Compare contrast perfect competttion

Literature, Russian Literature

Compare & Contrast Perfect competition Monopoly & Imperfect competition MMM-Batch 1 Semester: 2 Submitted by: Ratna Mehta Roll no: 57 Compare & Contrast Perfect competition Monopoly & Imperfect competition Markets: When most people think of a market, they think of a physical place which is equipped with a lot of shops and shelves stocked with a wide variety of goods. In economics, however, a market need not be a physical location. Where you have buyers and sellers of a particular product or service, you have a market. A market is any place where the sellers of a particular good or service can meet with the buyers of that goods and service where there is a potential for a transaction to take place. The buyers must have something they can offer in exchange for there to be a potential transaction. Market structure: Market structure refers to the factors, such as size of the market, technological, cost and demand conditions and the barriers to entry and exit, that would affect the effectiveness of managerial decisions. We can also consider the market structure as describing the state of the market with respect to competition. Market structures Monopoly Perfect competition Imperfect competition Monopolistic competition c Oligopoly Overview: Perfect competition is a theoretical market structure. It is primarily used as a benchmark against which other market structures are compared. The industry that best reflects perfect competition in real life is the agricultural industry. For example , As there are millions of farmers who would produce rice & there are millions of consumers who would consume rice. In this case not a single buyer or seller could influence the price of rice. Perfect competition is a competitive market. Economist uses the term" competitive market “ to describe a market in which there are so many buyers & so many

sellers that each has a negligible impact on the market price. Characteristics of perfectly competitive market- 1. Large number of buyers & sellers: In perfect competition, there must be large number of buyers and sellers. Each buyer buys a small quantity of the total amount. Each seller is so large that no single buyer or seller can influence the price and affect the market. According to Scitovsky buyers and sellers are price takers in the purely competitive market. Each seller (or firm) sells its products at the price determined by the market. Similarly, each buyer buys the commodity at the price determined by the market. 2. Homogeneous product: Under perfect competition, the product offered for sale by all sellers must be identical in every respect. The goods offered for sale are perfect substitutes of one another. Buyers have no special preference for the product of a particular seller. No seller can raise the price above the prevailing price or lower the price below the prevailing price. 3. Free entry and exit: Under perfect competition, there will be no restriction on the entry and exit of both buyers and sellers. If the existing sellers start making abnormal profits, new sellers should be able to enter the market freely. This will bring down the abnormal profits to the normal level. Similarly, when losses will occur existing sellers may leave the market. However, such free entry or free exit is possible only in the long run, but not in the short-run. 4. Perfect knowledge: Perfect competition implies perfect knowledge on the part of buyers and sellers regarding the market conditions. As results, no buyer will be prepared to pay a price higher than the prevailing price. Sellers will not charge a price higher or lower than the prevailing price. In this market, advertisement has no scope. 5. Perfect mobility of factors of production: The second perfection

mobility of factors of production from one use to another use. This feature ensures that all sellers or firms get equal advantages so far as services of factors of production are concerned. This is essential to enable the firms and industry to achieve equilibrium 6. Absence of transport cost: Under perfect competition transport, cost does not exist. Since commodities have, the same price it logically follows that there will be no transport cost. In the event of the presence of cost of transport, there will be no single price in the market. Transport cost occurs when there is no perfect knowledge of the market conditions on the part of buyers and sellers. 7. No attachment: There is no attachment between the buyers and sellers under perfect competition. Since products of all sellers are identical and their prices are the same a buyer is free to buy the commodity from any seller he likes. He has no special inclination for the product of any seller as in case of monopolistic competition or oligopoly. Theoretically, perfect competition is irrelevant. In reality, it does not exist. So it is a myth Profit maximization for a competitive firm: The goal of any competitive firm is to make profit. Three general rules for profit maximization under perfect competition are stated as follows: -If the marginal revenue is greater then marginal cost the firm should increase the output -If marginal cost is greater then greater then marginal cost the firm should decrease output -At profit maximizing level of output, marginal revenue & marginal cost are exactly same Example: Profit maximization for a perfectly competitive market QUANTITY | PRICE PER UNIT | TOTAL REVNUE(TR)= p*q | TOTAL COST (TC) | PROFIT | MARGINAL REVENUE (MR)= âˆ†TR | MARGINAL COST (MC)= âˆ†TC | ECONOMIC PROFIT= | (q) | (p) | | | TR-TC | | | MR-MC | 0 | 0 | 0 | 3 | -3 | | | | 1 | 6 | 6 | 5 | 1 | 6 | 2 | 4 | 2 | 6 | 12 |

