Checked by Yang Lu

THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

ECON 3123 Final Exam (Answer Book)

Date: Dec 10, 2025

Time allowed: 120 minutes

93+4

Not to be taken away.

Instructions:

- Answer ALL the questions. Write your answers on the answer book. Anything written on the question book will NOT be graded.
- Write your answer to all the questions within the provided area. **Anything outside the provided area will NOT be graded.**
- Make sure that all your handweritngs are legible. Anything that cannot be understood by the grader will not be graded.
- Please submit BOTH the question book and the answer book after the exam.

DO NOT OPEN UNTIL INSTRUCTED!

Name: WONG Sum King

Student ID: 2117 4490

Seat Number: 15

You MUST sign the following HKUST Honor Code.

Otherwise, your exam will NOT be graded.

The HKUST Academic Honor Code

Honesty and integrity are central to
the academic work of HKUST.
Students of the University must observe and uphold
the highest standards of
academic integrity and honesty in all the work
they do throughout their program of study.

◆

As members of the University community,
students have the responsibility to help maintain
the academic reputation of HKUST
in its academic endeavors.

◆

Sanctions will be imposed on students,
if they are found to have violated the regulations
governing academic integrity and honesty.

Your Signature: [signature]

Multiple Choice Questions (20 points)

1	2	3	4	5
C	A	D	C	C

Question 6 (15 points)

(1) (5 points)

u_n is the u when $P = P^e$, i.e. $\pi = \pi^e$.

$\pi_t = 5\% + 0.4\pi_{t-1} - 0.5u_t$

$= \pi^e_t + 2.6\% - 0.5u_t.$

Put $\pi_t = \pi^e_t =$

$0 = 2.6\% - 0.5u_n$

$u_n = 5.2\%$ #

Question 6 (15 points, Continued)

(2) (5 points)

$\pi_{t+1} = 5\% + 0.4(5\%) - 0.5(5.2\%)$

$= 4.4\%$ #

$\pi_{t+2} = 5\% + 0.4(4.4\%) - 0.5(5.2\%)$

$= 4.16\%$

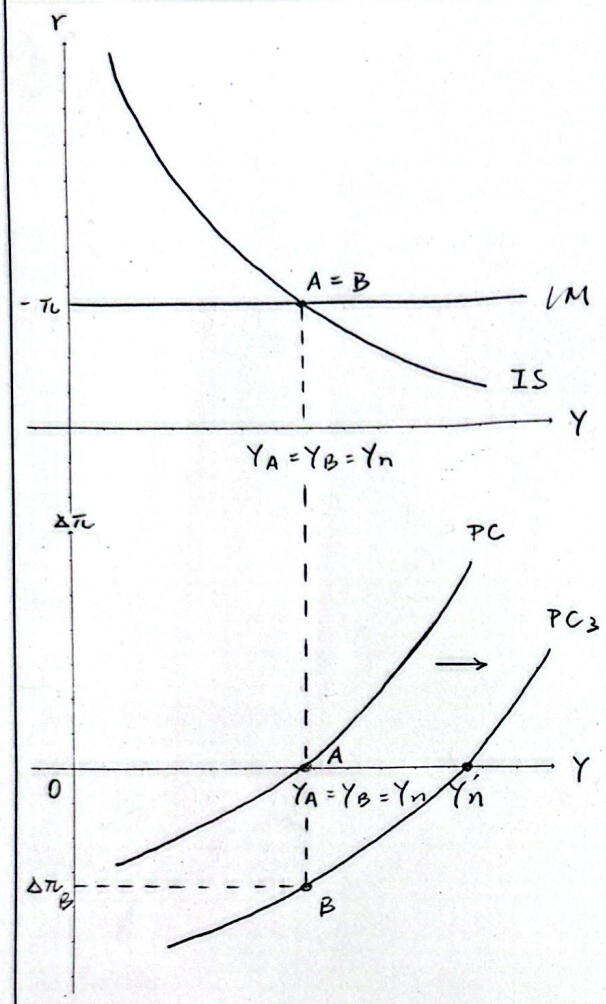
(3) (5 points)

