Micro-Macro Mix

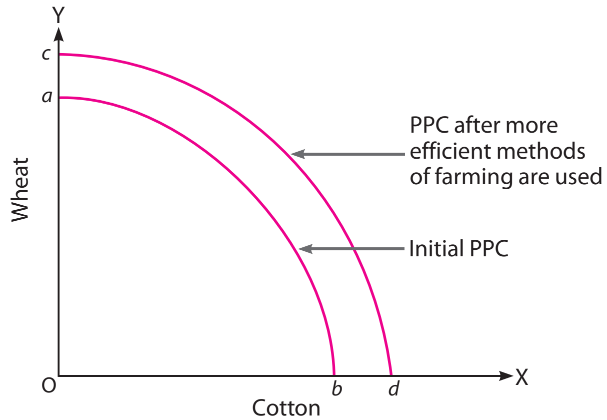
[Multidisciplinary question-answer, integrating micro & macro economics]

Unit–1

1. Only wheat and cotton are grown in an economy. More efficient farming methods are adopted by all the farmers. How would it impact (i) PPC of an individual farmer, and (ii) PPC of the whole economy? Use diagram.

Ans. More efficient farming methods are used by all the farmers growing wheat and cotton. Accordingly, PPC for an individual farmer as well as for the economy as a whole will shift to the right, as in Fig. 1.

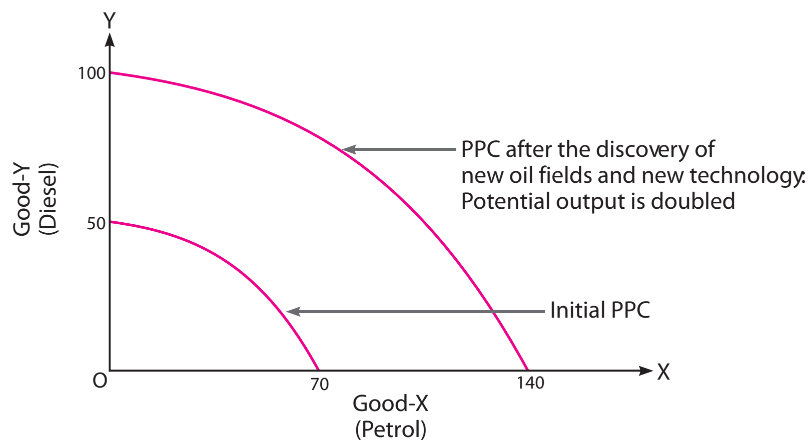
FIGURE 1



2. There is only one oil company controlling the supply of crude oil in a country. The company discovers new oil fields and new technology. As a result, the potential level of output in the economy increases by a factor of '2'. How would you reflect this change on a PPC diagram?

Ans. Initial PPC (Fig. 2) shows that the economy can produce 50 million barrels of diesel and 70 million barrels of petrol (using the given supply of crude oil). After the discovery of new oil fields and new technology, the potential level of output increases by a factor of '2'. Accordingly, PPC shifts to the right, indicating potential output of 100 million barrels of diesel and 140 million barrels of petrol.

FIGURE 2



3. Actual level of output of many individual firms in the economy is less than their potential level of output. In such a situation, is it possible that the actual level of output for the entire economy is equal to its potential level of output?

Ans. No. When many firms in the economy are operating inefficiently (as their actual output is less than the potential output) the economy as a whole cannot be expected to have efficient utilisation of resources. So that at the macro level also, actual output would be less than the potential level. In other words, the economy would be operating somewhere inside the PPC, not on the PPC.

4. The tax policy of the government shows a substantial shift from indirect taxation (a regressive taxation) to direct taxation (a progressive taxation). How would it impact the central problem of 'for whom to produce'?

Ans. A substantial shift from indirect taxation (regressive taxation) to direct taxation (progressive taxation) is expected to make the distribution of income more equitable.

5. Owing to high opportunity cost, farmers in an area are not willing to shift the use of land from the cultivation of cotton (meant for exports) to the cultivation of rice (meant for domestic consumption). But the government acquires the land and uses it for the cultivation of rice. Do you think that the government has taken a rational decision?

Ans. Acquiring land from the farmers and using it for the production of rice (instead of cotton) is indeed a rational decision by the government. Because, rice is needed for domestic consumption, and for food security of the people. Of course, this decision is rational from the society's point of view, not from the viewpoint of the farmers.

6. Microsoft Corporation (USA) plans to make huge FDI in the Indian economy. Do you think that this will push our GDP growth and shift the macro level PPC?