8 | 4 | 6 | 3 | 3 | 3 | 6 | 18 | 12 | 6 | 6 | 4 | 2 | 4 | 6 | 24 | 17 | 7 | 6 | 5 | 1 | 5 | 6 | 30 | 23 | 7 | 6 | 6 | 0 | 6 | 6 | 36 | 30 | 6 | 6 | 7 | -1 | 7 | 6 | 42 | 38 | 4 | 6 | 8 | -2 | 8 | 6 | 48 | 47 | 1 | 6 | 9 | -3 | The same can be illustrated in follows: economic profit in the short run. Case study 1: Describing the economic profit in short run PRICE OF BUYING PROPERTY WITHIN 1 LOCATION OF MUMBAI IS 2lacs | | | | | | | | | | | | QUANTITY (q) | PRICE PER UNIT (p) | TOTAL REVENUE (TR) | TOTAL COST (TC) | PROFIT | MR | MC | ECONOMIC PROFIT | 1 | 200000 | 2, 00, 000 | 180000 | 20000 | | | | 2 | 200000 | 4, 00, 000 | 340000 | 60000 | 2, 00, 000 | 1, 60, 000 | 40000 | 3 | 200000 | 6, 00, 000 | 480000 | 120000 | 2, 00, 000 | 1, 40, 000 | 60000 | 4 | 200000 | 8, 00, 000 | 600000 | 200000 | 2, 00, 000 | 120000 | 80000 | 5 | 200000 | 10, 00, 000 | 900000 | 100000 | 2, 00, 000 | 300000 | -100000 | 6 | 200000 | 12, 00, 000 | 1080000 | 120000 | 2, 00, 000 | 180000 | 20000 | 7 | 200000 | 14, 00, 000 | 1280000 | 120000 | 2, 00, 000 | 200000 | 0 | 8 | 200000 | 16, 00, 000 | 1500000 | 100000 | 2, 00, 000 | 220000 | -20000 | 9 | 200000 | 18, 00, 000 | 1740000 | 60000 | 2, 00, 000 | 240000 | -40000 | 10 | 200000 | 20, 00, 000 | 2000000 | 0 | 2, 00, 000 | 260000 | -60000 | Explanation: The sale of 1st house adds (MR) INR 200, 000 to our total revenue and (MC) INR 160, 000 to our total cost. Since it adds INR 40, 000 to our profits, it would seem desirable to produce this house. The sale of the 7th house This house adds (MR) INR 200, 000 to our total revenue and (MC) INR 200, 000 to our total cost. It adds nothing to our total profit but also subtracts nothing from it. The sale of 8th House adds another (MR) INR 2, 00, 000 to our total revenue but adds (MC) INR 2, 20, 000 to our total cost. Therefore it reduces the profit by 20, 000. We should NOT produce this house. At this point, we can stop the

