

## SECTION – 'A'

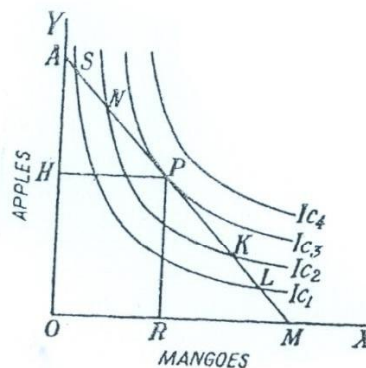
Q. 2 (a) □ **CONSUMER'S EQUILIBRIUM:**

The consumer is said to be in equilibrium when he obtains the maximum possible satisfaction from his purchases given the prices in the market and the amount of money he has for making purchases. In terms of Marshallian or utility analysis, a consumer is said to be in equilibrium, in case of one commodity, when its price and marginal utility have been equated.

□ **Equilibrium with Indifference Curves**

□ Make the following assumptions that how a consumer reaches an equilibrium position with the help of indifference curves.

- (i) Consumer has an indifference map showing his scale of preferences for various combinations of the two goods – apples and mangoes.
  - (ii) He has a given and constant amount of money to spend on the goods and if he does not spend it on one good, he must spend it on the other.
  - (iii) Prices of the goods in the market are given and constant.
  - (iv) Each of the goods is homogeneous and divisible; and
  - (v) The consumer acts rationally, that is, he tries to maximise his satisfaction.
- Suppose a consumer has an indifference map shown in the following diagram. Further suppose that the price line facing the consumer is AM, given a certain amount of money he has to spend on apples and mangoes and the prices of apples and mangoes in the market. Since his income and the relative prices of the two goods to be purchased are shown by the price-income line AM, his equilibrium must be on some point on this line. Any point not lying on this price line cannot be a possible equilibrium point, because his present price-income situation will not allow him to move on to that point (or purchase that combination).



- The consumer will maximise his satisfaction and be in equilibrium at a point where the price line touches (or is tangent to) an indifference curve. Such a point in diagram is P, which lies on indifference curve IC3.
- In equilibrium at point P, marginal rate of substitution (MRS) of mangoes for apples is equal to the price ratio between these two goods, since both the indifference curve IC3 and the price line AM have the same slope at point P (MRS of mangoes for apples is

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given by the slope of the indifference curve and the price ratio is given by the slope of the price line AM).

$$\square \text{ MRS. of mangoes for apples} = \frac{\text{Price of mangoes}}{\text{Price of apples}}$$

**Q. 2 (b) □ DIVISION OF LABOUR:**

- Division of labour refers to a scheme of dividing the given activity among workers in such a way that each worker is supposed to do one activity or only a small part of that activity. Division of labour was in terms of occupations.
- Division of labour could be of three types:
  - (a) Professional division of labour
  - (b) Process division of labour
  - (c) Territorial division of labour
- **Merits of Division of Labour:**
  - i) Division of labour result in specialisation.
  - ii) Practice also familiarises a worker with the difficulty of his job, so that, for example, he can cope quickly with breakdowns and take steps to avoid them.
  - iii) Division of labour and specialisation result in time saving.
  - iv) Specialisation makes possible a great extension in the use of machinery.
  - v) Another distinct advantage of division of labour is that it improves the productivity of labour and it makes it possible to expand operations into large scale units.
- **Demerits of Division of Labour:**
  - i) A change of occupation is often a form of relaxation.
  - ii) The more the range of the worker's task is narrowed and standardised, the lesser will be his share in the finished product.
  - iii) When a man is set with a variety of task he has a chance to develop initiative, judgement and resource.
  - iv) Those who specialise in doing a single job run great risks.

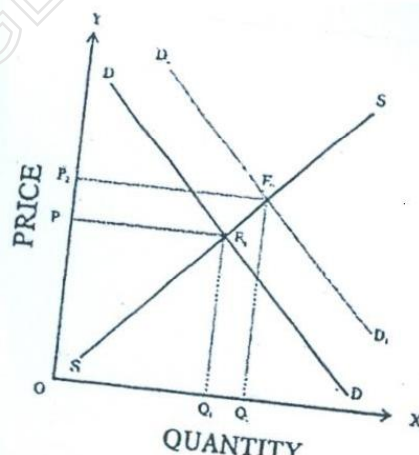
**Q. 2 (c) □ CARDINAL AND ORDINAL APPROACHES IN UTILITY ANALYSIS:**

- **The Cardinal Measurability of Utility:**
- According to this theory, utility is a cardinal concept, i.e. it is possible to measure and quantify satisfaction achieved from the consumption of various commodities. Thus it is possible for a consumer to say that he has derived utility equal to, say 15 utils from the consumption of one cup of tea. Since he can measure the satisfaction quantitatively he can very well say that bread is giving more or less satisfaction than tea and therefore, is preferable (or less preferable). In fact, Marshall has a unique way of measuring utility. According to him, money is the measuring rod of marginal utility. Thus, if he is prepared to pay Re. 1 for bread and 50 paise for tea, we can say these represent the utility which he is expecting from these commodities.

