

International Islamic University Chittagong

Department of Economics & Banking

Midterm Examination; Autumn-2022

Program: BSS (Honors) in Economics & Banking

Course Code: ECON-4703

Course Title: Applied Microeconomics

Time: 1 hour30 minutes

Full Marks: 30

[Answer the following questions. Figures in the right margin indicate full marks.]

QN	Description of Questions	Marks	CLOs & PLOs	Cognitive learning
1(a).	Consider a situation where a firm under monopolistic competition is earning supernormal profit initially. Being not satisfied by the amount of profit he wants to reduce price mistakenly assuming that other firms will not do the same. Unfortunately all the firms take the same initiative to earn extra profit and hence they engage in a price competition. Now draw a graph demonstrating the situation and identify the final equilibrium.	5		Analyze
1(b).	Assume the following demand and cost functions of a monopolistically competitive firm: $P = 100 - 0.2Q$ $C = 30Q - 5Q^2 + Q^3$ <ol style="list-style-type: none"> i. Determine equilibrium price and output. ii. How is monopoly solution different from that of monopolistic competition? iii. Find out competitive solution and compare the results with monopoly and monopolistically competitive solutions. 	5	CLO1,PLO1,4	Evaluate
2(a).	Given, $P = 5000 - 2Q$ $LAC = 6000 - 4Q + 0.001Q^2$ <ol style="list-style-type: none"> i. Define excess capacity and estimate the conventional measure of excess capacity from the information above. ii. How much economic profit does the firm earn if it operates under monopolistically competitive atmosphere? 	4		Evaluate
2(b).	Assume that there are two firms in the market facing the identical demand function. $P = 1000 - Q_T$, Where $Q_T = Q_1 + Q_2$ <ol style="list-style-type: none"> i. Find Cournot solution assuming zero marginal cost. ii. Figure out the solution under collusion. 	6	CLO2,PLO1,2	Remember

- | | | | | |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|-------------|----------|
| 3(a). | Firms in the group do agree to follow the price leadership under a dominant firm. How can you explicate this statement under collusive oligopoly? | 4 | | Create |
| 3(b). | “Kinked demand model is not a price determination model but once determined remain constant”- Explain this distinguishing feature of kinked demand model. | 4 | CLO1,PLO1,4 | Create |
| 3(c). | What is Market sharing cartel? | 2 | | Remember |
| Or | | | | |
| (a). | Suppose there are two firms in the economy selling mineral water with zero marginal cost. These firms do not realize that they are interdependent in decision making. Elucidate the process how these firms make their output decision through reaction curve approach. | 4 | | Create |
| (b). | Why do you think the development of Cournot model took place and who did that? Give an explanation of that developed model. | 4 | CLO1,PLO1,4 | Create |
| (c). | Why do you think one can follow the leadership of a barometric firm? | 2 | | Remember |