DEPARTMENT OF ECONOMICS — DECEMBER 6, 2019
SAN JOSE STATE UNIVERSITY — 6:00 P.M. TO 9:30 P.M.
MASTER'S COMPREHENSIVE EXAMINATION — PROCTOR: HUMMEL & LIU

INSTRUCTIONS:

1. Answer ONLY the specified number of questions from the options provided in each section. Do not answer more than the required number of questions. Each section takes one hour.
2. Your answers must be on the paper provided. No more than one answer per page. Do not answer two questions on the same sheet of paper.
3. If you use more than one sheet of paper for a question, write "Page 1 of 2" and "Page 2 of 2."
4. Write ONLY on one side of each sheet. Use only pen. Answers in pencil will be disqualified.
5. Write **------ END -----** at the end of each answer.
6. Write your exam identification number in the upper right-hand corner of each sheet of paper.
7. Write the question number in the upper right-hand corner of each sheet of paper.

Section 2: Macroeconomics, Monetary Theory, and Econometrics—Answer One Question.

2A. (Econ 202) Answer all of the following parts completely. Be specific.

a. Draw a standard aggregate demand-aggregate supply diagram correctly identifying both axes and all the curves. (Hint: if you put the interest rate on either axes, you automatically fail this question.)

b. What explains the slope of the aggregate demand curve?

c. Identify what can cause shifts in the aggregate demand curve. What factor do monetarists emphasize? What factor do Keynesians emphasize?

d. How would the pre-Keynesian neoclassical economists have drawn the aggregate supply curve? (You may describe it or draw it on a separate graph.) Explain why they would have drawn the curve this way.

e. How would your traditional Keynesians have drawn the aggregate supply curve? (Again, you may describe it or draw it on a separate graph.) Explain why.

f. Explain how the modern view compares with the pre-Keynesian and Keynesian views of aggregate supply. Then show on a diagram how a negative shock to aggregate demand would affect the curves in both the short-run and long run.

g. Now use the aggregate demand-aggregate supply model to portray the monetarist view of stagflation (i.e., inflationary recessions).

h. Finally, use the aggregate demand-aggregate supply model to portray what causes a recession according to real business cycle theory.

i. What theory of expectations does real business cycle theory depend upon?

(over)

2B. (Econ 203) Consider the following linear and log-linear SRF's for the demand for beer:

Variable Name	**Definition**	**Mean**
q	liters of beer consumed	56
pb	price of beer ($)	3.0
pl	price of other liquor ($)	8.5
pr	price of remaining goods (an index)	1.25
i	income ($)	32,600
ehatsq	squared OLS residuals	

Results

Demand for Beer Estimates

	(1) OLS-Linear	(2) OLS Log-Linear	(3) OLS Squared Residuals
Dep. Var.	q	log(q)	ehatsq
pb	-20.00***		19.50
	(-4.37)		(0.68)
pl	5.00		-13.00
	(1.05)		(0.63)
pr	13.00**		27.00
	(3.10)		(1.23)
i	0.0020*		0.0016***
	(2.57)		(4.39)
lnpb		-1.10***	
		(-4.27)	
lnpl		0.60	
		(1.04)	
lnpr		0.210*	
		(2.63)	
lni		1.100*	
		(2.22)	
_cons	82.16***	-3.243	78.27
	(4.57)	(-0.87)	(0.82)

(**2B** continued on next page)

2B (continued):

N	30	30	30
R-sq	0.822	0.825	0.081
adj. R-sq	0.794	0.797	-0.066
F	28.89	29.54	0.548***

t statistics in parentheses
* $p<0.05$, ** $p<0.01$, *** $p<0.001$

a. For the linear functional form, interpret the impact on beer consumption on the following:
— a 75 cent decrease in the price of beer
— a $500 decrease in income
— a $1 increase in the price of other liquor?
Be specific with units.

b. How would you interpret the impact on beer consumption from a 2% percent decrease in the price of beer and income using the log linear model?

c. Based on the log linear model how would you describe the following: demand price; elastic or inelastic, income; normal or inferior, other liquor price; substitute or complement?

d. Discuss the pro and con of the linear and log linear form in terms of slopes and elasticities.

e. What would you conclude about the regression of the squared residuals? Which tests would be important in interpreting the residual regression results? Which variable(s) might be of concern?

2C. (Econ 235) Answer all of the following parts completely. Be specific.

a. Does the Federal Reserve (Fed) actually control interest rates? If so, to what extent?

b. What is the short-run impact of an expansionary monetary policy on interest rates? What is this effect called, and why does it occur? Depict this short-run impact on a diagram of the loanable-funds market. Assume you are starting with a constant money stock and that the Fed engages in a one-shot increase in the money stock.

c. After the new money circulates throughout the economy, what happens to interest rates? What is this effect called, and why does it occur? Depict this impact on a diagram of the loanable-funds market.

d. Now assume that the Fed continues expanding the money stock at a constant rate. What is the impact on nominal interest rates? What is the impact on real interest rates? What is this effect called, and why does it occur? (You do not need to graph it.)

e. Why does the difference between short-term and long-term effects of monetary policy that you have described in parts (**b**), (**c**,) and (**d**) create problems for a monetary policy that targets interest rates?

f. Give the equation for the Taylor Rule. Clearly identify all variables and coefficients in the equation. What macroeconomic variables does the Taylor Rule try to stabilize? How does the Taylor Rule deal with the problems you described in part (**e**)?