Final Exam - Key

Nov. 25, 2024

Multiple Choice Tasks

Select the answer that most closely answers the question.

1. Which of the following is a key characteristic of a natural monopoly? [4p]

    A. The largest supplier in the industry controls most natural resources required for production. *[Natural monopolies are not related to natural resources]*

    B. Strong barriers prevent entry to the industry. *[Barriers are necessary for non-natural monopolies]*

    C. Only one firm knows how to produce the good. *[Has nothing to do with natural monopolies]*

    D. **Cost per unit decreases as production increases.** *[Natural monopolies cannot exist without economies of scale]*

2. A rational regulator sets a price floor for tomatoes. Given that the market is nearly perfectly competitive, what is most likely the intention of the regulator? [4p]

    A. To increase the production of tomatoes in the market. *[Price floors may incentivize producers to supply higher quantities, but this is a negative side effect of the policy, not its goal]*

    B. To decrease the DWL in the market. *[The price floor creates a DWL]*

    C. **To increase the producer surplus in the market.** *[Suppliers will achieve a price above the (low) equilibrium price, ultimately increasing their profits]*

    D. To increase the consumer surplus in the market. *[Consumer surplus will decrease]*

3. In which of the following cases makes more sense to use a kinked-demand model? [4p]

    A. Firms have established stable collusion. *[Collusion is supposed to be fragile in the K-D model]*

    B. **Firms do not decrease their price after a decrease in MC.** *[To avoid price wars]*

    C. Entry of new firms occurs often in the market. *[Not a feature of K-D model]*

    D. Most firms sell two separate lines of products. *[Completely made-up BS!]*

4. Which of the following is implied along a demand curve where price (p) and quantity demanded (q) are negatively related? [4p]

    A. p and q are independent.

    B. p and q are correlated but no causation is assumed between them.

    C. **There is a causative relationship between p and q.**

    D. p and q are two different relationships.

    [Along a demand curve, we clearly assume that consumers buy less <u>because</u> price increases]

5. OldBookie PTE LTD can print 600 books per day by using 3 alternative combinations of capital (K) and labor (L). (i) $50K$ and $10L$; or (ii) $45K$ and $20L$; or (iii) $45K$ and $15L$. Which of the following is accurate? [4p]

    A. Combination (i) is inefficient.

    B. **Combination (ii) is inefficient.**

    C. Combination (iii) is inefficient.

    D. All combinations can be efficient.

    [We can only tell that combination (ii) is inefficient because (iii) can produce the same output with the same K, but less L]

6. Which of the following does NOT make sense when handling national GDP accounts? [4p]
    A. Add government spending and household consumption together. *[Both components of expenditure]*
    B. Subtract imports from exports. *[Both components of expenditure]*
    C. Add profits and wages together. *[Both components of income]*
    D. **Add profits and investment together.** *[Does not make sense to add profits to investment because profits are income, but investment is expenditure]*

7. Which of the following is NOT a reason for the lack of sustained growth before 1800? [4p]
    A. Slow technological pace.
    B. New wealth would not fund productive investment.
    C. Escaping poverty was not a goal for the national leaders.
    D. **Limited labor force.**
    [As explained in lecture 11, only A, B, and C were factors. Labor was sufficient and actually underemployed]

8. Who of the following will be negatively affected by an unexpected increase in inflation? [4p]
    A. The Central Bank. *[It will not be affected at all]*
    B. Someone who borrowed money. *[The real value of the money they owe will decrease]*
    C. **Someone who gave a loan to someone else.** *[The real value of the money they are to receive will decrease]*
    D. Someone who just bought a house paying in cash. *[The house will most probably increase in value]*

9. Which of the following would you expect to see immediately after an increase in inflation? [4p]
    A. Decrease in the interest rate.
    B. **Increase in the interest rate.**
    C. Decrease in taxes.
    D. Increase in taxes.
    [Inflation can be fought by increasing the interest rate. An increase in taxation may have a deflationary effect but it would not be an efficient tool to control inflation]

10. Banks have plenty of excess reserves and money demand increases. The CB conducts no OMOs. What will happen to the interest rate? [4p]
    A. It will increase because money supply cannot adjust to the new money demand needs.
    B. It will decrease because money supply cannot adjust to the new money demand needs.
    C. **It will remain unchanged because banks will use their reserves to loan out the extra money that the economy needs at the current interest rate.**
    [Since banks have sufficient cash to release into the economy, M1 will shift to the right intersecting with the new money demand at the same interest rate]

11. Which of the following is LESS likely to be the intention of contractionary fiscal policy? [4p]
    A. **To lower money demand.** *[Governments never aim to change money demand or supply]*
    B. To lower inflation. *[CFP can decrease inflation]*
    C. To lower national debt. *[CFP can decrease government debt when taxation is increased or government expenditure is decreased]*
    D. To increase government revenue. *[True, since CFP can be conducted by increasing taxes]*