- **Ordinal utility:**
- Economists today generally reject the notion of a cardinal (or measurable) utility that people feel or experience when consuming goods and services. Utility does not ring up like numbers on a gasoline pump.
- Rather, what counts for modern demand theory is the principle of ordinal utility. Under this approach, consumers need to determine only their preference ranking of bundles of commodities. A statement such as "Bundle A is preferred to bundle B" – which does not require that we know how much A is preferred to B – is called ordinal, or dimensionless. Ordinal variables are ones that we can rank in order, but for which there is no measure of the quantitative difference between the situations. Page # 89; A/C: I-00003

**Q. 3 (a) □ CHANGES IN DEMAND AND SUPPLY:**

- Given a single pair of demand and supply curves in a market, the price and quantity will always tend towards equilibrium. If any one of the many factors which we held constant in drawing the demand and supply curves should change, either or both the curves will shift. Thus, changes in income, tastes and preferences, changes in the prices of other goods, and changes in the number of consumers all cause the demand curve to shift. Depending upon the impact of the changes in these variables, the demand curve may shift either up or down. Similarly, the supply curve may also shift if any of the variables assumed constant – the price of the inputs, the input-output relationship, the number of firms in the industry should change. Again, depending on the impact of the change, the curve will either shift to the right or shift to the left.



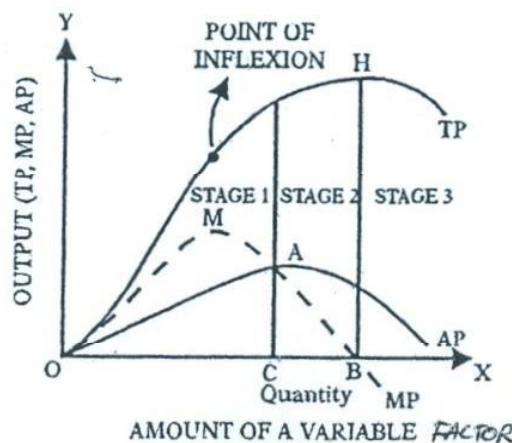
- Whenever there is any increase in demand, quantity demanded and supplied increases and a new price is set which is higher than the original price. Opposite will happen if because of some reasons demand falls. Thus, if the tastes and preferences of consumers change against the good in question or there is decrease in the incomes of the household or there is a decrease in the price of substitute goods, then the demand curve will fall. This will again affect the equilibrium prices.
- The supply conditions remain unchanged while the demand curve shifted upwards or downwards. Now, consider what happens when demand remains the same but supply increases or decreases. If supply increase, i.e., supply curve shifts rightwards (say

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- because of improved technology altering the input-output relationship) the new equilibrium price will be lower than original equilibrium.
- The new quantity demanded and supplied will be more than the original quantity demanded and supplied.
  - If the supply curve shifts leftwards, the new equilibrium price will be higher than the original price and the quantity supplied will be lower than the original quantity.
  - **Simultaneous change in the demand and the supply** – Demand and supply conditions sometimes change simultaneously changing the equilibrium price and quantity. The strength of changes in demand and supply determines the changes in the equilibrium price. If increase in demand is equal to increase in supply, the new equilibrium price will be equal to the old equilibrium price.
  - If increase in demand is more than the increase in supply, the new equilibrium price will be higher than the original price.
  - If increase in demand is less than the increase in supply, the new equilibrium price will be lower than the original equilibrium price.

Q. 3 (b) □ **LAW OF VARIABLE PROPORTIONS:**

- We can formally state the law of variable proportions as:
- Holding technology and all inputs except one constant, as equal increments of the variable inputs are added, beyond a certain point the resulting rate of increase in total product will decrease. Otherwise stated, after certain point, the marginal physical product of the variable input will diminish.
- The behaviour of output when the varying quantity of one factor is combined with a fixed quantity of the others can be divided into three distinct stages. In order to understand these stages, we may graphically illustrate the production function with one variable.



