Name:		Class:	5C

DUNMAN HIGH SCHOOL
Year 5 Weighted Assessment 1 [Mock Paper]
Economics (Higher 1) 8843

Question 1

Undoubtedly, the use of mineral fertilizers has played a key and historical role in raising agricultural productivity, thus contributing to food security globally. The fallout of Russia's invasion of Ukraine has seen fertilizer prices soar, adding to farmers' costs, and further inflating food prices. In this context, rapidly increasing fertilizers prices lower affordability and reduce fertilizer use by farmers, leading to additional issues of food availability and compounding the food access problem.

(a) Using a demand-supply diagram, explain the effect of Russia's invasion of Ukraine on the market for food. [5]

(b) Using the concept of price elasticity of demand, explain the effect of **a(i)** on the consumer expenditure on food. [3]

Question 2

Roughly 70% of carbon dioxide (CO2) produced in the U.S. is used for food and beverages. The gas puts the pop in soft drinks and the fizz in beer, and is turned into dry ice to keep food frozen. During the summer, demand for products such as beer and soda increases, and high temperatures this year have intensified that demand. On the other hand, maintenance shutdowns at industrial facilities that produce CO2 gas are expected to keep supplies tight.

Using a supply and demand diagram, explain the impact of the mentioned factors on the price of CO2. [6]

Question 3

The nationwide shortage of CO2 has sent food and beverage companies racing to keep operations running by hunting for alternate supplies. Regional suppliers with gas to spare say they are shipping CO2 as much as three times farther than normal to meet the needs of new customers, while other suppliers are sending trucks hundreds of miles farther afield to secure supplies for customers.

Using example from the above extract, explain the incentive function of the price mechanism. [2]

Question 4

It was estimated that the global demand for surgical masks was possibly several times higher during the COVID-19 pandemic. To make matters worse, the closure of airports and factories all over the world brought about a major disruption to global supply chains and the transportation of raw materials. This meant that existing production struggled to keep up with the demand for surgical masks, causing the global price of masks to rise sharply.

Using a demand-supply diagram and the concept of price elasticity of supply, explain why there was a sharp rise in the global price of surgical masks. [6]

Acknowledgements:

Q1. *Sources: (1) https://www.wto.org/english/news_e/news22_e/igo_14nov22_e.pdf, accessed 17 April 2023, (2)* Urooba Jamal (Business Insider) Apr 22, 2022
Q2 & 3. *Source: Jesse Newman, Wall Street Journal, Aug. 26, 2022*
Q4. Adapted from AJCJ 2023 Promotional Exam