Midterm Exam 2 Guide

I. Midterm Rules

a. Exam in 145 Dwinelle, 10:00-11:30
b. No blue books required.
c. No text, notes, calculators allowed.
d. Sit in section for your GSI. Seating Chart online & on overhead at exam.
e. Arrive Early, sit toward middle. If you need aisle seat, stand in aisle when others need to pass you.
f. Begin only when told to start. Stop when told to stop. Pass exam to GSI.
g. If fire alarm rings, collect your things, follow your GSI to steps of Dwinelle to take exam.

II. Midterm 2 Topics Outline

Midterm 2 Coverage is week 5 and week 6. Only macroeconomics. The following outline is a rough guide to topics. However, any definition questions will be limited strictly to words in this outline.

You should consult your lecture notes/slides, section notes, problem sets, and text, as stated in syllabus. There is also a past macro exam online. Since no calculator is allowed, any calculation questions will use “easy” to calculate numbers or provide enough information so that actual arithmetic is easy to do.

Chapter 18:

GDP
i) Market value definition (page 447, not in required reading)
   a. final goods and services
   b. produced within a country during given time period
ii) Expenditure method (focus for class)
iii) Nominal vs Real GDP (Skip section “GDP and the Incomes of Capital and Labor”)

Unemployment
i) Labor Force (and working age population)
ii) Unemployment rate
iii) Participation rate
iv) Understated employment (disguised unemployment)
v) Costs

Chapter 19

Inflation
i) definition
ii) how to measure (eg. use CPI)
iii) CPI bias (quality adjustment, substitution)
iv) Costs

Real Variables
i) real GDP (Chapter 18)
ii) real wage
iii) real interest rate (unexpected inflation, Fisher effect)
iv) indexing

Chapter 20
Productivity & Growth
i) Economic growth (review compounding)
ii) \( Y/Pop = Y/N \times N/Pop \) Equation
   a. Real GDP per capita \( Y/Pop \)
   b. Average productivity of labor \( APL = Y/N \)
iii) \( Y/N \) determinants
iv) Policies to promote growth

Chapter 21
Review of Demand for Labor via exercise 21.3
Types of Unemployment
i) Frictional
ii) Structural
iii) Cyclical

Chapter 22

1) Saving, National Saving, Public and Private saving
2) Saving as flow, wealth as stock, Changes in Wealth
3) Why people save; impact of \( r \) on savings
4) Factors that affect \( I \); impact of \( r \) on investment (recap page
5) \( S \) and \( D \) for savings and investment (\( S=I \) in closed economy)
\( S \) & \( D \) for funds (\( S \) & \( I \)); shifts of \( S \) and \( D \)

Chapter 24

1) Stocks & Bonds
   i) Purpose
   ii) Bonds (Coupon rate(yield), Inverse Relation between bond price & current interest rate)
   iii) Stocks Price (expected return on dividends & capital gains, risk premium, inverse relation between price and interest rate)
2) International capital flows
   i) \( NX+KI=0 \)
   ii) \( S+KI=I \) (Shifts of \( KI \), augments ideas on shifts of \( S \) & \( I \) above)

Chapter 25

1) Potential output
2) Output gap
   a. recessionary
   b. expansionary
Chapter 26

1) AD: planned vs actual spending (change in inventory)
2) Consumption Function and MPC
3) Autonomous vs Induced spending
4) Keynesian Model
   i) Key assumption
   ii) Keynesian Cross Diagram
      a) Shifts in AD
      b) Equilibrium Output
      c) Potential Output
      d) Gaps (recessionary/expansionary)
5) Income-expenditure multiplier

Chapter 23 & 27

1) Fractional Reserve banking
   a. Required Reserve Deposit Ratio
   b. Money Supply (M1)
2) Federal Reserve (FED)
   i) Buying/Selling Bonds (Open Market Operations)
      a) Relationship between Price of Bonds and Interest rate
      b) Money D& S (equilibrium, shifts, stabilization by FED)
   ii) Federal Funds Rate
3) Keynesian Model
   i) Keynesian cross, PAE as function of r
   ii) FED fights inflation, FED fights recession
3) Taylor Rule (predicts observed behavior of FED, whose decision making process is secret)

II. Problems Covered in Section

Your GSI likely presented problems from the following set. There will be some variation across sections. If you are thinking of working extra problems, we would suggest doing that for chapters 26 and 27 primarily, to get practice with the algebra.

For other chapters, check your section notes for problems presented in section. The following list is given so that if you wish to work extra text problems, you should draw from this list first. Some of these questions may also have appeared in problem sets as well.

Chapter 18

Problems 2,4 (GDP)
Problems 8,9 (unemployment)
Problem 6 (nominal/real GDP)

Chapter 19

Problem 1 (CPI)
Problem 4 (real wage)
Problem 10 (real interest rate)
Chapter 20

Review questions 3, 4
Problem 1 (growth)
Problem 4 (APL)
Problem 7 (determinants of APL)

Chapter 21

Exercise 21.3 (like part of problem 3 required on PS 3)
Problem 5, 8 (like on PS 3)

Chapter 22

5 (national saving)
8 (firm investment decision)
9 S&D (savings & investment & r)

1, 3 (savings decision, selected parts, if you have extra time)

Chapter 24

1 (interest rate, bond price)
2 (interest rate, risk premium, stock price)
3 (similar ideas)

Chapter 25

See problem set problems

Chapter 26:
Review Question 1 with Box 26.2
Review Question 6, 9
Problem 1 (planned vs actual)
Problem 3 (first steps)
Problem 7
Problem 8 (like PS4 #1)

Chapter 23:
Problems 1, 3, 6

Chapter 27
Problems 1, 3
Problem 4 (a or b)
Problem 5, 6 (basic problem incorporating real interest rate, all parts)
Problem 8 (Taylor rule)