

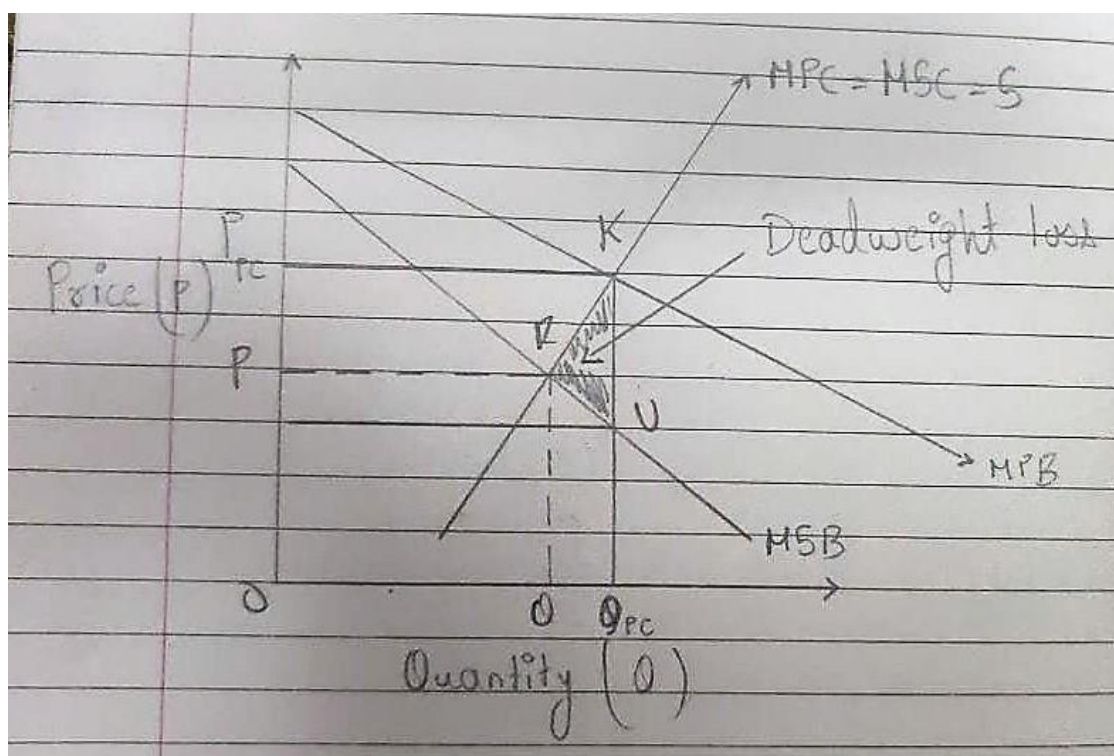
Assignment – 1 (Unit 1 & 2) – Business Economics – Macro

The answers to the assignment questions are as follows:

1. C – If the Government raises output above the free market level, consumers will get no benefit from the extra units of output.
2. C – The gap between $S + \text{tax}$ and S will be Rs. 5 at each quantity.
3. C – Marginal revenue = marginal cost.
4. D – Cannot be supplied by the market.
5. A – Rising trade ratios for countries.
6. C – Rise and real GDP will rise.
7. B – Provide consistency with regards to taxation and subsidies.
8. C – To impose trade sanctions on countries with which it disagrees politically.
9. D – Petrol consumption involves external social costs.
10. D – Nominal GDP uses current prices; real GDP uses constant prices.
11. C – the periodic fluctuations of output around the long run trend.
12. C – Net income from abroad.
13. C – This could lead to 'black' market where the cylinders are sold at more than ceiling price.
14. C – 120 Cr.
15. D – 800 Cr.
16. C – Country X has a comparative advantage in the production of mobiles.
17. D – 280 million.
18. (a.) Net Domestic Income = Mixed income of the self-employed + Operating surplus + Compensation of employees = $28,000 + 10,000 + 24,000 = \text{Rs. } 62,000$ crores
(b.) Gross Domestic Income = Net domestic income + depreciation = $62,000 + 1,700 = \text{Rs. } 63,700$ crores
(c.) Net National Income = Net domestic income + net factor income from abroad = $62,000 - 300 = \text{Rs. } 61,700$ crores

19. Excess usage of plastic results in emanation of residues which is detrimental to the environment. This means that usage of plastic entails social costs. For example – transfer of plastic debris into water bodies may lead to the death of marine life. To prevent water bodies from polluting and keeping it safe for marine life, external costs will have to be borne. Therefore, we can conclude that usage of plastic has external costs and the marginal social cost (MSC) of using plastic is greater than the marginal private cost (MPC) incurred.

However, the benefit of using plastic is greater to the user / consumer than the society. Therefore, the marginal private benefit (MPB) is greater than the marginal social benefit (MSB). If we do not consider externalities, market will have an equilibrium at point K (where P_{pc} is equal to Q_{pc}). However, if we consider the socially optimum level of output, the market equilibrium will be at point R (where P equal Q). Since $MPB > MSB$ and $MSC > MPC$, the market produces output greater than the socially optimum level. Looking at it from the society's perspective, there is excess usage and consumption of plastic. This results in deadweight welfare loss caused by overconsumption and represented by the triangle KRU in the diagram.



