



Summer 2018 examination

EC100

Economics A

Suitable for 2017/18 candidates and resit candidates from 2016/17

Instructions to candidates

You must attempt **ALL** questions. There are **FIFTEEN** questions in Section A, each worth 3 marks, and **THREE** questions in Section B, (two questions are worth 18 marks each and one question is worth 19 marks). The questions in Section A are multiple choice questions, while those in Section B require a written answer. The questions in Section A have only one correct answer which should be marked on the separate answer sheet for the multiple choice questions. The answers for the questions in Section B should be written in the booklet.

Time Allowed	Reading Time:	<i>None</i>
	Writing Time:	<i>2 hours</i>

You are supplied with:	<i>A separate answer sheet for the multiple choice questions</i>
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You may also use:	<i>No additional materials</i>
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Calculators:	<i>Calculators are not allowed in this examination</i>
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Section A (multiple choice questions each worth 3 marks)

- A1. The growth experiences of North Korea and South Korea are often used to support which of the following hypothesis?
- a) Geography hypothesis
 - b) Cultural hypothesis
 - c) Institution hypothesis
 - d) None of the above
- A2. Which of the following is excluded in the calculation of Gross Domestic Product (GDP) for the U.K.?
- a) A firm in London making wage payments to a Japanese citizen.
 - b) A Canadian bank making wage payments to a U.K. citizen.
 - c) A dental hospital in London charging treatment fee from a Chinese citizen.
 - d) All of the above.
- A3. Which of the following is consistent with the Malthusian theory?
- a) Population growth decreases when living standard improves.
 - b) Better technology can improve living standard in the short run but not in the long run.
 - c) Both GDP and GDP per worker are stagnant in the long run.
 - d) GDP per worker is stagnant in the long run due to diminishing marginal product of capital.
- A4. There are two banks in the Happy Land, Bank A and Bank B. Which of the following can happen when there is a fall in the value of Bank A's assets?
- a) A fall in the stockholder's equity for Bank A
 - b) A fall in the stockholder's equity for Bank B
 - c) A loss for all depositors in the Happy Land
 - d) All of the above
- A5. Which of the following statements is consistent with the search theory of unemployment?
- a) Cheaper and better video games increase the value of leisure resulting in lower reservation wage, thus a higher unemployment rate.
 - b) A higher unemployment benefit increases the reservation wage, resulting in lower unemployment rate.
 - c) The presence of job search websites speeds up the job search process resulting in lower unemployment rate.
 - d) All of the above

- A6. Who gains from unexpected inflation?
- a) A saver holding a saving account with a fixed rate of interest.
 - b) A worker earning a fixed wage.
 - c) A borrower paying an interest payment on a loan with a fixed rate of interest.
 - d) A restaurant charging prices from a printed menu.
- A7. The Happy Land is an isolated island with three sectors: agriculture, manufacturing and services. This year, the output of agriculture is £10 million. All agricultural output is sold to the manufacturing sector. The total revenue for all the manufacturing firms is £30 million. Half of manufacturing output is sold to the service sector. The total revenue for the service sector is £30 million. The total consumption expenditure is £20 million and the government expenditure is £10million. Which of the following statement is **CORRECT**?
- a) The GDP is £30 million according to the expenditure approach.
 - b) The GDP is £45 million according to the income approach.
 - c) The GDP is £70 million according to the production approach.
 - d) None of the above.
- A8. The nominal GDP of the Happy Land was £100 million in January 2017 and the country experienced an amazing 10% economic growth for a year. The growth rate of money supply was 15% during the same period and the nominal interest rate was 10% during 2017. Which of the following statements is **CORRECT**?
- a) Its inflation rate is 15% during 2017.
 - b) Its nominal GDP grew by 15% during 2017.
 - c) Its real interest rate is 10% in 2017.
 - d) All of the above
- A9. Which of the following macroeconomic policies can help to reduce inflation?
- a) The Central bank can conduct an open market purchase by buying government bonds from private banks
 - b) The Central bank can increase the reserve requirements
 - c) The Central bank can lower the interest rate paid on reserve balance held by commercial banks.
 - d) All of above

