ANDERSON SERANGOON JUNIOR COLLEGE
JC2 PRELIMINARY EXAMINATION
Higher 3

ECONOMICS **9809/01**

Paper 1 **23 September 2024**

No Additional Materials are required. **3 hours 15 mins**

READ THESE INSTRUCTIONS FIRST

An answer booklet will be provided with this question paper. You should follow the instructions on the front cover of the answer booklet. If you need additional answer booklets, ask the invigilator for a continuation booklet.

Section A
Answer **all** questions.

Section B
Answer **two** questions.

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

This document consists of **7** printed pages and **1** blank page.

Section A

Answer **all** questions in this section.

1 Health and Wellness

Extract 1: Singapore's Healthy Living Master Plan

In Singapore the city parks and park connectors can be identified as the key active ageing urban features. The physical foundation for this urban health policy was laid out in the first comprehensive city plan for an independent Singapore in the late 1960s. Embedding health-supportive public facilities and green spaces for sports and exercise into the city's rapidly developing urban landscape has since been one of the key elements of the government's centralized urban planning strategy. This has helped residents to enjoy easy access to green spaces and a built environment that is conducive for physical activity. Over the years the Singapore government has continued to expand the infrastructure and green space for active ageing across the entire city-state as part of the National Public Health Promotion.

Source: https://sportifycities.com/active-ageing-singapore/

Extract 2: Exercise Habits

Obesity – and its related illnesses – endangers the lives of millions across the world. Increasingly sedentary lifestyles of many adults partially explain the increase in obesity over recent years. The typical American spends many hours in front of a computer or TV screen, failing to exercise – all in spite of the health benefits of doing so. Exercise is known to significantly improve cardiovascular health, blood pressure, and cholesterol and to reduce the risk of developing diseases such as diabetes and osteoporosis.

For most people, failure to exercise is unlikely to be due to ignorance or lack of interest. It is more likely the result of difficulties in translating initial motivation to exercise into sustained behavioural change. In other words, it is hard to form an exercise habit. A key problem is the difficulty of translating current motivation into long-term behavioural change. While for many people, the prospect of exercising for three months and improving their health may seem attractive today, the daily decision to actually exercise when that time comes and to commit to the daily discipline is a much more difficult one.

One approach to overcoming this problem is for me to sign a contract with myself now that states that if I do not do what I commit to now, I will pay a monetary penalty. This type of contracting with one's self to sustain current actions in the future is a called a "commitment contract". Such commitment contracts have been used successfully to help people quit smoking. Another approach is the use of financial incentives to increase exercise, which has also been shown to increase exercise beyond the period in which incentives have been given.

Source: https://cepr.org/voxeu/columns/exercise-habits

Extract 3: The Principal-Agent Problem in the Healthcare Market

At the heart of the principal-agent relationship is the issue of information. As Arrow (1963) pointed out, the health care market is characterized by a high degree of uncertainty. In some circumstances, neither the doctor nor the patient is certain about the disease and the optimal treatment required. However, in most other scenarios, the doctor has a greater knowledge of the patient's condition than the patient has. This could give rise to certain problems.

The most often cited principal-agent problem is an induced demand by the doctor. This dynamic occurs when the doctor influences the patient's demand for care against the best interest of the patient. This induced demand implies persuasive activity to shift the patient's demand curve according to the doctor's self-interest. As in any agency problems, the degree of this induced demand depends on the information asymmetry between the doctor and the patient. As the patient becomes more empowered and informed about his or her health conditions and possible treatment alternatives, the doctor is less able to apply this sort of influence over the patient.

One major economic challenge in healthcare is to align the incentives of the three key players. They are: the payer, which can be the government or insurance companies; the provider, namely hospitals, doctors and clinics; and the patient, who receives healthcare services.

To illustrate, insurance companies as the payer want to keep cost under control. They may resort to denying claims for procedures that can be beneficial, hence harming patients' interests. Doctors are often funded by fee for service. In other words, they are paid based on workload, so they may order more tests, procedures and surgeries than necessary to get more money, which is against the payers' interest and the healthcare system at large. Patients are supposed to keep themselves healthy, but since healthcare costs are paid for, there is little incentive to do so, which is against everyone's interest.

