1) Macroeconomic agents

- households
- firms
- the government
- the rest of the world

Markets which the agents interact

- goods-and-services market
- labor market
- money (financial)

2) The resistance of products' price against the changes in costs or the tendency of price for a certain product to not respond instantly to change in the economic situation owing to minimum wage policy, employment contract, and labor union.

3) frictional unemployment : the normal turnover in the labor market, as well as when people transition into and out of the labor force

structural unemployment : a technological change in the structure of the economy that result in a significant loss of jobs in certain industries

cyclical unemployment : occurs with changes in economic activity over the business cycle ⇒ rises during recessionary peroids & declines during peroids of economic growth

seasonal unemployment : occurs when people are unemployed at particular times of the year when demand for labor is lower than usual

4) - frictional unemployment
- cyclical unemployment
- frictional unemployment
- structural unemployment
- seasonal unemployment
- frictional unemployment
- structural unemployment

5) The unemployment rate is $\frac{100-60}{100} = 0.4$. We can't find the labor force participation rate because we still miss the civilian working-age population.

6) The decline in the measured unemployment rate that results when people who want to work but can't find jobs grow discouraged and stop looking, thus dropping out of the ranks of the unemployed and the labor force. The discouraged-worker percentage keeps overall unemployment numbers high.

7) In Europe, unemployment is the price to be paid for labor market and social insurance agreements which preserve the dignity of work and a harmonious society. The higher unemployment rate, the more difficult it is for workers to find other work. So, structural unemployment which caused by shifts in the economy is most directly affected.

8) Inflation is the rate at which the value of a currency is falling and the general level of prices for goods and services is rising. As measures of inflation rise, this reflects a reduction in the purchasing power of money. Higher inflation generally harms savers because it erodes the purchasing power of the money they have saved. However, it can benefit borrowers because the inflation-adjusted value of their outstanding debts shrinks over time. Inflation also helps boost consumer demand and consumption, driving economic growth. People will also receive higher income.

9) Lenders are helped by unanticipated deflation because the money they get paid back has more purchasing power than the money they expected it to be when they loaned it out. For example, Miss Anna has borrowed 900,000 baht from Bangkok bank which she promises to pay back in two years. That means Miss Anna must pay back more than she borrowed while Bangkok bank will see their wealth increase.

10) Interest rates tend to rise with anticipated inflation. When interest rate is high, the central bank will set a higher nominal interest rate.

11) percentage change in CPI $= \frac{150 - 120}{120} \times 100 = 25$ → rate of inflation

$r = i - \pi = 30 - 25 = 5$

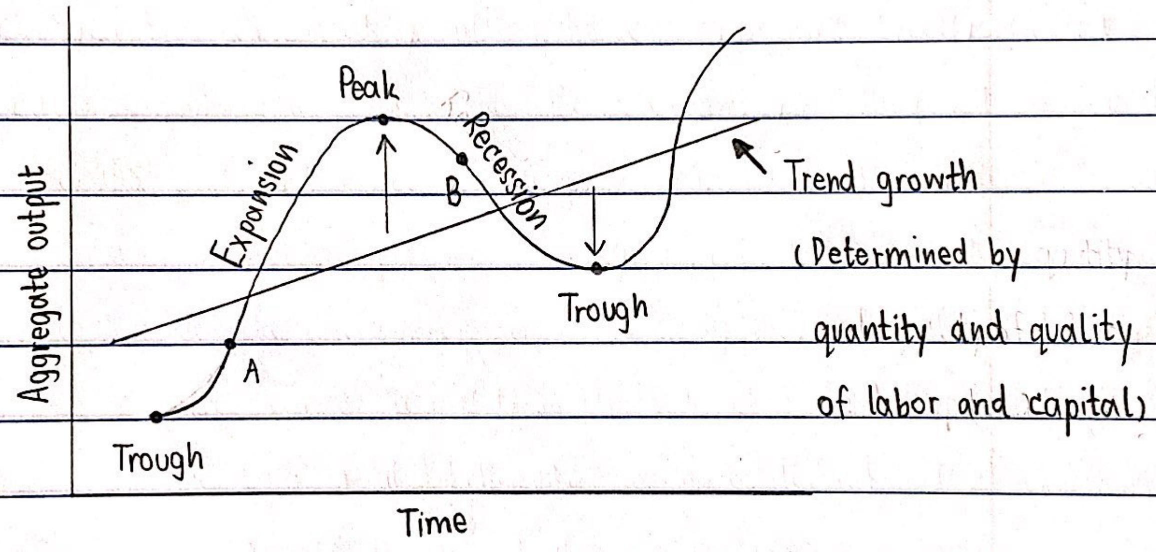
⇒ The bank's real interest rate is 5%. #

12) Increasing the money supply faster than the growth in real output will cause inflation. There is more money chasing the same number of goods. Therefore, the increase in monetary demand causes firms to put up prices.

13) menu costs : changing price lists ⇒ When inflation is high, prices need frequently changing which incurs a cost.

shoe leather costs : To save on losing interest in a bank, people will hold less cash and make more trips to the bank.

14)



- Expansion
- Recession
- To attempt to end a recession, the government can employ expansionary policy, which involves rapid deficit spending.
- To stop the economy from overheating during expansions by taxing and running a budget surplus to reduce aggregrate spending, it can use contractionary policy.
- quantity and quality of labor and capital

15) An increase in per-capita output leads to an increase in productivity.
To increase output, quality of capital and labor by education and quantity of capital and labor by population, and the level of technology increase.