Magsie 20/20

Data Response Rubric

A. Define the following terms

I. Merit goods [2 marks]

0	1	2
Wrong definition	The idea that it is a good that has positive side effects or is beneficial	An explanation that they are goods or services considered to be beneficial for people (society) that would be under-provided by the market and so under-consumed.
Comments:		

II. negative externalities [2 marks]

0	1	2
Wrong definition	The idea that they are "bad" effects of the production process.	An explanation that they are the costs suffered by a third party when a good or service is produced or consumed. (Produced on its own is enough.)
Comments:		

B. Using an appropriate diagram, explain how excessive use of private transport and the resulting traffic congestion is an example of market failure. [4 marks]

0	1	2	3	4
Inappropriate answer	For drawing a demand/supply diagram of private transport showing two demand curves (MSB and MPB) with MPB to the right of MSB and one supply curve (MSC) with the vertical separation or shaded welfare loss area identifying the negative externality (traffic congestion) or for providing an explanation that the costs of traffic congestion are external costs affecting third parties. Traffic congestion is an example of market failure because its costs are borne by society at large rather than by road users. (OR because the amount of private transport determined by the market exceeds the optimal amount.)		For drawing a demand/supply diagram of private transport showing two demand curves (MSB and MPB) with MPB to the right of MSB and one supply curve (MSC) with the vertical separation or shaded welfare loss area identifying the negative externality (traffic congestion) and for providing an explanation that the costs of traffic congestion are external costs affecting third parties. Traffic congestion is an example of market failure because its costs are borne by society at large rather than by road users. (OR because the amount of private transport determined by the market exceeds the optimal amount.)	
Comments:				

C. Using an appropriate diagram, explain how a decision to provide free public transport is likely to impact on the market for cars in Melbourne. [4 marks]

0	1	2	3	4
Inappropriate answer	For drawing a demand and supply diagram for the car market in Melbourne which shows a shift to the left of the demand curve or for providing an explanation of the fact that public transport is a substitute for private cars and so a fall in the price of public transport will lead to a fall in the demand for cars.		For drawing a demand and supply diagram for the car market in Melbourne which shows a shift to the left of the demand curve and for providing an explanation of the fact that public transport is a substitute for private cars and so a fall in the price of public transport will lead to a fall in the demand for cars	
Comments:				

D. Using information from the text and your knowledge of economics, evaluate a decision to provide free public transport in Melbourne.[8 marks]

0	1	2	3	4	5	6	7	8
No valid discus-sion	Few relevant concepts recognized. Little discussion or only basic understanding		Relevant concepts recognized and developed in reasonable depth. Some attempt at application and analysis.			Relevant concepts developed in reasonable depth, demonstrating effective evaluation, supported by appropriate evidence or theory.		
Comments:								

Positive impacts may include:

- ☐ it would boost demand for public transport services
- ☐ reduced negative externalities including pollution, traffic congestion, greenhouse gases and road accidents
- ☐ it would boost demand for services located near public transport
- ☐ it would boost the quality of life in Melbourne
- ☐ it would reduce the cost of travel for consumers
- ☐ reduced wear on road system
- ☐ it would boost employment in the public transport sector
- ☐ any reasonable answer.

Negative impacts may include:

- ☐ additional costs to the government of providing free transport of $340 million a year
- ☐ opportunity costs of the other services that could be provided
- ☐ it may not be price that is the main determinant of demand for public transport
- ☐ neglects the reasons other than price why many people do not use public transport e.g. convenience, flexibility, travel time and safety
- ☐ it would not make public transport more attractive for those who live in suburbs with no public transport at all
- ☐ neglects more effective strategies such as high services frequencies, central coordination of timetables, traffic priority for trams and buses, and a conspicuous staff presence
- ☐ neglects possible government revenue and lower costs if the alternative strategies are adopted
- ☐ taxes may be raised to fund the increased expenditure
- ☐ reduced demand for taxi services
- ☐ reduced demand for new and used cars
- ☐ reduced employment in the car industry
- ☐ any reasonable answer.

Do not award more than [5 marks] if the answer does not contain some reference to the information provided in the text.

Effective evaluation may be to:

- ☐ consider short-term versus long-term consequences
- ☐ examine the impact on different stakeholders
- ☐ discuss advantages and disadvantages
- ☐ prioritize the arguments.

clear, effective responses

(a) (i) Merit goods are goods whose consumption produces positive consumption externalities. They are socially desirable but tend to be always underproduced and underconsumed by the mark. It thus requires government intervention.

