The Final Exam is on Saturday August 11 at 9:00 AM.  
It covers material from Chapters 1-4, & 10-20; and consists of 40 multiple choice questions.  
Scantron forms not needed. Calculators and/or ordinary dictionaries may be used.

1) a) Trade deficit => net exports are negative => total imports > total exports.  
b) Tariff = tax on imported goods. Quota = numerical limitation on imports which may enter. Each will reduce imports of the item subject to the quota or tariff.  
c) General Agreement on Tariffs and Trade (GATT) has reduced trade barriers and increased the volume of trade - rules established under GATT are now enforced under the World Trade Organization (WTO).  
d) Foreign Direct Investment (FDI) and Foreign Portfolio Investment.  
e) i) real interest on foreign assets; ii) real interest on domestic assets; iii) perceived risk; iv) government policies.  
No, the real exchange rate is not included, so in Figure 18-2, pg. 395, the supply of dollars if vertical.  
f) U.S. Net Foreign Investment increases.  
g) The borrower does not repay the money borrowed (the lender may “write off” such “bad loans”).  
h) Krugman asserts imports from poor countries do not U.S. affect wages much because the monetary value of such imports represent a small proportion of GDP.  
In class the instructor argued this reasoning is inconsistent with standard economic thinking. For example, if imported shoes sold for a price of zero in the U.S. such sales would be zero percent of U.S. GDP, but would still affect wages/employment of (former) U.S. shoemakers. Krugman IS correct when he argues a country can not both have negative net exports and positive net foreign investment.  
i) In the 1980s: U.S. national savings rate ↓; net foreign investment ↓; and U.S. real interest rates ↑  
j) .01 U.S. dollars (one cent) would be needed to buy one Yen.  
k) The U.S. $ would have appreciated and the Yen would have depreciated.  
m) The U.S. real exchange rate (RER) increases (“under-valuation” of the $ decreases as RER approaches one).  
n) Nominal exchange rate (consistent with purchasing power parity) = 160/2 = 80 (¥/$).  
o) The burger should cost 5 Deutsche Marks (DM) in Germany.  
p) If the law of one price is true (or “holds”) then purchasing power parity is also true.  
q) Debtor has borrowed some money. A net debtor has borrowed more then they have lent to others (“saved”).

2) a) Real Interest Rate on vertical axis. i) households; ii) firms; ii) government; iv) foreigners. The Demanders are the same 4 groups as Suppliers, some within each group are net savers, others net borrowers.  
b) Net Foreign Investment = Foreign Investment (by Americans abroad) – Foreign Investment of foreigners into the U.S. We assume equilibrium in the foreign exchange market (and omit items such as money sent home by guest workers) so Foreign Investment = Net Exports  
c) National savings = investment (purchase of real “machines” domestically) + net foreign investment (capital outflow from the country). S = public saving + private saving = (Y-C-T) + (T-G). If government has a fiscal budget deficit, (T-G) is negative. Saving is a flow variable.  
d) NFI falls as real interest rate increases because profitability of domestic assets in comparison to foreign assets has increased. We hold foreign interest constant while domestic real interest increases. Think of this as implying that building factories in the U.S. is therefore more profitable relative to building them abroad. If real interest rate in the U.S. falls, the relative profitability of building factories abroad increases, so the quantity of dollars supplied on the foreign exchange market would increase.  
e) Supply of loanable funds shifts right; level of NFI increases; supply of dollars on the foreign exchange market shifts right -- real interest falls; and real exchange rate falls as well.  
f) Because real exchange rate increases, which reduces exports. Imports and exports both fall the same amount (so net exports, NX, remains unchanged).  
g) Quota = numerical restriction on imports. A Voluntary Export Restraint (VER) is basically the same, but the exporting nation determines which firms can export how much (VERs used to limit Japanese exports of autos into the U.S. during the 1980s).
3) a) Amount being loaned within Mexico increases; borrowers make investments outside of Mexico.
b) No – the real interest rate would still increase – Mexico’s NFI curve would shift rightward as in the text since Mexicans wish to invest more outside of Mexico for any given Mexican real interest rate. The supply of Pesos would still shift right, causing the Mexican real exchange rate to fall (Peso depreciation and Dollar appreciation).