analysis. We conclude that we will maximize our total profits if we produce 7 houses. We can summarize the argument. If the marginal revenue is greater than the marginal cost, we can increase total profits by producing more. If the marginal revenue is less than the marginal cost, we can increase our total profits by producing less. We maximize our total profits by producing that quantity at which the marginal revenue equals the marginal cost. Case 2: Describing the economic loss in short run PRICE OF BUYING PROPERTY WITHING 1 LOCATION OF MUMBAI IS 1, 60, 000 | | | | | | | | | | | | | | QUANTITY(q) | PRICE PER UNIT(p) | VARIABLE COST | TOTAL REVENUE (TR) | TOTAL COST (TC) | PROFIT | MR | MC | âˆ† MC | 1 | 1, 60, 000 | 1, 60, 000 | 1, 60, 000 | 180000 | -20, 000 | | | | 2 | 1, 60, 000 | 3, 00, 000 | 3, 20, 000 | 340000 | -20, 000 | 1, 60, 000 | 1, 60, 000 | 0 | 3 | 1, 60, 000 | 4, 20, 000 | 4, 80, 000 | 480000 | 0 | 1, 60, 000 | 1, 40, 000 | 20, 000 | 4 | 1, 60, 000 | 5, 60, 000 | 6, 40, 000 | 600000 | 40, 000 | 1, 60, 000 | 120000 | 40, 000 | 5 | 1, 60, 000 | 7, 20, 000 | 8, 00, 000 | 900000 | -1, 00, 000 | 1, 60, 000 | 300000 | -1, 40, 000 | 6 | 1, 60, 000 | 9, 00, 000 | 9, 60, 000 | 1080000 | -1, 20, 000 | 1, 60, 000 | 180000 | -20, 000 | 7 | 1, 60, 000 | 11, 00, 000 | 11, 20, 000 | 1280000 | -1, 60, 000 | 1, 60, 000 | 200000 | -40, 000 | 8 | 1, 60, 000 | 13, 20, 000 | 12, 80, 000 | 1500000 | -2, 20, 000 | 1, 60, 000 | 220000 | -60, 000 | 9 | 1, 60, 000 | 15, 60, 000 | 14, 40, 000 | 1740000 | -3, 00, 000 | 1, 60, 000 | 240000 | -80, 000 | 10 | 1, 60, 000 | 18, 20, 000 | 16, 00, 000 | 2000000 | -4, 00, 000 | 1, 60, 000 | 260000 | -1, 00, 000 | Illustration: With reference to the above matrix, it is assumed that the price of home at a particular location in Mumbai has fallen down to INR 1, 60, 000 (As there is a fall in demand), the total cost remaining constant. You can clearly observe that

selling the 5th house would make company suffer an loss of INR 1, 00, 000. The main argument is does the company should stop its production & selling beyond the 5 units & the answer is “ NO". The justification behind the same is as follows: 1. Remember that we are still in the short-run- This means that at least one of the costs is fixed and must be paid even if nothing is produced. If you choose to shut down(produce nothing) at 5 units of production , the company still bears the fixed cost of INR 1, 80, 000 The answer is -INR180, 000. The reason is that the fixed cost. The company is better off losing INR100, 000 than losing INR80, 000. 2. Shut down point: If the company produces 5 houses, the total variable cost is INR7, 20, 000 against which it earns a revenue of about 8, 00, 000. so the company must continue to produce 5 houses until & unless he can recover the variable cost out of the same.. Conclusion: The firm shuts down only if total revenue is less than variable cost. To maximize economic profits, produce the quantity for which the marginal revenue equals the marginal cost. If there is an economic profit, there is nothing more for you to do. But if there is an economic loss, in the short-run, produce that quantity if the total revenue is greater than or equal to the total variable cost. Shut down if the total revenue is less than the total variable cost. Alternatively, we can describe this on a per house basis. If there is an economic loss, in the short-run, produce that quantity if the price is greater than or equal to the average variable cost. Shut down if the price is less than the average variable cost. Perfect competition in the long run: With reference to case study no. 1 of maximizing the economic profit in the short run ; The sale of the 7th house adds (MR) INR 200, 000 to our total revenue and (MC) INR 200, 000 to our

