2014 RVHS H2 P2Q3

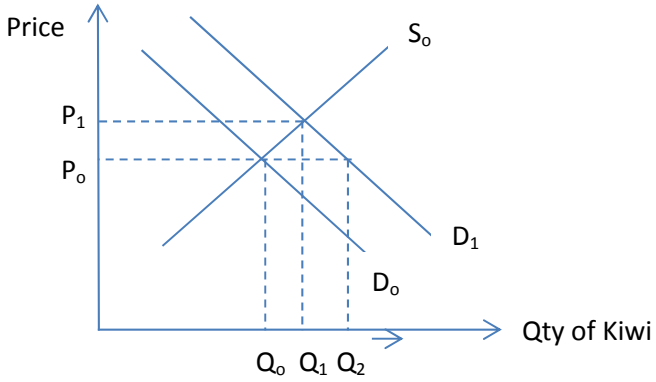
(a) Using the product and resource markets, explain the signalling and incentive functions of prices. (10)
(b) Discuss the extent to which these functions of prices are reliable. (15)

Part (a)

The signalling and incentive functions of prices of products and resources are the keys to the market's ability to decide what to produce, how to produce and for whom the goods are produced.

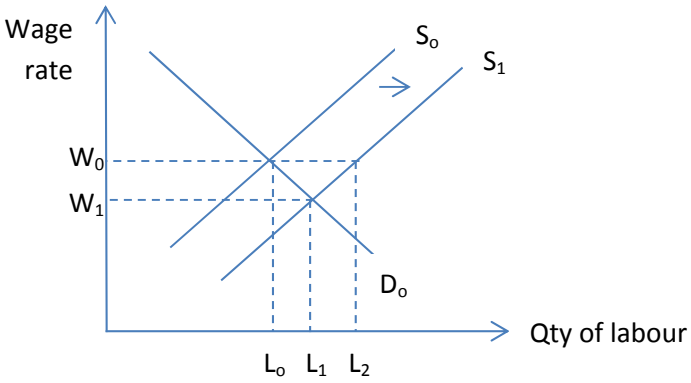
Take the example of a product market.

- Assume there is an increase in demand => shortage => signals to the producers and incentives them to increase their prices



Next, consider the example of a resource market (labour market)

- Assume there is an increase in supply => surplus => signals to the producers that they can reduce the wage rate



The price of labour, or the wage rate, also determines the ability of the workers to buy goods and services in the market, hence in turn determines for whom the goods are produced.

Level 3	8-10	Developed explanation on how prices can be relied upon to determine what to produce, how to produce and for whom the goods are produced
Level 2	4-7	Undeveloped explanation on how prices can be relied upon to determine what to produce, how to produce and for whom the goods are produced Developed explanation on how prices can be relied to determine what to produce and how to produce.
Level 1	1-3	A smattering of valid points

Part (b)

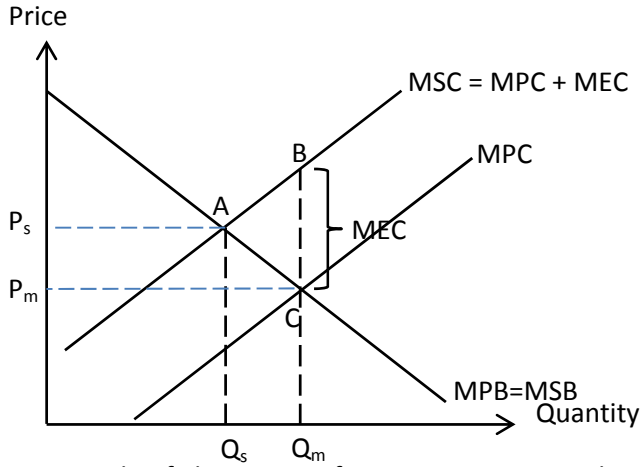
The assessment of the extent of the reliability of prices in determining the goods to produce, how to produce and for whom the goods are produced can be based on two criterions – allocative efficiency and equity. The allocation is considered reliable only if allocative efficiency is achieved, that is marginal social benefits (MSB) is said to be equal to marginal social costs (MSC).

Provide the possible scenarios in which the functions of prices will not lead to allocative inefficiency.

(1) the case of public goods.
Public goods are goods, such as national defence or street lighting, which have the two characteristics: non-rival and non-excludable in consumption. Non-rival means the consumption of the good by one additional person does not diminish the quantity available for others to consume. Non-excludable means it is impossible or prohibitively costly to confine the benefits to a particular group of people.

Very importantly here is the characteristic of non-excludability. This is because non-excludability leads to the free-ridership issue, which refers to the situation in which people who have not paid for the good cannot be prevented from using the good

(2) the case of externalities.
Externalities are positive or negative spillover effects of production or consumption on third parties, which neither the consumers nor producers take into account.

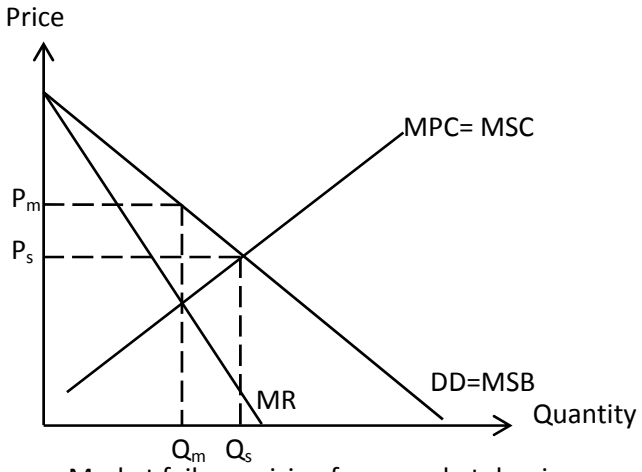


Market failure arising from negative externality

Explain - To illustrate, consider the case of negative externalities. The contamination of the water in the river caused by toxic waste from industrial production, deprives the residents which rely on the river for clean drinking water. With reference to the Figure below, the presence of the negative externality results in the marginal social cost (MSC) to diverge from the marginal private cost (MPB). As a result, the socially desired level of ouput, given by MSB=MSC, is Qs but the output produced and consumed if left by the market, given by MPB=MPC, is Q_m. From the perspective of the price level, the market price is simply too high, causing too little resources to be allocated to the production of the good.

(3) the case of market dominance.

Consider the case of a monopoly. Being the sole seller, the monoply can be said to have a high degree of market power.



Market failure arising from market dominance

Explain - the profit-maximisng monopoly will choose to produce at output Q_m where marginal revenue (MR) is equal to the marginal cost (MC) and charges a price P_m. However, the socially optimal level of output is Q_s where MSB=MSC. Hence, too little resources being allocated to the production of the good.

(Alternative – imperfect information)

Besides allocative efficiency, as mentioned, equity is the alternative criterion to be used to assess the reliability of prices. In a market economy, the distribution of goods is based on the ability to pay. As such, it is possible that certain goods may be out of reach to the poor. And such distribution is often regarded as unfair especially if the goods are considered to be essential.

In view of the various scenarios highlighted above, prices alone cannot be relied on to determine what to produce, how to produce and for whom to produce. Instead, they have to be coupled with certain government regulations to bring about a more efficient and equitable outcome.

Level 3	9-11	Developed explanation of 3 scenarios on why prices cannot be relied upon. Answer should also address equity to get the top end marks.
Level 2	5-8	Undeveloped explanation of 3 scenarios on why prices cannot be relied upon. Developed explanation of 2 scenarios on why prices cannot be relied upon.
Level 1	1-4	A smattering of valid points