Source: Speech by Mr Ong Ye Kung, Minister of Health at Singapore Economic Policy Forum, 31 October 2023

Extract 4: Singapore's 3M

Healthcare is kept affordable for Singaporeans through heavy government subsidies, supplemented by the Medisave, MediShield, Medifund.

Medisave is a national medical savings scheme which helps individuals put aside part of their income into their Medisave Accounts to meet their future personal or immediate family members' hospitalisation, day surgery and certain outpatient expenses. MediShield is an affordable catastrophic medical insurance scheme which helps Medisave account holders, and their dependents meet the cost of treatment for serious or prolonged illnesses. Singaporeans can use Medisave to pay the premiums of MediShield or Medisave-approved private insurance schemes. Lastly, Medifund is an endowment fund set up by the Government as a safety net to help needy Singapore citizens who are not able to pay for their medical care at restructured hospitals.

In recent years, there have been concerns over rising healthcare costs and the impact of these on the sustainability and affordability of health insurance premiums. In particular, the initial zero co-payment policy required under Integrated MediShield Plans (IPs) have contributed to the over-consumption, over-servicing and over-charging by doctors and policyholders which in turn impacts healthcare costs. In response, MOH introduced a minimum five per cent co-payment for new IP riders sold from April 1, 2019. The Government hopes that this co-payment together with other efforts such as the publication of fee benchmarks will encourage prudent use of healthcare services and keep healthcare costs sustainable for all Singaporeans.

Sources: https://www.moh.gov.sg, accessed on 8 May 2024 and https://www.straitstimes.com/singapore/health/moh-welcomes-measures-by-insurers-to-adjust-terms-for-full-rider-ips-and-require-co, accessed on 15 May 2024

Table 1: Healthcare Inflation in Singapore

Year	2018	2019	2020	2021	2022
Singapore	2.04	1.11	-1.54	1.13	2.18

Source: Singapore Department of Statistics, accessed on 15 May 2024

Extract 5: Rising healthcare costs in Singapore

The rising cost of providing healthcare in Singapore is an issue that requires urgent attention.

Government spending on healthcare costs quadrupled from S$3.7 billion in 2009 to S$15.2 billion in 2020 and is projected to hit S$27 billion in 2030.

Several factors contribute to healthcare cost increases. First, our population is ageing. Older patients tend to have more co-morbidities and complications, requiring more medical attention, more medication, procedures and longer hospital stays. For example, in 2019, the average stay in our public hospitals for those aged 65 and above was 6.9 days almost double the 3.9 days for those below 65. Therefore, as we grow older, we are likely to spend more on healthcare. And collectively, as we have increasingly more older persons in our population, our overall expenditure on healthcare will also rise correspondingly.

Second, with medical advancement, new treatments will become available. Previously untreated conditions may now become treatable. Older treatments that were less costly may be replaced by better but more costly new treatments. These advances can improve life spans and the quality of life, but they come at a price.

Third, operating costs may increase over time. For example, manpower cost accounts for more than half of healthcare costs. Some critical healthcare roles in Singapore, such as radiographers and pharmacists, are in short supply which has lead to an increase in manpower costs. Managing of healthcare costs is essential. However, it is challenging to do so in the public hospital sector because there is a major difference in the motivation to do so compared to private hospitals.

The latter is driven by the profit motive which provides a powerful incentive because any reduction you can achieve shows in the bottom line. The mantra in private practice is to cut down waste and improve efficiency. Hence a private practitioner will try to see as many patients as possible, which results in a lower cost per patient.

A public doctor is unlikely to be driven by the same motivation but might prefer to do other things such as research or other medical-related activities which may benefit his personal growth and development, but which will not improve his unit cost per patient. This being the case, it is critical that the public sector implements effective measures to manage costs because individual players in the system may not.

Sources: https://www.moh.gov.sg, accessed on 8 May 2024 and https://www.channelnewsasia.com, accessed on 8 May 2024

Extract 6: Singapore's War on Diabetes

Diabetes is a condition that affects more than 400 million adults globally, and this number is expected to increase to above 640 million, which equates to one in ten adults, by 2040. In Singapore, over 400,000 Singaporeans live with the disease. The lifetime risk of developing diabetes is one in three among Singaporeans, and the number of those with diabetes is projected to surpass one million by 2050.

