

	<b>NANYANG JUNIOR COLLEGE</b>
	2024 JC2 Preliminary Examination <b>H1 ECONOMICS</b>

Paper No: 8843/01

28<sup>th</sup> August 2024  
Wednesday

Time : 0800 - 1100 hrs  
Duration : 3 hours 00 min

### INSTRUCTIONS TO CANDIDATES

**Do not turn over this paper until you are told to do so.**

Write your name, class and the name of your Economics tutor in the space provided on the answer booklet.

**You are required to answer ALL questions.**

The number of marks is given in the brackets at the end of each part question.

Write your answers on the answer booklet provided. If you use more than one answer booklet, slot the additional booklets into the first booklet.

Please start each case study on a fresh page.

You are advised to spend several minutes reading through the questions and data before you begin writing your answers.

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There are **8** printed pages including this cover page.

Answer **all** questions

### Question 1: Impact of Russia-Ukraine War on Various Industries

**Table 1: Prices of Meat, Cereal and Dairy between 2016 to 2022**

	FAO Meat Price Index	FAO Cereal Price Index	FAO Dairy Price Index
<b>2016</b>	91.0	88.3	92.6
<b>2017</b>	97.7	91.0	108
<b>2018</b>	94.9	100.8	107.3
<b>2019</b>	100.0	101.6	102.8
<b>2020</b>	95.5	103.1	104.8
<b>2021</b>	107.9	131.2	139.6
<b>2022</b>	118.8	154.7	159.5

Source: Adapted from the Food and Agriculture Organisation of the United Nations (FAO)

#### **Extract 1: World food prices hit new record on impact from Ukraine war**

Global food prices have struck a new high, soaring at the fastest monthly rate in 14 years after the war in Ukraine hit the supply of grains and vegetable oils, in a shift likely to do the greatest harm in poorer countries around the world. March's food price index from the Food and Agriculture Organisation of the United Nations (FAO) rose to its third record high in a row, jumping 34 per cent from the same time last year. The index was 12.6 per cent higher than in February, a rise that the organisation described as a "giant leap".

According to estimates from the FAO and the Ukrainian government, 20 to 30 per cent of land in Ukraine producing winter grains, corn and sunflower will remain unplanted this spring or will be unharvested in July and August. Russia and Ukraine are important exporters of grains and sunflower oil, accounting for about 30 per cent of global wheat trade. Russia has continued shipping wheat since it invaded its neighbour in February, but western sanctions have complicated payments and transportations, leading to supply uncertainties.

Food price inflation had already taken root before the Ukraine war started, after poor harvests around the world last year on the back of bad weather and a sharp rebound in post-pandemic lockdown demand. If the shortage of food commodities persists, the global number of undernourished people could increase by 8 million to 13 million, with the most pronounced increases occurring in Asia-Pacific, followed by sub-Saharan Africa, and the near east and north Africa, said the FAO.

Source: Financial Times, 8 Apr 2022

#### **Extract 2: Effects of war on the fertiliser industry**

The effects of the Russia-Ukraine war may reverberate through the global fertiliser industry for years to come. Post-COVID supply-chain disruptions had already pushed fertiliser prices to cyclical highs in 2021. Russia's invasion of Ukraine in February, and the sanctions and trade

supply disruptions that followed then pushed prices even higher, grain prices also increased, reaching a peak in May 2022. Russia is a major producer of the three main types of fertilisers - nitrogen, phosphate, and potash (NPK), and a major exporter of key raw materials for fertiliser production elsewhere in the world. High fertiliser prices have boosted earnings and profitability of the 12 global fertiliser companies rated by S&P Global Ratings. This is boosting fertiliser companies' profits and credit quality for now but has also destroyed demand from farmers unable to afford fertilisers and, in turn, increased food insecurity worldwide. It also highlights the need to reduce dependence on Russia, the world's largest fertiliser exporter. Yet, investment required to end dependence on Russian and Belarussian fertilisers is being hampered by high inflation, supply shortages, and in the case of nitrogen fertilisers, uncertainties over the shape of further regulation to decarbonize the industry.

Source: Adapted from USDA, Economic Research Service Department of Agriculture, 2022  
and World Bank, 2022

### **Extract 3: Pollution generated from the use of chemical fertilisers**

Farmers apply chemical fertilisers on their fields, which provide crops with the nitrogen and phosphorus necessary to grow and produce the food we eat. However, when nitrogen and phosphorus are not fully utilised by the growing plants, they can be lost from the farm fields and negatively impact air and downstream water quality.

This excess nitrogen and phosphorus can be washed from farm fields and into waterways during rain events and when snow melts and can also leach through the soil and into groundwater over time. High levels of nitrogen and phosphorus can cause eutrophication of water bodies. Eutrophication can lead to hypoxia ("dead zones"), causing fish kills and a decrease in aquatic life. Excess nutrients can cause harmful algal bloom in freshwater systems, which not only disrupt wildlife but can also produce toxins harmful to humans.

