H2 Economics Prelims CSQ 1

(a)		Would public health programmes to track disease outbreaks and set safety standards be considered as public goods? Justify your answer.	[4]
		Yes, because these two programmes are meant to *'promote and protects the health of all people and their communities', 'prevent people from getting sick or injured in the first place'* and *'focuses on entire populations'* (extract1). To be specific they are non-excludable, non-rivalrous and non-rejectable in nature. [1] Safety standards and the tracking system are **non-excludable**. Producers are either unable to or find it is prohibitively costly to exclude non-payers from enjoying the benefits of the safety standards or the tracking system once they are produced. For example, infection control measures, such as hand hygiene, isolation precautions, environmental cleaning, and medication safety, are designed to be applied uniformly to all patients within a healthcare facility to protect all patients from potential harm. Disease outbreak tracking are designed to benefit an entire population or community. Once in place, typically applied universally to prevent the spread of disease [1] Once safety standards or the tracking system are set up, it is **non-rival in consumption**. The consumption of the standards and the system by one person does not reduce the quantity available for others to consume and benefit from. For example, the development and adherence to safety protocols for medical procedures do not diminish the benefits for other patients undergoing similar procedures. The surveillance and reporting of disease cases do not decrease the program's ability to identify and respond to cases in other individuals too. [1] Safety standards and the tracking procedure are also **non-rejectable**. Such public health program focuses on promoting and protecting the health of all people and their communities and prevent people from getting sick or injured. The collective supply of safety standards and tracking procedure for all, means that it cannot be rejected by the beneficiaries. For example, some safety standards and tracking procedure are mandated by laws and regulations and failing to comply can lead to disciplinary actions or legal consequences. [1]	

(b)		Using Figures 1 and 2, describe the main features of US healthcare spending per capita, both over time and compared with other countries.	[2]

Fig. 1: US Healthcare Spending Compared to Other Countries in 2021

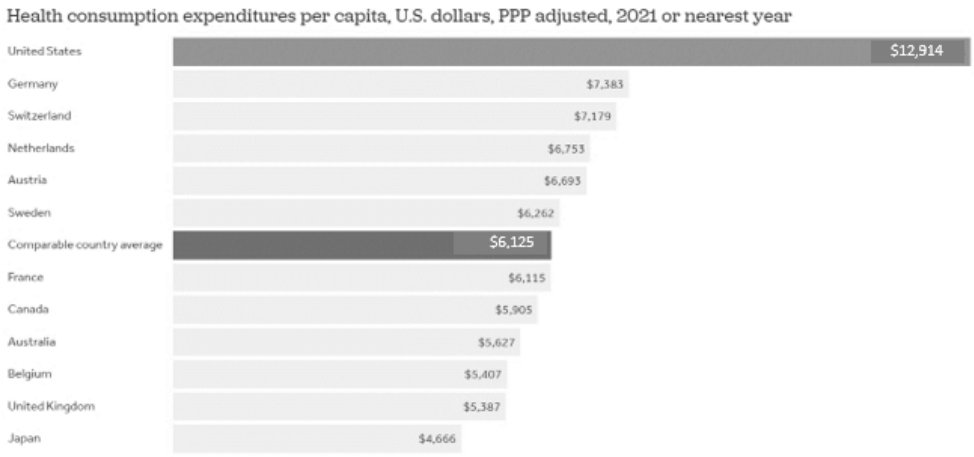
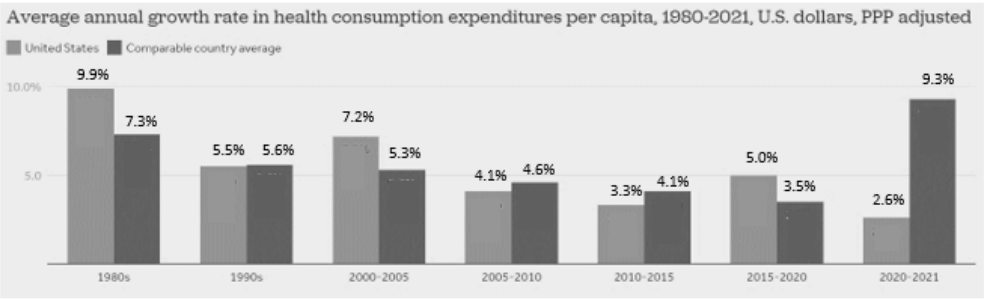


Fig. 2: Annual Growth Rate of US Healthcare Spending Compared to Other Countries



Source: healthsystemtracker.org

From Figure 2,

- since growth rate of healthcare spending per capita had been consistently positive, **we can conclude that US healthcare spending per capita has been increasing since 1980s. [1] or**
- However, since the growth rate had been falling, we can conclude that **the rate of increase in US healthcare spending per capita has fallen over the years.** [1]

From Fig 1,

- US healthcare spending per capita is the highest among the countries listed or
- US healthcare spending per capita is more than twice the amount the rest of the countries spent on average. [1]

