

Uva Wellassa University

Faculty of Management

Bachelor of Business Management in Entrepreneurship and Management

SECOND YEAR SECOND SEMESTER EXAMINATION – DECEMBER 2016/JANUARY 2017

ENM 271 - 2 Managerial Economics



**Uva Wellassa
University**



(2).

- a). "The firm's profit-maximizing level of output occurs when the additional revenue from selling an extra unit just equals the extra cost of producing it"
Do you agree with this statement? Justify your answer with perfectly competitive market. Use graphs where necessary. (8 marks)
- b). Suppose that the Sri Lankan market demand and supply for rice are estimated as $Q_D = 28 - 4P$, and $Q_S = -12 + 6P$ after the prolonged drought season. Where price of rice (P) is in 100 Rupees and Quantities denotes in million kilos. Assuming that Sri Lankan rice market is perfectly competitive;
- i). Find the market price, equilibrium quantity, consumer surplus and producer surplus (4 marks)
- ii). Assume that the government decided to import rice at world market price of Rs. 3.00 per kilo. Now calculate the market Q_D , Q_S and amount of import, new consumer surplus and producer surplus (4 marks)
- iii). Again assume that due to the pressure from Sri Lankan rice farmers, government decided to provide Rs.1.00 subsidy per kilo for rice farmers. Estimate the new Q_D , Q_S and consumer surplus and producer surplus (4 marks)
- iv). Discuss the differences in social welfare of above three situations (part i., ii., and iii). (5 marks)

(Total 25 marks)

(3).

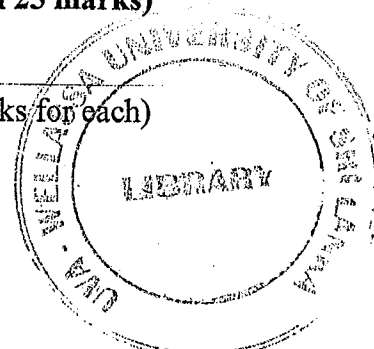
- a). Differentiate Oligopoly from Perfect Competition and Monopoly (6 marks)
- b). "Other things being equal, increases in concentration can be expected to be associated with increased prices and profits". Critically analyze this statement with Oligopoly market structure (6 marks)
- c). Industry demand Q_D of an oligopoly market is given by $Q_D = 48 - 4P$. Market leading firm is given as firm A and there are 4 other production firms (F) in this industry. Marginal Cost of firm A is Rs. 6 and the Marginal Cost of other 4 firms is given as $MC = 6 + Q_F$.
- i). What is the total supply curve of the 4 followers? (3 marks)
- ii). Find the demand curve for the dominant firm (A) (3 marks)
- iii). Find the dominant firm's (A's) price and output (4 marks)
- iv). What is the amount supply by each other firms? (3 marks)

(Total 25 marks)

- (4).
- a). Define the "Players", "Actions" and "Payoff" of a game (3 marks)
 - b). Discuss a "Prisoners Dilemma Type Game" by developing a game of this type on your own (7 marks)
 - c). Differentiate a "Nash Equilibrium" from a "Dominant Strategy" (6 marks)
 - d). Assume that two firms can either reduce their prices or keep them at the present level. If firm A cuts prices, it will earn Rs. 10 million if firm B also cuts prices and Rs. 20 million if firm B does not cut prices. If firm A makes no price change it will earn Rs. 0 million if firm B reduces prices and Rs. 5 million if firm B makes no price change. The outcome for the firm B is also same as the firm A
 - i) Develop the payoff matrix for the above game (3 marks)
 - ii) Does this game have a Nash equilibrium (2 marks)
 - iii) Does either firm have a dominant strategy?, explain (4 marks)
- (Total 25 marks)**

- (5).
- a). Briefly discuss the risk preference behavior of individuals using graphs (6 marks)
 - b). Assume that there are two firms (firm A and B) in a pharmaceutical R&D industry. Firm A is considering spending Rs. 200 million to develop a new kind of a drug with 40 per cent chance of successfully producing it. If so firm A will get the patent right of the drug worth of Rs. 550 million. However, firm B also has announced that it is also planning to spend Rs 150 million to develop the same drug with 30 per cent chance of successfully producing it. If so firm B also will get the patent right which is worth of Rs. 550 million (if firm A fails). If both firms A and B are investing and are successful, the value of patent (Rs. 550 million) will be divided equally between the two firms (each worth of Rs 275 million).
 - i). Firm A is a risk neutral firm, if so should it undertake this investment? Justify your answer (5 marks)
 - ii). If firm A can delay its investment and wait till firm B do it, should firm A wait and make the second move? Justify your answer (5 marks)
 - iii). If both firm A and B can form a joint venture to invest in this R&D, what is the expected wealth for both firms? (5 marks)
 - iv). If you are the manager of firm A, which decision you make in investing in this R&D activity. Explain the reasons for your decision. (4 marks)
- (Total 25 marks)**

- (6).
- Write short notes on any 5 (five) of the followings. (5 marks for each)
- a). Adverse Selection due to Moral Hazards
 - b). Optimum Output of a Perfectly Competitive Firm
 - c). Characteristics of Monopoly



- d). Price Competition
- e). Non-Zero Sum Games
- f). Risk Preference
- g). Adverse Selection

(Total 25 marks)