total cost. It adds nothing to our total profit but also subtracts nothing from it. Our representative construction company produced 7 homes and earned an economic profit of INR120, 000. This means that the owner earned INR 120, 000 more income than could be earned in the next best alternative. In the long-run, this should attract new sellers into the industry. These new sellers will realize that they can earn more in the construction industry than they are presently earning doing whatever it is that they are doing. In perfect competition, there are no barriers to their entry. Assuming new suppliers have entered the industry, the supply of houses (construction companies would definitely increase resulting into fall in the price of product assuming the total cost of constructing an house remains constant. The price /unite(home) was INR 2, 00, 000, Lets assume that with the increase in supply, price has fallen down to INR 1, 80, 000(Per/unit) The following matrix illustrates the economic profit in the long run for the company giving a clear picture how much of houses would yield them an economic profit= 0 (Where MR= MC) or long —run equilibrium situation QUANTITY(q) | PRICE PER UNIT(p) | TOTAL REVENUE (TR) | TOTAL COST (TC) | PROFIT | MR | MC | âˆ† MC | 1 | 1, 80, 000 | 1, 80, 000 | 180000 | 0 | 1, 80, 000 | | | 2 | 1, 80, 000 | 3, 60, 000 | 340000 | 20, 000 | 1, 80, 000 | 1, 60, 000 | 20, 000 | 3 | 1, 80, 000 | 5, 40, 000 | 480000 | 60, 000 | 1, 80, 000 | 1, 40, 000 | 40, 000 | 4 | 1, 80, 000 | 7, 20, 000 | 600000 | 1, 20, 000 | 1, 80, 000 | 1, 20, 000 | 6, 00, 000 | 5 | 1, 80, 000 | 9, 00, 000 | 900000 | 0 | 1, 80, 000 | 3, 00, 000 | 1, 20, 000 | 6 | 1, 80, 000 | 10, 80, 000 | 1080000 | 0 | 1, 80, 000 | 1, 80, 000 | 0 | 7 | 1, 80, 000 | 12, 60, 000 | 1280000 | -20, 000 | 1, 80, 000 | 2, 00, 000 | -20, 000 | 8 | 1, 80, 000 | 14, 40, 000 | 1500000 | -1, 10, 000 | 1, 80, 000 | 2, 20, 000 | -40,

000 | 9 | 1, 80, 000 | 16, 20, 000 | 1740000 | -1, 20, 000 | 1, 80, 000 | 2, 40, 000 | -60, 000 | 10 | 1, 80, 000 | 18, 00, 000 | 2000000 | -2, 00, 000 | 1, 80, 000 | 2, 60, 000 | -80, 000 | Explanation: With reference to the above matrix; at the price of INR 180, 000, the representative company now produces 6 houses (where the price = marginal revenue = marginal cost). An economic profit of zero means that sellers are earning no more than can be earned in the next best alternative. So at an economic profit of zero, there is no more reason for a new seller to enter. Why if the price is INR 180, 000 per house, is the economic profit equals zero. The(MR) price is INR 180, 000. The Average Total Cost(MC) of producing 6 houses is INR 180, 000. When we take subtract the bothe the values we get economic profit as"0".. If the economic profit is zero, the number of sellers will not increase nor decrease. When economic profits equal zero and the number of sellers will not change, the situation is called long-run equilibrium. Economic losses in the long run: As per the observation in case study no. 2, the economic loss of INR 1, 00, 000 when the company is producing 5 houses & still continuing with further production doesn’t seem to wrk in the long run. Eventually in the long run, companies realize that times are not going to change any better. The demand for the houses could stay low & some companies would never afford more economic losses & finally they would exit out of the construction industry permanently. Firms do leave the industry basically because of 3 reasons: 1. Changes in the demand of the product: If we begin in long-run equilibrium, the price of houses is $180, 000 and each company is producing 6 houses. Let us assume that the other companies are leaving in the industry & you still being a part of the industry is facing the reduction in the