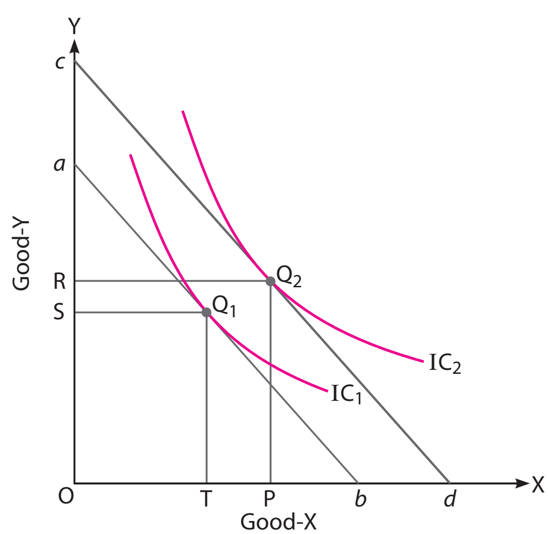
Ans. FDI in India by the Microsoft Corporation (USA) would definitely push our GDP growth, because FDI is made within the domestic territory of India. Also, this investment would shift the macro level PPC to the right, indicating higher level of potential output.

Unit–2

1. The government offers old-age pension to the senior citizens. An average senior citizen finds an increase in his money income. How would it impact his equilibrium in terms of IC Analysis?

Ans. As a result of increase in money income of an average senior citizen, his budget line would shift to the right. He would now strike equilibrium at a higher IC, getting higher level of satisfaction.

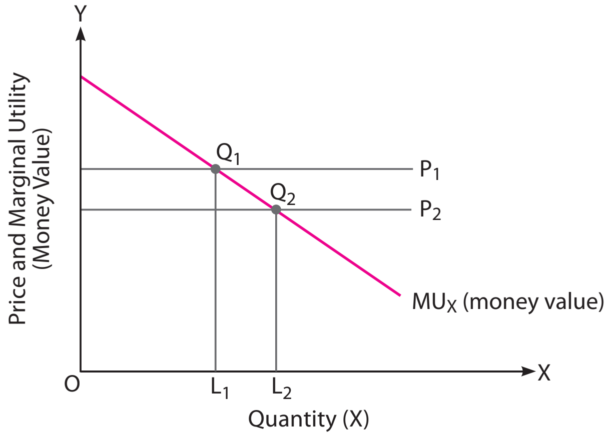
FIGURE 3



- Budget line shifts from *ab* to *cd* (note that it is a parallel shift).
- Point of equilibrium shifts from Q_1 to Q_2. The consumer is now getting more of both the goods. Accordingly, his satisfaction level increases.

2. Consumer's equilibrium is struck when $P_X = MU_X$ (in terms of money). The government fixes a ceiling on the price of commodity-X, so that the ceiling price is lower than the equilibrium price. How would it impact the equilibrium of the consumer?

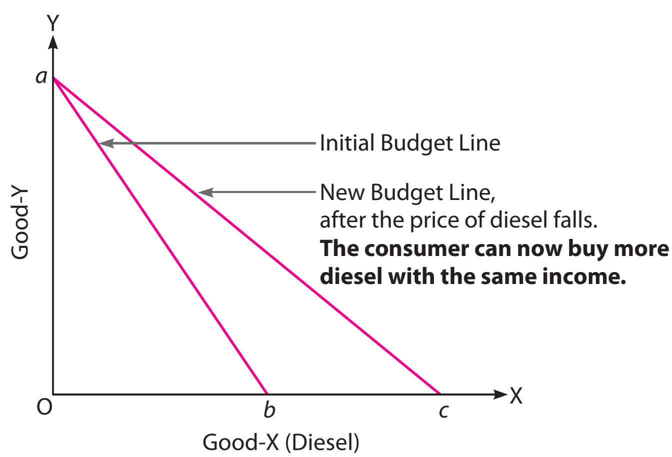
Ans. FIGURE 4



✦ Owing to ceiling, price is lowered from P_1 to P_2. Equilibrium shifts from Q_1 to Q_2. Consumption of commodity increases from OL_1 to OL_2. Satisfaction level rises, even when consumer's income is constant.

3. Price of diesel has substantially fallen in the domestic market, owing to a fall in the price of crude oil in the international market. How would you reflect his change in terms of budget line of the consumer who spends his given income on goods X and Y of which X is a diesel?

Ans. FIGURE 5



4. Owing to discriminatory tax policy of the government the price of Good-X has fallen more than the price of Good-Y in the Indian markets. How would it impact equilibrium of the consumer who spends his given income across Goods X and Y? Use utility analysis.

