Question #1 of 40

Relative to the growth rate in potential GDP, the rate of appreciation in the aggregate stock market:

A) is the same in the short and long run.

B) can be lower in the short-term but is equal in the long run.

C) can be higher in the long run but is the same in the short-term.

Question #2 of 40

Which of the following situations is *least likely* to constrain growth in an economy?

A) Strong domestic currency appreciation due to demand for domestically owned natural resources

B) A lack of access to natural resources

C) Limited ownership of natural resources

Question #3 of 40

Which of the following concepts is uniquely associated with the endogenous growth theory of economic growth?

A) Real gross domestic product (GDP) growth based on investment in new capital and technological change.

B) Increased spending on health care and population growth.

C) No diminishing returns to knowledge capital.

Question #4 of 40

Shefali is an emerging market economy where labor cost accounts for 35% of total factor cost. The long-term trend of labor growth is 2%. Capital investment has been growing at 1.5% but is expected to grow at 3% in the future. Shefalian economy is expected to experience annual growth of 2.5% in total factor productivity. The potential GDP growth rate for Shefali is *closest to*:

A) 4.85%

B) 7.5%

C) 5.15%

Question #5 of 40

A country with relatively poor endowment of natural resources is *most likely* to:

A) suffer from 'Dutch disease'.

B) enjoy the technological progress of a country with a vigorous manufacturing sector.

C) devote a disproportionate amount of its economic energy to pursuing the limited natural resources that the country has.

Question #6 of 40

The endogenous growth theory contends that economic growth is a function of which of the following two economic variables?

A) The creation of knowledge capital and real interest rates.

B) The subsistence real wage and real interest rates.

C) Real interest rates and technological change.

Question #7 of 40

Which of the following concepts is uniquely associated with the classical theory of economic growth?

A) Subsistence real wage.

B) Real GDP growth.

C) Target rate of return.

Question #8 of 40

Ruritania and Utopia are two emerging market economies for which Jon Gordon, CFA, calculated a potential GDP growth rate of 4.3% (for both).

In calculating the identical growth rates, Gordon used the Cobb-Douglas production function and the following data:

	Labor Growth Rate	Capital Growth Rate	Growth in TFP*
Ruritania	2.2%	3.1%	1.8%
Utopia	1.7%	3.1%	1.8%

*Total Factor Productivity

Which of the following statements is *most accurate* regarding Gordon's assumptions in calculating growth rates?

A) Gordon has assumed that the elasticity of output with respect to capital is higher in Ruritania than Utopia

B) Gordon has assumed that the elasticity of output with respect to labor is lower in Utopia than Ruritania

C) Gordon has assumed that the elasticity of output with respect to TFP is higher in Utopia than Ruritania

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Question #9 of 40

Yasmani Sandoval has gathered the following information on the economy of Sangarnio and that of Gurtania, two developed economies with strong trade links with each other.

Country	TFP Growth Rate	Labor Force Growth Rate	Labor cost as a % of total factor cost
Sangarnio	1.8%	1.1%	0.55
Gurtania	1.9%	1.0%	0.60

Which of the following conclusions is Sandoval *most likely* to draw?

A) According to classical growth theory, Sangarnio's sustainable growth rate is higher than that for Gurtania

B) Gurtania has a sustainable growth rate of over 4% according to neoclassical growth theory

C) Sangarnio has the lowest sustainable growth rate according to neoclassical growth theory

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Wisterbon, Pratia and Surico are neighboring nations. The three countries share borders and frequently trade with each other.

Pratia

- A developing nation with an abundant oil reserves
- Primary economic activity is oil industry

Wisterbon

- A developing nation focusing on labor intensive industries because it lacks many natural resources

Surico

- A developed nation
- Largest trading partner for both the other two countries

The following economic and demographic statistics are available for the three countries.

	Wisterbon	Pratia	Surico
GDP (in $ billions) 10 years	$100.0	$100.00	$3,000.00

ago			
GDP (in $ billions) Current	$156.0	$164.00	$4,209.00
Long-term growth rate in technology (est.)	1.5%	1.2%	2.1%
Long-term growth rate of capital	4.9%	4.40%	3.4%
Sovereign credit rating	A	A+	AAA
Savings rate (average is 10.0%)	12.5%	10.0%	5.0%
Population (in millions)	10.2	10.0	50.4
Labor Growth Rate	2.8%	2.5%	0.6%
Cost of capital relative to total factor cost	30.0%	35.0%	27.5%
Capital Growth Rate	4.9%	4.4%	3.4%
TFP Growth Rate	1.5%	1.2%	2.1%

