Chapter Review Questions

Chapter 1

1. Provide a definition of economics.
2. What are the two main fields of economics? Suppose that you are studying the effect of an increase in the price of a product and the resulting change in the firm's revenue. Is this a topic covered in microeconomics or in macroeconomics? Why? Provide a brief explanation.
3. Suppose that the price of a product increases from $5.00 per unit to $6.00 per unit. What is the percentage change in the price of the product?
4. Write the formula for marginal.
5. Write the formula for slope.
6. Suppose that you have the following data. 20, 10, 3, 30, 40, 50.
    a. Calculate the average of these data. Show your work.
    b. Calculate the geometric average of these data. Show your work.
7. What is fallacy of composition? Give an example.
8. What is post hoc fallacy? Give an example.
9. What is false choice fallacy? Give an example.
10. What is the difference between a positive statement and a normative statement?
11. Define positive economics and normative economics. Give one example of a positive economic statement and one example of a normative economic statement.
12. What is a variable? Give an example.
13. What is the difference between time series variable and cross-sectional variable? Provide two examples of each.
14. What is the difference between a stock variable and a flow variable? Provide two examples of each.
15. Use data in Table 1.3 to calculate slope between each point.

Table 1.3: Slope Calculation

[1]	[2]	[3]
Point	X	Y
1	20	20
2	39	19
3	57	18
4	74	17
5	90	16
6	105	15
7	105	0
8	100	-5

Chapter 2

Use the data provided in Table 2.3 to answer Questions 1.

Table 2.3

[1]	[2]	[3]
	Widget 1 (tons)	*Widget 2* (tons)
Country A	50	40
Country B	40	20

1. Calculate the opportunity cost of both countries.
    a. Which country has an absolute advantage?
    b. Which country has a comparative advantage?
    c. Should these countries trade with each other? Is no, why not? If yes, why?
2. What is a Production Possibilities Frontier? Explain.
3. Using data in Table 2.1, plot the production possibilities frontier for Illinois. Make sure that you label the axes, and points on the axes, properly. Provide a brief explanation.
4. Using data in Table 2.3, plot the production possibilities frontier for Country A and Country B. Make sure that you label the axes, and points on the axes, properly. Provide a brief explanation.
5. Draw a Circular Flow diagram. Which economic agent is the main consuming unit in an economy and which economic agent is the main producing unit? Provide brief explanation.
6. Using data provided in Table 2.2, calculate opportunity cost of moving from point *a* to *b*, to *c*, all the way to point *h*. Do you see any pattern? Provide a brief explanation.

Chapter 3

1. What are the conditions that must be met for demand to exist?
2. What are the conditions that must be met for supply to exist?
3. What are the factors that may affect a household's decision to purchase a good or service?
4. What is the Law of Demand? Explain and provide an example.
5. Draw a household's demand curve. Make sure that you label the exes correctly.
6. What is a consumption substitute? Provide an example and draw the necessary diagram(s).
7. What is a consumption complement? Provide an example and draw the necessary diagram(s).
8. What is the Law of Supply? Explain and provide an example.
9. What are the factors that may affect a firm's decision to produce goods and services? Provide brief explanation.
10. Draw a firm's supply curve. Make sure that you label the exes correctly.

11. What is a production complement? Provide an example and draw the necessary diagram(s).
12. What is a production substitute? Provide an example and draw the necessary diagram(s).
13. What is a normal good? Provide an example.
14. What is an inferior good? Provide an example.
15. Distinguish between change in quantity demanded and change in demand. Draw diagrams to support your answer.
16. Distinguish between change in quantity supplied and change in supply. Draw diagrams to support your answer.
17. Suppose that the cost of production increase. How may a firm react to these increases in costs of production?
18. What is market quantity demanded? How does it differ from the quantity demanded by a household?
19. What is market quantity supplied? How does it differ from the quantity supplied by a firm?
20. What is market equilibrium? How do we reach equilibrium in the market? Provide an example.

Chapter 4

Use the data provided in Table 4.1 to answer questions 1-4.

Table 4.1: Market Quantity Demanded and Market Quantity Supplied

[1]	[2]	[3]
Price (in Dollars)	Market Quantity Demanded (Q_d)	Market Quantity Supplied (Q_s)
0	30	0
1	25	5
2	20	10
3	15	15
4	10	20
5	5	25
6	0	30

Source: M. Ashraf

1. Draw the market demand and market supply curves. Show the equilibrium price and equilibrium quantity.
2. Suppose that the market price is at $1. Is the market in equilibrium? If yes, why? If no, why not?
3. Suppose that the market price is at $4. Is the market in equilibrium? If yes, why? If no, why not?
4. What happens when the market price is at $5? How do we get to the equilibrium price and equilibrium quantity.

Refer to Figure 4.6 to answer question 5.