Ans. A consumer strikes his equilibrium when:

$$\frac{MU_X}{P_X} = \frac{MU_Y}{P_Y}$$

P_X falls more than P_Y. So that,

$$\frac{MU_X}{P_X} > \frac{MU_Y}{P_Y}$$

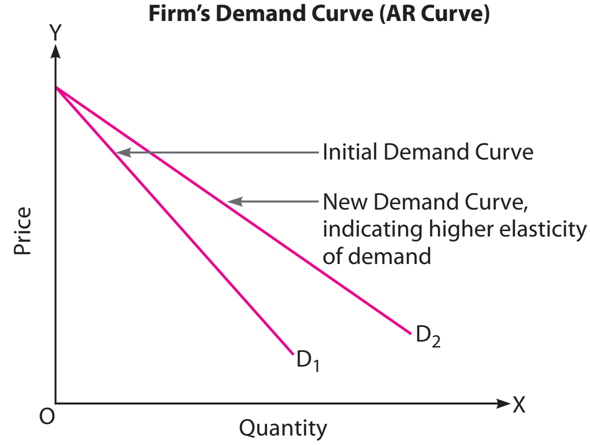
This would induce the consumer to shift some expenditure from Good-Y to Good-X. When the consumption of Good-X increases, MU_X would fall. On the other hand, when the consumption of Good-Y decreases, MU_Y would rise. The switch-over from Y to X would continue till $\frac{MU_X}{P_X} = \frac{MU_Y}{P_Y}$.

5. Owing to influx of FDI, entrepreneurs in the manufacturing sector in India find that the elasticity for their product has tended to rise. How would you reflect this change in terms of demand curve for an individual firm in the manufacturing sector in India?

Ans. Firm's demand curve (AR curve) would become more elastic, as indicated by Fig. 6.

FIGURE 6

Firm's Demand Curve (AR Curve)



6. What kind of change in the market structure do we have in the Indian market after the government opened the domestic auto sector to the foreign investors?

Ans. Many foreign car companies have established their production units in India after the auto-sector was opened to FDI. Prior to that there were hardly 3-4 companies, exercising high monopoly power in the Indian car market. Now, competition has substantially increased. However, still there are only a few big companies controlling the entire market. **The market structure continues to be oligopolistic. The change has been from greater monopoly power to lesser monopoly power** of the individual firms: from greater control over price to lesser control over price.

7. Given $E_d < 1$, for our export goods, do you think export industries in India would benefit from a rise in exchange rate?

Ans. When the exchange rate rises, our currency depreciates in value. Domestic goods become cheaper in terms of foreign currency. But when elasticity of demand (for our exports) is less than 'one', total expenditure on the commodity reduces with a fall in price of the commodity. Accordingly, revenue receipts of our export industry would fall, even when price of export goods has fallen.

Unit–3

1. Returns to a factor in the auto industry are not affected by a fall in price of cars due to a cut in excise duty. Do you agree?

Ans. Fall in price of the cars (owing to a cut in excise duty) has nothing to do with returns to a factor. Returns to a factor (increasing, diminishing or negative returns) arise simply because the factor ratio tends to vary as output is increased. In the short period, some factors are fixed. Accordingly, factor ratio must vary, as output can be increased only by increasing the input of a variable factor.

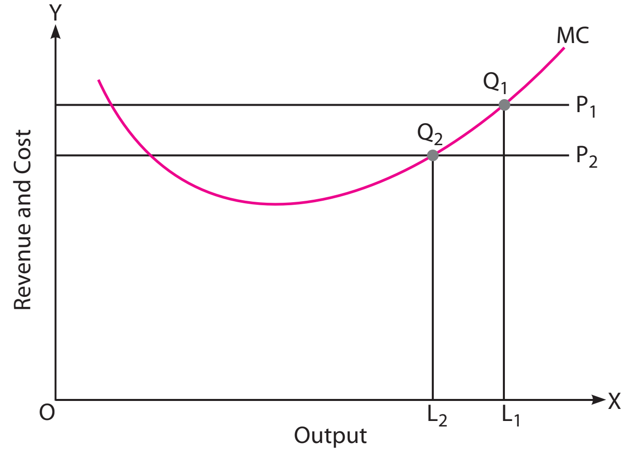
2. Returns to a factor in the domestic industry start diminishing faster when the government does not allow the import of an efficient technology owing to the scarcity of foreign exchange. Do you agree?