supply(due to which the supply curve would shift to the left). In this case again; as the supply is low let’s assume that price will now rise to INR 200, 000 (Case study: 1 we used above). For the individual company, the price and the marginal revenue will now equal INR200, 000. To maximize profits, the company will produce where the new marginal revenue equals the marginal cost --- 7 houses. 2. Change in cost of production: For a second disturbance, let us consider an increase in a fixed cost. The fixed costs are the costs of the capital and the opportunity costs of the owners. Let us assume that, for some reason, these rise by INR 120, 000 (from INR 180, 000 to $ INR 300, 000). The long-run results of an increase in a fixed cost are as follows: The quantity produced in the market is smaller (because there are fewer sellers) and the market price is higher. In the long-run, all of the burden of the increase in the fixed costs is borne by the buyers in the form of higher prices. Economic profits for owners remaining have risen to zero. (The other burden of the increase in the fixed costs is, of course, borne by those companies that had to go out of business.) 3. Possible changes in the variable cost: Monopoly: " Mono" means one. Therefore, a pure monopoly describes the industry that consists of a single firm producing a single product. Characteristics of Monopoly Market: 1. There is a single firm in the market. The monopoly firm produces the entire output of the industry. The firm & the industry are one & the same. 2. A monopolist produces a unique product . In other words there are no close substitutes of the firm’s output. 3. The demand for the product needs to be relatively inelastic (i. e., few substitutes). If this were not the case, then if the monopoly raised its price, buyers would simply shift to other substitute products. This would limit its

ability to raise the price considerably. Causes of monopoly: 1. Economies of scale: Generally in the monopolistic market, the economy of scale is very high (investment). Due to which not to many people would be able to enter & sustain the market. Eg: Indian Railways, Highways developed by NHAI (National Highways Authorities of India) The above are the examples of Natural monopoly because of the Nature of their business. 2. Monopolies Created by Policy: Patents & copy wrights are examples of policies induced monopolies. One of the reason, Patents & copy-rights are maintained as an integral part of judicial system is to motivate the researchers for the contribution done by an individual in the particular field. Ones patent & copy-wrights are imparted to any product or service it automatically creates monopolistic market for the product. 3. Monopoly due to entry barriers: Monopolies are protected from the competition by barriers to the entry. By restricting the entry into an industry, these barriers create some degree of imperfect competition. Barriers to entry can be natural or artificial. Natural monopolies are created as result of high economies of scale & because of the nature of their business. Artficial monopolies are generally created by government. For e. g.: Patents & copy-wrights. In some industries, vertical integration can provide a barrier to entry. " Vertical integration" means that the same company controls many phases of the production process. Companies that refine oil into gasoline also own the oil wells and the tankers General Motors also is vertically integrated. General Motors owns the companies that produced the automobile bodies, the batteries and sparkplugs, and the glass. This makes it much more expensive for a new company to try to compete. And Microsoft produces both computeroperating

systems and software programs. Is it any wonder that the operating system Windows was made purposely incompatible with Lotus1-2-3, once the most popular spreadsheet in the world. (Microsoft produces a competing product --- Excel) . The business decision of a pure monopolist: Let us assume that the construction industry becomes a pure monopoly. Lets assume there were 1000 companies in the construction industry which has merged upthe companies are now merged into one company. Like any producer whose goal is to maximize profits, a monopolist will produce that quantity at which the marginal revenue equals the marginal cost. The key differences: Demand Curves for the perfectly competitive market: 1. Because the competitive firms are price takers they in effect face horizontal demand curves PRICE: Demand Quantity of output Because a monopoly, firm is the sole producer, it faces the downward sloping market demand curve. Demand curve under monopolistic market: 2. PRICE: Demand Curve Quantity of Output The key difference between a competitive firm & a monopoly is the monopolies ability to influennec the price of its output. The monopolistic market's demand curve slopes downward for almost all usual reasons. That if it increases the price of the output the demand would fall & if it reduces the price the demand would rise(in short it follows the regular Law of demand) PROFIT MAXIMIZATION UNDER MONOPOLY: The following matrix enables us to understand the profit maximization under a monopoly: QUANTITY | PRICE PER UNIT | ATC | TOTAL REVENUE(TR) | AVERAGE REVENUE(AR) | MARGINAL REVENUE(MR) | MARGINALCOST(MC) | MR-MC | ECONOMICPROFIT | (in ' 000) | (in '000) | (in ' 000) | | | | | | 1 | 320 | 340 | 320 | 320 | | | | -20 | 2 | 300 | 240 | 600 | 300 | 280 | 160 | 120 | 60 | 3 | 280 | 200 | 840 | 280 | 240 | 140 |