The causes of diabetes are many. Respondents pointed to a complex interaction of economic, social, cultural, individual, national and environmental factors. For example, they highlighted that access to unhealthy food, affluence of society, expansion of eating-out places, and roles of the F&B industry that has led to the growing diabetes situation in Singapore. This was seen to be made worse by Singaporeans' obesogenic lifestyle, characterized by work stress, poor sleep patterns and poor overall eating and living habits.

In response to this, the Singapore Health Minister declared War on Diabetes (WoD) on 13 April 2016, citing the psychosocial burden on individuals and families and economic reasons for the thrusts of this policy.

The policy core of WoD, centred primarily on increasing the population's level of physical activity, improving the quality and quantity of dietary intake, increasing early screening uptake and improving intervention to better control diabetes and its associated complications. It also put in place systems to foster healthier lifestyles such as the National Steps Challenge, promote good health by employers in the workplace such as offering healthier food options as a default, and facilitate adjustment of lifestyle habits and better decision-making by individuals.

The health ministry also partnered with the F&B industry to support major beverage companies and companies undertaking innovation to lower sugar content in their products, by fostering a supportive regulatory environment to encourage innovation and experimentation. This is illustrated in the 2017 industry pact, where seven beverage companies pledged to reduce the sugar level in their beverages to twelve percent or less by 2020. This incremental decrease signalled the government's recognition that innovation and (re)formulation of F&B products would need time, and that immediate introduction of any measures or regulation may backfire. Consumers' taste acceptance of newer and healthier products would also need time to develop.

Legal parameters were also explored. These included mandatory front-of-pack nutrient summary labelling such as the Healthier Choice Symbol (HCS), advertising regulations for the least healthy sugar-sweetened beverages (SSBs), excise duty on manufacturers and importers, and banning of higher-sugar prepackaged SSBs.

However, there were mixed feedback from the WoD with some questioning the rationale on WoD, and suggesting waging a war against sedentary lifestyle or promoting healthier living might be more appropriate. The HCS, which had made significant inroads in encouraging healthier F&B consumption, was found to be unclear in its representation. F&B retailers also noted the high innovation, production and marketing costs in the (re)formulation of F&B products as major challenges. Smaller F&B manufacturers and outlets, such as SMEs, reported acute cash flow issues and were less able to engage in innovation to (re)formulate healthier products. Many respondents questioned the sustainability of rewards, vouchers and subsidies programmes that encourage healthier cooking, eating and living.

Source: Ow Yong LM, Koe LWP. War on Diabetes in Singapore: a policy analysis. Health Res Policy Syst. 2021 Feb 8;19(1): 5

(a) Explain, with reference to examples from the extracts, the difference between a quasi-public good and a private good. [6]

(b) Discuss the extent to which traditional economic theory is useful in explaining how people decide whether to exercise. [8]

(c) With reference to Extract 4, explain why the Singapore government intervenes with MediShield in the market for health insurance. [6]

(d) With reference to the extracts, assess the appropriate policy measures to promote better outcomes in the Singapore healthcare market. [10]

[Total: 30]

Section B

Answer **two** questions from this section.

2 Discuss the limitations faced by governments when they use policies suggested by traditional economics and whether behavioural economics can help them overcome these limitations. [35]

3 The outbreak of COVID-19 caused global greenhouse gas emissions, a major contributor to global warming, to plummet some 5.5 per cent in 2020. However, emissions have since resumed its upward trajectory and are projected to reach a record high in 2023. Current climate policies are insufficient to keep the rise in global temperatures to below 2 °C which was laid out as an overarching goal in the Paris Agreement to combat climate change.

Discuss whether economic theory can account for the above phenomenon as well as support the government intervention required. [35]

4 A large firm operating in an industry with low levels of competition is considering the use of strategies to increase profits.

Discuss how the level of competition in an industry may affect the potential profitability of a firm and assess the extent to which strategies implemented by the firm will lead to higher profits. [35]

5 Discuss the extent to which being open provides the best way for economies to attain inclusive economic growth. [35]

6 Discuss whether sustainable growth can be more easily achieved by advanced economies than by emerging economies. [35]

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