Ans. It is true that returns to a factor would start diminishing faster, if old technology is not replaced by a more efficient technology.

3. How would equilibrium output of a retail firm in the domestic economy be affected when FDI in retail industry increases competition in the domestic market and market price of the commodity is reduced. Assume that an individual firm has no control over price of the product.

Ans. Owing to FDI, competition in the domestic market increases and market price of the commodity is lowered. It causes a downward shift in the market price from P_1 to P_2 as in Fig. 7. The equilibrium point would shift from Q_1 to Q_2. Accordingly, output level of the firm would decrease from OL_1 to OL_2.

FIGURE 7



4. How is micro concept of supply different from the macro concept of supply in the context of equilibrium output?

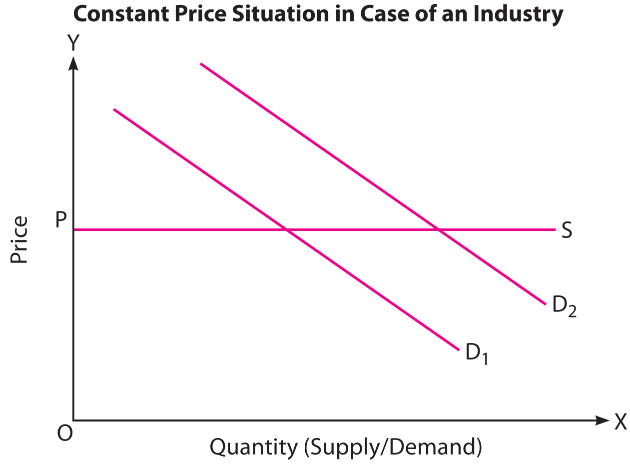
Ans. Micro concept of supply refers to planned supply of a commodity by an individual firm or an individual industry. On the other hand, macro concept of supply refers to planned aggregate supply or planned supply of all producing units in the economy.

5. Because of a perfectly elastic AS, general price level remains constant even when AD increases. Can you think of a 'constant price situation' in case of an industry?

Ans. In case of an industry also, market supply curve can be perfectly elastic, as indicated by a horizontal straight line supply curve (Fig. 8). In such a situation market price of the commodity will not be affected, no matter what the level of demand is.

FIGURE 8

Constant Price Situation in Case of an Industry



✦ No matter what the demand is, price remains constant.

Unit–4

1. In the context of equilibrium of an industry, price and output are simultaneously determined. But in the context of equilibrium GDP, we focus only on output, not the price. Why?

Ans. It is true that in the context of equilibrium GDP, we focus on the volume of output, not the price level. This is because we assume that general price level remains constant. General price level is constant, because AS is perfectly elastic. AS is perfectly elastic because of the existence of excess capacity in the economy, as during economic depression.

2. We discuss equilibrium GDP on the assumption that price level is constant. Also, under perfect competition, a firm faces a constant price level. Are the two situations similar?

Ans. No, the two situations are not similar. A firm under perfect competition faces a constant price level because it has no control over price of the product. On the other hand, in the context of equilibrium, price level is constant because AS is perfectly elastic (owing to the existence of excess capacity in the economy).

3. In macroeconomics, AS is assumed as perfectly elastic, so that AD emerges as the principal determinant of equilibrium output. Why don't we make a similar assumption in the context of equilibrium output of an industry?

Ans. In macroeconomics, Keynes relates his discussion to a specific situation of economic depression. Existence of excess capacity is a typical feature of this situation. This makes AS (aggregate supply) as perfectly elastic, till the point of full employment in the economy. Accordingly, AD (aggregate demand) emerges as the principal determinant of equilibrium output. In microeconomics, we do not focus on any such specific situation as of excess capacity. Accordingly, supply curve of an industry is taken as of normal shape: it slopes upward, from left to right. [Here, it may be noted that under normal situations AS curve would also be upward sloping.]

4. Demand curve is perfectly elastic in case of an individual firm under perfect competition. But AD curve is never like that. Give a reason-based answer.

Ans. In case of an individual firm (under prefect competition) demand curve is perfectly elastic. This shows that an individual firm can sell any quantity at the existing market price. The reason is that quantity produced by an individual firm is **always** a notional component of the market supply. So that, no matter how much is produced by a firm, it never impacts the market price, other things remaining constant. It is this situation which enables us to conclude that an individual firm (under perfect competition) can produce/sell any quantity at the existing price. Or that, the demand curve for the product of an individual firm is perfectly elastic. On the other hand, AD is the sum total of demand for all goods and services in the economy. It can never be perfectly elastic when it is measured in terms of aggregate expenditure and related to the level of income in the economy.

