is in the CDP of the constant prices.
- (b) Real GDP is nominal GDP divided by GDP deflator.
 Nominal GDP is real GDP multiplied by GDP deflator.
 (c) CDP are real to a particular of the second second
- (c) GDP per capita is not nominal GDP divided by real GDP. Nominal GDP could be equal to real GDP.
- (d) The GDP deflator is not a price index. Real GDP is not nominal GDP multiplied by GDP deflator.
- **2.** El Farol bar problem
- (a) asserts that correlation does not imply causality.
- (b) is a particular case of Simpson's paradox that occurs when the fallacy of division is combined with Benford's law in the presence of Goodhart's law, presuming that the *post hoc ergo propter hoc* fallacy does not hold.
- (c) shows that governments may be interested in manipulating macroeconomic variables to better serve their own purposes.
- (d) illustrates the limitations of presuming that a problem of interactive decision-making involving many individuals can be solved by assuming that, despite the fact that all individuals may be alike, the same solution will be acceptable by all the individuals involved.

3. Which of the following options describes the fact that a certain property true for each individual in a group is also true for the whole group?

- (a) The fallacy of composition
- (b) The fallacy *cum hoc ergo propter hoc*
- (c) The prisoner's dilemma
- (d) None of the above

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4. Which option is not false?

- (a) The *post hoc* fallacy necessarily becomes the fallacy of division in every situation in which the Tinkerbell effect is the same thing as the reverse Tinkerbell effect.
- (b) 'Emergent property' is an alternative way of designating the 80/20 rule.
- (c) The Easterlin paradox states that some pyramid scheme is always the solution to the trolley problem.
- (d) None of the above

5. It appears that, in the near future, autonomous cars (driverless, self-driving, or robotic cars) will run the roads. It will then be necessary for the computer programme controlling the car's behaviour to incorporate solutions to dilemmas like the following one. Imagine that an autonomus car is accidentally put in a situation in which only two outcomes are possible: either the car runs over several pedestrians and kills all of them or all these pedestrians are saved at the expense of causing the passing of the only passenger in the car. Such a dilemma would be an example of (a) self-serving bias.

- (b) the ultimatum game.
- (c) Simpson's paradox.
- (d) the trolley problem.

6. It is not uncommon to find students eating foodstuff in the faculty's classrooms during the recess between classes. Suppose that students are informed that that cameras will be installed to record everything occurring in the classrooms. It seems likely that students will cease to eat in classrooms despite the fact that no one is told that eating is not permitted. This situation would illustrate

- (a) Peter's principle.
- (b) the Matthew effect.
- (c) Benford's law.
- (d) Goodhart's law.

Write your answers in MINUSCULE (lower case letter) in only ONE of the following tables

Use Table 1 if you give <u>at most one answer to each question</u>

Use Table 2 if you want to give two answers to some question



| DNI Number | 1st Surname | Name |
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