100 | 80 | 4 | 260 | 185 | 1040 | 260 | 200 | 120 | 80 | 75 | 5 | 240 | 180 | 1200 | 240 | 160 | 140 | 20 | 60 | 6 | 220 | 180 | 1320 | 220 | 120 | 160 | -40 | 40 | 7 | 200 | 182. 59 | 1400 | 200 | 80 | 180 | -100 | 12. 59 | 8 | 180 | 187. 5 | 1440 | 180 | 40 | 220 | -180 | 13. 5 | 9 | 160 | 193. 33 | 1440 | 160 | 0 | 240 | -240 | -33 | 10 | 140 | 200 | 1400 | 140 | -40 | 260 | -300 | -60 | Assumptions for a clear understanding of a matrix: 1. Avrage revenue is equal to the price of the good. 2. the price per unit would always fall down under the monopolistic market as it follows the law of demand. 3. the profit maximization under monopoly takes place only when MR= MC 4. The formula for economic profit is: (PRICE-ATC)* QUANTITY 5. For a monopoly firm, P> MR= MC To explain the reason why P> MR= MC(Lets assume if the firm wants to sell 2ooo units of houses @ INR 3, 00, 000(per unit) which can help the firam earn INR60, 00, 00, 000..(total revenue). In order to achieve this the firm needs to make sure that 1st 1000 units of houses are sold at 3, 20, 0000 each. The above matrix clearly explains that marginal revenue (difference in the total revenue has fallen down to 2, 40, 000) as against to offer a price of 3, 00, 000. Finally a million dollar question; how many houses needs to be sold to earn an economic profit 1. As per the economic profit formula: the economic profits are mentioned in the matrix above with the highest economic profit @ selling 3000 houses earning a economic profit of 80, 000 but one of the most important parameters to keep in mind is that the economic profit is also a point where marginal revenue= marginal cost , which is the least at 5000 units . so the profit could be maximized at 5000 units. In the short run, monopoly firms make economic profits or economic losses, or may even close down.. the primary difference between monopoly

& perfect competition lies in the long run, unlike the firms in perfective competitive market, monopolies make economic profits in the long run as the firms is protected from potential competition b y barriers to entry.. this economic profit is called as monopoly profit. Oligopoly: The case of perfect competition & monopoly illustrate some important ideas about how markets work. However there are markets in the economy, like that of airline manufacturing or DeBeers diamonds of South Africa. The listed above companies do face the competition in the market but the competition is not so strong that it makes it perfectly competitive market. They also have a fair amount of market power in their respective industry but they are not as strong as the monopoly markets who has the highest market power in the market structure. This kind of markets neither form a part of perfect competition market or Monopoly. These kinds of firms behave in imperfectly competitive markets. The market structure of imperfect competitive markets is as follows: Imperfect competition Monopolistic competition Oligopoly First type of imperfectly competitive market is: Oligopoly Oligopoly is a market with few sellers offering a product of similar or identical products. These markets are dominated by three of four large firms. In oligopoly, the largest firm in an industry produces the maximum output. Oligopoly exists because of barriers to entry (competition) & also very few people would like to take a chance to invest & at the same time also undertake risk to compete against the main brands. To conclude on “ How few is “ few"? The answer is “ few enough that each seller CAN have an effect on the price of the product". Many of our least competitive industries are oligopolies. Determination of Oligopoly against Monopolistic competition depends upon the measurement