4) i) Wealth Effect; ii) Interest Rate Effect; iii) Exchange Rate Effect
i) misperceptions of relative prices by firms (they only notice the price of what they sell has increased); ii) Sticky wages; iii) sticky prices. Along AD everything affecting demand except price level and things directly affected by price level changes are constant (e.g., consumption, investment, government spending, taxes, etc.). Along SRAS everything affecting supply except price level and things directly affected by price level changes are constant (e.g., wages, input prices, technology, etc.). Stock market boom => AD shifts rightward. Fall in the price level => move downward on a stationary AD curve.

5) If wage contracts are for longer time periods, the SRAS will shift more slowly (increase in wages shifts SRAS left). SRAS is upward sloping because price level can increase in the short run without an increase in wages and other input prices. In the long run input prices will increase if output prices increase.

6) In expansion: unemployment ↓; output (real GDP) ↑; interest rates ↑; and inflation ↑ - (opposite in contraction)

7) a) Animal spirits = investment levels that change for reasons that are not logical and can not be measured. Wave of pessimism can shift AD leftward. Real investment, I, is initially most affected.
b) In recession AD and SRAS intersect to the left of the LRAS curve. Falling wages and other input prices shift SRAS rightward to move economy toward long run equilibrium.
c) wages fall => SRAS shifts right => stabilizes economy since firms produce more in response to lower costs.
d) The price level (and all things directly affected by changes in it) is not constant.
e) Increased technology and resources (more capital, more labor, better trained workers...). The same things that shift production possibilities frontier outward (away from the origin) shift the LRAS rightward.
f) Unemployment insurance. Amount paid out by government increases in recessions (as unemployment rate ↑).
g) No, since a regressive tax would imply more tax is paid as incomes fall.
h) Tax cuts shift AD rightward since consumption and investment spending increase (for a given price level).
i) If people work more the LRAS and SRAS shift right since more would be supplied at any price level.

8) a) If inflation is zero and real interest rate increases by 2% then nominal interest rate also increased by 2%.
b) As interest rate increases, cost of holding money increases so people hold less (assume money pays no interest).
c) As Mₚ↑ => interest rate ↓ => AD shifts right since investment and consumption increase.
d) Federal funds rate is the interest rate banks pay on very short term loans (to meet reserve requirements). It falls as Mₚ↑. The Fed would want to decrease the fed funds rate in a recession if using “counter-cyclic policy.”
e) To slow down the economy when it is growing too fast. To reduce or prevent increases in inflation.
f) To slow down the economy to a growth rate that is sustainable and reduce the growth in inflation.
g) A larger spending multiplier implies a larger effect of increased government spending. A larger marginal propensity to consume => larger multiplier => a larger rightward shift in AD from an ↑ in G.
h) G↑ => interest rates ↑ => Consumption & Investment ↓. Complete crowding out => AD will not shift as G↑
i) Yes. Effect would be the same since ↑ in saving implies ↓ in consumption. AD would not shift rightward as much after G↑. This type of crowding out could occur with no increase in interest rates.
j) If mpc = .9 consumers spend 90% of an increase in income (save 10%, ignoring income taxes). 
Spending multiplier = 1/(1-mpc) = 1/(1-.9) = 1/.1 = 10

9) a) Fiscal deficit exists in years when government spending > tax revenue. National debt = amount owed by government (↑ in years when deficit is positive). Trade deficit = imports – exports = - net exports = - NX
b) Classical Economists focus on (long run) Aggregate Supply; and Keynesians on Aggregate Demand.
c) In a boom, with counter-cyclic policy, the Fed should reduce money supply growth rate and raise interest rates (contractionary monetary policy); while the federal government should raise taxes or reduce government spending (contractionary fiscal policy).