Review For Midterm

Exam 1 covers from Chapter 1 up to and including Chapter 4.

Review For Midterm

There are 8 multiple choice questions (5 pts each), 1 mandatory long answer question (30 pts), and 2 long answer questions (30 points each), of which you choose one.

Chapter 1

- High Growth Rate Countries
- Low Growth Rate Countries
- Transition countries
- Globalization
- Growth vs Development
- Developing Country
- Less Developed Country

Chapter 1

- North/South
- UN categories: LDC, emerging, industrialized, post industrialized
- World Bank categories: low, lower middle, upper middle, upper
- Income distribution
- FDI
- Foreign Aid

Chapter 2

- Gross National Product vs Gross Domestic Product
- Per capita variables
- PPP
- Value added
- International comparison program, international prices

Chapter 2

- Industrial revolution
- HDI-Human Development Index
- Millennium Development Goals (MDGs)

Chapter 3

- Factor accumulation
- Productivity growth
- Least Square Regression method
- Total factor productivity (TFP)
- Solow residual
- Robert Barro's characteristics of growing countries (Stable, investments in social programs, strong government, private enterprise, trade, geo.

Chapter 4

- Isoquants
- Fixed coefficient production function
- Constant Returns to Scale
- Capital-output ratio, Incremental Capital-output ratio (ICOR)
- Labor-intensive
- Capital-intensive

Chapter 4

- Knife-edge problem
- Diminishing returns to capital
- Capital deepning
- Capital widening

Chapter 2

GDP calculations

- Finding GDP.
- Finding international prices.
- Finding GDP in other currencies using exchange rates.
- Finding PPP adjusted GDP.

Chapter 3

- Growth functions: $X_t = X_0(1+r)^t$, $X_t = X_0 e^{rt}$
- Solow Growth Model: $S = I\ g_Y = (w_K g_K) + (w_L g_L) + a$

Chapter 4

Basic Growth Model

- Aggregate Production Function: $Y = F(K, L)$
- Savings: $S = sY$
- Total savings equals investment: $S = I$
- Change in capital stock: $\Delta K = I - dK$
- Change in labor: $\Delta L = nL$

Chapter 4

Basic Growth Model

- $\Delta K = sF(L, K) - dK$
- $\Delta L = nL$

Chapter 4

Harrod-Domar Growth Model

- Capital output ratio: $v = \frac{K}{Y}$
- Change in output: $\Delta Y = \frac{\Delta K}{v}$
- Growth rate: $g_Y = \frac{\Delta K}{Yv} \implies g_Y = \frac{s}{v} - d$

Chapter 4

Harrod-Domar Growth Model

- Growth is a factor of savings, depreciation, and ICOR.
- Works well in the SR.
- Stability depends on population, capital growth, and income growth being at the same level.
- No productivity gains.

Chapter 4

Solow (Neoclassical) Growth Model

- Production function: $y = F(1, k)$.
- Change in capital: $\delta k = sy - (n + d)k$

Chapter 4

Solow (Neoclassical) Growth Model

- Change in capital per worker depends on savings, pop growth, and depreciation of capital.
- Production function needs constant returns to scale and diminishing returns to capital.