Fertilized soils, as well as livestock operations, are also vulnerable to nutrient losses to the air. Nitrogen can be lost from farm fields in the form of gaseous, nitrogen-based compounds, like ammonia and nitrogen oxides. Ammonia can be harmful to aquatic life if large amounts are deposited from the atmosphere to surface waters. Nitrous oxide is a potent greenhouse gas.

There are many ways that farmers can prevent nutrient losses from their operations, including, but not limited to adopting the Nutrient Management Techniques: Farmers can improve nutrient management practices by applying chemical fertilisers in the right amount, at the right time of year, with the right method and with the right placement. This would reduce the negative impacts on others.

Source: Environmental Protection Agency, 2022

### **Extract 4: Malaysia raises ceiling price for chicken; industry players say issues remain unsolved**

Malaysia has raised its price ceiling for standard chicken to RM9.40 (S\$3.10) per kg, which will come into effect on Friday. The decision, Agriculture and Food Industries Minister Ronald Kiandee said, was taken by the Cabinet after taking into account a cash assistance scheme announced by Prime Minister Ismail Sabri Yaakob, where cash aid of RM500 will be given to eligible low- and

middle-income households. Some 8.6 million households are slated to receive up to RM2,600 in aid this year.

The government has previously capped the price of standard chicken at RM8.90/kg. The cap was set to be lifted on July 1, but a public uproar saw the decision being scrapped. Attributing global food inflation to supply chain disruptions triggered by geopolitical conflict and climate change, Dr Kiandee said “the government is trying its best to set a mechanism to ensure the Malaysian family isn’t burdened by the challenges of the cost of living”.

Businessman Ameer Ali Mydin, who operates a chain of hypermarkets, said the government should focus on solving the chicken supply shortage instead of tinkering with pricing. “The situation will be unchanged with the new ceiling price so long as we continue to have supply shortages,” he said, as quoted by news site Free Malaysia Today.

Chicken consumption in Malaysia is the highest amongst the various types of meat. Malaysia’s chicken supply first started shrinking in February, with producers claiming that soaring costs meant they could no longer supply poultry at the existing price cap. The heavily weakened ringgit has caused prices of imports to rise drastically. The cost of imported livestock feed, which has risen by 70 per cent since the war in Ukraine started, is the main factor driving up production costs.

Source: Adapted from The Straits Times, 29 Jun 2022

### Questions

- (a) With reference to Table 1, compare the prices of meat, cereal and dairy over the period shown. [3]
- (b) (i) Explain one function of the price mechanism. [2]
- (ii) With reference to Extract 1, explain and comment whether demand or supply factors have a greater impact on the rising price of food. [6]
- (c) Using Extract 1 and a production possibility curve diagram, explain the impact of the Ukraine war on the Ukrainian economy. [3]
- (d) Using a relevant price elasticity concept, explain the impact of the Russia-Ukraine war on Russia’s fertiliser export revenue. [4]
- (e) (i) With the aid of a diagram, explain the source of market failure in the fertiliser market as mentioned in Extract 3. [4]
- (ii) Assess the various policies a government could undertake to achieve efficient allocation of resources in the fertiliser market. [8]
- (f) Discuss whether increasing the price ceiling of chicken together with cash assistance to low- and middle-income households is the best way “to ensure the Malaysian family isn’t burdened by the challenges of the cost of living.” [10]

**[Total: 40]**

**Question 2: Unemployment and Growth****Extract 5: Pressure mounts on South Africa's ruling party as unemployment rises again ahead of election.**

South Africa's unemployment rate, already the highest in the world, rose to 32.1% in the fourth quarter of 2023, according to official government figures released on Tuesday. The news is a blow to the ruling African National Congress Party as it faces its steepest election test ever in a few months. The desperately high unemployment rate is a key voter issue.

High barriers to entrepreneurship, and limited access to business environments, still pose major challenges for people who want to get into business; and even though attitudes towards entrepreneurship have become more positive, knowledge and skills gaps persist. Some economists argue that the proposed minimum wage risks adding to the hiring costs faced by businesses.

On the other hand, further complicating matters, many poorly educated workers have entered the labour force, leading to skills mismatches. Skills shortages and mismatches are key challenges to growth and inclusiveness. The economy is shifting towards more skill-intensive sectors like retail, financial services and telecommunications. Meanwhile, agriculture and mining, which had historically offered opportunities for unskilled labourers, are now in decline.

Unemployment among those aged 15-24 was 59.4% at the end of last year as Africa's most advanced economy continued to struggle to create jobs for young people entering the workforce. When a larger portion of the youth population is unable to find employment, it can lead to increased poverty, social unrest, and a loss of productivity and potential.

Despite challenges, the government has taken steps to address the youth unemployment crisis. Through the Presidential Youth Employment Intervention (PYEI), the government has established SAYouth.mobi as a zero-rated platform for unemployed young people to access opportunities for learning and earning. The President added that working together with the National Youth Development Agency (NYDA), they have set up a number of initiatives in assisting a number of young people to start their own businesses. Having a job does not only provide an income, but it is also fundamental to people's sense of self-worth, dignity, hope, purpose and inclusion."

