CODE OF HONOR PLEDGE:

I will not give or receive aid on this examination. I understand that if I am aware of cheating on this exam, I have an obligation to inform Professor Brooks. I also understand that Professor Brooks will follow the University of Notre Dame Academic Code of Honor if he detects acts of academic dishonesty.

Signature: ________________________________

Printed Name: ________________________________

Date: ________________________________

I. Concepts (10 of 100 points)

1) What do each of these abbreviations stand for?
   
a. GDP: Gross Domestic Product
   b. WTO: World Trade Organization
   c. CPI: Consumer Price Index
   d. IMF: International Monetary Fund

2) What is the definition of GDP? (not asking what the abbreviation stands for)
   
   Gross Domestic Product is the total market value of all final goods and services produced in a particular location over a given period of time.

3) In the space below, write the formula for the unemployment rate:

   Unemployment Rate = # of unemployed people / # of people in the labor force
II. Real vs. Nominal GDP (20 of 100 points)

Suppose the following table fully summarizes the economy from 2009-2011:

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prices</td>
<td>Quantities</td>
<td>Prices</td>
</tr>
<tr>
<td>Cars</td>
<td>1000</td>
<td>10</td>
<td>1200</td>
</tr>
<tr>
<td>Grain</td>
<td>2</td>
<td>3000</td>
<td>1</td>
</tr>
</tbody>
</table>

Suppose that the base year in all calculations is 2010. Suppose the basket used to compute CPI is 1 car and 350 units of grain. Fill out the following table:

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal GDP</td>
<td>16,000</td>
<td>18,400</td>
<td>22,500</td>
</tr>
<tr>
<td>Real GDP</td>
<td>15,000</td>
<td>18,400</td>
<td>20,500</td>
</tr>
<tr>
<td>GDP Deflator</td>
<td>106.7</td>
<td>100</td>
<td>109.8</td>
</tr>
<tr>
<td>CPI</td>
<td>109.7</td>
<td>100</td>
<td>132.3</td>
</tr>
</tbody>
</table>

In each year, compute the inflation rate using the GDP Deflator:

- Inflation rate in 2010: -6.3%
- Inflation rate in 2011: 9.8%

Suppose that the minimum wage in 2011 is $10. Use the CPI to adjust that nominal variable into their value in 2009 and 2010 dollars.

- Value in 2009 dollars: $8.29
- Value in 2010 dollars: $7.56
### III. Categorization of GDP (20 of 100 points)

For each expenditure, mark an X in the column or columns where the expenditure would be counted (positive or negative) in GDP. There may be more than one answer.

<table>
<thead>
<tr>
<th>Expenditure</th>
<th>C</th>
<th>I</th>
<th>G</th>
<th>X</th>
<th>M</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Furniture produced this year, which is currently in warehouse and will be sold to a foreign country next year</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government payments of unemployment benefits</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apples purchased from a foreign country and consumed by households.</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial services purchased from a foreign bank by a domestic firm to facilitate its operations</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial services purchased from a foreign bank by a domestic household to facilitate a stock transaction</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The purchase of a new house this year, and the rent money collected from its occupants</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College tuition payments</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flour purchased by a baker, which is then turned into bread</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Computers stored in a warehouse last year are sold to households this year</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One individual buys shares of a company directly from another individual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
IV. Multiple Choice (50 of 100 points)

1) According to the Solow growth model, if there is an increase in productivity:
   a. Consumption decreases in the short run and increases in the long run
   b. **Consumption increases in the short run and the long run**
   c. Consumption increases in the short run and decreases in the long run
   d. Consumption decreases in the short run and may or may not increase in the long run.

2) According to the Solow growth model, if there is an increase in the savings rate:
   a. Consumption decreases in the short run and increases in the long run
   b. Consumption increases in the short run and the long run
   c. Consumption increases in the short run and decreases in the long run
   d. **Consumption decreases in the short run and may or may not increase in the long run.**

3) Which best summarizes Argentina’s economic history for the past 100 years?
   a. Argentina was poor 100 years ago, then grew quickly, but then destabilized and became poor again.
   b. **Argentina was rich 100 years ago, then pursued policies aimed at reducing their dependence on imports, which resulted in many economic crises.**
   c. Argentina was poor 100 years ago, then because of trouble in international markets it has never been able to grow.
   d. Argentina was rich 100 years ago, then pursued policies aimed at increasing international trade, which resulted in many economic crises.

4) Which of the following is **not** a criticism of the IMF?
   a. Harsh restrictions on borrowers
   b. Not accountable to any higher body
   c. Structural adjustment programs not sufficiently tailored
   d. **Targets loans at nations that are not credit-worthy**

5) Why is China’s growth so important for the world economy?
   a. No country has ever grown as fast as China
   b. **China’s very large population**
   c. No country has ever sustained growth for such a long period of time
   d. All of the above
6) Which of the following is true about the experiences of fast-growing countries?
   a. Their fast growth tends to end suddenly.
   b. Fast growth episodes have only occurred in East Asia.
   c. No country has sustained fast growth for as long as China.
   d. Fast growth occurs when countries increase their rate of savings.