Chapter 3

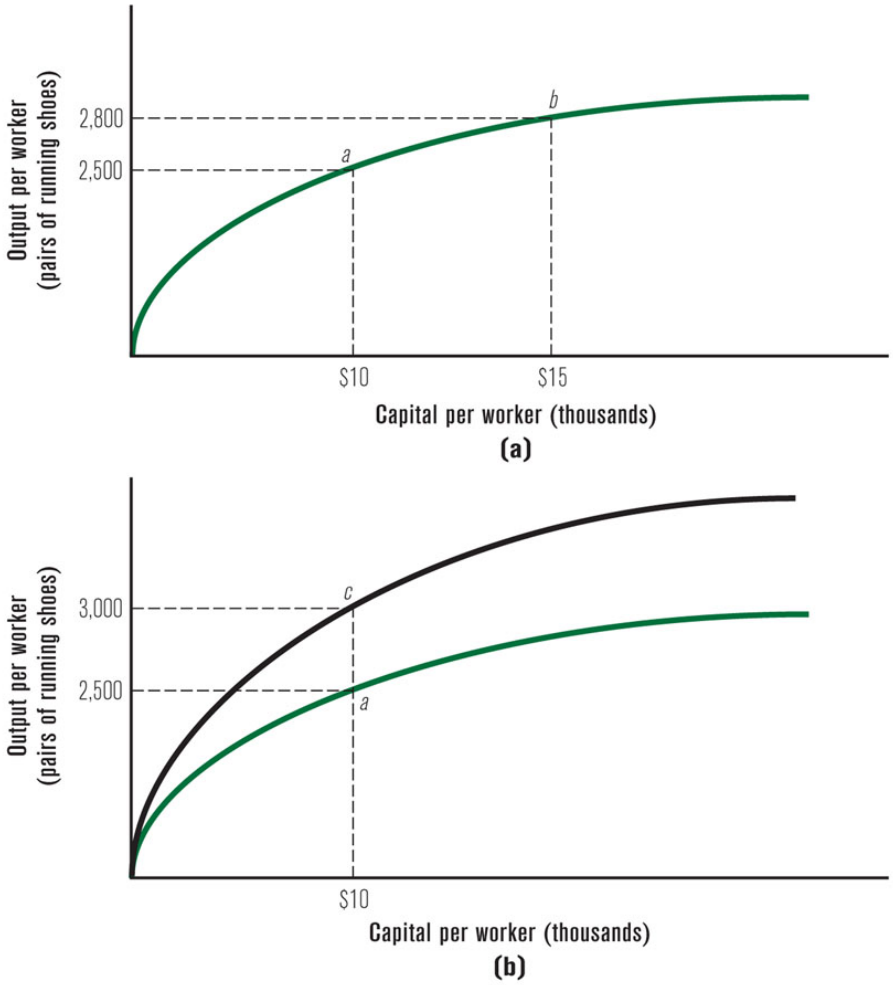

FIGURE 3-1 Basic Sources of Economic Growth

(a) Factor accumulation. As capital per worker expands, output per worker increases.
(b) Productivity gains. As the factors of production are used more efficiently or the economy