Source: AP News, 20 February 2024

**Table 2: Unemployment, inflation and real GDP growth rates in South Africa, 2015 - 2023**

Year	Unemployment rate (%)	Inflation rate (%)	Real GDP growth rate (%)	Population growth rate (%)
2015	25.4%	4.6%	1.32%	2.1%
2016	26.7%	6.3%	0.66%	0.98%
2017	27.5%	5.3%	1.16%	0.39%
2018	27.1%	4.6%	1.56%	1.23%
2019	28.7%	4.7%	0.26%	1.30%
2020	29.2%	3.3%	-5.96%	1.23%
2021	34.3%	4.6%	4.7%	1.00%
2022	33.5%	6.9%	1.91%	0.84%
2023	32.8%	5.9%	0.6%	0.87%

Source: Various Sources

**Extract 6: A Strong Commitment to Human Capital is an Investment in Rwanda's Future**

A recent commitment by the Rwandan government to provide equitable opportunities for poor and vulnerable households by investing in their nutrition, health care, and education is having a profound impact on the lives of many.

Rwanda's strong economic growth has afforded impressive development gains and substantial improvements in living standards. Despite these advancements, the World Bank's Human Capital Index predicted that a child born in Rwanda in 2018 would be only 37 percent as productive when she grew up as she could have been if she enjoyed full health and education. A country's human capital—the nutrition, health care, and education that help people realize their full potential—is essential for long-term economic stability, inclusive growth, and increased resilience to crises. Working collectively, ministries, and agencies across the government are now delivering better and more efficient social protection, nutrition, health, and education services. Rwanda's National Strategy for Transformation combined a whole-of-government approach with a strong focus on people-centric policies. With support from the World Bank, Rwanda has strengthened the resilience of families, given young children a more promising start, improved learning environments for students and teachers, and provided more equitable access to quality health care services for all citizens.

Source: The World Bank, 3 December 2023

**Extract 7: Governments must drive inclusive, sustainable growth in face of global uncertainties:**

Governments must drive inclusive and sustainable growth in response to the uncertainty and deep structural challenges that are faced today, said Finance Minister Lawrence Wong on Monday (April 18). This means repurposing fiscal policy and the role of the state towards building longer-term capacity and public goods, which can include infrastructure such as healthcare and education. It also requires fostering a refreshed common agenda between the public and private sectors beyond specific projects, in areas such as research and development (R&D) and lifelong

learning, he added. Externally, it also calls for a reinvigorating of the international order such that it is open and based on rules, with a stronger commitment to multilateral solutions.

It is Mr Wong's first public speech since he was announced as the leader of the ruling PAP's fourth generation (4G) team last week, a move that paves the way for him to be Singapore's next prime minister.

In a keynote address, he touched on the difficulties faced by economies and the possible response to them. Globalisation is heading into a new era of decoupling, with the possibility of a more divided world economically that mirrors a more divided world politically, he added. Growth has also been less inclusive, Mr Wong pointed out, as technology has contributed to the shrinking of middle-class jobs in some industries and Covid-19 also hit unskilled workers disproportionately. He added: "The consequence of these factors - weak and uneven income growth, high inequality, and weak social mobility - pose significant risks for us all. When people feel that the odds are stacked against them - when they cannot reach the top no matter how hard they try; when their children will never do better than them - social stability is affected, and things start to fall apart."

To respond to these challenges, Mr Wong noted that it "is not just about the amount of spending, but how and what we spend on". He added: "It's about the state playing a more active and purposeful role to achieve important longer-term goals - to raise productivity, to tackle inequality and rekindle social mobility."

Source: The Straits Times, 19 April 2022

**Questions**

- (a) With reference to Extract 5,
- (i) Explain the main type of unemployment faced by South Africa. [2]
  - (ii) Explain why high youth unemployment rates can be detrimental to an economy. [4]
- (b) With reference to Extract 5 and using an aggregate demand and aggregate supply diagram, explain the impact of a 'proposed minimum wage' on South Africa's economy. [4]
- (c) With reference to Table 2, explain the change in living standards in South Africa over the period 2015 to 2023. [4]
- (d) Using aggregate demand and aggregate supply analysis, explain the relationship you would expect between unemployment rate and inflation rate **and** comment on the extent to which Table 2 supports the expected relationship. [6]
- (e) With reference to Extract 6, explain how Rwanda's strong economic growth can enable the government to improve the non-material living standards. [2]
- (f) With reference to Extract 7, discuss whether technology might be expected to result in "weak and uneven income growth, high inequality, and weak social mobility". [8]
- (g) According to Extract 7, governments need to "repurpose fiscal policy and the role of the state" to drive inclusive growth.
- Discuss whether a government should concentrate on supply-side measures to achieve inclusive growth. [10]

**[Total: 40]****\*\*\* The End \*\*\***