with a help of very popular statistical tool known as: Concentration ratio which is the percentage of total output in the market supplied 4 to 5 largest firms. But commonly, industries in which the concentration ratio is under 50% are considered effectively competitive. Industries in which the concentration ratio is at least 50% but less than 70% are considered weak oligopolies (the other companies still sold at least 30% of the total.). And industries in which the concentration ratio is at least 70% are considered strong oligopolies. Of course, the higher is the concentration ratio, the stronger is the oligopoly. “ Stronger" means that the companies in that industry have a greater ability to influence the price There are some further terms that would make your understanding of oligopoly better: Collusion: An oligopoly with only two members is called as duopoly. When two firms . when two firms agree on quantity of the total production & the price to charge . such an agreement is called as collusion. Cartel: A cartel is a group of sellers who come together to try to act as though they are a monopoly. When more than 2 firms come in unison agreeing upon the quantity of sale & price to be charged for that is called as “ cartel" Case study of United States forming price leadership: In the United States, cartels are illegal. Yet there are several examples there have been attempts to form a cartel without actually breaking the law. The main practice involved here is called “ price leadership". In price leadership, one company sets the price and the others follow. But the companies do not actually meet. This was practiced in steel, automobiles, banking and a few other industries, but has faded out in recent years. The practice of price leadership seems to have originated with the creation of United States Steel. Under the leadership of Judge Gary, United

States Steel held the famous “ Gary dinners" in New York each year. All of United States Steel’s competitors would come to New York. After dinner, Judge Garry would announce the prices of steel products that all would charge in the coming year. Since United States Steel sold two-thirds of all of the steel sold in the United States at the times, it was understood that any competitor charging a lower price would be driven out of business. This behaviour was a cartel and was clearly illegal. Beginning in the 1920s, United States Steel would simply skip the dinners. IT would announce it prices at press conference. All of its competitors understood they must charge the same prices or risk being driven out of business. Because it had not met with its competitors, United States Steel had not done anything illegal. It became the “ price leader", the smaller companies would charge the same price that it had announced. Understanding of equilibrium under Oligopoly: QUANTITY | PRICE | TOTAL REVENUE | (quantity of litres of paint) | (usual downward slopping curve) | (total profit) | 0 | 120 | 0 | 10 | 110 | 1100 | 20 | 100 | 2000 | 30 | 90 | 2700 | 40 | 80 | 3200 | 50 | 70 | 3500 | 60 | 60 | 3600 | 70 | 50 | 3500 | 80 | 40 | 3200 | 90 | 30 | 2700 | 100 | 20 | 2000 | | | | | | CAPACITY OUTPUT UNDER CARTEL (CASE 1) MANUFACTURING UNIT | OUTPUT | PRICE PER UNIT | TOTAL REVENUE | 1 | 35 | 60 | 2100 | 2 | 35 | 60 | 2100 | TOTAL | 70 | 60 | 4200 | CAPACITY OUTPUT UNDER MONOPOLY (CASE 2) MANUFACTURING UNIT | OUTPUT | PRICE PER UNIT | TOTAL REVENUE | 1 | 40 | 60 | 2400 | 2 | 30 | 60 | 1800 | TOTAL | 70 | 60 | 4200 | (SELF INTEREST) Explanation: In case of binding agreement does not take place that means under monopoly, Manufacturing unit 1 produces 40 litres*60/litre= 2400 Manufacturing unit 2 produces 30 litres*60/litre= 1800 There by producing a

total output of 70*60= 4200 If total output is 70 litre*60/litre= 4200 and if manufacturing unit 1 is supposed to sell 40 litres*60/litre= 2400 (this illustrates that individually manufacturing unit 1 is able to earn more profits). As when selling it on a industry level : 70 litre*60/litre= 4200 but individually they would be able to make a profit of 2400 if they decide to produce 40 litres. Nash equilibrium is a situation in which economic participants interacting with one another each choose their best strategy given the strategies that other has chosen. In the above case, if manufacturing unit 1 is producing 35 litre and that's why the best strategy for manufacturing unit 2 is to produce 35 litres and vice versa. Once they reach the Nash equilibrium, neither both of them has an incentive to make a different decision. This clearly illustrates the tension between co-operation and self-interest. Oligopoly would be better off cooperating and reaching the monopoly target. Yet as they pursue their own self-interest they anyways are not ending up with the meeting the monopoly outcomes and maximising the join profits. Oligopolies are aware that the increase in the amount that they produce reduces the price of their product therefore they stop short of following competitive firm's rule of producing up to the point where price equals the marginal cost. Monopolistic Competition: Monopolistic competition is the way that most actual competition occurs. Monopolistic competition was defined as an industry with one seller (i. e. a monopoly) of a very narrowly defined product. The demand for this product is very elastic because there are many close substitutes for it. The close substitutes provide the competition. Examples given included Coca Cola, McDonalds, and personal computers. In essence, Monopolistic competition has four main