Chapter 4

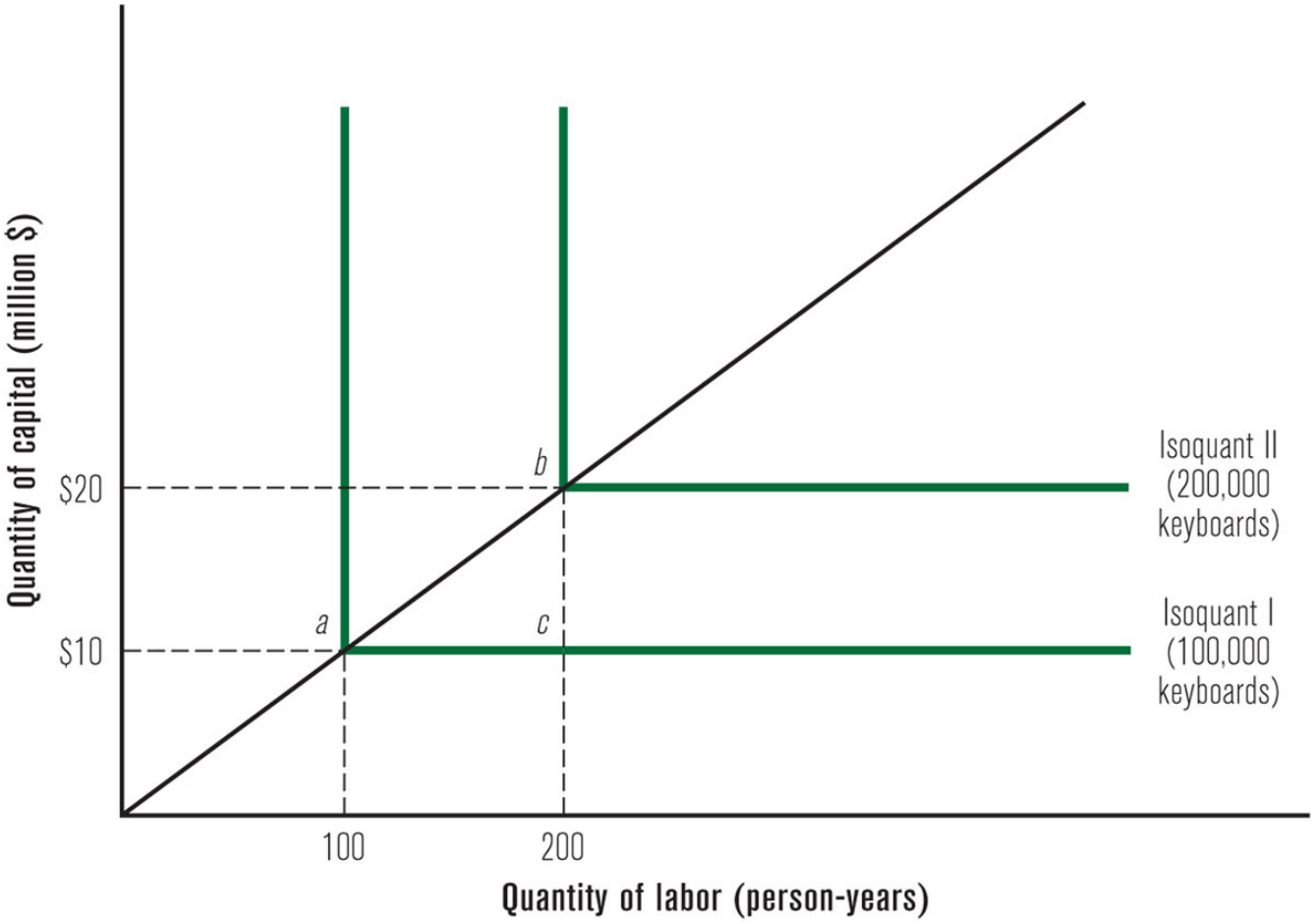

FIGURE 4-1 Isoquants for a Fixed-Coefficient Production Technology

With constant returns to scale, the isoquants will be L-shaped and the production function

