

(c) Draw Isoquants if the two factors of production (Labour and Capital) are:

- (i) Perfect substitutes of each other
 - (ii) Perfect complementary goods of each other
- Explain the two cases with special focus on Marginal Rate of Technical Substitution. [6]

Q5. Attempt any TWO questions out of the following:

(a) An amusement park charges different prices for regular admission and a lower price for senior citizens. What is this pricing scheme called? Critically analyse this pricing scheme. What conditions are necessary for the amusement park to practice this pricing strategy? [1+2+3]

(b) Governments around the world often enact laws that restrict the prices that businesses can legally charge their customers. One such example is that of the minimum support prices that are set by the government. What is the welfare effect due to the shortages created in the market as a result of price ceiling? Explain using diagram. [6]

(c) A perfectly competitive firm is incurring losses in the short run. The dilemma the manager is facing is to either shut down the plant or to continue to operate. What factors would affect the manager's decision in such a situation. Explain with the help of diagrams. [6]

END

EMBA-104 MANAGERIAL ECONOMICS

Time: 3:00 Hours

Max. Marks: 60

Note: Answer ALL questions. All questions carry equal Marks. Assume suitable missing data, if any.

Q1. Adapted from articles in newspapers, India Today, Livemint and Economic Times, answer the questions that follow:

Profits of Vodafone Idea and Bharti Airtel have been hit and some rivals have gone out of business since Reliance Industries' Jio Infocomm unleashed a fierce price war when it entered India's crowded telecoms market in 2016 with free calling and cut-price data.

Competition levels in the telecom sector are set to ease significantly next year and the industry blended average revenue per user (ARPU) likely to recover some lost ground with Reliance Jio slated to pursue a less aggressive pricing strategy in calendar 2019, global ratings agency, Fitch said.

Reliance Jio's disruptive pricing since its entry more than two years ago forced the older carriers to match rates to hold on to customers, galvanising consumption of voice and data services. Fringe players that couldn't withstand the brutal price wars exited and the industry consolidated down to three large private players—Vodafone Idea and Bharti Airtel among the older ones and Jio – making it an ideal market situation for pricing power to return over time.

Vodafone idea, Bharti Airtel and Reliance Jio accounts for over 90% of the revenue market share. Yet, the industry is suffering with losses of more than ₹40000crore. Recently, Reliance Jio Infocomm Ltd has raised basic monthly tariff plans to account for interconnect usage charges (IUC) that the telecom operator has to incur for calls made to rival networks.

Analysts said the price rise bodes well for Bharti Airtel and Vodafone Idea which have been complaining that current tariffs are unsustainable and price repair must happen in the sector.

The rival operators have still not increased their tariffs!

Considering the developments as mentioned in the above case, answer the following:

- (a) Which market structure is represented by Telecom sector in India? Name one most striking feature of this market structure highlighted in above case. [2]
- (b) Which behaviour of Airtel and Vodafone in retaliation to the price hike by Reliance Jio is highlighted in above case? Explain the impact of this behaviour using suitable market structure model. [4]
- (c) Assuming the three players decide to collude, how can it lead to joint profit maximization? Do you think the situation of collusion will sustain for long? Explain using diagrams. [6]

Q2 Attempt any TWO questions out of the following:

- (a) Due to the recessionary conditions in the economy and the consequent reduction in income of the consumers, the demand for generic foods increases and the demand for organic foods decreases. Show the impact on the consumer's purchase pattern for the two consoles using indifference curve analysis. Discuss the nature of the two goods. [6]
- (b) Briefly explain consumer's equilibrium in case of two commodities. Also, explain the Marginal Rate of Technical Substitution. [6]
- (c) Calculate cross price elasticity of demand between
 (i) Inkpen and ballpen
 (ii) Inkpen and ink

Good	Before		After	
	Price (Rs/Unit)	Quantity (unit/month)	Price (Rs/Unit)	Quantity (unit/month)
Inkpen (Y)	5	15	2	20
Ballpen (X)	1	10	1	8
Inkpen (Z)	4	10	5	9
Ink (X)	5	15	5	10

Comment on the nature of goods.

[6]

Q3. Attempt any TWO questions out of the following:

- (a) How do mutual funds help in reaping the benefit of economies of scale and economies of scope? [6]
- (b) Show total cost curves and average cost curves in two diagrams respectively and explain the relationship between cost curves. [6]
- (c) In 50 words differentiate between Economies of Scale (EOS) and Increasing Returns to Scale? Explain in detail the factors that result in EOS. [6]

Q4. Attempt any TWO questions out of the following:

- (a) Explain law of diminishing marginal returns with the help of a suitable example and diagram. Why a producer chooses second stage of production? [6]
- (b) Assuming Price of output (Q) as \$3 and Cost of Labour as \$400, how will the producer choose the optimal inputs (Labour, L and Capital, K) to maximize its profits. [6]

K*	L	ΔL	Q	MP_L	AP_L
2	0	--	0	--	--
2	1	1	76	76	76
2	2	1	248	172	124
2	3	1	492	244	164
2	4	1	784	292	196
2	5	1	1100	316	220
2	6	1	1416	316	236
2	7	1	1708	292	244
2	8	1	1952	244	244
2	9	1	2124	172	236
2	10	1	2200	76	220
2	11	1	2156	-44	196