

January Examination Period 2022-23

ECN102 World Economy

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Duration: 2 hours

Answer ALL questions

Calculators are permitted in this examination. Please state on your answer book the name and type of machine used. Complete all rough workings in the answer book and cross through any work that is not to be assessed.

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Answer all questions.

Question 1. [20 marks]

Consider the following statements and explain if they are True or False.

a) 'The World Bank uses GNI per capita values when making lending decisions to heavily indebted economies.'

[5 marks]

b) 'An increase in GDP per capita requires both an increase in the quantity and the productivity of factors of production.'

[5 marks]

c) 'Of the three economies in Table 1, Botswana has the highest Human Development Index.'

[5 marks]

Table 1. Components of the Human Development Index (HDI) for selected countries. (UNDP Human Development Report, 2021).

Country	Life expectancy at birth (years)	Expected years of schooling (years)	Mean years of schooling (years)	GNI per capita (2017 PPP \$)
Bolivia	63.6	14.9	9.8	8,111
Botswana	61.1	12.3	10.3	16,198
Philippines	69.3	13.1	9.0	8,920
Minimum value	20	0	0	100
Maximum value	85	18	15	75,000

d) 'The theory of Absolute Convergence explains that with diminishing marginal productivity of capital, poor economies should experience faster rates of economic growth and catch up with the rich. This theory is strongly supported by empirical evidence.'

[5 marks]

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Question 2. [20 marks]

Between January 2017 and October 2022, the World Bank funded a project aimed at improving research skills and boosting firm-level innovation in Peru.

a) Use the Solow model to explain the expected impact of this project on GDP per capita. Draw a diagram to support your answer.

[8 marks]

b) Pro-poor economic growth policies lead to the rapid reduction of extreme poverty through a combined effect of reducing inequality and increasing the average growth rate. Is the project in Peru pro-poor? Explain your answer.

[4 marks]

Answer the questions below based on the information in Table 2.

Table 2. GDP per capita and inequality in selected Latin American economies, 2017 values. (World Bank, WDI 2022)

Country	GDP per capita, PPP (constant 2017 international \$)	Gini index	Poverty headcount ratio at \$2.15 a day (2017 PPP) (% of population)
Bolivia	8,423.70	44.6	4.9
Peru	12,506.53	43.3	4.5
Brazil	14,524.61	53.3	5.3
Mexico	19,721.26	46.7	2.6
Uruguay	23,009.87	39.5	0.1
Argentina	23,597.12	41.1	0.4
Chile	24,411.54	44.4	0.3

c) Which of the economies included in Table 2 had the highest degree of income inequality in 2017? Explain your answer.

[4 marks]

d) Why are the GDP per capita values in Table 2 converted to a common currency using a PPP exchange rate?

[4 marks]

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Question 3. [30 marks]

a) Portugal and Spain trade Chorizo and Port. The production of Port requires 16 labour hours per unit in Portugal and 30 labour hours per unit in Spain. The production of Chorizo requires 18 labour hours per unit in Spain and 24 labour hours per unit in Portugal. If Portugal and Spain both completely specialise production in their comparative advantage good, calculate the per unit gain from specialisation in the production of Chorizo and Port.

[5 marks]

b) True or False: 'To maximise the benefits from engaging in international trade, a country will always completely specialise production in the competitive advantage good.' Explain your answer.

[5 marks]

Answer the questions below based on the information in Table 3:

Table 3. Data on Labour (L) and Capital (K) resource endowments in India and Nigeria. (World Bank, WDI, 2022)

	Population, total (L)	Gross fixed capital formation (constant 2015 US\$) (K)
India	1,380,004,385	715,042,000,000
Nigeria	206,139,587	67,538,485,604

- c) If production of rice is labour intensive, and petroleum products are capital intensive, draw and annotate a diagram to explain the pattern of trade between India and Nigeria.

 [10 marks]
- d) The government in Nigeria is concerned about the effects of trade on the producers of the labour intensive good in the economy. To support this sector, the government is proposing to introduce an import tariff on rice, and has requested an economic analysis of the impact of this import tariff. Explain what effect the import tariff will have on consumption and production of rice in the economy relative to the case of free trade.

[10 marks]

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Question 4. [30 marks]

a) The UK has a trade surplus with respect to trade in services. How is the export of a service recorded in the UK's balance of payments?

[5 marks]

b) Netflix recently changed the structure of its business, so that revenues from UK subscribers are paid to Netflix Services UK, the UK subsidiary for the corporation. Previously, UK accounts were registered to one of Netflix's EU subsidiaries. As a result of this change, revenue from Netflix subscribers in the UK are no longer recorded in the UK's balance of payments. Is this true or false? Briefly explain your answer.

[5 marks]

In response to high inflation rates, many central banks, including the Federal Reserve in the US and the Bank of England in the UK, are increasing interest rates.

c) Explain, with reference to the IS-LM-BP model, why economies with a free-floating exchange rate regime are using interest rates to target a reduction in the rate of inflation.

[10 marks]

- d) If US interest rate rises are relatively greater than UK interest rate rises, what effect will this have on the UK sterling (£) – US dollar (\$) exchange rate? Explain your answer. [5 marks]
- e) Is increasing interest rates to reduce inflationary pressure an effective policy for an economy with a fixed exchange rate regime? If not, what policy would you recommend? Briefly explain your answer.

[5 marks]

End of Examination/ R Male