- A10. Which of the following is a property of economic fluctuations?
- a) When the fall in GDP slows down, the recession is definitely going to be over in the following quarter.
 - b) Employment and real consumption are pro-cyclical.
 - c) When GDP is growing, it will probably start to fall in the following quarter.
 - d) All of the above
- A11. The UK government has recently increased the subsidy for working parents to pay for nurseries. Which of the following can be an outcome of this policy?
- a) A decrease in the shadow economy
 - b) A decrease in home production
 - c) An increase in labour supply
 - d) All of the above
- A12. The unemployment rate of the Happy Land increased from 5% in 2017 to 7% in 2018. Which of the following statements cannot be reconciled with this observation?
- a) Labour force participation rate has gone up
 - b) Number of unemployed workers has not changed.
 - c) More workers moved to the Happy Land
 - d) None of the above
- A13. Which of the following statements is correct according to the aggregate production function?
- a) Upward sloping labour supply curve because of the law of diminishing marginal product of labour
 - b) Upward sloping credit supply curve because of the law of diminishing marginal product of capital
 - c) Lower output when employment increases because of the law of diminishing marginal product of labour
 - d) Lower investment when real interest rate increases because of the law of diminishing marginal product of capital.

A14. Country A has a flexible exchange rate while country B's currency is pegged to country C. There is a rise in the demand for country A's output from country B. Which of the following statement is definitely **INCORRECT**?

- a) Country A's currency appreciates against country B's currency because country B now demands more of country A's currency
- b) Country C's currency appreciates against country B's currency because country B now demands more of country A's currency
- c) There is no change in the real exchange rate between the three countries.
- d) All of the above

A15. Which of the following statements is correct?

- a) According to the Solow model, providing tax-free saving can encourage saving thus increasing long run economic growth.
- b) According to the Solow model, the growth miracle experienced by Asian Tigers during 1960-90 is due to faster capital accumulation.
- c) According to the Malthusian theory of growth, the end of the one-child policy can be a reason for the slowdown in economic growth in China.
- d) All of the above

Section B (19 marks for B16, 18 marks for B17 and 18, answers to be written in the booklet.)

Where appropriate, make use of graphs and equations in your answers.

B16. [19 marks in total] During the period 2007 – 2009, many western economies have experienced what is now called “The Financial Crisis”.

- a) What are the three basic functions of banks? Some economists argue these basic functions have contributed to the Financial Crisis. Explain briefly. [8 marks]
- b) The Financial Crisis has caused a few banks to fail across different countries. Explain how the failing of a few banks have caused losses to depositors and the wider economy? [4 marks]
- c) The Financial Crisis has resulted in what is now known as the “Great Recession”. What are the measures used by the government and central bank in response to the Great Recession? Give one example each for fiscal policy and monetary policy. Briefly explain the mechanism for these policies to bring the economy out of the recession. [7 marks]

B17. [18 marks in total] There are three countries A, B and C trade with each other. Country A and C both have a flexible exchange rate regime while Country B pegged its currency against Country C.

- a) Country B has been experiencing high rate of economic growth and attracting foreign investment. Explain what happen to the nominal exchange rates for the three countries. In your answer, also explain what happen to the foreign reserve of country B? [6 marks]
- b) The Economist constructed a Big Mac Index which is the ratio of prices of a Big Mac across countries. Explain how can the Big Mac index be used to learn about whether a certain currency is under-valued or over-valued against another. Why may this not always hold? [5 marks]
- c) According to the Big Mac Index, currency B is under-valued. If this is right, explain who are the winners and losers in country C. [7 marks]

- B18. [18 marks in total] Some economists conduct a development accounting exercise to understand why output per worker is so different across countries (see Table below). As an economist, you are trying to explain to the Chinese government about the findings and give them advices.

Country	Income per Worker in 2010	Average Years of Schooling	% of U.S. Physical Capital Stock per Worker in 2010	Income per Worker If Technology Were at U.S. Level
(1)	(2)	(3)	(4)	(5)
United States	82,359	13.1	100.0	SAME
United Kingdom	67,025	9.8	65.8	61,548
South Korea	54,315	11.8	87.7	74,496
Spain	54,539	10.4	83.9	68,684
Mexico	27,625	9.1	33.5	47,725
Brazil	15,975	7.5	16.9	35,045
China	12,961	8.2	14.9	34,881
India	9,010	5.1	8.9	24,071
Ghana	4,928	7.1	4.2	21,502
Afghanistan	3,980	4.2	3.7	16,818
Dem. Rep. of the Congo	628	3.5	0.8	9,625

- Use the table above to explain to the Chinese government why China is less productive than the US. [6 marks]
- Using the Solow model, explain to the Chinese government that a policy that increases the saving rate is good for growth and productivity in the short run but it is not an effective policy for the long run. [6 marks]
- Using the Solow model, explain to the Chinese government that a good policy for the long run is to be more open to adopting better technology and devote more resources to research and technology. Why does this policy work better than the policy in (b) in the long run? [6 marks]