		Note – Given the phrasing of the question, will need to describe US healthcare spending per capita, both over time and compared with other countries. One observation per category to get 2 marks.	
(C)		Explain two likely sources of market failure in the healthcare industry	[6]
		Based on Extract 1, unlike public health programme which are largely public goods, the healthcare industry treats people who are sick and focuses on individual patients. Hence they are private goods. Regardless, there are sources of market failure. [Positive Externalities] One likely source is the generation of positive externalities. From extract 2, 'Early prevention" such as annual health screening to detect chronic illnesses can lead to positive externalities as it can 'reduce the long-term healthcare costs for the society.. lead to healthier individuals .. enhances overall workforce productivity and economic output' The generation of positive externalities imply the MSB is above MPBactual. Considering the full benefits of the healthcare screening to the society, the socially optimum output should only be QS, where MSB = MSC. However, rational decision-making by individuals, acting in pursuit of their self-interest, disregard the MEB. As such, they consume up to QP, the point where the last unit of healthcare screening consumed brings them as much benefits as it costs them to consume it, i.e. where MPBperceived = MPC. There is thus under-consumption of QPQS units of healthcare screening in the free market. The last unit consumed (QP) adds more to society's benefit than it does to society's cost, indicating that society's welfare can be increased further by consuming more of the good. The under-consumption of QPQS units results in the society forgoing additional benefit of QScaQP while avoiding the additional cost of QScbQP. Since the additional benefit to society is greater than the additional cost had, consumption been increased to QS, the society experiences a welfare loss or deadweight loss given by the area abc as the potential welfare gain is forfeited -> market failure.	

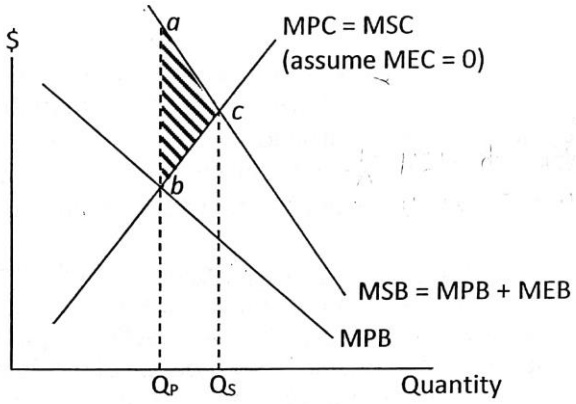
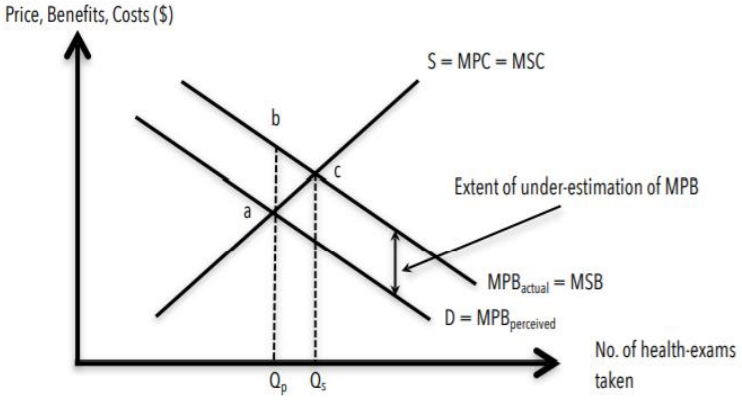


Figure 7: Under-consumption of goods with positive externalities

[Imperfect information]

From Extract 2, it was also highlighted that healthcare services are fundamental part of people's lives, supporting their health and well-being." Early prevention, can prevent dire and expensive healthcare problems later in life'. Using healthcare screening as an example again, we see that consumers may put off health screening as they are unaware of the full extent of benefits e.g. early detection of diseases will increase chances or recovery and reduce treatment costs. As consumers are not aware and hence will not consider these benefits in their decisions. Hence perceived MPB shaped by incomplete or inaccurate information is lower than MPB benefits of consuming healthcare given full and accurate information. MPB perceived< MPB actual -> lead to suboptimal decision-making and inefficient allocation of resources -> market failure



From extract 3, it was also highlighted that there is difficulty 'in finding physicians and specialists - With a lack of accessible doctor credentials and accomplishments, health consumers cannot easily find a good doctor. Instead, consumers rely on uninformed online reviews that can help with assessing traits like staff friendliness and wait times." Given that these platforms do not evaluate a physician's skill level in helping people with their health disorders, there may be misinformation. If the overly exaggerated, MPB perceived > MPB actual -> lead to suboptimal decision-making and inefficient allocation of resources -> market failure.