(ii) Negative externalities occur when the consumption or production of a good leads to extra cost to third parties that are not involved in the transaction and whose interests are not taken into consideration.

(b) Market for private transportation.

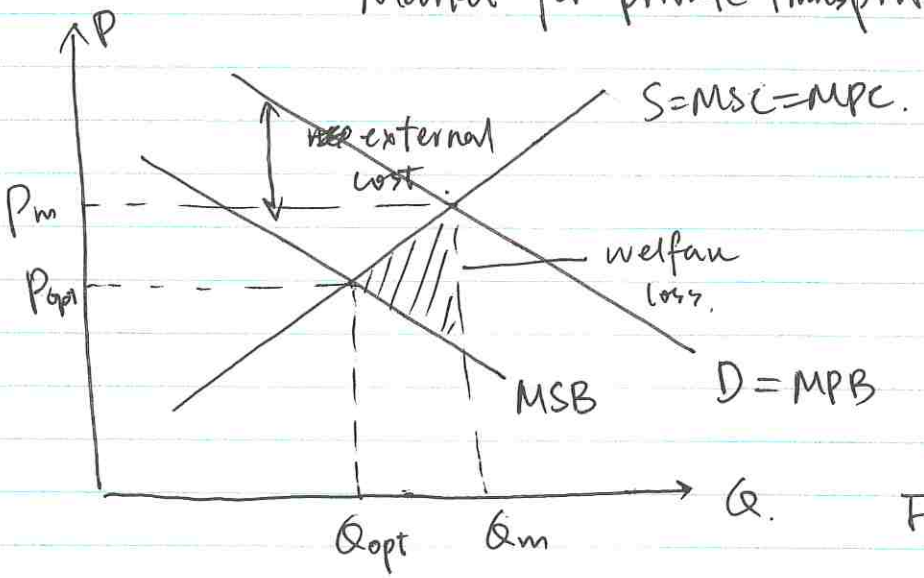

Fig 1.

As shown in Fig 1, MPB is to the right of MSB, meaning that MSB is less than MPB, and there exist external costs due to the consumption of private transportation. ~~When MPC = MPB~~, At Pm, MPC = MPB, Qm is produced at the equilibrium. However, consumers haven't taken into consideration the external costs involved, which is traffic congestion. Traffic congestion can lead to inconvenience for third parties who are not driving the car, for example, ~~bike~~ motors, buses, etc. Because of these negative

externalities, the society desires less private transportation. At a lower price Popt, MSC = MSB, Qopt < Qm. By taking all ~~parties into~~ third parties into account, Qopt represents the allocative efficiently of the market.

The welfare loss due to this market failure is illustrated in shadow, indicating allocative inefficiency of the current market.

(c)

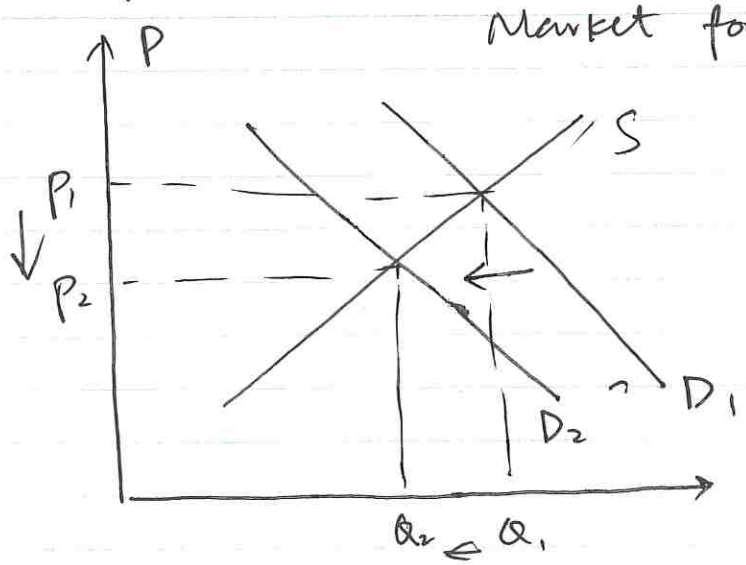

Fig 2.