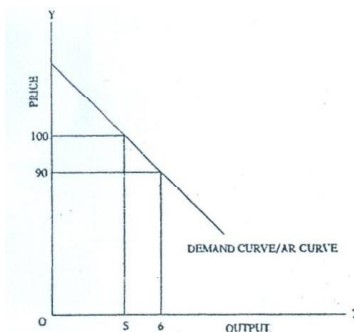
- In this figure, the quantity of variable factor is depicted on the X axis and total product (TP), average product (AP) and marginal product (MP) are shown on the Y axis.
- The figure shows, TP curve starts from zero, reaches its maximum and then starts declining. The AP curve starts from zero, it rises, reaches its maximum and starts falling. Similar is the behaviour of MP curve; however, the MP curve starts declining earlier than the AP curve. We generally divide the behaviour of the total product,

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- marginal product, and average product into three stages.
- Stage I – The Law of Increasing Returns
  - Stage II – The law of Diminishing Returns
  - Stage III – Negative Returns
  - **Returns to Scale:**
  - In the short-run, it is not possible to make changes in all inputs because of limitations of time. Therefore, we try to increase output by making changes in the quantity of variable factors only (labour, raw materials etc.) keeping quantity of other factors fixed (e.g., machines, buildings, etc.). That is, in the short-run, we change the variable factor of inputs and study the behaviour of production function.
  - In the long-run, we have sufficient time to make changes in all the inputs. Or we say, we have sufficient time to change the scale of the firm. The study of changes in output as a consequence of changes in all factor inputs forms the subject-matter of Return to Scale.
  - Where all inputs are increased in the same proportion, the output can change in one of the three ways. First, a doubling, say of all inputs may lead to a doubling to output. In that case, the production function exhibits constant returns to scale. Second, a doubling of all inputs may yield more than proportionate increase in output i.e., more than a doubling of output. When this takes place, we say that the production function exhibits increasing returns to scale. Finally, we have decreasing returns to scale when a doubling of all inputs yields less than proportionate increase in output i.e., less than a doubling of output.
  - Decreasing returns to scale may also take place. The most common for decreasing returns to scale is setting in of diseconomies scale. The gains, due to specialisation of labour may be set off by the inefficiency associated with organizing and monitoring large enterprises.

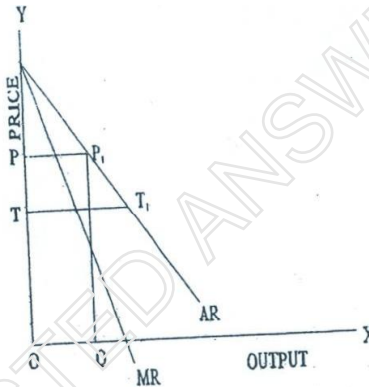
**Q. 3 (c) □ RELATIONSHIP BETWEEN AR, MR & ELASTICITY UNDER MONOPOLY:**

- Since monopolist is the only producer (in a monopoly industry), the industry's demand curve and firm's demand curve are one and the same. The monopolist can hardly suffer the delusion that its actions have no effect upon the price it receives. In fact, the monopolist's output decision will have a decided impact upon price, and the monopolist is well aware of that. The consequences of this can be seen in figure. At a quantity of five units, consumers are willing to pay Rs. 100 per unit. In order for the monopolist to expand output by one unit, he must lower the price from Rs. 100 to Rs. 90. Clearly, the effect of expanding output is to reduce the price as we slide down along the demand curve.



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- Thus we find that monopolist's demand curve is negatively sloped and monopolist should reduce the price if he wants to increase sales. If he increases the price, the demand for his product falls down.
- Marginal revenue and price are identical for the competitive firm. It is supply and demand that determine an industry price, and as a price taker, the firm faces a perfectly elastic demand at the market price. Since each increase in the competitive firm's output increases total revenue by a constant amount equal to the price, its marginal revenue is its price. Since the demand curve (i.e., average revenue curve) slopes down wards, marginal revenue will be below it. The implication of marginal revenue curve lying below average revenue curve is that the marginal revenue will be less than price or average revenue. When monopolist sells more, the price of the product falls, marginal revenue, therefore, must be less than the price.