		Note: • Given the key word 'likely', candidate can suggest relevant sources of market failure not in the extract such as moral hazard or adverse selection due to asymmetric info. Cannot accept inequity concerns as it is not a source of market failure.	
	(ii)	A rising share of the US population are enrolled in Medicaid which subsidises healthcare costs for people with low incomes. [Extract 2] Discuss whether government subsidies is the best policy to ensure healthcare are allocated desirably in US.	[8]
		<u>Question Interpretation</u> • Command Word: Discuss whether -> Give a balanced argument before making a judgement • Context: healthcare in US • Concepts: Subsidies (eg. Mediaid) vs other policy measures to correct market failure in healthcare to achieve social optimal point [Eg Govt direct provision; Legislation / Regulation: quarantine, mandatory immunisation laws, Public education: Encouraging residents to do things that benefit their health (e.g., physical activity) or creating conditions to promote good health, and requiring certain actions (e.g., food safety); and Insurance: Medicare] **<u>Approach:</u>** • Thesis: Explain how indirect subsidies can be adopted to ensure that allocation of resources to healthcare is desirable (both efficiency and equity to be addressed). • Link: Highlight its advantages as well as its limitations in achieving the micro-goals. The limitations then justify why it may not be the best and the need for alternatives • Antithesis: Then explain another two policy measures that can be used to overcome the limitations of subsidies to achieve the goal of efficiency or/and equity in healthcare. For each one, first explain how it can overcome the limitations of the indirect subsidies that make it better, then highlight its limitations as well. • Judgement: Explain the criteria/conditions necessary for subsidies (both direct and indirect) to be the best to correct the market failure in healthcare and why in reality it may not. <u>Introduction</u> Highlight that Govt intervention is necessary to ensure that healthcare will be consumed at the level that is socially desirable by the government. From (c), the source of market failure is a combination of positive externalities, imperfect information. In addition, from extract 3, there is inequality in the consumption of healthcare due to income inequality too. As such the proposed policy should address them. <u>Body</u> Thesis 1: Explain why government subsidy can be considered a good policy to ensure healthcare are allocated desirably.	

- Explain how indirect subsidies work to correct market failure by reducing the MPC of supplying healthcare services, eg. vaccination.
    - Referring to Figure 3, the government estimates the socially optimal level of output (Qs) and grant a subsidy amounting to value of 'cd' * at Qs, to increase consumption from Qp to Qs.
    - As the subsidies reduce unit COP, MPC of production is reduced -> Assuming that producers pass on the full subsidy to consumers by ↓ing P of vaccination -> ↓ MPC of consumption -> MPC curve shifts down to MPC'
    - MPB perceived > MPC1 at the private optimal level (Qp). Consumers will increase consumption up to the level where MPB perceived = MPC1, ie. consumption of vaccination increased to Qs, i.e. social optimal level.

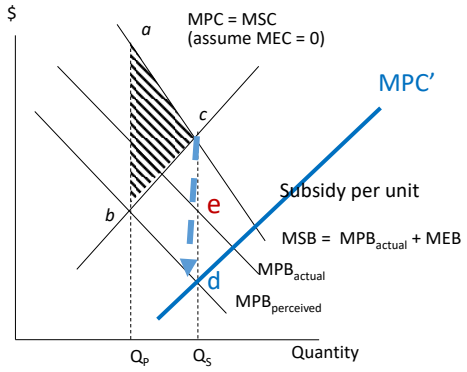


Figure 3: Using Indirect subsidies to increase consumption of healthcare services such as vaccination.

- **Explain how indirect subsidies work to increase equity by reducing the price of healthcare services such as vaccination for the lower income households in US (e.g Medicaid in Extract 3)**
    - As the indirect subsidies reduces the unit COP for producers, they will be willing and able to supply more vaccination at every price or accept a lower price for each unit of vaccination supplied. From Figure 4, as such the SS curve shifts from So to S1, the fall in price from P0 to P1 leads to increase consumption of vaccination from Qp to Qs promoting a more equitable level of consumption

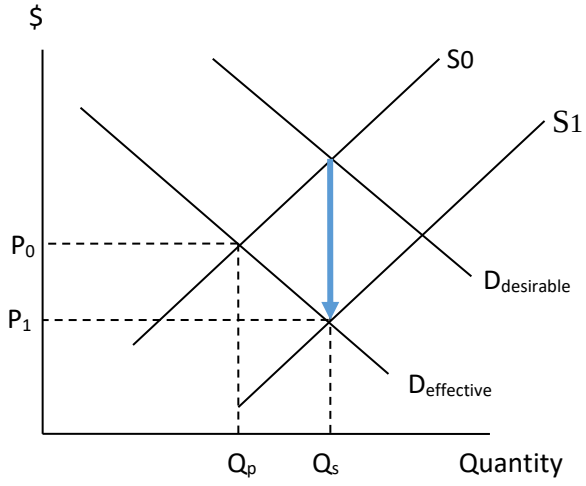


Figure 4: Using Indirect subsidies to increase consumption of healthcare service, eg. vaccination