Chapter 4

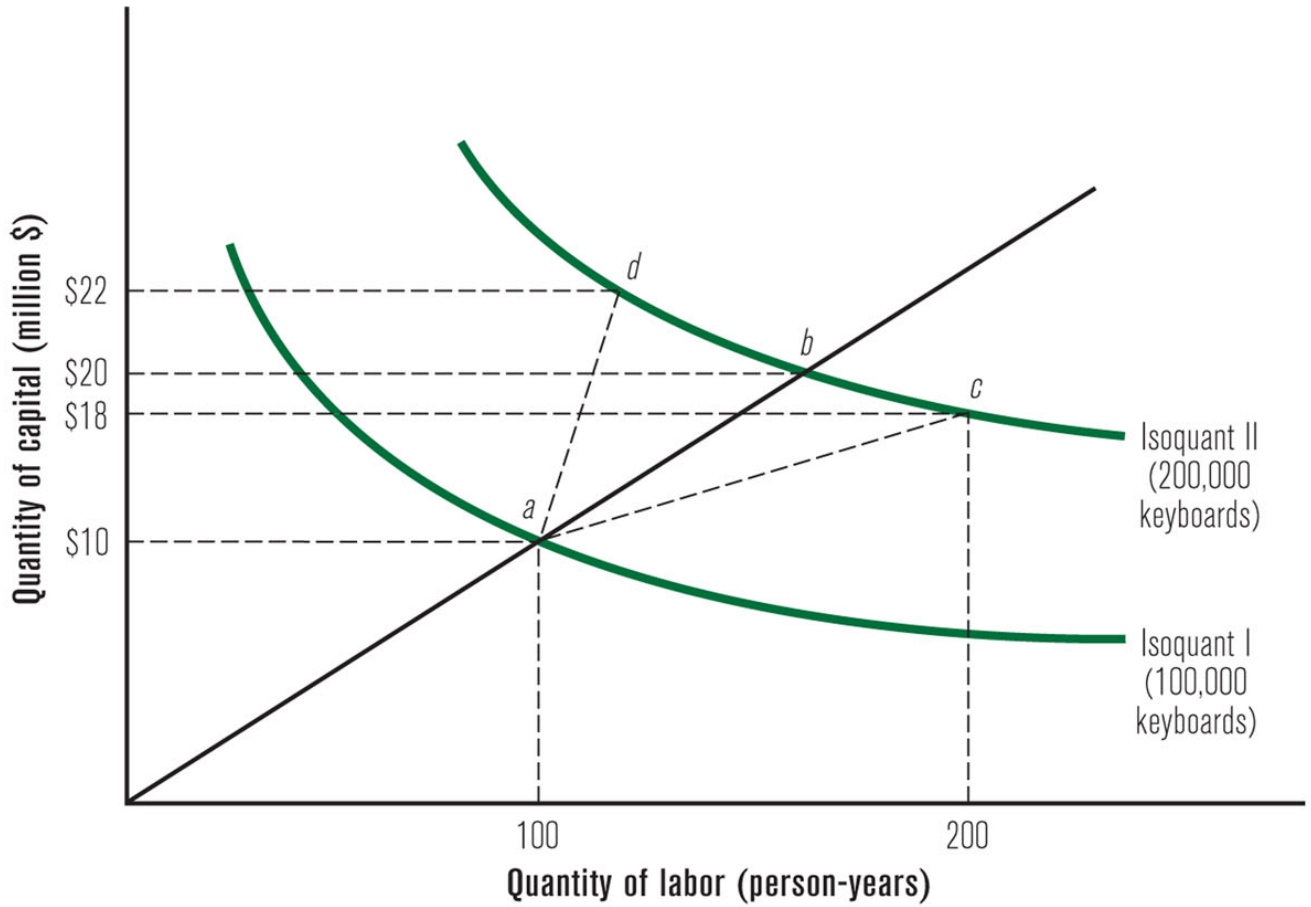

FIGURE 4–2 Isoquants for a Neoclassical Production Technology

Instead of requiring fixed factor proportions, as in Figure 4–1, output can be achieved with varying combinations of labor and capital. This is called a *neoclassical* production function.

Chapter 4

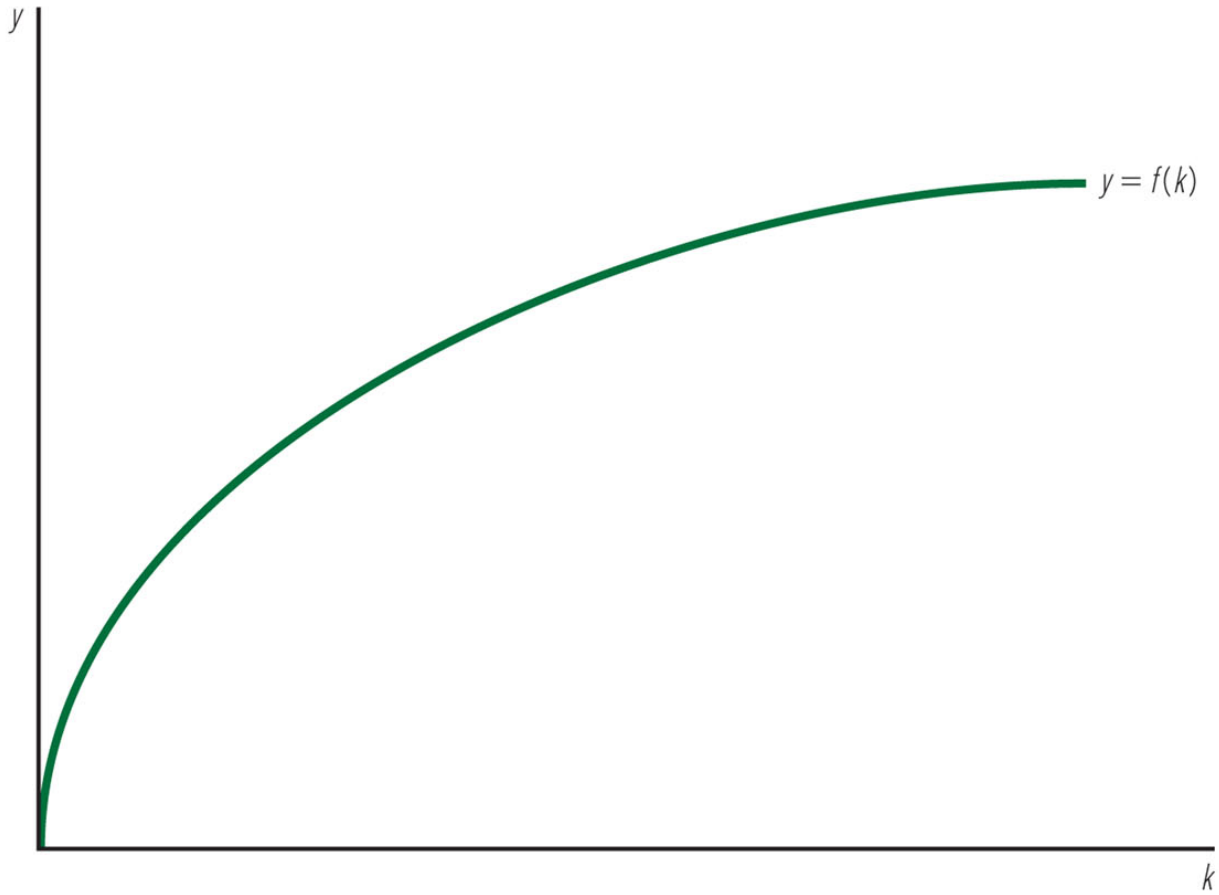

FIGURE 4–3 The Production Function in the Solow Growth Model

The neoclassical production function in the Solow model displays diminishing returns to capital so that each additional increment in capital per worker (k) is associated with smaller