The three countries have sent their top finance ministers and economists to the annual Trade and Economic Growth Forum (TEGF) to discuss potential trade and growth opportunities. Comments pertaining to concerns regarding future growth potential included:

Economist #1:	We are concerned about the GDP per capita and population growth. The current GDP per capita appears to be beyond the subsistence level.
Economist #2:	We are concerned that the output per capital ratio has been constant. It is likely that the equilibrium growth rate has been reached and the economy cannot grow any faster.
Economist #3:	We are concerned that we are not investing enough in infrastructure and education to increase the growth rate.

Some common initiatives for economic growth were listed from the TEGF:

1. Fund a technology research center
2. Lower trade barriers
3. Provide financial incentives for innovation
4. Coordinate energy policies
5. Invest in education

Each country decided to adopt four of the five initiatives. Pratia did not like lowering trade barriers. Surico did not like coordinating energy policies. Wisterbon did not like providing financial incentives for innovation.

Question #10 of 40

Which country is *most likely* to rely on improving technology rather than capital deepening for increase in potential GDP growth?

A) Surico.

B) Pratia.

C) Wisterbon.

Question #11 of 40

The natural resources advantage of Pratia compared to Wisterbon and the differences in growth rates may be explained by:

A) Wisterbon's inability to access natural resources.

B) Pratia's economic growth is hampered by the focus on extracting oil.

C) Pratia's economic growth surpasses Wisterbon because of natural resources advantage.

Question #12 of 40

Which economist is mostly applying neoclassical theory when stating her concerns?

A) Economist #2.

B) Economist #3.

C) Economist #1.

Question #13 of 40

The country *most likely* to achieve convergence of higher living standards is:

A) Wisterbon.

B) Pratia.

C) Surico.

Question #14 of 40

The three countries' willingness to provide financial incentives for innovation is because:

A) increase in innovation is the only way to grow under the endogenous growth theory.

B) consideration of private benefits alone would lead to suboptimal investment in R&D.

C) Increase in innovation would lead to convergence of standard of living.

Question #15 of 40

For Surico, the education investment that may increase the growth rate of potential GDP is the one that would increase:

A) research and development to increase TFP.

B) application of technology to increase TFP and productivity of labor.

C) non-ICT capital to increase capital deepening.

Question #16 of 40

Mary Gorton makes the following two statements regarding investment and economic growth.

Statement 1	'Investment in human capital increases hours worked and will likely boost economic growth.'
Statement 2	'Investment in public infrastructure projects can assist economic growth by giving additional benefits to private investment.'

Which of Gorton's statements is *most likely* correct?

A) Both statements are correct

B) Statement 1 only

C) Statement 2 only

Question #17 of 40

Which of the following investments is *least likely* to be described as a foreign direct investment or FDI? When a foreign company invests in the domestic economy by:

A) purchasing equity securities.

B) building a manufacturing plant.

C) buying property and equipment.

Question #18 of 40

An increase in growth rate of potential GDP in developed countries is *most likely* to be driven by:

A) both capital deepening and technological progress.

B) capital deepening.

C) technological progress.

Question #19 of 40

Which of the following is *least likely* to affect the rate of appreciation of the aggregate stock market?

A) Reinvestment of dividends

B) Growth rate in potential GDP

C) Growth in Price earnings multiples

Question #20 of 40

Countries can increase labor productivity by:

A) increase in labor force participation rate.

B) improvement in technology.

C) increase in average hours worked.

Question #21 of 40

While having lunch with a group of friends, Francine Lenser, CFA, was overheard saying the following: "The recent boom in technological advances should keep the economy growing. Whenever the economy slows, someone will come along with a bold new idea that kick-starts it."

Lenser's statement *most accurately* reflects the:

A) endogenous growth theory.

B) neoclassical growth theory.

C) exogenous growth theory.

Question #22 of 40

Tamay Farthani, CFA, is studying the economic growth rate in several developing and developed countries. She believes there is strong evidence that well developed financial markets enhance growth prospects by channeling investment to projects with the highest risk-adjusted returns and by encouraging the use of leverage.

