International Islamic University Chittagong

Department of Economics & Banking

Midterm Examination, Autumn-2023

Program: BSS (Hons) in Economics & Banking

Course Code: ECON-2302

Course Title: Intermediate Microeconomics

Time: **1.5 Hours**

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).	Define total fixed cost (TFC), total variable cost (TVC) and total cost (TC). Distinguish between short-run total cost (STC) and long-run total cost (LTC).	05		Remembering
1(b).	Explain why is short-run average cost (SAC) "U-shaped"?	05	CLO1,PLO2	Evaluating
2(a).	Suppose, total cost function C= f(Q) (i) Calculate marginal cost, average cost and slope of average cost. (ii) Describe what happens to AC when MC < AC , MC > AC and MC=AC.	05		Analyzing
2(b).	Consider the cost function: $C = \frac{1}{3}Q^3 - 7Q^2 + 111Q + 50$ (i) Is this 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.	05	CLO2,PLO3	Analyzing
3(a).	Define Perfect Competition. What are the conditions of short run equilibrium? Explain the situation where firm earns supernormal profit.	05		Creating
3(b).	What is shut-down point? How long a rational producer will continue producing output even if it incurs loss?	05	CLO3,PLO1	Understanding
	Or			
3(a).	Prove that the upward segment of the marginal cost curve that lies above average variable cost is the supply curve of a perfectly competitive firm.	05	CLO3,PLO2	Creating
3(b).	Explain the derivation of industry supply curve under increasing cost industry.	05		Understanding