Unit–5

1. When per capita real GDP is rising, does it mean that welfare level of every individual is increasing in the economy?

Ans. No, is the answer. Because per capita change only indicates an average change. It does account for the distribution of income. It is possible that real GDP rises, but the distribution of income becomes more skewed. Benefit of higher GDP may not reach the poorest of the poor. It may just accrue to richer sections of the society in terms of higher profits. So that, even when average real GDP has risen, it may not reflect a rise in welfare level of every individual in the economy.

2. Most producing units in the economy are producing less than their full capacity. In such a scenario, will the potential GDP level of the economy be identified by a point on the PPC or inside it?

Ans. Potential level of output is always indicated by a point on the PPC curve. Because, potential level of output is based on the assumption that (i) resources are fully utilised, (ii) resources are efficiently utilised, and (iii) technology is constant. When most producing units in the economy are producing less than their full capacity then, at the macro level, it implies a situation of excess capacity or under utilisation of resources. When resources are under-utilised, the actual level of output is less than the potential level. So that in the given situation, actual level of output will be indicated by a point inside the PPC, not the potential level.

3. Personal income rises owing to transfers from the government. Does it mean every household in the economy should lower the consumption of inferior goods?

Ans. Personal income is a macro concept. It refers to income of all the individuals and households in the economy during the period of an accounting year. A rise in personal income (owing to transfers from the government) implies a rise in aggregate income of the individuals and households. However, it does not mean that the transfers from the government accrue to each and every individual in the country. **Example:** The government may give transfers only to senior citizens by way of old-age pensions. These transfers do not include each and every individual in the country. Accordingly, it is concluded that a rise in personal income (owing to government transfers) may not lead to a rise in income of each and every individual (or every household) in the economy. Thus, the principle of negative income effect (fall in consumption of inferior goods owing to a rise in the level of income) may not apply to each and every individual (or every household) in the economy.

4. Personal disposable income rises because of a substantial cut in direct personal taxes. Does it mean that every individual in the economy can save more? Would it in any way impact the firm's demand curve in a perfectly competitive environment?

Ans. Personal disposable income is a macro concept. It refers to income of all individuals and households in the economy. A substantial cut in direct personal taxes leads to rise in personal disposable income, as an aggregate of disposable income of the individuals and households in the economy. It never implies that the disposable income of each and every household in the economy must rise. Because, many individuals and households may not be paying taxes, because their income is already lower than the taxable level. A cut in direct personal taxes would cause no impact on the capacity to save of such people. Accordingly, it is concluded that a cut in direct personal taxes never implies that each and every individual in the economy can save more.

A rise in personal disposable income would not impact firm's demand curve under perfect competition. Because, firm's demand curve under perfect competition is always perfectly elastic. It is not because of income level in the economy. But, because by definition, a firm under perfect competition can sell any quantity against a given market price. It is simply a price taker.

5. Do you think GDP level in India would in any way be impacted by a substantial fall in the price of diesel?

Ans. A substantial fall in the price of diesel is expected to lower the cost of production of those producing units where diesel is used as a significant input. Transport industry is the best example in this situation. A fall in the price of diesel is expected to lower the cost of transportation. This has a cascading effect. Because, most manufacturing units in the economy depend on transportation for the supplies of inputs as well as output. Lower cost of transportation is expected to induce higher level of output. If this happens, GDP level would certainly rise.

Unit–6

1. The RBI has cut SLR from 22% to 21.5% of demand deposits of the commercial banks. How would it impact the demand for residential apartments in India?

Ans. A cut in SLR (as a percentage of demand deposits) offers an opportunity for the commercial banks to create more credit against a given amount of their liquid assets. Accordingly, availability of credit tends to expand. Easier availability of credit is expected to raise its demand for purpose of investment in residential apartments. Also, when credit creation capacity of the banks expands, the banks (operating in a competitive financial market) may lower the rate of interest. This will further induce the investors to raise loans for the residential apartments. Thus, consequent upon a cut in SLR, the demand for residential apartments is expected to rise because of (i) expansion of credit supply in the market, and (ii) lower rate of interest.

2. A cut in repo rate from 8% to 7.75% has been recently announced by the RBI. How would it impact the car-market in India?

Ans. A cut in repo rate enables the commercial banks to raise loans from the RBI at a lower rate of interest. This is expected to lead to a cut in the market rate of interest (the rate at which the commercial banks offer loans to the general public). Lower interest rate also means lower EMI (annualised monthly installment) for a given amount of a loan. Accordingly, demand for credit is expected to rise for the purchase of durables like cars. A rise in demand is expected to induce further investment in the car industry. Production capacity would enhance. In case excess capacity exists in the car industry, it would be eliminated. In either situation, the car market would expand.

