請按題號依序寫下答案。

一、 是非說明題 (下列 1~6 題須說明答案為是或非的理由； 1~5 題須繪圖，**不繪圖以零分計。**) ：每題 8 分，共 48 分。

1. The AD curve is steeper if the private investment is more sensitive to the interest rate.

2. In the AD-AS model, COVID-19 causes the short-run equilibrium general price level to rise.

3. In the lonable funds model, the equilibrium interest rate rises when people expect their future income to increase.

4. Assume that unemployment results from the minimum wage. Other things equal, the unemployment rate rises with the number of discouraged workers.

5. The value of money rises when the central bank raises the interest rate paid on the banks' reserves.

6. Assume that the required reserve ratio is 20%, the ratio of the currency held by the public to the money supply is 1/4, and the amount of currency issued is $100. The maximum amount of money supply is $500.

二、 問答題：共 52 分。

1. Suppose that movies are a normal good, but public transport is inferior. Draw an indifference map with a budget constraint and initial optimal choice. Now let income increase and draw a plausible new optimal choice. (6 points)

2. The football stadium of the National Central University has 30 seats. The demand for tickets is given by P = 36 − (1/2)Q, where Q is the number of ticket-buying fans.
   (a) Draw the supply and demand curves to scale in a graph. (4 points)
   (b) Determine the equilibrium admission price, and the amount of revenue generated from ticket sales for each game. (4 points)
   (c) A local alumnus and benefactor offers to install 6 more seats at no cost to the University. Compute the price that would be charged with this new supply and compute the revenue that would accrue at this new equilibrium price. Should the University accept the offer to install the seats? (5 points)
   (d) Redo the previous part of this question, assuming that the initial number of seats is 40, and the University has the option to increase capacity to 46 at no cost to itself. Should the University accept the offer in this case? (5 points)

3. Consider the demand curve P = 100 − 2Q. The supply curve is given by P = 30.
   (a) Draw the supply and demand curves to scale, and compute the equilibrium price and quantity in this market. (6 points)
   (b) If the government imposes a tax of $10 per unit, draw the new equilibrium and compute the new quantity traded and the amount of tax revenue generated. (6 points)
   (c) Is demand elastic or inelastic in this price range? (4 points)

4. Henry is contemplating opening a microbrewery and investing his savings of $100,000 in it. He will quit his current job as a quality controller at Megaweiser where he is paid an annual salary of $50,000. He plans on paying himself a salary of $40,000 at the microbrewery. He also anticipates that his beer sales minus all costs other than his salary will yield him a surplus of $55,000 per annum. The rate of return on savings is 7%.
   (a) Calculate the accounting profits envisaged by Henry. (2 points)
   (b) Calculate the economic profits. (2 points)
   (c) Should Henry open the microbrewery? (4 points)
   (d) If all values except the return on savings remain the same, what rate of return would leave him indifferent between opening the brewery and not? (4 points)