characteristics: 1. The market for monopolistic competition is very competitive (as the demand is elastic). the buyer in the market has thousands of products to choose from which is very unlikely in Monopoly. 2. Product differentiation: Each firm would at least produce a product which is slightly different than the other firms. Rather being price taker,(horizontal demand curve) each firm is a price maker (downward slopping demand curve-the same as monopoly). , the products of the various competitors are differentiated. Supermarkets sell dozens of brands of cereal, ice cream or frozen yogurt, soaps, toothpaste, and so forth. Companies spend billions of dollars in advertising, trying to differentiate their products from those of their competitors. There are several reasons that this product differentiation is so common. First, and most obvious, is the fact that the tastes of different people are different 3. Relatively easy entry and exit from the industry: Firms can enter & exit without any restrictions. That why firms in the market adjusts until economic profit is driven to O. 4. Good information of buyers & sellers. Main Assumptions of Monopolistic competition: The demand curve of firm facing monopolistic competition slops downwards as the product produced by each of the firm differs from each other & would reach profit maximization when marginal revenue = marginal cost. Profit maximization of Monopolistic competition in short run: In the above illustration it is clearly stated that the rectangle PCBA is the economic profit as Monopolist would produce the quantity where Marginal revenue= Marginal cost at quantity at q1. the firm also makes profit because the price at which customer is buying the product is less than the average total cost of the product. The long run equilibrium for the monopolistic firms: Although when firms start making

profits; new firms has an incentive to enter the market. This entry increases the no. of products that customer can choose from which makes the demand for an individual firm already existing in the market to fall. This makes the demand curve of to shift left side as illustrated in the below graph. As the demand falls; the firms starts experiencing the the decline in the profit. Long run equilibrium in the monopolistic Market Conversely, when firms are making losses, the markets have an incentive to exit. As the firms exit customers have fewer products to choose from. This would encourage the demand curve to shift right (in increase in demand as lesser products to choose from) and firms slowly starts experiencing the rising profit. this process of entry & exit continues till the markets are making zero economic profit. Once the market reaches the equilibrium , new firms have no incentive to enter & existing firms have no incentive to exit. A final Glance at the comparisons: PARAMETER | PERFECT COMPETITION | MONOPOLY | OLIGOPOLY | MONOPOLISTIC COMPETITION | No. of firms | Large no. of firms with similar product. | Single firm or few firms forming cartels. | Many firms but only few of them hold a major market share. | Large no. of firms with differentiated product or different area of operation. | Price v/s MC | Price= MC at long equilibrium | Price > MC, hence the firms make profit | Price> MC | Price> MC | Extent of collusion | No. of collusion price could be set by buyer or firm. Markets decide price and each firms takes it own share. | No. of collusion as a single firm. A few firm may come together to make cartelling and has co-operation is possible. | These companies squabble between co-operation and self-interest. Long term co-operation is not possible due to game theory (high rivalry). | No collusion companies try to differentiate the

product and compete with each other. They’ve different areas of operation. | Price v/s Long Run AVC | Price= AVC in Long Run. Hence firm can sustain in the market. | Price> AVC in Long Run due to entry barriers. | Price > AVC in Long Run, as few firms hold major market share. The firm keeps on differentiating products. | Price= AVC in Long Run due to more market price. | Efficiency | Market reaches allocative efficiency. More efficient use of resources. | In order to generate more profit, firm don not supply as required. Hence there is dead weight loss. Non efficient | If oligopolistic firm has non co-operation then efficiency is high and buyers are benefited. For co-operating oligopolies firms are benefited by market is non efficient. | They have different are of operation on product, market is non efficient. |