

BACHELOR OF ARTS EXAMINATION, 2019

(2nd Year, 3rd Semester, Old)

ECONOMICS**MICROECONOMICS II**

Time : Two hours

Full Marks : 30

Answer any *five* questions.

1. The government of India has planned to sell foodgrains to the consumers living below the poverty line (the 'BPL consumers') at a special price below the market price. For this purpose they distribute food coupons among the BPL card holders such that on submission of the coupon at any retail shop the consumer carrying the coupon gets the special price of the foodgrains.

(a) Is this an example of price discrimination? If it is, specify the type of price discrimination. Justify your answer.

(b) What will be the effect of introduction of this scheme on the size of the foodgrain market (in terms of output) in the country under the following two situations:

- (i) The government subsidizes the retailers
- (ii) The government does not subsidize the retailers.

2+4 = 6

2. Consider an industry with a monopoly wholesaler and a monopoly retailer. The final demand for the product is $D(p) = 1 - p$. The wholesaler procures the product at per unit cost of $0 < c < 1$. Show that the wholesaler always has an incentive to buy out the retailer. Calculate the minimum amount of money the wholesaler should pay to buy out the retailing firm.

4+2 = 6

3. Consider three consumers valuation for two products X and Y.

	Good X	Good Y
Consumer 1	$V_x^1 = 4$	$V_y^1 = 0$
Consumer 2	$V_x^2 = 5$	$V_y^2 = 5$
Consumer 3	$V_x^3 = 0$	$V_y^3 = 4$

For a monopoly producing both the products with zero marginal cost, verify whether the following statements are true:

[Turn over

- a. "Pure tying is better than no-tying".
- b. "Mixed tying is better than pure tying".

3 + 3 = 6

4. Let duopolist I, producing a differentiated product, face an inverse demand function given by $p_1 = 100 - 2q_1 - q_2$ and have a cost function $c_1 = 2.5 q_1^2$. Assume it is common knowledge that duopolist II wishes to maintain a market share of $1/3$. Find the optimal price, output and profit for duopolist I. Find the output of duopolist II.

6

5. Consider an industry with the following structure: there are 50 firms that behave in a competitive manner and have identical cost functions given by $c(y) = \frac{y^2}{2}$. There is one monopolist that has zero marginal cost of production. The monopoly acts as a price leader. The demand curve for the product is given by $D(p) = 1000 - 50p$. Calculate the industry output and the price.

6

6. Consider the following simultaneous move game of complete information:

	L	R
T	5,5	3,6
B	6,3	4,4

Suppose, the game is repeated infinitely. Under what conditions cooperation between the players may sustain at each stage of the game?

6

7. Describe the long-run equilibrium under the monopolistically competitive market situation. Compare it with the outcomes of both the competitive market situation and the monopoly market situation.

3 + 3 = 6