$4\% = 5\% + 0.4(5\%) - 0.5\, u_{t+1}$

$u_{t+1} = 6\%$ #

Question 7 (35 points)

(1) (5 points) and (3) (10 points)



15

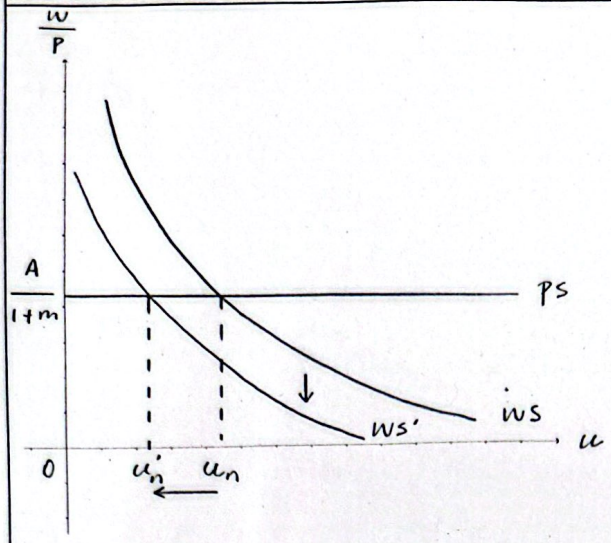
Effects:

As u_n falls, Y_n ($= AL(1-u_n)$) rises, so the PC shifts to the right.

Given the same IS and LM curves, $Y < Y'_n$, so inflation decreases.

Question 7 (35 points, Continued)

(2) (10 points)



Effects:

As workers' bargaining power weakens, i.e. z (collective variable) falls.

For any given level of u, $\frac{w}{P}$ falls, i.e. WS curve shifts downwards.

As a result, u_n falls.

(4) (10 points) Circle the correct one and write one-sentence explanation.

Inflation (increases / decreases / remains unchanged / is uncertain).

Explanation:

Given the same IS and LM curves, $Y < Y_n'$,

so $\Delta \pi < 0$.

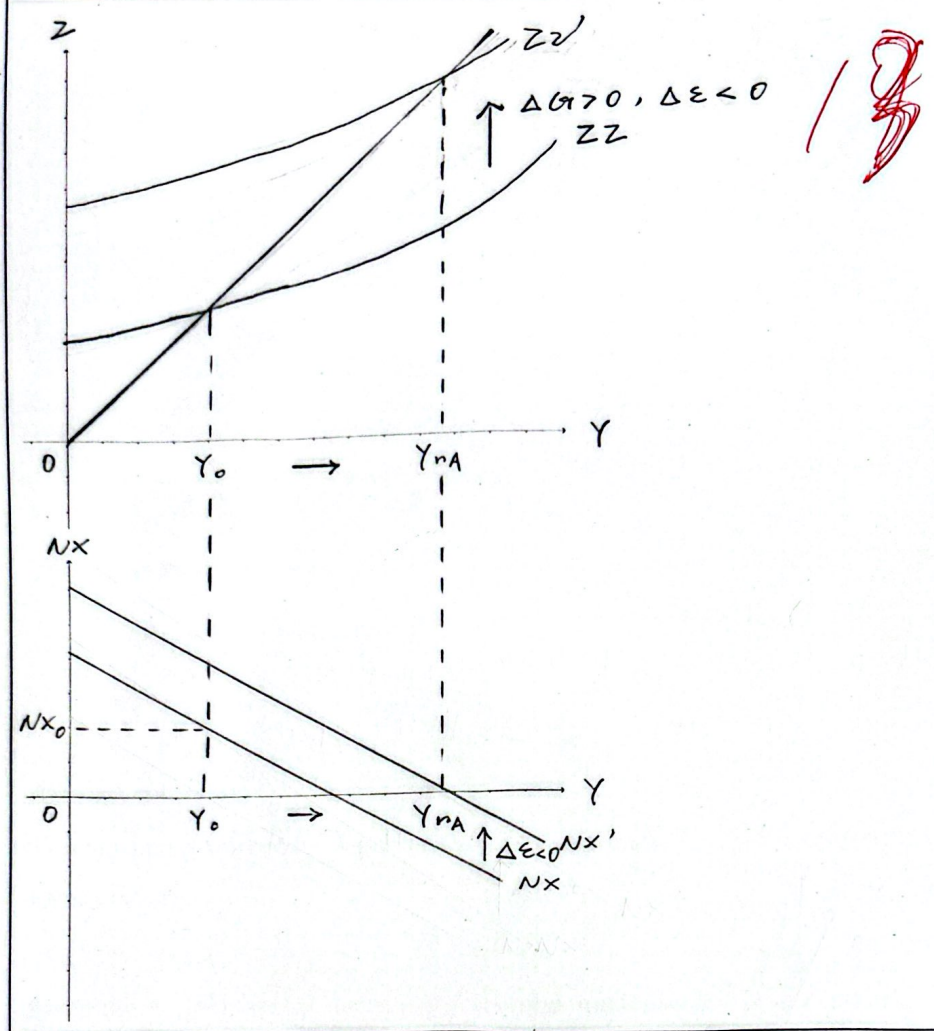
Output (increases / decreases / remains unchanged / is uncertain).