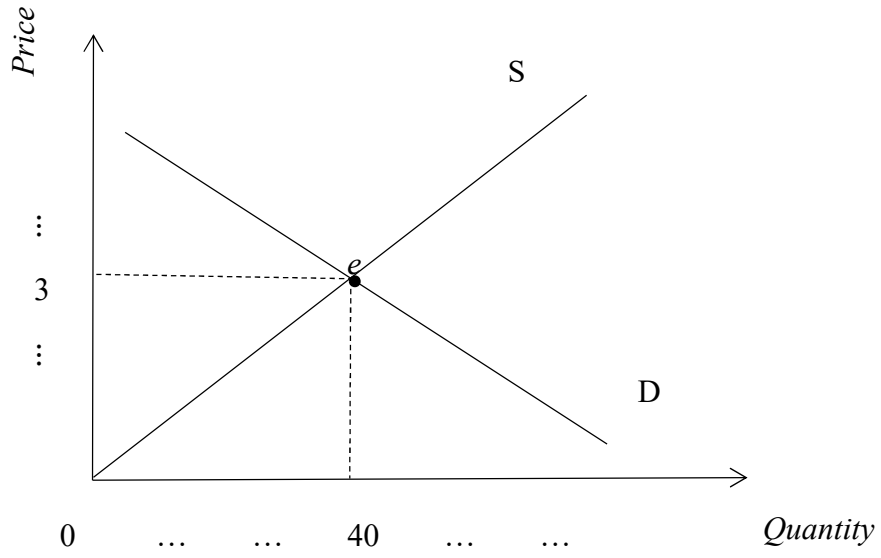

Figure 4.6

Source: M. Ashraf

1. What are the equilibrium price and equilibrium quantity according to the data in Figure 4.6?
2. Suppose technological advances lead to higher production. Which curve will shift and in which direction? Show by drawing the necessary diagram(s), and comment.
3. Suppose technological advances lead to higher production. What may happen to the equilibrium price and the equilibrium quantity? Show by drawing the necessary diagram(s), and comment.
4. Suppose that a hurricane hits the region which lead to the destruction of oil refineries. What impact it may have, if any, on the production of gas? Show by drawing the necessary diagram(s) and comment.
5. Suppose that technological changes lead to an increase in gas production and more gas efficient cars. Show the impact these changes by drawing the necessary diagram(s) and comment.
6. What may happen to the number of gallons bought and sold when the government imposes a binding price ceiling? Show the impact by drawing the necessary diagram(s) and comment.
7. What may happen to the number of gallons bought and sold when the government imposes a binding price floor? Show the impact by drawing the necessary diagram(s) and comment.

Chapter 5

1. What is a business cycle. Draw a diagram and show the various stages of a business cycle.
2. List four topics that are discussed in macroeconomics. Provide brief explanations.
3. List four topics that are discussed in microeconomics. Provide brief explanations.
4. What is a measure of the aggregate output that we learned in this chapter? Provide a brief description.
5. What is potential output? Provide a brief description.
6. What is per capita output? Provide a brief description.
7. Suppose a country's aggregate output (Y) is $100 billion during a given year. Its aggregate consumption (C) is $80 billion during that year. What is the value of aggregate saving (S)? Use the formula provided in the chapter for your calculations.
8. What is a main reason for price stickiness discussed in this chapter? Provide a brief explanation.
9. Why do firms sign contracts? Provide a brief explanation.

Chapter 6

1. Define GDP and GNP and highlight the differences.

Refer to Table 6.7 to answer questions 2 and 3. Suppose that a hypothetical economy produces three goods—Good A, Good B, and Good C. Table 6.7 lists the quantities of each good produced and prices in Year 1 and Year 2.

Table 6.7

	Quantity (Units)		Price (Dollars)	
Good	Year 1	Year 2	Year 1	Year 2
A	10	12	5	4
B	5	4	1	3
C	20	15	20	20

Source: M. Ashraf

2. Suppose that the base year is Year 1.
    a. Calculate nominal GDP for both years.
    b. Calculate real GDP for both years.
    c. Calculate GDP deflator.
    d. Calculate the inflation rate between Year 1 and Year 2.
3. Suppose that the base year is Year 2.
    a. Calculate nominal GDP for both years.
    b. Calculate real GDP for both years.
    c. Calculate GDP deflator.
    d. Calculate the inflation rate between Year 1 and Year 2.

4. Refer to Questions 2 and 3. Highlight the differences between figures obtained in the two questions and comment.
5. Refer to the data provided in Table 6.7.
    a. Assume that the base year is Year 1. Calculate GDP quantity index.
    b. Now assume that the base year is Year 2. Calculate GDP quantity index.
    c. Are there any differences between 5-a and 5-b? Comment on your findings.
6. What is consumer price index (CPI)? Provide a definition. How does CPI differ from GDP deflator? Comment.
7. Define inflation, deflation, and disinflation. Provide examples of each and comment.