3. How would cheap monetary policy impact the competitive environment in Indian markets?

Ans. Cheap monetary policy is that policy which facilitates greater availability of credit at a lower rate of interest. Lowering the market rate of interest leads to a cut in the cost of investment. Accordingly, investment tends to rise. Microeconomics teaches us that investment is always directed to those areas of production activity which are yielding extra-normal profits. When new firms enter such industries (yielding abnormal profits), competition tends to grow. Competitive environment spreads/expands. Extra-normal profits are lowered or eliminated. Greater output is available at a lower price. This is a situation of economic expansion, implying growth and development of the economy as a whole.

4. Introduction of money as a medium of exchange has helped the economists to explain consumer's equilibrium in terms of utility analysis. How do you explain this fact?

Ans. It is true that the introduction of money has helped economists to explain consumer's equilibrium in terms of utility analysis. The consumer strikes his equilibrium when:

$$\underbrace{\frac{MU_X}{P_X}}_{\text{rupee worth of satisfaction actually obtained by a consumer}} = \underbrace{MU_M}_{\text{rupee worth of satisfaction that the consumer wishes to obtain}}$$

Imagine a situation when money is not available as a common unit of value. It would have been extremely difficult for the economists to write this equation of consumer's equilibrium. Price of one commodity would have been expressed in terms of the quantity of the other commodity (foregone in exchange), and it would have been extremely difficult to find a quantitative expression for MU_M (when money does not exist). Some good would have been randomly used as a common unit of value in place of money. But the choice of that good would vary from individual to individual. Perhaps the expression of consumer's equilibrium would have never been possible in terms of an algebraic equation.

5. 'A bank account for every household' has found a massive response in India. Analyse its impact on (i) credit creation by the commercial banks, and (ii) the demand for consumer durables in the domestic market

Ans. 'A bank account for every household' is an important element of JDY (Jan-Dhan Yojana) recently launched by the Government of India. It provides for a zero balance account and includes the facility of debit card as well as life insurance cover (of ₹ 2 lakh) for the accountholder. Millions of households in the country have availed this facility. **A fact of underlined significance is JDY has attracted cash deposits of thousands of crores by the marginal savers in the country.** This has enhanced primary deposits of the commercial banks. It is on the basis of their primary deposits (cash deposits) that the banks are able to create secondary deposits. **Expansion of cash deposits leads to expansion of credit creation capacity of the commercial banks.**

Secondly, JDY has expanded the ambit of financial inclusion in the country. More and more people are getting connected to the financial markets. This is expected to raise the demand for credit for the purchase of consumer durables. Implying, **that the demand for consumer durables in the domestic market is expected to rise.**

Unit–7

1. 'Supply-demand equality' determines macro equilibrium as well as micro equilibrium. Then, where is the difference? Explain.

Ans. It is true that supply-demand equality determines both micro as well as macro equilibrium. Yet there is a significant difference. At the micro level, we focus on supply-demand relating to an individual industry or an individual commodity in the market. **Example:** Micro equilibrium is struck when demand for sugar is equal to supply of sugar and the market for sugar is cleared. On the other hand, macro equilibrium focuses on aggregate supply and aggregate demand. Aggregate supply refers to supply of all goods and services in the economy, as planned by the producers during the period of an accounting year. Aggregate demand refers to demand for all goods and services in the economy, as planned by the buyers during the period of an accounting year.

When micro equilibrium is established, both equilibrium price and equilibrium quantity are simultaneously determined. When macro equilibrium is established, we find equilibrium GDP only. [Students are advised to note that at the +2 level, macro equilibrium is studied with reference to the assumption that the price level remains constant.]

2. Analyse the chain effect of 'inflationary gap' on the demand for coarse grain in India.

Ans. Inflationary Gap refers to a situation when AD > AS (corresponding to full employment level in the economy). It is a situation when prices of goods and services start trending up, and the supply of goods and services in the economy remains constant.

A rise in the general price level lowers real income of the people. It hits marginal buyers the most who spend the bulk of their income on the basic necessities of life (food, clothing and shelter). Because of a fall in their real income, such buyers are expected to shift from the consumption of superior grains to the consumption of coarse grains. Hence, it is concluded that in a situation of a rise in the general price level (corresponding to inflationary gap) the demand for coarse grain is expected to rise. This establishes the inverse relationship between income of a household and the demand for an inferior good.

