Econ 102
Midterm Exam

Note: Total time – 50 minutes
Answer both Part A and Part B
Part A and Part B are of equal value

USE TWO EXAM BOOKS, ONE FOR Part A AND THE OTHER FOR Part B. ON EACH EXAM BOOK PRINT YOUR NAME AND YOUR TA'S NAME.

Part A (25 minutes)

Justify, qualify, or repudiate EACH of the following. BE BRIEF.

(1) Any economic good created this year by factors of production located in America will end up being counted as part of this year’s American Gross Domestic Product (GDP).

(2) The conventional economics textbook claim that a society must choose between “guns or butter” is not always true. Sometimes the supply of military goods (guns) can be increased without decreasing the supply of civilian goods (butter).

(3) In any economic sector (such as agriculture) the law of diminishing returns does not apply as long as technology in that sector is rapidly improving.

(4) If belts and pants are close complements and the price of pants increases sharply, that will shift the demand curve for belts to the right. (Use a supply-and-demand diagram to explain your answer.)

OVER
Fiscalmania is a large island in the central Pacific with no exports and no imports. Its inhabitants spend on consumption $100 million plus 50% of income received. Or if

\[ C = \text{consumption spending} \]
\[ Y = \text{national income} \]
\[ TX = \text{taxes} \]

then

\[ C = 100 + 0.5(Y-TX). \]

The investors of Fiscalmania always spend $200 million, or if

\[ I = \text{investment spending} \]

then

\[ I = \bar{I} = 200. \]

The government is presently running a balanced budget, with taxes (TX) and government spending (G) both $50 million, or

\[ G = 50 = TX. \]

1. What is the marginal propensity to consume?
2. What is the equilibrium level of income?
3. Demonstrate that at this equilibrium level of income (your answer to (2)), total savings in Fiscalmania equals the desired level of investment.
4. The country is under a joint dictatorship. The President (Mr. Spendalot) controls government spending, while the Vice President (Mr. Taxalot) controls taxation. The President is worried about high unemployment and decides to increase government spending by $20 million. If the Vice President wants to prevent this spending increase of $20 million from raising the equilibrium level of national income, by how much must taxes by increased?
5. Learning of this tax increase (your answer to (4)), the President announces that in order "to personally boost the economy", he will buy $5 million in shares of stock of Fiscalmania companies. Explain the impact of this action on the equilibrium level of national income.