[Alternatively, you can explain how direct subsidies work to increase equity by increasing the purchasing power of the lower income households in US

- *As the direct subsidies increases the purchasing power of the lower-income consumers, it increase their demand for vaccination from Deffective to Ddesirable, hence increasing consumption of vaccination from Q0 to Q1 promoting a more equitable level of consumption.]*

Limitations: Might not be effective due to inaccurate estimated of the MEB. As a policy to internalise external benefits, subsidies need to be given at the right amount to move consumption levels to socially optimum level but government, just like individuals, have imperfect information. Calculation of MEB is difficult as the benefits of healthcare can be long term. Short term benefits can be difficult to quantify as well. Should the government under-estimate the MEB, the under-consumption does not get completely eliminated. Should the government overestimate, it will be a wastage of government fund. High opportunity cost in terms of alternative public projects foregone, and not sustainable too. In addition, government subsidy should not be granted if the under-consumption is due to imperfect information.

Anti-thesis 1: Explain how public education can be adopted to close the information gap to increase the consumption of healthcare vaccination.

- Part of the problem of the under-consumption of healthcare service is due to information imperfection which should not be corrected by indirect subsidies, as it does not address the root cause of the market failure. Referring to Figure 3, the amt of subsidies granted should be 'ce' and not 'cd'.
- Public education and campaign, by creating awareness of the benefits of the healthcare services such as vaccination and the changing mindset, aims to increase consumption by raising MPB (perceived) towards MPB (actual). This can be in the form of television advertisements to pamphlets to road shows

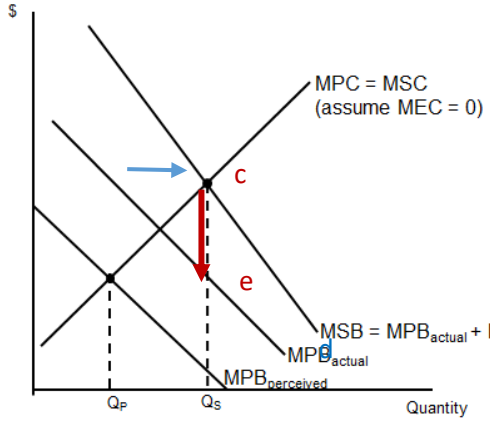


Figure 6: Using public education to shift 'MPBperceived' to 'MPBactual', and indirect subsidies to shift 'MPBactua'l to MSB, hence achieving collectively achieving Qs

(can refer to fig 3 instead of drawing a new one)

Limitations:

- Uncertainty of outcome. Effect of campaigns uncertain – message will not be able to reach everyone in the target group, takes time to change mindset. Benefits that the campaign brings about may be limited but the cost of running the campaigns may be considerable → society is worse off
- Public education at best can only close the information gap but cannot resolve the market failure due to positive externalities.

Point Evaluation: Public Education can complement indirect subsidies, given that there are two sources of market failure. Despite this, given that both are market-based solution, effectiveness is still dependent on responsiveness of consumers.

Anti-thesis 2: Explain how legislation such as compulsory healthcare can be adopted to ensure certainty of outcome

- Explain how this is necessary if social optimum level of consumption of the specific healthcare service at 100% (e.g Covid-19 vaccination)

Limitations

- Costly to monitor to ensure compliance and needs to be accompanied by some form of subsidy for the low-income households or provided for free by the Govt.

Overall Evaluation:

Discuss whether government subsidies is the best policy to ensure healthcare are allocated desirably in US.

Government subsidy is the best policy to ensure that vaccinations are allocated desirably in US if
(1) it can address all the root causes of the under-consumption of vaccination. If not, other measures will be needed to complement it.

The root causes of the problem in US based on Extract 3. i.e. lack of awareness, positive externality, income inequality, uncertainty of cost, etc. As seen from the above analysis, there is no one-size-fits-all cure. Root causes of the under-consumption of vaccination which may differ across countries. In the case of US,

- **Given that US is a** developed country with income inequality, targeted subsidy can better ensure equity and sustainability.
  - Subsidies can continue to target only at the lower income households to ensure that they can afford the vaccination rather than indiscriminately provided free to everyone including those that can afford it. This can be done via mean-testing where the amount of subsidies given can be based on a certain criteria. Persons who need more financial assistance (e.g. lower-income households) will be granted higher subsidies under the means testing framework. Full government subsidy (i.e. free provision) will be most effective for the lowest income (e.g those unemployed, the retirees and the disabled)

  - With mean-testing, providing subsidies is regarded as a more sustainable policy compared to free provision too as relatively less government resources will be diverted towards it. It is important to note that even if the govt has the funds, expenditure on vaccination requires the government to either reduce its expenditure in other areas such as improving infrastructure as well as education or increase taxes which may create other macroeconomic problems including erosion work incentive which undermines potential EG.

