Izmir University of Economics
ECON 100
Spring 2013

Problem Set 4 (Chapters 10-11)

Essay Questions

1) Refer to the information provided in table below to answer the questions that follow.

Employment	10,000 people
Unemployment	2,500 people
Economically inactive	3,000 people

Calculate
a) The economically active=Employment +Unemployment =10,000+2,500=12,500
b) The unemployment rate=(Unemployment/Economically active)= (2,500/12,500)*100=20%
c) The economic activity rate=Economically active/Working age population= (12,500/(12,500+3,000))*100=80.65%
d) The employment rate= Employment/Economically active= (10,000/12,500)*100=80%

2) The information below is for a two-good economy and it shows production and prices for three consecutive years:

Good	Q2000	P2000 (mil.TL)	Q2001	P2001 (mill.TL)	Q2002	P2002 (mil.TL)
Shoes	100	30	200	20	100	10
Pen	50	20	100	10	150	20

a) Calculate the nominal GDP for each year. Show all your work.
2000 ----- 100*30+50*20=4000
2001----- 200*20+100*10=5000
2002 ----- 100*10+150*20=4000
b) Calculate the real GDP for each year using 2000 as the base year. Show all your work.
2000 ----- = 4000 (The real GDP in 2000 is the same as the nominal GDP in 2000 because the base year is 2000)
2001 ----- 200*30+100*20=8000 (we use prices in 2000)
2002 ----- 100*30+150*20=6000 (we use prices in 2000)
c) By what percentage did real GDP rise from year 2000 to year 2001 and from year 2001 to year 2002?
From 2000 to 2001:
$(GPD_{2001}-GDP_{2000})/GDP_{2000}*100$= (8000-4000)/4000*100= 100%
GDP increased by 100% from 2000 to 2001

From 2001 to 2002:
$(GDP_{2002}-GDP_{2001})/GDP_{2001}*100$= - 25%
GDP decreased by 25% from 2001 to 2002
3) Which of the following is an intermediate good? Which of the following is a final good?
   I) Coffee beans bought by Starbucks.
   II) Starbucks coffee bought by a student.
   III) The purchase of a new limo for the prime minister.
   IV) Tires Ford buys to put on a car.

Intermediate: I, IV
Final: II, III

4) Use the data in the table below to calculate aggregate expenditure and imports of goods and services.

Item	Billions of pounds
Government Expenditure on goods and Services	25
Aggregate income	110
Consumption Expenditure	65
Investment	20
Exports of goods and services	25

Aggregate expenditure is _____ billion pounds.
Aggregate income = Aggregate expenditure
Aggregate expenditure =110
Imports of goods and services are_____ billion pounds.
Aggregate expenditure equation: Y=C+I+G+X-M, import: M
110=65+20+25+25-M
M=25
Net exports are _____ billion pounds.
Net exports= X-M
X-M=25-25
X-M =0

Multiple Choice Questions

1) UK Gross domestic product is the market value of all the _____ produced ; _____ in a _____.
A) Final Goods and services; within the UK; given time period
B) goods; within the UK; month
C) goods; by UK firms located anywhere in the world; year
D) Final Goods and services; by UK firms located anywhere in the world; quarter

2) During a year, a firm's net investment is $4000 and depreciation is $1000. The firm's gross investment is
A) $6000
B) $4000
C) $5000
D) $1000

3) All of the following are examples of net investment except
A) the purchase of bookshelves by DNR
B) The purchase of cash registers by Migros
C) TRT's purchase of a new studio
D) a person depositing $100 a week to her savings account

4) A bakery uses flour to produce bread. When calculating GDP, we include _____, because when we add the value of the flour to the value of bread to calculate GDP, the result is _____.
A) Both the value of bread sold in a store and the value of the flour used to produce the bread; the true value of the economy's output

B) Only the value of bread sold in a store; double counting
C) Both the value of bread sold in a store and the value of the flour used to produce the bread; double counting
D) Only the value of the flour used to produce the bread; double counting

5) An electrician who is laid off because the economy is in a recession and who gets rehired some months later _____.
A) frictionally unemployed.
B) structurally unemployed.
C) cyclically unemployed.
D) naturally unemployed.

6) When an economics professor quits his/her job at a university and starts looking for a better job in another university, he/she is
A) frictionally unemployed.
B) structurally unemployed.
C) cyclically unemployed.
D) naturally unemployed.

7) The unemployment that arises when changes in technology or international competition change the skills is
A) frictionally unemployed.
B) structurally unemployed.
C) cyclically unemployed.
D) naturally unemployed.

8) CPI tells us _____.
A) the price level in a given period expressed as a percentage of the price level in the base period, which is by definition equal to zero
B) the inflation rate in a given period compared to the inflation rate in the base period, which is by definition equal to zero
C) the price level in a given period expressed as a percentage of the price level in the base period, which is by definition equal to 100
D) the inflation rate in a given period compared to the inflation rate in the base period, which is by definition equal to 100

9) If the CPI in 2001 was 100 and the CPI in 2002 was 130, then the rate of inflation between 2001 and 2002 was
A) 11%.   B) 30%.   C) 13%.   D) 14%.

10) An increase in the overall price level is known as
A) deflation.
B) recession.
C) inflation.
D) stagflation.

11) The term business cycle refers to the
A) Periodic but irregular up and down movement of total production.
B) Regular up and down movement of total production.
C) long-term trends in the level of total production.

D) None of the above.

12) In a business cycle, a peak represents the end of _____ and a trough represents the end of _____.
A) an expansion; a recession
B) a depression; an expansion
C) a trough; a peak
D) a recession; an expansion