20. The short-run aggregate supply curve denotes the aggregate amount of goods (output) that firms are able and willing to supply at a given price in the short run. The short-run aggregate supply curve is upward sloping because the firms will supply more as the price increases. The factors of production (land, labour, capital) take time to change. Thus, in the short run, the factors of production are fixed / relatively inflexible in nature. This leads to the marginal revenue being greater than the marginal cost (in the short run).

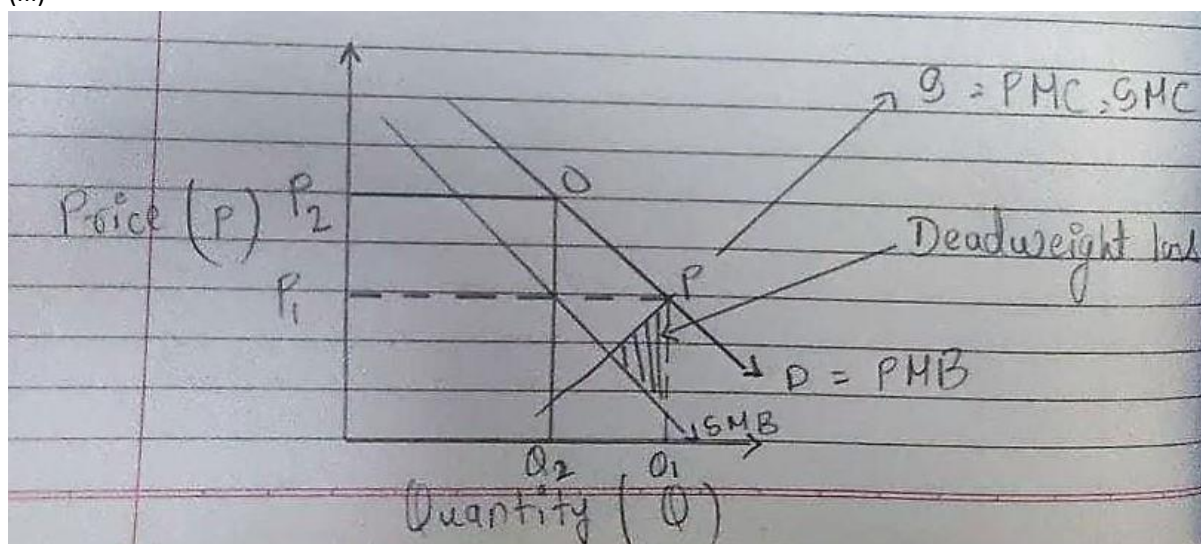
Thus, in the short run, the higher the price, the higher the output. Basically, there is a direct relation between the price and supply. Therefore, the short-run aggregate supply curve is upward sloping.

21. (i) Negative externality is a phenomenon where a third party suffers costs / losses because of an economic transaction between two other unrelated parties. Negative externality is also referred to as external costs. Let us evaluate the example provided in the question to understand the concept of negative externality better. Consumption of cigarettes will lead to passive smoking by the people surrounding the smoker. This may in turn lead to respiratory diseases causing ill health. Due to this more people will start demanding quality healthcare, thereby driving up the prices of healthcare services. This will result in reduced healthcare access by the marginal sections of the society. Consumption of cigarettes may also lead to reduced productivity. Thus, we can see how the society in large is adversely affected by the consumption of cigarettes.

(ii) Price intervention: the government may impose higher indirect taxes on tobacco consumption to deter people from smoking. This method was implemented by the Australian government and they have witnessed a lower proportion of population indulging in smoking cigarettes.

Non-price intervention: the government should carry out campaigns making people aware about the ill-effects of smoking and tobacco consumption.

(iii)



22. Actual economic growth is measured by the annual percentage change in a country's real national output (GDP). On the other hand, Potential economic growth is also known as trend growth and is measured by the estimated annual change in a country's potential level of national output.

23. The three methods of measuring national income are as follows:

(a.) **Product (Output) method** = Under this methodology of calculating national income, the value of all goods and services produced during the year is added up. This is the most direct method of calculating the national income of a country. It is sometimes also referred as value added method to GDP or GDP at factor cost by industry of origin. Basically, it is the sum of gross value added.

When one uses this method to calculate the national income, the problem of double counting arises. This is because the output of one industry is the input of another. Thus, when we calculate the national income using product method, we might be summing the same output multiple times.

To avoid this issue, one must use the concept of 'value added', which is the difference between output value and input at each stage of production.

- (b.) **Income method** = National income calculated using this approach is the summation of all factor incomes, i.e., wages, salaries, rent, interest, and profit that one earns during production of goods and services in the nation.

Double counting in this method arises when we use the same factor income twice in the calculation process. For example – a labourer earns wages by working. He in turn uses his income to purchase goods and services which give rise to profit for a firm. Thus, during the calculation process, in essence, we have used the same income twice.

- (c.) **Expenditure method** = Calculating the national income using this approach would be to add up the flows of expenditure needed to purchase the nation's output. If we had to formulate it, it would look like this: $GDP = C + I + G + (X - M)$, where;

C – consumer expenditure

I – investment expenditure

G – government expenditure

X – income from exports

M – import expenditure

The answer produced by each of these three methods will differ because all three methods consider different aspects. Output method considers value of produced goods, income method considers the factor payments, whereas expenditure method uses amount spent on expenditure. Thus, the answers we will arrive at will be different.

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