Farthani is correct regarding developed financial markets impact on growth regarding:

A) only channeling investment to projects with the highest risk-adjusted returns

B) only the use of leverage

C) both channeling investment to projects with the highest risk-adjusted returns and the use of leverage

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Question #23 of 40

Bob Forster makes the following statements regarding economic growth theories and trade barriers

Statement 1	Removing trade barriers and allowing the free flow of capital often leads to countries specializing in industries where they have comparative advantage
Statement 2	Developing economies that have not reached the point of significant diminishing returns to capital can attract investment, leading to development of their economy and an eventual slowing of growth

Which of Forster's comments are *most likely* correct?

A) Both statements are correct

B) Statement 1 only

C) Statement 2 only

Question #24 of 40

Jon Barnton is studying the potential rate of economic growth in Barini, a large developed economy in Western Europe. He makes the following statement:

'Barini has seen a slowdown in GDP growth over the past decade, the likely causes being a slowdown in population growth, the wealth effect and increasing immigration.'

Which of the factors stated by Barnton is *least likely* to explain the slowdown?

A) Population growth

B) Immigration

C) Wealth effect

Question #25 of 40

Government incentives that encourage private investment in technology and knowledge are *most strongly* supported by the:

A) neoclassical growth model.

B) endogenous growth model.

C) classical growth model.

Question #26 of 40

Which of the following factors is *most likely* to contribute to a failure of the convergence hypothesis?

A) Low rates of savings.

B) Political stability.

C) Regulatory policies that encourage investment.

Question #27 of 40

Which of the following concepts is uniquely associated with the neoclassical theory of economic growth?

A) diminishing marginal product of capital.

B) In steady state GDP growth rate is equal to growth rate in total factor productivity divided by labor's share of total factor cost.

C) In steady state, the rental price of capital is equal to capital's share of total output divided by total capital.

Question #28 of 40

Which of the following would *least likely* occur due to an increase in growth rate of potential GDP?

A) Monetary policy would be expansionary.

B) Credit spreads on fixed income investments widen.

C) Fiscal policy would be expansionary.

Question #29 of 40

Hannah Burton is a fixed income analyst and has questioned her supervisor as to why she needs to spend so much time forecasting potential GDP and its growth rate. Her supervisor replies:

"Positive growth in potential GDP leads to an expectation of rising income, leading in turn to higher current savings. Positive growth in potential GDP therefore implies higher real asset returns and higher real interest rates.

Hannah's supervisor is *least accurate* regarding:

A) higher real asset returns

B) higher current savings

C) higher real interest rates

Question #30 of 40

Mark Tortal uses the Cobb-Douglas production function to analyze potential growth in emerging economies. His simple model takes the classic form $Y = TK^{\alpha}L^{(1-\alpha)}$.

Using Tortal's model, which of the following statements is *most likely* correct?

A) developing markets typically display a lower α than developed markets

B) Aplha (α) represents the share of output allocated to capital and a smaller α indicates a lower benefit of capital deepening

C) The production function exhibits decreasing returns to scale

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Question #31 of 40

Hemali is an emerging market economy where labor's share of GDP is 60%. The long-term trend of labor growth is 2%. Capital investment has been growing at 1.5% and is expected to continue at that rate in the future. Hemali has increased the budgetary allocation for primary and secondary education. Accordingly, economists estimate that labor productivity will increase by 2% per year.

The potential GDP growth rate for Hemali is *closest* to:

A) 3.80%

B) 5.50%

C) 4%

Question #32 of 40

Which of the following statements regarding the long-run rate of stock market appreciation and the sustainable growth rate of the economy is *most likely* correct?

A) Long-term growth in the aggregate stock market valuation is most closely correlated to long term growth in P/E ratios

B) Long-term growth in the aggregate stock market valuation is most closely correlated to long term growth in GDP

C) Long-term growth in the aggregate stock market valuation is most closely correlated to long term growth in earnings relative to GDP

West Lundia and Cragistan are neighboring emerging market nations. These two countries share a border and frequently trade with each other. Cragistan has abundant oil reserves and precious metals, both of which West Lundia lacks. Kurtenstein is a developed market nation that borders both West Lundia and Cragistan and is the largest trading partner for both the other two countries. Kurtenstein is a major buyer of Cragistan's unrefined petroleum and West Lundia's cheaper labor. All three countries are politically stable and have formed a regional monetary union, known as WICKA (West Lundia, Cragistan, Kurtenstein Alliance – pronounced 'wicka'). Their currency, the WiCKA Rand or WCK, is a free floating currency.

Exhibit 1 shows selected economic and demographic statistics are for the three countries and for the year 20X1.

