MBA Managerial Economics

Assignment 1

Due: Sunday 9th Nov 2025

Marks: 70

Q1 Define the following terms: (10 marks)

a) Economic Profit

b) Frictional Profit Theory

c) Compensated Profit Theory

Q2 Use a supply and demand diagram to illustrate the effect of the following (10 marks)

a) A sudden spike in tourism in Lahore during a major international cricket event. Show the impact on the hotel room market in Lahore.

b) The government imposes a price ceiling on wheat flour. Explain what happens in the market for flour.

c) A heatwave increases electricity demand while load-shedding worsens. Illustrate the effect on the electric fan market.

d) Technological innovation cuts the production cost of solar panels by half. Show the effect in the solar energy equipment market.

e) Heavy rain damages vegetable crops in rural Punjab. Illustrate the impact on the tomato market.

Q3 A firm faces the following inverse demand curve: P = 50 - 4Q (20 marks)

a) Derive the Total Revenue (TR), Marginal Revenue (MR) and Average Revenue (AR) functions.

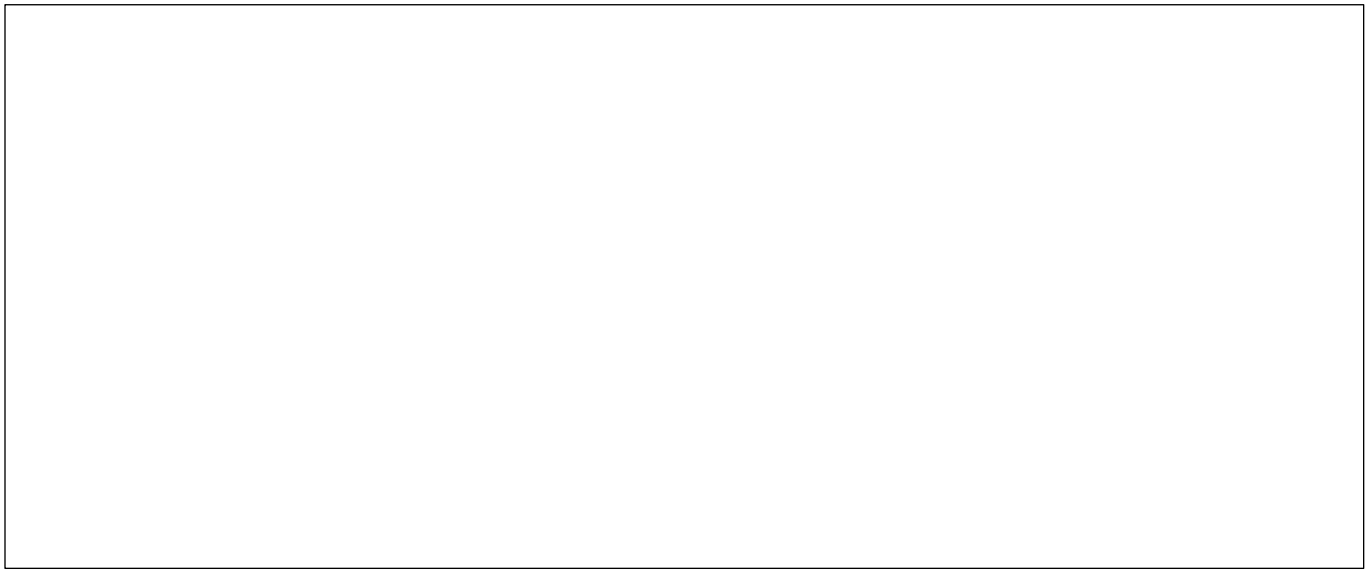
b) Find the output level that maximizes total revenue.

c) Calculate the maximum total revenue.

d) Plot the **P**, **TR**, and **MR** curves. Label all curves and relevant points on the graph.

Q4 A firm's fixed cost (FC) is 20. The variable cost (VC) function associated with producing output Q is: $VC = 0.2Q^3 - 2Q^2 + 10Q$ (20 marks)

a) Write the Total Cost (TC), Marginal Cost (MC) and Average Cost (AC) functions.



b) Find the output level Q that minimizes AC.

c) Compute MC and AC at this output level.

d) Plot TC, AC and MC curves. Label all curves and relevant points on the graph.

Q5 Using Total Revenue and Total Costs from the earlier questions, calculate Total Profit and Marginal Profit in terms of Q (10 marks).