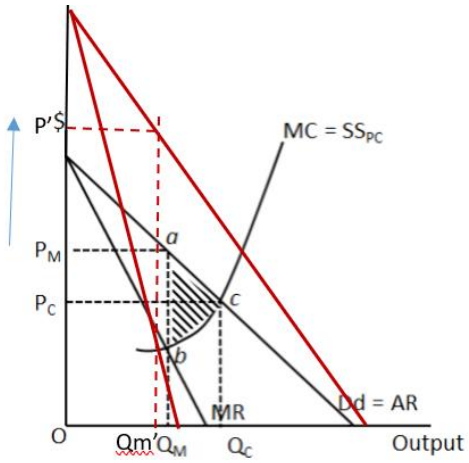
(2) it can address the problem of under-consumption of vaccination with certainty and within the timeframe stipulated

The urgency of the situation and hence the priority of the govt will be high if non-vaccination has a great implication on safety and security and well-being of the nation. If certainty of outcome must be achieved and within a short timeline, then subsidies is **definitely not** the best solution given the inherent uncertainties as effectiveness depends on consumers' responses. With the given situation, to ensure that there is 100% consumption, then it is necessary to have a command and control policy (e.g free Govt provision and compulsory consumption) to ensure effectiveness.

		Level 2 (4-6 marks): Answers in this level will be able to analyse a two-sided response demonstrating how govt subsidy and at least one other policy work to increase efficiency and equity, and yet highlighting the respective limitations/unintended consequences. **Level 1 (1-3 marks):** Answers in this level either lack scope (i.e., one-sided) or lack depth (e.g., lack rigour in analysis, lack of elaboration). **Evaluation (1-2 marks):** Evaluation marks will be awarded to evaluative comments on the view after consideration of the discussion presented.	
(c)		Discuss the extent to which pharmaceutical companies' competitive strategies worsen inefficiency.	[10]
		Question Interpretation • Command Word: Discuss extent → Give a balanced argument before making a judgement • Context: pharmaceutical companies • Concepts: Competitive strategies (Price and Non-price) to increase profit; : Impact on efficiency (allocative, productive and dynamic) **Approach** • Explain how pharmaceutical companies' competitive strategies may worsen inefficiency • Explain how pharma companies' competitive strategies may improve efficiency (internal EOS and R&D). • Make a judgment one the extent the pharmaceutical companies' competitive strategies worsen inefficiency making clear the conditions. **Introduction** <u>Highlight how pharmaceutical firms are likely to compete in a oligopolistic market structure and are considered allocative and productive inefficient.</u> • Figure 3 showed the world's biggest pharmaceutical firms based on prescription drug sales revenue → Market concentration ratio is likely to be high. Production and sales are likely concentrated in the hands of these few firms -> The industry is likely to oligopolistic. • A profit-maximising oligopolist will charge a price above marginal cost and produce a level of output that is below the socially optimal level. It is therefore allocative inefficient. In addition, it will mostly not produce at its lowest LRAC, hence it is productive inefficient from society's perspective. **Development** Explain how in an oligopoly, each firm's actions may be strategically countered by the reactions of one or more other firms in the industry. Such strategic competitive behaviour can potentially worsen inefficiency. <u>R1: Explain how setting up statutory barriers to entry as a competitive strategy to deter entry of new competitors can worsen allocative inefficiency.</u>	

The firms can compete by setting up statutory barriers to entry to prevent the entry of new firms into an industry and thereby limits the degree of competition faced.

- From extract 4, it was stated that the *'pharmaceutical companies employ a slew of powerful tactics to gain and keep monopolistic market control and gain profits: from legislative protections such as patents to gaining exclusive rights of production.'*
- These are statutory barriers. By applying for licensing from the government for the right to supply a certain prescription drug or for intellectual property rights such as patents and exclusive franchises, the firm will be the sole producer as the inventor or creator of a drug or process.
- This in turn allows the firm to charge a price even higher above its marginal cost then before and produce a level of output that is further below the socially optimal level. It therefore leads to a worsening allocative inefficient -> greater deadweight loss.



Or R1: Explain how the firms can also set up strategic barriers via intensive marketing strategies which will worsen productive and allocative inefficiency.

- It was stated in extract 2 that '9 in 10 major drug companies spend much on marketing and sales' such as engaging in advertising campaigns. Such advertisements serve two purposes: to generate a higher demand and reduce both cross and price elasticity of demand to charge a higher price for any given output earn higher profits and act as a strategic BTE by raising market penetration costs.
- However, their intense non-price competition and strategic behaviour means that they expend huge amounts of resources to create product differentiation and strengthen barriers to entry endogenously. Such expenditures on marketing and advertising or R&D are sunk costs and cannot be recovered once spent. Thus, these firms do not minimise their cost, i.e. not productive efficient. They are prepared to sacrifice their short-run profits to build barriers to entry, with the aim of maximising their long-run profits.

