RIVER VALLEY HIGH SCHOOL
JC 1 Promotional Examinations
in preparation for General Certificate of Education Advanced Level
Higher 1

ECONOMICS **8843/01**

27 September 2022

1 hour 30 mins

Additional Materials: Answer Booklet

READ THESE INSTRUCTIONS FIRST

Write your index number and name on all the work you hand in.
Write in dark blue or black pen on both sides of the paper.
You may use a soft pencil for any diagrams, graphs or rough working.
Do not use staples, paper clips, highlighters, glue or correction fluid.

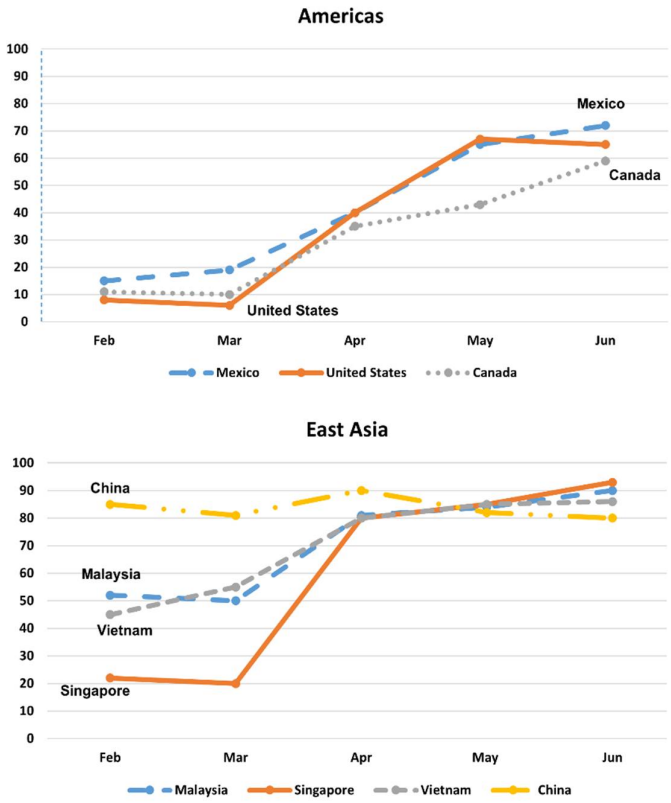
Answer **all** questions.

At the end of the examination, fasten all your work securely together.
The number of marks is given in brackets [ ] at the end of each question or part question.

Answer **all** questions.

Question 1: Market for Healthcare during the Covid-19 Pandemic

Figure 1: Share of population who say they wear a mask in public in 2020 (%)



Source: The Economist, accessed 21 July 2022

Extract 1: The upward trend in medical mask prices

With recent updates from the World Health Organisation warning that the Covid-19 virus could be spread through respiratory droplets produced from coughs and sneezes, a national run on household goods was set off in China. At the top of the list of items that consumers are fighting to lay hands on are facial masks.

According to Reuters, Cao Jun, a general manager of mask manufacturer Lanhine which operates a factory east of China's Ningbo city said: "[Our] firm's clients are demanding a combined 200 million masks per day compared to its normal production rate of 400,000 a day."

The demand for masks has drastically risen as a result of mass panic. Dennis Wei, a junior at Carleton College studying Economics, shared that "the primary reason for the rise in the price of masks is due to a shortage of masks." "The demand for masks has drastically risen as a result of consumers reacting to the virus while the supply of masks may have actually dropped, as many migrant workers who produce the masks were prevented from returning to work due to quarantine and other safety reasons," Dennis added.

In the face of a mask price spike, some pharmacies in China have been fined for attempts of price gouging[1] and stockpiling. While price gouging is not approved of by the Chinese government, this has not prevented people from buying masks at any price.

Source: Concordia Applied Journalism, accessed 21 July 2022

Extract 2: Free markets sometimes need a little help

The United States' Centers for Disease Control and Prevention recommends that people wear face masks to protect others from the spread of the Covid-19 virus. Yet, there have been reports for weeks that there are shortages of face masks.

When a product becomes scarce, pushing up prices, producers are incentivised to ramp up production. The problem is that a person willing to pay the higher price may not be someone whose use of a mask would most benefit others.

So, let's imagine two men. The first one can do his well-paid professional job from home and doesn't go out because he fears getting the virus. The other is an essential worker who must continue to do his low-income job every day and interact with others in close proximity. When the price of masks shoots up, the first man can easily afford to order more masks for himself via Amazon, but the other is unable to do so. Since the first man interacts with few others, there's little benefit to his wearing a mask. But the essential worker interacts with dozens of people daily, which means he's protecting many others by wearing a mask.