- In figure, AR is the average revenue curve of the monopolist and slopes down wards. MR is the marginal revenue curve and lies below AR curve. At OQ output, price is P<sub>1</sub>Q but marginal revenue is T<sub>1</sub>Q which is less than the price. MR and AR are related with each other through elasticity in the following way:

$$MR = AR \left[ \frac{e-1}{e} \right]$$

Where e = elasticity; AR = Average revenue or price; MR = Marginal Revenue

- Since the expression  $\left[ \frac{e-1}{e} \right]$  will be less than unit, MR will be less than price. The extent to which MR curve lies below AR curve depends upon the value of AR  $\left[ \frac{e-1}{e} \right]$ .
- It is to be noted that marginal revenue is a linear function (for all linear demand curves) and bisects any horizontal distance between the price axis and the demand curve. In other words, in order to draw marginal revenue curve, for a linear demand curve, we should first extend AR curve so that it meet Y-axis (or price axis). After that should draw MR curve starting from the Y-axis so that it bisects any perpendicular line drawn from a point on the AR curve to the Y-axis.

SECTION – 'B'

Q. 4 (a) □ THE QUANTITY THEORY OF PRICES:

- Early monetary economists used velocity to explain movements in the overall price level. The key assumption here is that the velocity of money is stable and predictable. Suppose that all prices, wages, and incomes double. With unchanged spending

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patterns, the income velocity of money would remain unchanged and the demand for money would double.

- On the basis of this insight about the stability of velocity, some early writers used velocity to explain changes in the price level. This approach, called the quantity theory of money and prices, rewrites the definition of velocity as follows:

$$P = \frac{MV}{Q} = \left[ \frac{V}{Q} \right] M \approx kM$$

- **The implications of the quantity theory:**
- As we can see from the equation, if  $k$  were constant, the price level would then move proportionally with the supply of money. A stable money supply would produce stable prices; if the money supply grew rapidly, so would prices. Similarly, if the money supply were growing a hundredfold or a millionfold each year, the economy would experience galloping inflation or hyperinflation.
- To understand the quantity theory of money, it is essential to recall that money differs fundamentally from ordinary goods such as bread and cars. We want bread to eat and cars to drive. But we want money only because it buys us bread and cars.
- In reality, velocity has tended to increase slowly over time, so the  $k$  ratio might also change slowly over time. Moreover, in normal times, the quantity theory is only a rough approximation to the facts.
- The quantity theory of money and prices holds that prices move proportionally with the supply of money. Although the quantity theory is only a rough approximation, it does help to explain why countries with low money growth have moderate inflation while those with rapid money growth find their prices galloping along.

**Q. 4 (b) □ THE REASONS FOR INTERNATIONAL TRADE IN GOODS AND SERVICES:**

Nations find it beneficial to participate in international trade for several reasons.

- **Diversity in Natural Resources:**
- **Differences in Trades:**
- **Differences in Costs:**

An important feature in today's world is that some companies or countries enjoy economies of scale; that is, they tend to have lower average costs of production as the volume of output expands. So when a particular country gets a head start in producing a particular product, it can become the high volume, low-cost producer.

Large-scale production is an important advantage in industries with major research-and-development expenses.

**Q. 5 (a) □ WHAT IS CAPITAL FORMATION? ITS ROLE IN ECONOMIC DEVELOPMENT:**

Capital formation is one of the major factors in economic development. It is the increase in the stock of both material and human capital by making available a part of society's currently available resources. Capital formation results when some proportion

of society's present income is saved and invested in order to increase material as well as human capital.

□ **Significance of Capital Formation:**

The importance or significance of capital formation in the process of economic development of a country is briefly given below:

- **Building up of infrastructures.**
- **Adoption of modern techniques of production.**
- **Qualitative improvement of human resources.**
- **Proper utilization of natural resources.**
- **Technological process.**
- **Development of agriculture and industrial sectors.**
- **Higher rate of growth in national income.**
- **Expansion of economic activities.**
- **Building import substitution industries.**
- **Reduction of foreign debt.**

**Q. 5 (b) □ MERITS AND DEMERITS OF DIRECT & INDIRECT TAXES:**

□ **Merits and Demerits of direct taxes:**

▣ **Merits:**

1. Direct taxes are generally imposed according to the ability of the person to pay.
2. Since these taxes are generally progressive in nature, they can bring about social and economic justice.
3. Direct taxes are revenue elastic. In other words, as income of the community increases, the tax yield from direct taxes also increases.
4. Direct taxes are supposed to inculcate a spirit of civic consciousness amongst the taxpayers.

▣ **Demerits:**

1. Direct taxes are generally payable in lumps or even in advance.
2. It is not easy to find out the ability to pay of the person being taxed.
3. Such taxes require proper keeping of accounts, which some taxpayers may not be able to do so.
4. These taxes can be evaded by preparing dubious and false accounts and giving false information about income and wealth.
5. The tax authorities may change them arbitrarily and by this the honest taxpayer may suffer.