- The funds and resources spent on sales promotion and non-price competition are wasteful as they do very little to change the physical nature of the product → a wastage of resources (esp. for persuasive and competitive advertising) as the resources used for such advertising could have been diverted to more productive uses (hence allocative inefficiency)

R2: Explain how the pharmaceutical firms can also engage in R&D which potentially can lead to dynamic efficiency.

The firms can potentially be dynamic efficient as they have both the willingness and ability to engage in R&D. Extract 4 stated that in the past, there were 'massive improvements in drug efficacy', i.e. there were drug development'.

Protected by the strong barriers to entry, they could make and retain supernormal profits in the long run, affording them the means to carry out R&D. Since improvement in drug development may allow them to capture a larger share of the market given that it may have some time before rivals can respond with a similarly improved drugs, they will have the incentive to innovate to compete. Fig 3 showed that the world's biggest firms were spending on R&D in 2021, with Pfizer the largest firm spending the most in absolute amt. R&D -> Product and Process innovation -> dynamic efficiency.

- Product innovation – where introduction of new drugs adds to existing range of drugs in the market, the increased diversity of drugs in the market -> expansion of consumer choice. Chances are now higher that consumers are able to find products that better cater to their personal tastes and preferences, from which they are able to derive higher levels of utility. Similarly, the constant improvement in the functions and quality of products.
- Process innovation – more cost-efficient methods of production which may result in lower prices paid, leaving consumers with more consumer surplus.

Evaluation

[Standard]

Assuming that the firms in the pharmaceutical industry aim to maximise profit and are in imperfect competition, their competitive strategies to increase profit will worsen inefficiency unless the govt intervene

[Justification]

- On allocative efficiency [R1] - Their competitive strategies will certainly worsen allocative inefficiency as it leads to greater barrier to entry and increases their monopoly power. Governments can influence drug prices through pricing and reimbursement policies. These policies can help control healthcare costs, improve affordability for patients, and ensure efficient allocation of healthcare resources.
- On dynamic efficiency [R2] - Their competitive strategies may improve dynamic efficiency only if the governments continue to grant patents to incentivise innovation. This protection allows firms to recoup their R&D

		investments. However, governments must balance this with measures to prevent patent abuse, such as generic drug competition and patent expiry, to ensure affordability and access to medicines. [Overall judgement] While government intervention can be essential in ensuring that pharmaceutical firms operate efficiently, it should be approached carefully to avoid unintended consequences. Overly restrictive regulations can stifle innovation, discourage investment in R&D, and limit patients' access to new and potentially life-saving treatments. The balance between government intervention and industry autonomy varies from country to country and depends on the local healthcare system, regulatory framework, and public policy priorities. Striking the right balance is a complex challenge that requires ongoing evaluation and adaptation to changing circumstances and industry dynamics. **Level 2 (4-7 marks):** Answers in this level will be able to analyse a two-sided response demonstrating how the pharmaceutical firms' competitive strategies often then not worsen inefficiency and then how the strategies can lead to greater efficiency. **Level 1 (1-3 marks):** Answers in this level either lack scope (i.e., one-sided) or lack depth (e.g., lack rigour in analysis, lack of elaboration). **Evaluation (1-3 marks):** Evaluation marks will be awarded to evaluative comments on the view after consideration of the discussion presented.	

H2 Economics Prelims CSQ 2

Suggested Answer

(a)	With reference to Table 1,		
	(i)	explain what is meant by real GDP growth.	[2]
		• **[Define GDP + Real, include "growth"]** Real GDP growth refers to **the increase total value of all final goods and services newly produced within the geographical boundary of a country in a given year, before allowance for depreciation [1]**, and is **measured in terms of prices that prevailed during some fixed base period** (or with the price effect removed)**[1]**.	
	(ii)	explain **one** indicator of material living standards and **one** indicator of non-material living standards.	[4]
		• **[Identify indicator and explain link to mSOL]** Real GDP growth is an indicator of material SOL. For example in 2021, when real GDP growth was 8.3%, the amount of goods and services produced in the economy had increased. As real GDP growth > population growth, this suggests that each individual has access to more goods and services thus ↑ material SOL. • **[Identify indicator and explain link to nmSOL]** PM2.5 is an indicator of non-material SOL. For example in 2021, the PM2.5 level was higher than 2020, which suggests greater that the population in India could experience more breathing difficulties resulting in more healthcare problems which worsens their quality of life. This would mean a lower level of non-material SOL.	
(b)	**(i)**	With reference to Extract 6, explain **two** measures that are used to address the effects of inflation in India.	[4]
		1. Export restrictions on wheat and sugar • **[Identify an effect of inflation]** An effect of inflation is the **higher price of necessities such as food**. • **[Explain how the measure address the effect]** With exports of wheat/sugar restricted → more of these foods/inputs can be allocated to domestic market → ↑supply of wheat/sugar in India → ↓price of wheat/sugar in india → ↓unit COP for food producers → ↓**price of food** 2. Cutting taxes on fuel • **[Identify an effect of inflation]** An effect of inflation is the **higher price of factor inputs such as fuel which ↑unit COP in the country**. • **[Explain how the measure address the effect]** ↓tax on fuel → ↓unit COP for fuel producers → ↑supply of fuel → ↓**price of fuel** → ↓**unit COP** of producers in the economy as fuel is a key input	