In other words, allowing the market to allocate a scarce good through higher prices means the wrong people are likely to get it. Moreover, some people may end up hoarding masks, whether for personal use or to sell at even higher prices.

Countries touted as Covid-19 success stories have been rationing masks. For instance, South Korea limits the price to US$1.20 a mask, far below the previous market price of $2.00. It also imposes a weekly ration of two face masks per person to prevent panic buying and prioritize allocations to health personnel. At the same time, production was ramped up so that individuals are allowed 10 masks every two weeks.

This does not mean that all medical supplies should be under price control or rationed. But price controls on goods like masks, hand sanitiser or vaccines, once they become available, can be useful if doing so helps limit the spread of the coronavirus. The free market generally works, but sometimes it needs an assist.

Source: adapted from The Conversation, 6 May 2020

Extract 3: The case for vaccinations

The COVID-19 pandemic has created havoc on a global scale. Countries have turned to a multi-pronged approach, involving social distancing, face masks, sanitising hands and surfaces and most recently, vaccinations that have been heralded as a safer pathway to herd immunity and a final layer of defence against the virus.

[1] Gouging refers to the practice of overcharging for a good or service

To build up herd immunity, a large portion of a community (the herd) should become immune to a disease, making the disease's spread from person to person unlikely. The whole community becomes protected — not just those who are immune.

However, effective vaccines will only contribute to herd immunity if people accept them. The far-from-universal willingness to accept a COVID-19 vaccine is a cause for concern. In a global survey of potential acceptance of a COVID-19 vaccine, positive responses ranged from 55% in Russia to 87% in China. Countries where acceptance exceeded 80% tended to be Asian nations with strong trust in central governments.

According to Professor Teo Yik Ying, Dean of the National University of Singapore's Saw Swee Hock School of Public Health, the extent of anti-vaccination sentiments in Singapore is considerably lesser than in Europe or North America as we have a smaller fraction of people with deep-seated prejudice against vaccines. The hesitancy that people face when it comes to the COVID-19 vaccine is more an issue of misinformation. This spread of anti-vaccination misinformation, including unfounded claims linking the vaccine against measles to an increased risk of autism in children, has been blamed for an increase in measles cases in recent years across many countries, such as the United States and Samoa.

Source: World Bank, 19 November 2020 and Channel News Asia, 29 December 2020

Extract 4: Bridging the vaccinations gap

COVID-19 vaccines are finally within reach at the end of a difficult pandemic year. But even after we have overcome the imminent challenges of sufficient supply and equitable access, a range of well-designed programme is needed to drive acceptance and uptake. Researchers, politicians, and other stakeholders have come together to propose some strategies including:

1. Making the vaccine free and easily accessible.
   Even a small charge may put people off receiving the vaccine and vaccinating at a variety of locations may reduce "hassle factors" that can act as a barrier. Making vaccines easily accessible in familiar and convenient locations, such as "drop-in" clinics that are near where people often go, can also encourage uptake.

2. Harnessing social influence.
   Researchers propose that the vaccines should be endorsed by trusted community figures. This should be accompanied by credible and clear communication from such sources demonstrating that getting vaccinated is beneficial, easy, quick and affordable. Developing trusted sources, fact-checking and responding to misinformation through dedicated dashboards can help to manage vaccination hesitancy.

3. Grants in the form of vaccinations payments.
   A stimulus check could be handed to people who complete their vaccinations, thus incentivising more vaccination takeup. Such a strategy has been implemented in other contexts where in-kind payments increased full immunisation rates among young children in India.

Source: Medical News Today, 17 December 2020

Questions

(a) With reference to Figure 1, compare the share of population who say they wear a mask in public in East Asia with that in Americas from February to June 2020. [3]

(b) Extract 1 mentions that "the primary reason for the rise in the price of masks is due to a shortage of masks".

Using a supply and demand diagram, account for the rise in the price of masks in China. [5]

(c) Given the relationship that exists between price elasticity of demand (PED) and total revenue, explain why pharmacies in China attempted "price gouging". [4]

(d) Extract 4 mentions that the vaccine should be made free and easily accessible.

Identify and explain the **two** main characteristics of a 'public good' and comment briefly on whether they are likely to be possessed by free and easily accessible vaccines. [6]

(e) With reference to Extract 2:

(i) Explain how the price mechanism allocates scarce resources in the market for masks. [4]

(ii) Assess whether price controls in the market for masks will bring about a more equitable outcome for society. [8]

(f) Discuss whether the provision of grants is the best way to bring about greater allocative efficiency in the market for vaccinations. [10]

[Total: 40]