Explanation:

As π falls, r ($= 0 - \pi = -\pi$) rises and the LM curve shifts upwards.

Question 8 (30 points)

(1) (5 points) and (2) (10 points)



Policy mix:

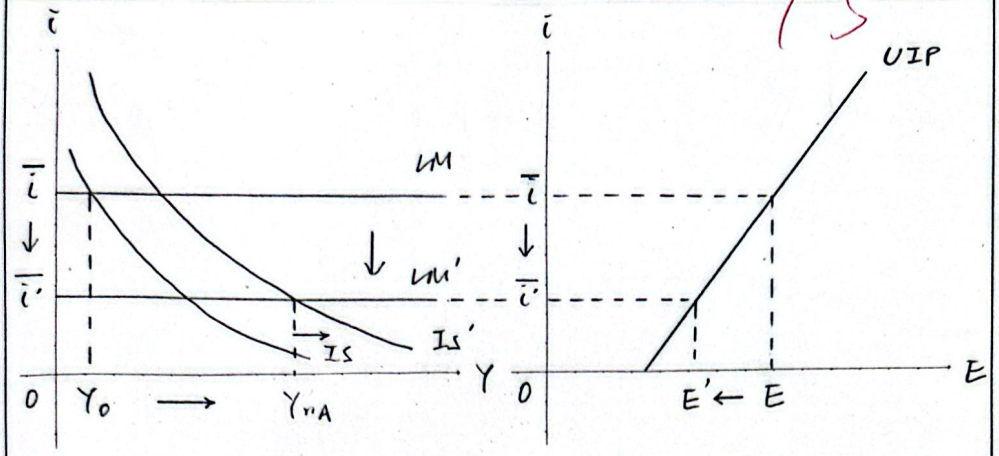
Raise the G and lower the ε.

Explanation: (curve)

- Raising the G leads to an upward shift of the ZZ ↑
- Lowering the ε leads to a rise in NX, so the ZZ ↑ (and NX curves shift upwards)

Question 8 (30 points, Continued)

(3) (15 points) Circle the correct one and write one-sentence explanation.



Monetary policy:

Expansionary monetary policy (i.e. reducing $\bar{i}$) is needed to achieve a lower E and therefore ε.

Consumption (~~increases~~ / decreases / remains unchanged / is uncertain).

Explanation:

As Y rises, while T does not change, C rises.

Investment (~~increases~~ / decreases / remains unchanged / is uncertain).

Explanation:

As Y rises and $\bar{i}$ falls, I rises

Net export (increases / ~~decreases~~ / remains unchanged / is uncertain).

Explanation: Y↑, IM↑ + ε↓, NX↑ (effect of the former > latter) (NX!=0), NX falls.

As the trade surplus (NX>0) is removed to achieve a trade balance

********** END OF THE EXAM **********