	(ii)	Extract 6 highlights that India is "committed to containing inflation" but the government needs to "keep in mind the requirements of growth". Explain the trade-off involved in the above statement.	[2]
		• **[Explain the goal]** India is "committed to containing inflation" which suggest it is prioritizing price stability, ensuring GPL remains stable. To do so, this may mean it aims to ↓AD to ↓GPL. **[1]** • **[Explain the resulting trade-off]** However, this may mean it would have to sacrifice economic growth, as ↓AD may lead to ↓real output. **[1]** • Note: no diagram required.	
(c)	Discuss the effectiveness of **two** policies from Extract 7 that can achieve inclusive economic growth in India.		[8]

		Possible policy options: Developing agri tech; education and skills devt; improving access to piped drinking water
		
		Introduction: Inclusive growth is growth that is sustained over a period of time, broad-based across economic sectors, and creates productive employment opportunities for the majority of the country's population. For inclusive growth to be attained, there should not be a worsening of the country's Gini coefficient.
		
		Policy 1: Increased focus on agricultural technologies
		• **[Link to sustained growth]** The government could subsidise or directly invest in R&D to improve agriculture crop yields. The spending by the government would directly increase AD by ↑G. This would achieve actual growth via the multiplier process. In addition, the R&D would also improve the productive capacity in the economy allowing for more to be produced given the fixed amount of resources. This will lead to a increase in AS achieving potential growth. Overall, there would be sustained growth resulting from the agricultural technologies.
		• **[Improving income distribution]** In addition, as farming is the "primary source of livelihood for about 58 per cent of India's population" (Ext 7) who are most likely those in the lower-income brackets, the increase crop yield would make farming more profitable for them, leading to a rise in their incomes. This would address the worsening income distribution.
		• **Strengths:** Able to raise the incomes of a large proportion of India's population. Also able to ↓cost-push inflation through ↓price of food/agri products.
		• **Limitations:**
		  ○ The policy may not address the "waves of educated young people who enter the labour force each year" (Ext 5) or those in the "informal sector" who are affected by the uneven nature of the economic growth in India.
		  ○ In addition, the extent to which sustained growth can be achieved also depends on the proportion of the GDP that is from India's agriculture sector. This policy would also take a long time given the nature of R&D.	

Policy 2: Digitisation of education and skill development

- **[Link to sustained growth]** The government could spend on developing the access to education via the 'one class-one TV channel' programme (Ext 7) as well as improving the quality education, including at university level (through the Digital University). The spending by the government would directly increase AD by ↑G. This would achieve actual growth via the multiplier process. In addition, education and skills development would also improve the quality of labour in India by raising labour productivity. This will lead to an increase in productive capacity causing AS to increase. Overall, there would be sustained growth.
- **[Improving income distribution]**
    - With better education leading to higher labour productivity, demand for workers would rise leading to higher wages for labour. This would benefit the low to middle income workers who previously may not have had access to quality education. The increase in incomes for the low/middle-income workers would narrow the income gap, improving the income distribution.
    - The improvement in education and skills of the workforce may also attract new investment, both domestic and foreign, into India. This could generate new jobs.
- **Strengths:** Addresses one of the causes of the lack of inclusive growth i.e., lack of domestic investment.
- **Limitations:**
    - Education and skills development takes time.
    - Appropriate to support the "new college graduates, farmers looking to leave the fields and women taking on work" (Ext 5).

Conclusion

- **[Rank – addressing root cause]** While both policies would eventually be able to help India achieve a more inclusive growth, the policy to digitise education and skill development may be more effective as it addresses the concerns of the government relating to the lack of jobs for the "new college graduates, farmers looking to leave the fields and women taking on work" (Ext 5) compared to the agricultural technology policy which benefits mainly those in the agricultural sector.
- **[Recommendation]** However, it should be noted that both policies would not be able to effectively achieve inclusive growth in a short time period given that both R&D and education take time. The government may have to consider more short-term measures such as the continued provision of subsidised fuel, food and housing for the poorest (Ext 5).

Level 2 (4-6 marks): Answers in this level will be able to explain a two-sided response (i.e., 2 appropriate policies) demonstrating how the policies are able to achieve inclusive growth. This should cover both achieving sustained growth that does not worsen the income distribution.

Level 1 (1-3 marks): Answers in this level either lack scope (i.e., one-policy) or lack depth (e.g., lack of analysis/elaboration).