12. Singapore government issues 20B dollars worth of 10-year bonds, which are bought by a pension fund in Norway. How should those 20B dollars be registered in Singapore's GDP? [4p]

    A. As exports.

    B. As imports.

    C. As investment.

    D. As nothing.

    [This transaction does not affect any element of the GDP because nothing was produced. Only cash was transferred from the Norwegian pension fund to the Singaporean government]

13. Which of the following is/are accurate? [4p]

    A. World commerce was more important in the economy in 1950 than in 1910. *[Volume of global trade reduced from 1910 to 1950 due to tariffs, quotas and restrictions]*

    B. The cause of hyper-globalization was the invention of the internet. *[The internet affected trade decades after hyper-globalization had started]*

    C. Both of the above.

    D. None of the above.

Problem A

[Scenario A] Stella has the right to choose between either option A or option B for how a valuable resource will be distributed between she and Frank.

	Stella	Frank
Option A	*20 units*	*150 units*
Option B	*30 units*	*30 units*

14. How much will the DWL in Scenario A be, if Stella acts on her own interest only? [4p]

    A. Zero.

    B. Around 30 units.

    C. Around 50 units.

    D. Around 100 units.

    E. Around 150 units.

    F. Around 200 units.

    [Option A distributes $20 + 150 = 170$ units, while option B distributes $30 + 30 = 60$ units. If Stella acts selfishly, she will choose option B, thus resulting a DWL of $170 - 60 = 110$ units]

15. What is the value of the: "right to choose the option", that Stella is entitled to, in scenario A? [4p]

    A. Zero.

    B. At least 10 units.

    C. At least 20 units.

    D. At least 30 units.

    E. At least 60 units.

    F. At least 100 units.

    [Its value is equal to what Stella would accept as a trade-off in order to forgo her right to choose the option, i.e. at least $30 - 20 = 10$ units]

Problem B

[Scenario B] There is an economy where: households save 20% of their income, the capital stock is 400, and capital depreciates by 30% annually.

16. How much is the Solow steady-state output in the economy from scenario B? [4p]
    - A. Around 100.
    - B. Around 200.
    - C. Around 300.
    - D. Around 400.
    - E. Around 500.
    - **F. Around 600.**
    - G. Around 700.

    [The economy equilibrates at $s \cdot Y = d \cdot K$ or $0.2Y = 0.3 \cdot 400$ or $0.2Y = 120$ or $Y = 600$]

17. How much output do households consume at the Solow steady-state in the economy from scenario B? [4p]
    - A. Around 100.
    - B. Around 200.
    - C. Around 300.
    - D. Around 400.
    - **E. Around 500.**
    - F. Around 600.
    - G. Around 700.

    [Household consumption is equal to the income that is not saved; the economy saves $0.2 \cdot 600 = 120$, so consumption is equal to $600 - 120 = 480$]

18. The economy in scenario B, currently produces 450 units of output. Which of the following would you expect for its economic growth rate for next year if technology and productivity of labor do not change? [4p]
    - A. It will be sustainable.
    - B. It will be negative.
    - C. It will be constant.
    - **D. It will be positive.**
    - E. It can be any of the above.

    [Since the economy is below its steady-state, next year its output will increase]

Short Answer Tasks

Answer the following questions in no more than 80 words.

19. Briefly state the difference(s) between *structural* and *frictional* unemployment. [Hint: Do not define them, just state the difference(s)] [7p] *[Limit 80 words]*

    Structural unemployment comes from rigidities in the labor market that are permanent. Frictional unemployment comes from processes in the labor market that take time but in the end are resolved. [30 words]

20. What does the Lakner-Milanovic "elephant" tells us for the middle-class of developed countries? [7p] *[Limit 80 words]*

    While globalization increased the wealth of most countries that embraced it, the middle-class of developed countries saw its income remain relatively stagnant or even decline, while the poorer classes and the elite significantly increased their own. [36 words]

21. Briefly explain whether the commodity market (market of $Y = C + I + G$) can play a stabilization role in the economy. [7p] *[Limit 80 words]*

    The commodity market cannot effectively stabilize shocks, because government expenditure (G) is rarely planned, it takes time to affect the demand, and its core aim is public goods' funding and redistribution of income. [33 words]

22. A profit maximizing monopoly experiences a decrease in MC. Briefly explain how it should react regarding its pricing. [7p] *[Limit 80 words]*

    When MC decreases, it will intersect with MR at a higher quantity, which can be sold only if the price decreases. [21 words]

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END OF TASKS