3. To combat deflationary gap, the government plans autonomous investment. How would it impact the demand for cement and steel industries in India?

Ans. Deflationary Gap refers to a situation of deficiency of AD, leading to underemployment or unemployment in the economy. Such situations lead to a drought of private investment, simply because demand for goods and services is lacking in the economy. The economy sinks into a 'low level equilibrium trap'. To break this deadlock, the government intervenes in the production activity by way of autonomous investment. This investment focuses on the creation of infrastructural facilities in the economy, so that private investment is induced. The core component of infrastructural facilities relates to the construction of roads, dams and bridges. These are those production areas where steel and cement are used as the principal inputs. Thus, we can conclude that autonomous investment by the government (as it concentrates on the construction of roads, dams and bridges) is expected to trigger the demand for steel and cement in the country.

Unit–8

1. A significant fall in the price of crude oil has helped the Indian government to improve its CAD (current account deficit) as well as fiscal deficit. Explain how.

Ans. (i) A significant fall in the price of crude oil has helped improve CAD. This is because a fall in the crude oil price has led to a reduction in our import bill.

(ii) A significant fall in the price of crude oil has helped the government to improve its fiscal deficit also. This is because the fall in oil price has been so substantial that it has enabled the government to increase import duty on oil even when the price of petrol/diesel has fallen in the domestic market. Increase in tax revenue has led to a fall in fiscal deficit.

2. How high fiscal deficit impacts the performance of industry at the micro level? Explain.

Ans. High fiscal deficit impacts the performance of industry at the micro level in two ways as under:

(i) High fiscal deficit leads to higher borrowings by the government. When the government borrows the bulk of loanable funds, availability of funds is reduced for the private investors. This is called 'crowding-out': a situation of financial crunch for the private investors. Crowding-out percolates (spreads) at the micro level. It hinders the performance of such industry in particular which requires intensive investment, like the auto industry.

(ii) High demand for loanable funds by the government raises the market rate of interest. It acts as a deterrent for an individual investor to seek loans for purpose of investment. It further impairs the performance of the industry at the micro level.

3. Explain the impact of budgetary policy of the government on the allocation of resources.

Ans. Taxation and subsidies are the two principal parameters of the budgetary policy of the government. It is by varying these parameters that the government tries to impact the allocation of resources. Excise duty is increased relating to those areas of production (like tobacco and liquor) where the government wants a cut in the allocation of resources. A rise in excise duty raises the cost of production. It leads to a cut in planned output or planned allocation of resources.

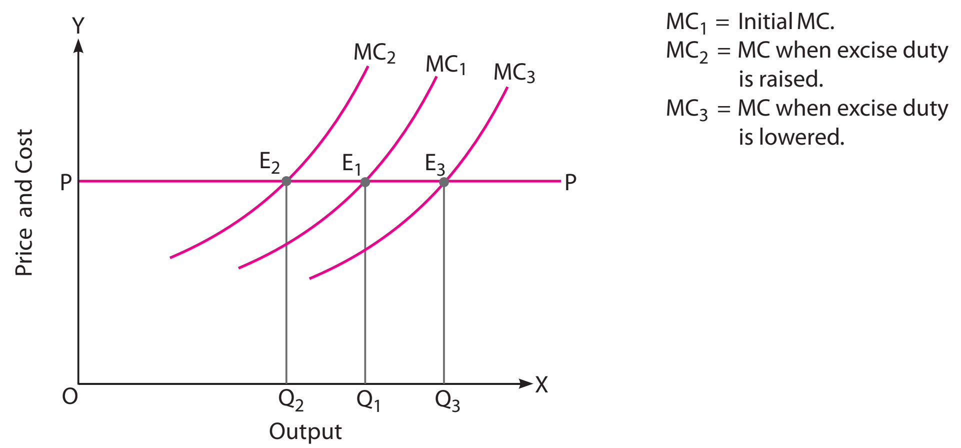
On the other hand, subsidy is offered for such production activities (like seeds and fertilizers) where the government desires greater allocation of resources. Subsidies lower the cost of production and therefore, induces higher investment.

It may be noted that the taxation and subsidy policy of the government is used to impact reallocation of resources in a manner such that social welfare is enhanced.

4. How does change in excise duty impact the equilibrium output of a firm in a perfectly competitive environment?

Ans. Changing the excise duty means either raising it or lowering it. In case excise duty is raised, cost of production is also raised. Price remaining constant (as under perfect competition), higher cost would lead to a cut in the equilibrium output of a firm. A cut in excise duty, on the other hand, would lower the cost of production. Price remaining constant, it would lead to higher level of equilibrium output. Fig. 9 Illustrates these situations.