□ **Merits and demerits of indirect taxes:**

▣ **Merits:**



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1. Indirect taxes are less inconvenient.
  2. Since these taxes are usually hidden in the prices of goods and services being transacted, the burden does not pinch much.
  3. With a proper administration, the chances of evading these taxes can be minimised.
  4. A proper structuring of indirect taxes can help the state to move the demand and supply forces in a way so as to yield desirable results – encouraging higher priority industries and discouraging lower priority ones.
  5. Indirect taxes if levied on the basis of ad valorem, can be made equitable i.e. higher rate of tax for the luxury articles and lower or nil for the necessities.
  6. Indirect taxes are quite flexible and can be made very selective.
- ☒ Demerits:
1. These taxes generally do not look into the ability to pay and are therefore unjust to the poor.
  2. They do not create consciousness among the taxpayers because they are unaware of the fact that they are paying these taxes.
  3. These taxes feed inflationary forces through higher prices, higher costs and wages.
  4. These taxes are uneconomical because the Government has to incur huge expenditure on the collection of these taxes.
  5. In most of the cases, the burden of these taxes gets shifted forward, and it is the ultimate consumer who gets over burdened by these taxes.

## SECTION – C

Q. 6 (a) ☐ **THE MEANS OF TRANSPORT AND COMMUNICATION:**

The means of transport and communication have an important bearing on the economic growth of a country. If a country is well connected with rail road, sea ports and has a developed means of communication including information technology, it than helps in improving the productive capacity of the various sectors of the economy. An efficient transport and communication network contributes to improving the quantity and quality of goods due to competition and reduction in production costs.

Q. 6 (b) ☐ **FARM MECHANIZATION:**

- ☐ Mechanization of farms means the use of machines for conducting agricultural operations, replacing the traditional methods which involve human and animal labour. Farm mechanization is one of the packages of green revolution technology. Farm mechanization implies the use of mechanical technology in the varied farming operations like sowing, harvesting, thrashing, levelling, watering, spraying, weeding etc., etc. The farm mechanical technology includes:

1. **Chemical Technology** – Plant protection measures.
2. **Hydrological Technology** – Tubewells.

3. **Mechanical Technology** – Tractors, thrashers, bulldozers etc.□ **The Farm Mechanization Debate:**

- There is no doubt about it that farm mechanization along with the use of package of modern inputs increase agricultural productivity. It reduces pre and post harvest losses. It leads to increased income of the farmers which leads to increased savings, which leads to greater investment in agricultural machinery and eventually leads to higher standard of living of the farmers and so the country.
- The Government of Pakistan is guiding and encouraging farm mechanization in the country. Spray machines are applied to spray the standing crops. The manual harvesting of wheat and rice is now virtually dispensed with. Tractors, bulldozers and attached implements are increasingly brought into the scene. The ZTBL and commercial banks are providing credit to the farmers to purchase tractors. In order to increase mechanization, the Government of Pakistan has given a number of incentives to the farmers such as reduction in prices of tractors, withdrawal of sales tax on bulldozers, and combined harvester etc. The sale of tractors and other improved agricultural implements are on the increase in the country.

Q. 7 (a) □ **COTTAGE INDUSTRY:**

- Cottage and small scale industry forms an important part of the manufacturing sector. It has a great significance for a developing country like Pakistan.
- The scale of industry may be defined on the basis of employment or fixed assets. By cottage industry is meant the industry which is generally carried on in the home of artisan. He is usually assisted in his work by the members of his family. The job may be whole time or part time. No power is used in the cottage industry and the implements used are very simple. Fore example wood work, hand knotted carpets, toy making etc are the examples of cottage industry.
- **Problems of small scale industry.** The difficulties, obstacles, problems faced by small scale industry in Pakistan are as under:
  1. Financial constraints.
  2. Production cost is high.
  3. Use of outdated machinery.
  4. Lack of standardization.
  5. Shortage of trained and technical persons.
  6. Lack of co-ordination.
  7. Lack of marketing facilities.
  8. Inadequate and irregular supply of electricity.
  9. Short supply of raw material
  10. Provision of technical training.

**Q. 7 (b) □ MAIN EXPORTS OF PAKISTAN:**

- i) Textile Manufactures**
- ii) Food group**
- iii) Leather and leather products**
- iv) Sports goods**

**THE END**

SUGGESTED ANSWERS