

ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)
ORGANISATION OF ISLAMIC COOPERATION (OIC)

DEPARTMENT OF BUSINESS AND TECHNOLOGY MANAGEMENT

Semester Final Examination Summer Semester, A. Y. 2022-2023
Course No. : BTM 4203 Time : 3 hours
Course Title : Microeconomics Full Marks : 150

Answer all 6 (six) questions. All questions carry equal marks. Marks of each question and corresponding CO and PO are written in the right margin with brackets.

1. a) England and Scotland both produce scones and sweaters. Suppose that an English worker can produce 50 scones per hour or 1 sweater per hour. Suppose that a Scottish worker can produce 40 scones per hour or 2 sweaters per hour.
- Which country has the absolute advantage in the production of each good? Which country has the comparative advantage?
 - If England and Scotland decide to trade, which commodity will Scotland export to England? Explain.
 - If a Scottish worker could produce only 1 sweater per hour, would Scotland still gain from trade? Would England still gain from trade? Explain.
- b) The following table describes the production possibilities of two cities : 10 (CO2) (PO1)

City	Pairs of Red Socks Per Worker per Hour	Pairs of Red Socks Per Worker per Hour
Boston	3	3
Chicago	2	1

- Which city has an absolute advantage in the production of each color sock? Which city has a comparative advantage in the production of each color sock?
 - Without trade, what is the price of white socks (in terms of red socks) in Boston? What is the price in Chicago?
 - If the cities trade with each other, which color sock will each export?
 - What is the range of prices at which trade can occur?
- c) Why do economists oppose policies that restrict trade among nations? 5.0 (CO2) (PO1)
2. a) How does a tax on a good affect the price paid by buyers, the price received by sellers, and the quantity sold? What determines how the burden of a tax is divided between buyers and sellers? Why? 7.0 (CO2) (PO1)
- b) Congress and the president decide that the United States should reduce air pollution by reducing its use of gasoline. They impose a \$0.50 tax on each gallon of gasoline sold. 18 (CO2) (PO1)
- Should they impose this tax on producers or consumers? Explain carefully using a supply-and-demand diagram.
 - If the demand for gasoline were more elastic, would this tax be more effective or less effective in reducing the quantity of gasoline consumed? Explain with both words and a diagram.

- iii. Are consumers of gasoline helped or hurt by this tax? Why?
- iv. Are workers in the oil industry helped or hurt by this tax? Why?

3. a) In a supply-and-demand diagram, show producer and consumer surplus at the market equilibrium. What is efficiency? Is it the only goal of economic policymakers? 7.5 (CO3) (PO1)
- b) Suppose the demand for French bread rises. Explain what happens to producer surplus in the market for French bread. Explain what happens to producer surplus in the market for flour. 5.0 (CO2) (PO1)
- c) Draw a supply-and-demand diagram with a tax on the sale of a good. Show the deadweight loss. Show the tax revenue. 7.5 (CO2) (PO1)
- d) How do the elasticities of supply and demand affect the deadweight loss of a tax? Why do they have this effect? 5.0 (CO2) (PO1)
4. a) Suppose that Congress imposes a tariff on imported automobiles to protect the U.S. auto industry from foreign competition. Assuming that the United States is a price taker in the world auto market, show the following on a diagram: the change in the quantity of imports, the loss to U.S. consumers, the gain to U.S. manufacturers, government revenue, and the deadweight loss associated with the tariff. The loss to consumers can be decomposed into three pieces: a gain to domestic producers, revenue for the government, and a deadweight loss. Use your diagram to identify these three pieces. 15 (CO1) (PO2)
- b) List five arguments often given to support trade restrictions. How do economists respond to these arguments? 10 (CO3) (PO1)
5. a) Draw a supply-and-demand diagram to explain the effect of a negative externality that occurs as a result of a firm's production process. 7.5 (CO2) (PO1)
- b) What are corrective taxes? Why do economists prefer them to regulations as a way to protect the environment from pollution? 7.5 (CO2) (PO1)
- c) Explain the following four cost curves and shape: average total cost (ATC), average fixed cost (AFC), average variable cost (AVC), and marginal cost (MC). 5.0 (CO2) (PO1)
- d) What are the main characteristics of a competitive market? Under what conditions will a firm exit a market? Explain. 5.0 (CO2) (PO1)
6. Explain the following principles of economics: 25 (CO3) (PO1)
- a) Rational people think at the margin.
 - b) Trade can make everyone better off.
 - c) Markets are usually a good way to organize economic activity.
 - d) Prices rise when the government prints too much money.
 - e) Society faces a short-run trade-off between inflation and unemployment.