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ECONOMICS
STANDARD LEVEL
PAPER 2

Thursday 20 November 2008 (morning)

2 hours

INSTRUCTIONS TO CANDIDATES

- Do not open this examination paper until instructed to do so.
- Answer three questions.
- Use fully labelled diagrams and references to the text / data where appropriate.

8808-5105

11 pages

1. *Study the extract below and answer the questions that follow.*

Gas (petrol)* prices hardly affect demand

❶ American economists and politicians have been debating whether raising **indirect taxes** on gas would help cut demand, easing US dependence on oil and fighting global warming.

❷ A study at the University of California suggests that large increases in the price of gas have resulted in only a small reduction in the amount of miles driven by Americans. Further, drivers changed their ways less during the most recent price rises than they did during the period of rapidly rising gas prices of the 1970s. The study suggests that only a very large tax could have a significant effect.

❸ The study examined two periods of rising prices: 1975 to 1980, and 2001 to 2006. In each period, it examined the **price elasticity of demand** for gas.

❹ Researchers found that for every 10% increase in price between 1975 and 1980, quantity demanded fell by an average of 2.75%. However, between 2001 and 2006, every 10% price increase reduced quantity demanded by only 0.65%.

❺ Some energy economists predicted that as gas prices rose to record heights, drivers would eventually be forced to cut back on trips and use less gas. The prediction came true. But the change was not significant.

❻ Another study released at the same time, found that the amount of miles driven by the average American in 2005 dropped for the first time in 25 years, but by less than half of a percent. The study attributed the decline to higher prices as well as the aging of the US population, since elderly Americans drive less than those of working age.

❼ Why the difference in gas consumption patterns between the 1970s and the current period? It could be the result of more Americans buying homes a long way from their work. The difference also could be connected to the rising number of families with two cars.

❽ Environmentalists have proposed a number of recommendations to reduce the use of cars, such as improved public transportation, road charging (toll roads), and subsidies to encourage alternative transport.

[Adapted from David R Baker, "Gas prices hardly affect demand", San Francisco Chronicle (1 December 2006).

* Petrol: where many people around the world use the word "petrol" for the fuel that drives their cars, Americans use the word "gas".

(This question continues on the following page)

(Question 1 continued)

(a) Define the following terms indicated in bold in the text:

(i) indirect taxes *(paragraph ❶)* *[2 marks]*

(ii) price elasticity of demand *(paragraph ❸)*. *[2 marks]*

(b) Using an appropriate diagram, explain how an indirect tax on gas is likely to affect the price and quantity of gas. *[4 marks]*

(c) Using information from the text, calculate the value of price elasticity of demand for gas from 1975 to 1980 and from 2001 to 2006 **and** explain what the values signify. *[4 marks]*

(d) Using information from the text/data and your knowledge of economics, evaluate possible ways, apart from increasing the indirect taxes on gas, of reducing the demand for gas. *[8 marks]*

2. *Study the extract below and answer the questions that follow.*

Mexico limits the price of tortillas to help the poor

❶ Large increases in the price of corn have led to high prices for corn tortillas. Tortillas are an essential part of the Mexican diet and are especially important for the poor. To ease the problem, President Felipe Calderon signed an agreement with businesses to prevent corn tortilla prices from rising too high.

❷ The agreement sets a maximum price of 8.50 pesos (US$0.78, €0.60) per kilogram. Some stores have been selling tortillas for as much as 10 pesos (US$0.91, €0.70) per kilogram. However, President Calderon did not specify how the price controls would be enforced.

❸ The agreement also raises **quotas** for tariff-free corn imports to 750 000 metric tons (826 733 US tons), most of which will come from the United States.

❹ The rise in tortilla prices has been one of the first major challenges for the president, putting him in an uncomfortable position between the interests of business and those of the poor.

❺ Tortilla prices rose by 14 % in 2006, more than three times the **inflation** rate, and they have continued to increase rapidly in the first weeks of 2007. The jump in tortilla prices, a component of core inflation, may force the central bank to raise interest rates, worsening an economic slowdown and challenging President Calderon's election pledge to create jobs.

❻ The rise in the price of corn is partly due to the increased demand for ethanol, a substitute for oil. Ethanol is made with corn and the demand from US ethanol plants is pushing corn prices as high as US$3.40 (€2.63) a bushel, the highest in more than a decade.

❼ President Calderon partly blames greedy Mexican corn distributors, in the private sector. Last week, he opened an investigation into whether these private corn sellers were limiting supplies to manipulate prices. In response to this, he said that Mexico's 22 000 government stores, which also sell corn, would sell their corn at no more than 3.5 pesos a kilogram.