Chapter 7

1. Draw a Keynesian Cross diagram and show the level of equilibrium output. Make sure that the axes are labelled correctly.
2. Suppose that $MPC = 0.8$, and intercept of the consumption function, α, is 100.
    a. Write the equation for the aggregate consumption function.
    b. Plot the function in Part a. Make sure that the axes are labelled correctly.
    c. Write the corresponding aggregate saving function.
    d. Plot the function in Part c. Make sure that the axes are labelled correctly.
3. Suppose that the $MPC = 0.7$.
    a. What is the value of the government spending multiplier? Show your work.
    b. What is the value of tax multiplier? Show your work.
    c. Do the values in Parts a and b differ? If so, why? Explain.
    d. What is the value of balanced-budget multiplier? Show your work.
4. Assume a closed economy, and suppose that,
   $MPC = 0.8$
   $C = 100 + MPC \times (Y - T)$
   $I = 100$
   $G = 100$
   $T = 20$
    a. Write the equation for planned aggregate expenditure.
    b. What is the equilibrium level of output? Show your work.
    c. What is the level of disposable income? Show your work.
    d. What is the value of aggregate consumption? Show your work.
    e. Suppose now that planned investment spending increases to 150. How will this change affect the equilibrium level of output and aggregate consumption? Show your work.
    f. Now suppose that government spending increases to 200. How will this change affect the equilibrium level of output and aggregate consumption? Show your work.

Chapter 8

1. Why did the need for a central bank arise? Explain.
2. What were the names of the predecessors of the Fed? Briefly explain.
3. What is the structure of the Fed?
4. Briefly explain the functions of the Fed.

Chapter 9

1. What are the characteristics that an asset must have for it to function as money? Provide brief explanation of each.
2. How do banks create money? Explain.
3. What is money demand? Explain.
4. What is money demand curve? Draw a diagram. Make sure that the axes are properly labelled.
5. Why does there exist a negative relationship between the interest rate and the quantity of money demanded. Explain.
6. What is money multiplier? Write the equation and provide a brief explanation.
7. What are the tools of monetary policy discussed in the text? Provide brief explanations of each.
8. What is the mechanism through which changes in interest rate affect aggregate output? Draw a diagram and explain.

Chapter 10

1. Draw a short-run aggregate supply curve. Why does the short-run aggregate supply curve have this shape? Explain.
2. What are the factors that may lead to a shift the short-run aggregate supply curve? Explain.
3. Explain the connection, if any, between the Keynesian Cross diagram and the *IS* curve. Draw the necessary diagrams.
4. Draw an *IS* curve. Explain what does an *IS* curve show?
5. What the factors that may shift the *IS* curve? Provide brief explanations.
6. What is the Fed Response function? Explain.
7. What are the factors that may shift the Fed Response function? Provide brief explanations.
8. Highlight the channels through which changes in the overall price level affect aggregate output.
9. Draw an aggregate demand curve and explain the reason behind this shape.
10. What are the factors that may shift the aggregate demand curve? Explain.
11. Show, with the help of a diagram, the equilibrium price level and equilibrium aggregate output. Provide a brief explanation.

12. What does a long-run aggregate supply curve look like? Draw the necessary diagram(s) and provide brief explanations.

Chapter 11

1. Why do firms demand labor, and why do households supply labor? Provide brief definitions and draw the labor-demand curve and the labor-supply curve.
2. Provide brief definitions of the following:
    a. Unemployed person
    b. Employed person
    c. Out of the labor market
    d. Population
    e. Unemployment rate
    f. Employment-to-population ratio
    g. Discouraged-worker effect
3. Suppose that the population of the noninstitutionalized persons in the economy is 100, and out of these, 10 are unemployed and 80 are employed. Calculate the following:
    a. Labor force
    a. Labor-force participation rate
    b. Unemployment rate
4. Suppose that the frictional unemployment rate is 2%, and the structural unemployment rate is 3%. What is the natural rate of unemployment?
5. What are the assumptions made in this chapter about the labor market?
6. What is an implication of the classical model?
7. What roles do monetary and fiscal policies play in the economy in the context of the labor market?

Chapter 12

1. What is openness index? Provide a brief description and an example.
2. Suppose that a country's exports are $100 billion, its imports are $120 billion, and its GDP is $500 billion. What is the value of its openness index?
3. Refer to Figure 12.2. According this figure, which country is the most open and which country is the least open? Do these ranking provide an accurate picture of the relative volumes of trade? Discuss.
4. Suppose that a country's exports are $100 billion, its imports are $120 billion. Is this country experiencing trade surplus or trade deficit, and by how much?
5. Suppose that MPS = 0.30. What is the value of the net-exports multiplier?
6. Suppose that MPS = 0.25. Suppose that this country's net exports increase by $200 billion. All else constant, will this change in net exports have any impact on the country's equilibrium output level? If yes, by how much? If no, why not?
7. Graphically show the impact of a decrease in an economy's net exports. Make sure that you label axes properly and provide all the relevant details.

Chapter 13

1. What do we mean by economic growth? What is the difference between economic growth and economic development.
2. How do we calculate per capita GDP? Provide an example and explain.
3. When did economic growth start to take hold? Provide a brief explanation.
4. Looking at the data provided in this chapter, is the average person today living better, worse, or about the same as an average person living a thousand years ago? Explain.
5. What is the method used in this chapter to compare the living standard of an individual today with the living standard of an individual a thousand years ago? Provide a brief explanation.
6. Over the millennia, has the poverty decreased, increased, or about the same? Explain.
7. Using the data provided in this chapter, would you rather live in today's world or in a world that existed a thousand years ago? Explain.