

**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) Discuss the business cycle by answering *all* of the following. As you answer each part, make sure you identify it with the appropriate letter:

- a.** Define depressions (or recessions) and mention what characterizes them. Do they constitute a genuine, regular, predictable cycle? Why or why not?
- b.** What typically happens to employment, output, investment, prices (or inflation), real wages, nominal interest rates, and the Solow residual over the business cycle?
- c.** How long do depressions (or recessions) usually last?
- d.** Discuss stagflation (an inflationary recession). What is it, how does it differ from a typical recession, and why might it arise?
- e.** Explain why reducing unemployment below its natural rate (or NAIRU) requires accelerating inflation.
- f.** Relate your answer to the shape of the short-rate aggregate supply curve and the role of expectations in shifting that curve.
- g.** Identify and describe the two different ways that macroeconomists have modeled expectations.
- h.** Draw an aggregate-demand, aggregate-supply graph in output-price level space clearly identifying both axes and all three curves.

(over)

**2B.** (Econ 203) Consider the following results from a semi-log wage regression:

variable name	variable label
sprice	selling price of home, dollars
lsprice	= log(sprice)
livarea	living area, <b>hundreds of square feet</b>
beds	number of beds
baths	number of baths
lgeot	= 1 if lot size > .5 acres, 0 otherwise
age	age of home at time of sale, years
pool	= 1 if home has pool, 0 otherwise
ehatsq	= squared residuals from log regression

Wage and Squared Residuals Equations

	(1) lwage	(2) ehatsq
educ	0.079*** (0.008)	0.002 (0.008)
educfem	0.044*** (0.012)	0.013 (0.011)
educasian	-0.066** (0.027)	0.007 (0.026)
exper	0.006*** (0.001)	0.004*** (0.001)
married	0.160*** (0.047)	0.020 (0.046)
female	-0.755*** (0.168)	-0.177 (0.162)
marfem	-0.162** (0.064)	0.022 (0.062)
metro	0.185*** (0.039)	0.038 (0.037)
south	0.026 (0.035)	0.049 (0.034)

(2B continued on next page)

**2B** (continued):

black	-0.108** (0.052)	-0.037 (0.051)
asian	0.983** (0.423)	-0.066 (0.408)
_cons	1.513*** (0.118)	0.052 (0.114)

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N	1000	1000
R-sq	0.281	0.020
adj. R-sq	0.273	0.009
F	35.105	1.840
rss	242.141	224.600

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Standard errors in parentheses

\* p<0.10, \*\* p<0.05, \*\*\* p<0.01

- a. How would you interpret the impact of another year of experience on the hourly wage rate?
- b. How would you interpret the impact of the metro variable on the hourly wage rate?
- c. Provide an interpretation of the education coefficient and the education\*female interaction term based on the semi-log form. What would you conclude?
- d. Provide an interpretation on the return on education for a female Asian and a male Asian.
- e. Produce a 2 by 2 table showing the wage differentials between married and female. Interpret the differentials?
- f. Describe the base group in interpreting the dummy variables?
- g. What would you conclude about the regression of the squared residuals? Which tests would be important in interpreting the regression results? Which variable might be of concern?

**2C.** (Econ 235) Analyze the demand for money by answering *all* of the following. As you answer each part, make sure you identify it with the appropriate letter:

- a. Describe in words how changes in the demand for money affect the purchasing power of money, the price level, and real cash balances. Explain why this makes money like any other good or service.
- b. Illustrate your answer to part (a) by drawing a demand-stock graph for money, correcting labeling the axes and curves. Also show how the graph can depict real cash balances. (Hint: If you put the interest rate on either axis, you automatically fail this section of the comprehensive examination.)
- c. Describe at least four factors that cause the demand for money to change (i.e., shift). What are the two broad categories of money demand into which these various factors fall?
- d. Relate the demand for money to the concept of velocity and to the equation of exchange.
- e. Describe how the demand for money behaves during hyperinflations.
- f. What do economists mean when they say a change in the money stock is *neutral*?