		Evaluation: Up to 2 marks for a conclusion reach with respect to the effectiveness of the discussed policies.	
(d)	Discuss whether India should continue to pursue a "growth-at-all-costs" (Extract 1) strategy.		[10]
		Introduction • As mentioned in Extract 5, India has been pursuing a growth-at-all-costs strategy in order to double the size of its economy. While it has achieved high growth of 8.7% in 2021, it has also come with its costs. • The Indian government would have to weigh the benefits and costs of this strategy to determine if they should continue to pursue it. **Requirement 1: Explain the benefits of the growth-at-all-costs strategy** • Pursuing growth at all costs has allowed the Indian economy to growth at high rates with the aim to achieve an economy comparable to US, China and Japan. • **[Impact on employment]** A benefit of high growth rates would be the complementary impact on reducing unemployment in the economy. Assuming large increases in AD over the years, this would spur growth via the multiplier process, leading to a large increase in real output in India. This should lead to an increase in the derived demand for labour, leading to a fall in cyclical unemployment in India. • **[Impact on price stability]** If the high growth is complemented by potential growth, this may also allow the economy to achieve price stability by keeping GPL low in India. • **[Impact on BOT]** Extract 5 also highlights that India's growth has also been a result of export revenue at "record highs". This would also help to increase India's balance of trade surplus (assuming it was initially at surplus). • **[Spurring further growth]** The high growth rates, price stability and improvements in the balance of trade may also raise consumer and business confidence in India, which would spur further growth via increased domestic and foreign investments. • Thus, growth has led to India possibly being able to achieve some of its key macro-objectives such as high and stable growth, price stability and low unemployment. • **[Impact on SOL]** Achieving these goals would raise the standard of living in India. As explained in part (aii), a higher real GDP would lead to higher material SOL while lower unemployment could improve non-material SOL by reducing the stress levels of households given that less are affected by unemployment. **Requirement 2: Explain the costs of the growth-at-all-costs strategy** • **Sacrifices inclusive growth**: Extract 5 and 7 highlight that the growth is not inclusive as the benefits enjoyed are not broad-based across different sectors. While the growth has benefited the minority rich as seen from the surge in the number of Indian billionaires, the benefits	

		are not enjoyed evenly and the growth has not led to sufficient jobs, especially the waves of educated young people that enter the labour force. This results in unemployment for those from the low- and middle-income households. This is further evidenced from the increase in India's Gini coefficient from 0.321 to 0.357. This suggests that while overall SOL may have risen given the real growth experienced, the SOL for those in the low- and middle-income households may have either stagnated or worsened. • **Sacrifices sustainable growth**: Table 1 provides data on air pollution worsening as mentioned in part (aii). This could be due to the high growth rates experienced in India. With high levels of production, factories end up releasing greater amounts of air pollution. This may have long lasting impacts on the environment which could be costly for future generation in terms of increasing the likelihood of falling ill due to poorer environmental conditions. This would thus lower future generation's non-material SOL and thus sacrificing sustainable growth. • **Worsens inflation:** Extract 5 highlights that a large number of Indians are being "battered… by high inflation". When countries pursue high growth rates, it may be via large increases in AD. However, if the growth in AS cannot keep up, it may lead to demand-pull inflation. If the inflation persists, it may result in weaker consumer confidence given the unpredictability of prices. **Conclusion: Should India continue with the strategy?** • India should not continue with the growth-at-all-costs strategy given that the costs outweigh the benefits, and the government may wish to consider pursuing a more inclusive and sustainable growth instead. • **[Extent of costs is large given the current pandemic]** The present approach has worsened the inequality in the country which has affected the SOL of the low and middle income households, who are also affected by rising inflation. Given the impact of the recent pandemic and the war in Ukraine, the above negative consequences would be magnified as suggested by Extracts 6 and 7. • **[Extent of benefits is small given the unsustainable nature of redistributive efforts]** While achieving high growth brings about benefits in terms of raising government revenue through higher tax revenue collected, which could be used to address the income distribution, this may be unsustainable as even with the current slew of redistributive policies, "economic inequalities are still a reality" (Ext 7) and more would need to be done given that the high rates of growth would only further worsen the income distribution in India. • **[Suggest alternative approach]** Beyond a greater emphasis on redistributive policies to achieve inclusive growth, India may wish to review its structure of the economy to pursue growth that is more inclusive and sustainable e.g., identifying sectors where job creation is necessary or sectors where environmental friendly production can be developed. **Level 2 (4-7 marks):** Answers in this level will be able to explain a two-sided response demonstrating the arguments for and against India	

		continuing with a growth-at-all-costs strategy. There should be adequate rigour and development on both sides of the discussion. **Level 1 (1-3 marks):** Answers in this level either lack scope (i.e., one-sided) or lack depth (e.g., lack rigour in analysis, lack of elaboration). **Evaluation (1-3 marks):** Evaluation marks will be awarded to evaluative judgment and comments on the decision by India after consideration of the discussion presented.	