Because public trasportation is a substitute to cars, which means they serve similar purpose, when the price of public transport decreases, the demand for it increases, because people who uses car will switch to its cheaper alternative.* As a result, the demand for cars decreases, as shown in Fig 2, D1 shifts leftward to D2. ~~As the original price~~ Consequently, price drops from P1 to P2, and quantity ~~drops from~~ of cars drops from Q1 to Q2. So the price and quantity of cars would decrease because the smaller demand.

* Because of its "low cross elasticity of demand" ✓

It's tricky to illustrate a free good on a graph since P=0.

(d)

Market for public transport.

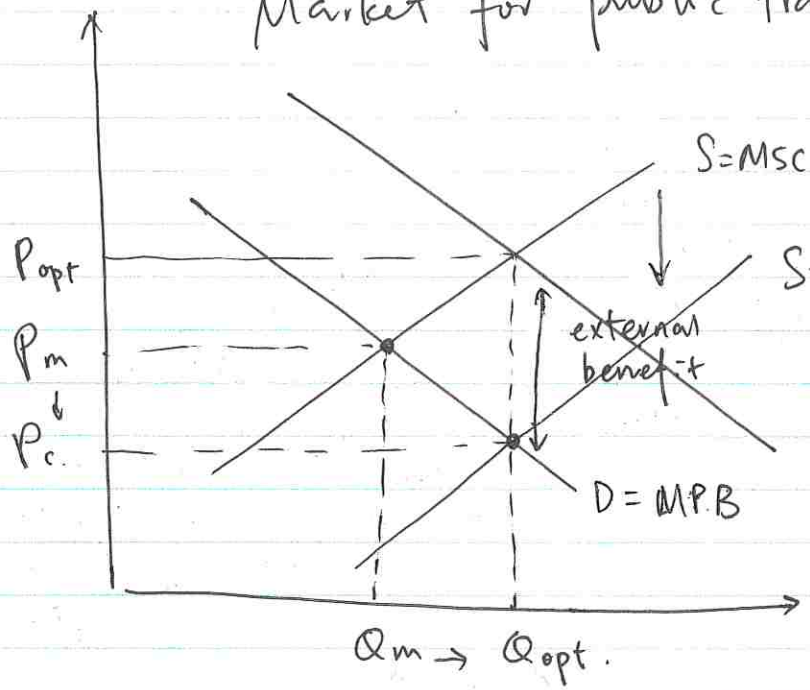

Fig.3.

In a free market, ~~there~~ for public transport, MSB > MPB, so there are external benefits of consumption. Qm < Qopt. Pm < Popt. However, when government provide free public transport, the supply curve shifts downward making to the Quantity shifts from Qm to Qopt. and price is lowered from Pm to Pc. Therefore, the ~~opt~~ optimum quantity is achieved from a ~~market~~ Society's point of view.

This method is effective in that it can correct the market failure due to external consumption benefit. since according to (c), free public transport lower the demand for cars, public transport has the external benefit of reducing traffic congestion, pollution, greenhouse gases and road accidents. Therefore, this free provision makes the society better off by eliminating the welfare loss due to external benefit that can be derived.

In addition, free public transport makes people better off and improves their living standard. Because it "would also transform ... a happier place to live" (paragraph ③). ~~There~~ Moreover, ~~so~~ because of free provision, Pc is lower than Potp, it avoid the problem that some people may not afford it, and makes it accessible to everyone, reducing inequality. Therefore, overall, people's living standard improves and there is economic development.

However, ~~or~~ on the other hand, free public transport is really costly for the government, as it would cost "about $340 million a year" (④) These money are collected from people, which means people might pay a higher tax and have more financial burden, especially on those who don't use public transport. ~~After~~ Moreover, spending these money on public transport means less spending on other things like education and health care, which are more important to a society and thus should be priorterized. Therfore, the free provision involves a cot of opportunity cost and costs a lot for government.

Alternatively, the government can focuses more on improving service rather than lower prices. As mentioned in the text, people may not affected a lot by the economic factor, but non-financial barriers. like inconvenency. ~~Also~~ Also, by improving the services, it is more beneficial in the long run, and people would be more willing to

use public transport, the positive externality is thus smaller. However, by providing free transport, government has to spend a lot of money every year, which may not be practical in the long run. Therfore, improving service is more effective and less costly in the long run.

Even though free trasport is an effective measure to correct the market failure and thus improve people's living standard and promot economic development. It may not work in the long run and can be very costly. When the government is making decisions it should also consider non-finical factors. like improve services.