7) According to Esther Duflo, if we want to know how to save the greatest number of lives possible with $1,000,000 in the developing world, we can find the answer by:
   a. Using macroeconomic modeling
   b. Using randomized controlled trials
   c. Asking local government officials
   d. Understanding free market forces

8) What was a key difference between Argentina and South Korea’s economic policy?
   a. Argentina subsidized industry while South Korea did not.
   b. Argentina promoted agriculture while South Korea promoted manufacturing.
   c. Argentina subsidized its least efficient industries while South Korea subsidized its most efficient industries.
   d. Argentina has low education while South Korea has a high education level.

9) Which of these explains the vast majority of growth in real US GDP per working age person?
   a. Increases in capital
   b. Increases in labor hours
   c. Increases in productivity
   d. None of these

10) IMF loans are used for:
    a. Stabilizing the value of currencies over the short to medium term
    b. Financing infrastructure projects that may boost the economy
    c. Helping countries to smooth the transition to free market economies from socialist economies
    d. Facilitating capital flows to and from developing countries

11) Which of the following is not a function of the WTO?
    a. Provide loans to countries to encourage trade
    b. Standardize the tariffs that countries charge to other countries
    c. Settle trade disputes between countries
    d. Promote world trade
12) Suppose a US accounting agency pays its domestic employees $2,000,000 and pays $500,000 in consulting fees to a London firm. The agency provides $1,000,000 worth of services to UK firms, $1,000,000 of services to the US government, $5,000,000 worth of services to US firms, and $1,000,000 of services to US households.
   a. These activities contribute $2,500,000 to US GDP.
   b. These activities contribute $4,500,000 to US GDP.
   c. These activities contribute $7,500,000 to US GDP.
   d. None of the above.

13) Suppose there are 5 unemployed people who last looked for work 1 week ago, 5 unemployed people who last looked for work 8 weeks ago, and 5 employed people who last looked for work 1 week ago. The following are not looking for work: 25 retirees, 10 full time students, 10 members of the military and 40 full time workers.
   a. The unemployment rate is 10% and the labor force participation rate is 50%.
   b. The unemployment rate is 15% and the labor force participation rate is 60%.
   c. The unemployment rate is 15% and the labor force participation rate is 50%.
   d. The unemployment rate is 10% and the labor force participation rate is 60%.

14) Which of the following is guaranteed to cause a rise in steady state consumption?
   a. A decrease in savings
   b. An increase in savings
   c. A decrease in capital depreciation
   d. An increase in capital depreciation

15) Which of the following is not associated with the Great Leap Forward?
   a. Starvation due to a drop in agricultural productivity
   b. Production of worthless pig iron
   c. Collectivization of agriculture
   d. Foreign invasion in coastal areas

16) Which of the following might rationalize Argentina’s move toward import substitution policy?
   a. Argentina had promising industries that were being suppressed by foreign firms
   b. The Argentine economy in the early 20th century was highly dependent on trade
   c. Argentina did not have enough gold to be competitive in international markets
   d. The Argentine government wanted to be self-reliant for international security reasons after losing World War I
17) Import substitution policy is designed to:
   a. Increase net exports by increasing exports and decreasing imports
   b. Protect “infant industries” in the domestic economy
   c. Subsidize low productivity industries so that workers keep their jobs
   d. Fund government expenditure by taxing foreign goods

18) US real GDP per working age person has grown at what rate over the past 100 years, and approximately how often does it double?
   a. grows at 4%, doubles every 18 years
   b. grows at 2%, doubles every 18 years
   c. grows at 4%, doubles every 35 years
   d. grows at 2%, doubles every 35 years

19) Which of the following would not likely increase GDP?
   a. Encouraging child labor
   b. Run perpetual trade deficits
   c. Direct spending away from consumption, toward investment
   d. Require adults to work 60 hours per week

20) Each of these would be studied in development economics except:
   a. What policies increase net exports?
   b. What policies increase vaccination rates?
   c. What policies increase income of microenterprises?
   d. What policies increase child school attendance?

21) Which of these causes a rise in unemployment?
   a. A discouraged worker stops looking for work
   b. A worker is reduced from part time to full time
   c. A worker is forced into early retirement
   d. A retiree is offered a job and returns to the labor force

22) The reforms in Argentina in the 1990s failed because:
   a. Government debt grew out of control
   b. Inflation grew out of control
   c. The government nationalized many industries and mismanaged them
   d. The government raised tariffs on foreign goods
23) Which of these is not a key ingredient of modern macroeconomic models?
   a. Households
   b. Governments
   c. Firms
   d. Equilibrium

24) Which of these best describes the Korean economy during the period of Japanese occupation?
   a. The Japanese introduced industrialization and GDP grew.
   c. The Japanese discouraged manufacturing and encouraged food production to help feed the Japanese homeland.
   d. Introduction of raw materials from Japan caused GDP to grow.

25) China’s exchange rate strategy encourages Chinese exports by:
   a. Strengthening the Chinese yuan by allowing US dollars into the Chinese economy
   b. Weakening the Chinese yuan by allowing US dollars into the Chinese economy
   c. Weakening the Chinese yuan by keeping US dollars out of the Chinese economy
   d. Strengthening the Chinese yuan by keeping US dollars out of the Chinese economy