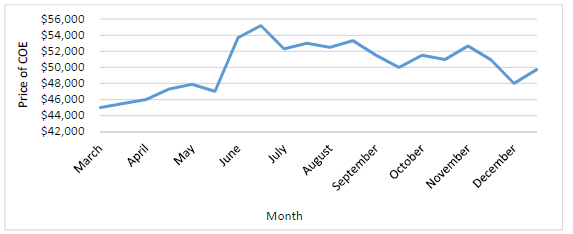
**H1 Economics 2018 – CSQ – Demand and Supply & Market Failures – Q2**

**Uber in Singapore**

A Certificate of Entitlement (COE) represents a right to vehicle ownership and use of the limited road space for 10 years. There are 5 categories of COE for bidding – Category A to Category E. Vehicles classed under Category A are up to 1,600cc and 130bhp.

**Figure 1: 2016 COE Prices for Category A (1,600cc and 130bhp)**



Source: Land Transport Authority

**Extract 1: Private-hire car companies join in the bid for COE**

Uber-owned Lion City Rental is looking to put 1,800 new cars on the road in anticipation of growing demand. Rival company Grab is also expected to do the same. In recent months, both have started sourcing for new vehicles, and are jostling with private car owners for fresh Certificates of Entitlement (COE). Now, with the Government announcing "light touch" regulations governing third-party taxi apps, the proliferation of private-hire vehicles will accelerate. Most of the taxi companies are also starting up private-hire subsidiaries to compete with Uber, Grab and other small players like Smove and Tribecar. This will only intensify the competition for COEs. Most private-hire cars are smaller vehicles, so the pressure will be greater on COE Category A bidders (cars up to 1,600cc and 130bhp).

However, the COE quota is set to grow. The supply of COE is mainly determined by how many cars are de-registered (and either scrapped or re-exported thereafter); when one car leaves the road for good, it creates room for a fresh COE so that a new one can take its place. The COE release for passenger cars is expected to rise sharply to about 95,000, compared to about 58,000 in 2015.

Source: Todayonline, 16 January 2016 & The Straits Times, 16 April 2016

**Extract 2: Regulations on private-hire cars**

**(affects the availability of resources – drivers of private-hire cars) PES is price-inelastic)**

Private-hire car (PHC) drivers from ride-sourcing service operators such as Uber and Grab are now required to obtain a vocational licence under amendments to the Road Traffic Act. PHC drivers are required to go through a medical examination, attend a 25 hours course and pass a test. This framework will ensure the drivers are equipped with sufficient knowledge and skills to provide the service safely. Together with the existing rules that require PHCs to be licensed as public service vehicles and to have adequate insurance, these measures help LTA better enforce against errant drivers and vehicle owners.

Source: The Straits Times, 10 March 2016

**Extract 3: Enhancing vehicle incentive schemes for a cleaner environment**

Extra miles’ worth of pollution is being belched into Singapore’s air every year from a traffic spike fuelled by ride-sharing apps such as Uber. The lower cost of taking an Uber is encouraging some people to step away from public transport and get into the Uber. According to figures in the past two years, Singapore fell short in meeting its targets for pollutants. The Government will hence adjust the current Carbon Emissions-Based Vehicle Scheme (CEVS) in a bid to nudge car-buyers towards cleaner and more environmentally-friendly models such as electric vehicles.

The current CEVS will be replaced with a new scheme that would consider four other pollutants which include nitrogen oxides, hydrocarbons, particulate matter and carbon monoxide on top of carbon dioxide. The National Environment Agency said rebates for environmentally-friendly car models will range between S$10,000 and S$20,000, depending on the vehicle’s worst- performing pollutant. By including four more pollutants, the new scheme hopes to account more holistically for the health and environmental impact of vehicular emissions.

Source: Channel News Asia, 8 March 2017

**Extract 4: Electric vehicles ‘not economically feasible yet’**

A study on electric vehicles (EVs) found that consumers were concerned about the purchase price of EVs as it is more expensive than a petrol-driven car even with rebates, the availability of personal and public charging infrastructure and the limitations of the technology such as the range, battery life and time taken to charge EVs. Nevertheless, the LTA and the EDB noted that similar to the development of hybrid vehicles, the prices of EVs are expected to fall as the cost of the technology continues to decline and mass production allows for cost savings from larger scale of production.

Source: Today, 6 July 2017

**Extract 5: The unstoppable march of the gig economy**

This year we saw the rise of the "gig economy", which is characterized by the prevalence of short-term contracts or freelance work. For instance, there is a flow of investments into Singapore as Uber and Grab firms established their foothold in Singapore. Even as retrenchments rose and job vacancies fell in the tepid job market this year, private-hire jobs have emerged as a bright spot. Consumers embrace having personal drivers to ferry them. Employers benefit as they could turn to hiring freelancers to reduce cost. Push factors for workers include greater work-life balance and structural challenges such as a mismatch between skills and jobs that may nudge them into temporary freelance work. Ride-sharing services may also generate positive externalities. They could reduce parking congestion. More importantly, the widespread availability of private-hire services can signal that a local economy is friendly to the high-tech industry and so can be a draw for investments.

While the gig economy has unravelled a vast ocean of opportunities for many, it also carries downsides, with the lack of benefits and protection posing headaches for policymakers. For instance, in Singapore, the lack of Central Provident Fund (CPF) contributions, a core pillar of the Republic’s social security system has implications for home ownership and healthcare. Experts also expressed their concern that the gig economy may stymie workers’ desire to deepen their skills.

Source: Today Online, 22 May 2017

**Questions**

(a) Using the data from Figure 1, summarise how the price of COE had changed from March to December 2016. [3]

(b) With reference to Extract 1, use supply and demand analysis to explain the likely impact on the price of COE. [5]

(c)(i) Define price elasticity of supply. [1]

(c)(ii) Using Extract 2, explain how the price elasticity of supply for private-hire cars might have changed with the need for the drivers to apply for a vocational license. [2]

(d)(i) Using Extract 3, explain the economic case for government intervention. [5]

(d)(ii) Comment on the effectiveness of rebates for environmentally-friendly car models in curbing vehicular emissions of pollutants. [6]

(e) Extract 5 describes the introduction of private-hire car services in Singapore. In light of the above, discuss whether the advantages outweigh the disadvantages. [8]

[Total: 30]