Exhibit 1: Selected economic and demographic statistic for 20X1

	West Lundia	Cragistan	Kurtenstein
Population (in millions)	5.63	5.52	25.18
Labor force participation (in %)	64.50%	64.50%	71.20%
GDP (in $ billions)	$50.0	$50.0	$1,500.0
Share of capital in total GDP	40.00%	35.00%	20.00%
Average Hrs. per worker in labor force per yr	1690.0	1690.0	1898.0
Sovereign credit rating	A	A+	AAA
Savings rate (average is 10.0%)	12.5%	10.0%	5.0%
Imports (in $ billions)	$7.50	$15.00	$250.00
Exports (in $ billions)	$8.00	$20.00	$200.00

Analysts' projected 10 year estimates are provided in Exhibit 2. Cragistan's projected population growth is based on a slightly higher fertility rate but also a less restrictive immigration policy.

10 Year estimates	West Lundia	Cragistan	Kurtenstein
Population (in millions)	6.44	6.51	25.94
Labor force participation (in %)	68.50%	65.50%	72.20%
Average Hrs. per worker in labor force per yr	1794.0	1742.0	1908.4
GDP (in $ billions)	$78.0	$82.0	$2,014.0
Long-term growth rate in technology	1.20%	1.40%	2.00%
Long-term growth rate of capital	4.80%	4.50%	3.00%

The forecasted growth rate in potential GDP for Cragistan and Kurtenstein are 4.4% and 3.0% respectively. The estimated long-term actual GDP growth rate for West Lundia is lower than its estimated potential GDP growth rate.

Monetary Policy:

- All three countries have relatively independent central banks.
- All three target inflation as a primary goal.

Fiscal Policy:

- West Lundia has a slight surplus and actively seeks to affect aggregate demand.
- Cragistan has a moderate surplus and may seek to affect aggregate demand.
- Kurtenstein has a slight deficit and does not actively affect aggregate demand.

International Trade:

- West Lundia is a net exporter.
- Cragistan is a net exporter.
- Kurtenstein is a net importer.

Financial Markets:

- Kurtenstein has well established high volume liquid equity and fixed income markets.
- Cragistan and West Lundia both have moderately liquid equity markets.
- Cragistan has a credit market with more volume and smaller credit spreads than West Lundia.

Question #33 of 40

Based on the Cobb-Douglas growth accounting relation, the forecasted long-term growth rate in potential GDP for West Lundia is *closest* to:

A) 4.7%.

B) 2.6%.

C) 5.1%.

Question #34 of 40

As compared to Cragistan's long-term growth rate of labor, West Lundia's higher long-term growth rate of labor is *most likely* caused by the difference in the two countries':

A) fertility rates.

B) immigration policies.

C) labor force participation rates.

Question #35 of 40

In which country would a restrictive monetary policy *most likely* be implemented?

A) Cragistan.

B) West Lundia.

C) Kurtenstein.

Question #36 of 40

Cragistan's potential GDP growth rate exceeds that of Kurtenstein's. Which difference in factors could help justify Cragistan's higher sustainable growth rate?

A) The savings rate between the two countries.

B) The established financial sector intermediation.

C) The free trade and unrestricted capital flows.

Question #37 of 40

The evidence that supports the club convergence hypothesis includes, Cragistan's and West Lundia's:

A) savings rates, and population growth rates are stabilizing and becoming similar to Kurtenstein's rates.

B) long-term growth rates are converging toward Kurtenstein's long-term growth rates.

C) institutions are becoming standardized according to regional monetary union guidelines.

Question #38 of 40

If in Kurtenstein the growth in earnings relative to GDP is 0.50% and the growth of price-to-earnings is 0.8%, then the long-term aggregate equity growth rate is:

A) 4.7%.

B) 3.9%.

C) 3.0%.

Question #39 of 40

Which of the following statements regarding endogenous growth theory is *least likely* correct?

A) Endogenous growth theory suggests that private firm spending levels on R&D is often sub-optimal

B) Social returns benefit society as a whole and encourage private firms to invest more aggressively in R&D which in turn fuels growth

C) Endogenous growth theory suggests that economies may not reach a steady state growth but instead permanently increase growth

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Question #40 of 40

Which of the following statements regarding convergence hypotheses is *least accurate*?

A) The neoclassical theory contends that countries will eventually have the same growth rates and per capita income

B) The club convergence hypothesis contends that poorer countries with similar institutional features to those of richer countries will grow rapidly to catch up with their

C) The conditional convergence hypothesis contends that convergence of living standards requires countries to have the same population growth rates