[Source: adapted from *The Globe and Mail*, 19 January 2007,
http://www.theglobeandmail.com/servlet/story/LAC.20070119.RTORTILLA19/TPStory/Business, and
The International Herald Tribune, 18 January 2007,
http://www.iht.com/articles/ap/2007/01/18/business/LA-FIN-Mexico-Expensive-Tortillas.php]

(This question continues on the following page)

Question 2 continued)

(a) Define the following terms indicated in bold in the text:

(i) quotas *(paragraph ❸)* *[2 marks]*

(ii) inflation *(paragraph ❺)*. *[2 marks]*

(b) Using an appropriate diagram, explain how private corn sellers might be able to "manipulate prices" *(paragraph ❼)*. *[4 marks]*

(c) Using information from the text, explain the nature of the cross elasticity of demand for oil and ethanol. *[4 marks]*

(d) Using information from the text/data and your knowledge of economics, evaluate the government intervention in the corn tortilla market. *[8 marks]*

3. *Study the extract below and answer the questions that follow.*

Growth lifts business mood to record high

❶ Confidence in the South African economy climbed last month. There is general optimism about the country's growth prospects. However, analysts warn that South Africa's large **current account deficit** remained a risk to the positive outlook.

❷ The business confidence index of the South African Chamber of Business rose to a record high of 103.5, while the Reuters Econometer, a measure of economic confidence, climbed to its highest level since May last year (2006), at 263.74.

❸ Analysts said that the outlook for economic growth remained positive although growth was expected to slow slightly this year (2007). But next year would see higher levels of growth, with the multiplier effect of increased infrastructure spending in preparation for the 2010 Soccer World Cup. A leading economist observed, "what is going to make a significant impact is the 410 billion rand (the South African currency) increase in capital expenditure". Economists forecast growth of 4.33 % for this year and 4.62 % next year.

❹ On the negative side, the current account deficit rose to above 6% of GDP last year – a record high. This remains a threat, and could have serious implications for the rand if the deficit is not brought back to more comfortable levels of around 3 % of GDP.

❺ The central bank has increased **interest rates** four times in an attempt to slow down strong consumer spending. However, consumption is showing only small signs of responding. As monetary policy operates with a lag, the effect of tightened interest rates is only likely to be felt in coming months. Analysts remain divided on whether rates will be raised again when the monetary policy committee meets next month.

❻ Lower oil prices are a positive sign for the inflation outlook, and analysts have predicted an average of 5.26 % this year and 4.80 % next year.

[Source: adapted from *Business Day (Johannesburg)*, Ayanda Shezi, 12 January 2007]

(This question continues on the following page)

(Question 3 continued)

(a) Define the following terms indicated in bold in the text:

(i) current account deficit *(paragraph ❶)* *[2 marks]*

(ii) interest rates *(paragraph ❺)*. *[2 marks]*

(b) Using an AD/AS diagram, explain why "lower oil prices are a positive sign for the inflation outlook" *(paragraph ❻)*. *[4 marks]*

(c) Using an appropriate diagram, explain why the rising current account deficit "could have serious implications for the rand" *(paragraph ❹)*. *[4 marks]*

(d) Using information from the text/data and your knowledge of economics, evaluate the likely effects of the "tightened interest rates" *(paragraph ❺)*. *[8 marks]*

4. *Study the extract below and answer the questions that follow.*

Chinese fruit might cause EU battle

❶ European fruit and vegetable farmers, who already benefit from heavy **subsidies**, are looking for even more protection from Chinese competition.

❷ Damaged by low-cost competition from China, Poland's strawberry producers filed a complaint with the European Union (EU) last year, leading to the EU's first agricultural import tariff of 34.2 % on imports of frozen strawberries from China.

❸ Poland's strawberry growers aren't alone. EU trade officials, under pressure from Spanish farmers, set quotas in 2004 on Chinese mandarins and other Chinese citrus fruits. Lobbyists representing industries such as Spanish furniture makers and Belgian apple farmers could pursue dumping complaints against the Chinese. The EU recently imposed anti-dumping duties on Chinese and Vietnamese shoes following complaints from Italian shoemakers.

❹ European regulators are being influenced by two views. Some producers fear Asian competition. However, European jam, yogurt and ice-cream producers, who need cheap fruit to cut their costs, do not support the call for increased protection.