FIGURE 9



We know, equilibrium is struck when: (i) MC = MR, and (ii) MC is rising.

(i) **Initially**, the firm is in equilibrium at point E_1, on MC_1.

Equilibrium output = OQ_1.

(ii) When excise duty is raised, MC curve shifts upward. It is now indicated by MC_2. Equilibrium is struck at point E_2, on MC_2.

Equilibrium output = OQ_2 (it reduces).

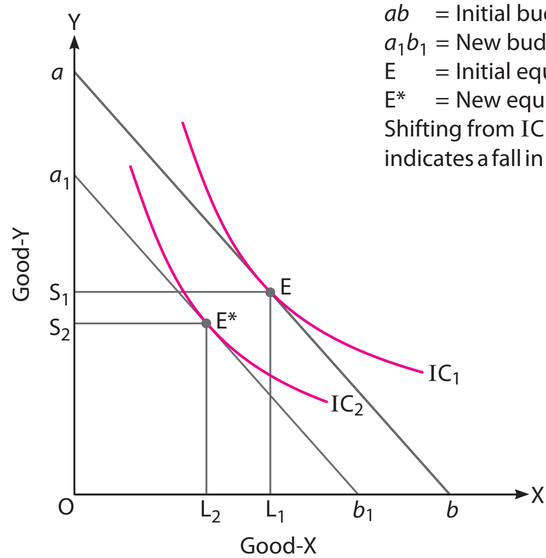
(iii) When excise duty is lowered, MC curve shifts downward. It is now indicated by MC_3. Equilibrium is struck at point E_3, on MC_3.

Equilibrium output = OQ_3 (it increases).

5. Imagine a situation when cash subsidy on domestic LPG is withdrawn. Explain its impact on the welfare level of an average BPL family. Use IC diagram.

Ans. When cash subsidy on LPG is withdrawn, disposable income of the BPL family is reduced. In terms of Indifference Curve Analysis, this would mean that the budget line of the average BPL family shifts to the left. Other things remaining constant, it would lead to a cut in its welfare level. This is illustrated through Fig. 10.

FIGURE 10



ab = Initial budget line.
a_1b_1 = New budget line.
E = Initial equilibrium.
E* = New equilibrium.
Shifting from IC_1 (higher IC) to IC_2 (lower IC) indicates a fall in welfare level.

Initially the BPL family is in equilibrium at point E, on IC_1.

It consumes OL_1 of Good-X and OS_1 of Good-Y.

After cash subsidy is withdrawn, budget line shifts downward, from *ab* to a_1b_1.

New equilibrium is struck at point E*, on IC_2. Being on a lower IC, welfare level of the BPL family is also lowered. Now it consumes OL_2 of Good-X and OS_2 of Good-Y.

Unit–9

1. In the event of depreciation of the domestic currency, how would a firm reallocate its budget on the purchase of raw material from rest of the world?

Ans. When domestic currency depreciates, it implies that more rupees are to be paid to buy a unit of foreign currency (say US $). Accordingly, rupee payment for the purchase of a given quantity of raw material from rest of the market would rise. This would prompt the firm to buy more from the domestic market rather than the foreign market. Implying that the firm would now allocate lesser budget for the purchase of raw material from rest of the world.

2. Firm X imports goods only for resale in the domestic market. How would appreciation of the domestic currency impact its domestic sale?

Ans. Appreciation of the domestic currency implies that a unit of foreign currency can now be purchased by paying lesser rupees than before. Accordingly, the firm can now import goods by paying lesser rupees than before. This amounts to a cut in the import-bill (in terms of rupees) for a given volume of imports. The firm can now afford to sell its goods at a lower price in the domestic market. **It is expected to boost its domestic sale.**

3. When the rupee appreciates in value in relation to US dollar, demand for education in the US Universities tends to move up. Would you treat this change as a movement along the demand curve or shift in demand curve?

Ans. It is true that when rupee appreciates in value in relation to US dollar, demand for education in US Universities tends to move up. This is because, the given amount of US currency (required for education) can now be purchased by paying lesser rupees. **Such a change should NOT be treated as a shift in demand curve.** For the Indian students, the price of US education has reduced in terms of the Indian currency; accordingly, demand has stretched. We know, any change in demand in response to a change in own price of the commodity is reflected as a movement along the demand curve. **Hence, it is concluded that a rise in demand for US education in response to appreciation of the Indian currency is to be treated as a movement along the demand curve.**