

# International Islamic University Chittagong

Department of Economics & Banking

Midterm Examination; Spring-2024

Course Code: ECON-2302

Time: 1.5 Hours

Program: BSS (Hons) in Economics & Banking

Course Title: Intermediate Microeconomics

Full Marks: 30

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

QN	Description of Questions	Marks	CLOs & PLOs	Cognitive learning
1(a).	Distinguish between short run total cost (STC) and long run total cost (LTC).	02		Remembering
1(b).	Given TFC= 400. Find AFC for Q = 8, 10 and 20. Draw AFC.	02	CLO1,PLO2	Evaluating
1(c).	Why long-run average cost (LAC) curve is called 'envelope' curve?	06		Understanding
2(a).	Suppose, long run cost function: $C = Q^3 - 50Q^2 + 1000Q$ Show that MC and AC are equal at minimum AC.	04		Evaluating
2(b).	Consider the cost function: $C = \frac{1}{3} Q^3 - 7Q^2 + 111Q + 50$ (i) Is this a short run cost function? Why? (ii) Write out the total variable cost function. Find minimum average variable cost. Show that minimum AVC is equal to MC. (iii) Show that MC reaches minimum before AVC.	06	CLO2,PLO3	Evaluating
3(a).	Define Perfect Competition. What are the conditions of short run equilibrium? Explain the situation where firm earns normal profit.	06		Understanding
3(b).	Explain the derivation of short run industry supply curve.	04	CLO3,PLO2	Understanding
<b>Or</b>				
3(a).	What is shut-down point? How long a rational producer will continue producing output even if it incurs loss?	05	CLO1,PLO3	Understanding
3(b).	Illustrate the derivation of long run industry supply curve for decreasing cost.	05		Understanding