❺ The EU thinks it has much to gain by finding the right trade balance. "Agriculture will be an area of tremendous growth," says the EU trade commissioner. China can sell bulk products in the EU, saving EU consumers money, he claims, while the EU can benefit from China's growing middle classes by selling products for which people in China have high **income elasticity of demand**, such as wine and cheese.

❻ The value of Chinese agricultural exports to Europe is growing. For example, Chinese frozen strawberry exports to the EU rose to $26.4 million last year from $6.2 million in 2002, an increase in market share to 20 % from 3.5 %.

❼ Chinese agriculture exporters are actively pursuing sales to Europe. At a trade fair last month in Chengdu, agriculture was the most prominent sector represented – ahead of high-tech and heavy-machinery firms.

❽ Poland is the world's sixth-largest grower of strawberries. It joined the EU in 2004 and has an unemployment rate near 15 %. Lobbyists pushing for strawberry tariffs said that without them, the country could lose more than 2500 jobs.

[Source: adapted from http://www.chinadaily.com.cn/world/2006-12/26/content_767919.htm 20 January 2007]

(This question continues on the following page)

(Question 4 continued)

(a) Define the following terms indicated in bold in the text:

(i) subsidies *(paragraph ❶)* *[2 marks]*

(ii) income elasticity of demand *(paragraph ❺)*. *[2 marks]*

(b) Using an appropriate diagram, explain the effect of the EU tariff on frozen strawberries on the European market for frozen strawberries. *[4 marks]*

(c) Using an appropriate diagram, explain the type of unemployment that Poland might experience without the strawberry tariff. *[4 marks]*

(d) Using information from the text/data and your knowledge of economics, evaluate a decision to increase protection in the EU strawberry industry. *[8 marks]*

5. *Study the extract and data below and answer the questions that follow.*

Nigeria

❶ Nigeria's economy depends heavily on the oil sector, which contributes 95% of export revenues, 76% of government revenues, and about a third of gross domestic product (GDP). Oil prices rose considerably in 2005. With its large reserves of human and natural resources, Nigeria has the potential to build a prosperous economy, reduce poverty significantly, and provide the health, education, and **infrastructure** services its population needs.

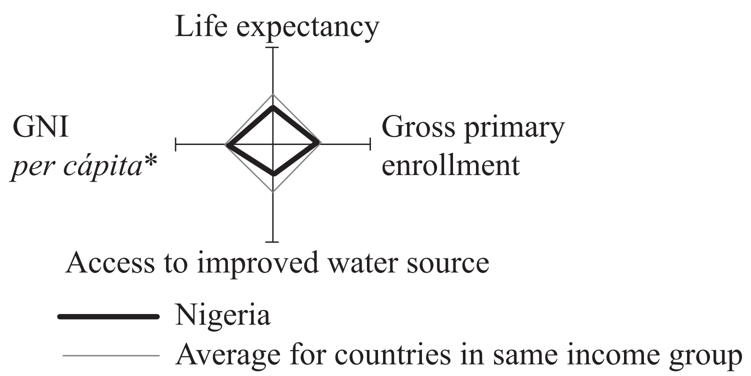
❷ GDP *per capita* is about US$400. Despite the country's relative oil wealth, poverty is widespread – about 37% of the population lives in extreme poverty.

❸ Government efforts in the fight against corruption are improving the country's international image. The government is also trying to ensure that public money can only be used for approved **investment** projects.

Table 1: Selected economic indicators for Nigeria – 2004 and 2005

	2004	**2005**
Average annual growth (%)		
GDP	6.0	6.9
GDP *per capita*	3.7	4.7
Economic indicators		
Consumer prices (% change)	19.4	13.5
Terms of trade index (base year = 2000)	104	143
Current account balance (US$ millions)	3251	12 447

Figure 1: Development diamond for Nigeria 2005



[Source: adapted from *The World Bank Group, Country Brief,* April 2006 and *Nigeria at a glance,* September 2006]

* GNI *per capita* is similar to GNP *per capita* but measured with a special method used by the World Bank

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(Question 5 continued)

(a) Define the following terms indicated in bold in the text:

(i) infrastructure *(paragraph ❶)* *[2 marks]*

(ii) investment *(paragraph ❸)*. *[2 marks]*

(b) Using information from paragraph ❶ and table 1, explain why there is evidence that the demand for oil was price inelastic in 2005. *[4 marks]*

(c) Using an AD/AS diagram, explain the effect that the changing current account balance is likely to have on inflation. *[4 marks]*

(d) Using information from the text/data and your knowledge of economics, evaluate possible measures that the Nigerian government might employ to promote economic development. *[8 marks]*