# FINAL PAPER of ECO404 Fall 2012

# With SOLUTION by MSBA_124

## My Paper

**Fitting a regression line to the electricity sales (consumption) data running from the first quarter of 2000 (t = 1) to the last quarter of 2003 (t = 16) given in the above Table, we get estimated regression Equation.**

**$S_t = 11.90 + 0.394t$** **Marks 5**

**Thus, based on the past trend, forecast next two quadrants of 2004 electricity consumption (in million kilowatt-hours) in the city to be**

Solution:

$S_{17}$ = 11.90 +.0.394(17) = 18.60 in the first quarter of 2004

$S_{18}$ = 11.90 + 0.394(18) = 18 .99 in the second quarter of 2004

**Question: 03: Given the total revenue and total cost functions:**

**$TR = 80Q - 0.00025Q^2$**

**$TC = 260{,}450 + 5Q + 0.00035Q^2$** **5 Marks**

**Find the profit maximizing level of output under monopoly**

TR=TC

80Q – 0.00025Q2 = = 260,450 + 5Q +0.00035Q2

MR=MC

80-0.0005Q = 5+0.0007Q

80-5=0.0007Q+0.0005Q

75=0.0012Q

Q = 75/0.0012

**Q=62500**

**3-Briefly discuss the basic valuation model of firm. How this model can be adjusted for risk?** **5 Marks**

**Page 266 – Handouts**

**Question:**

**Why firm produce more than one products.** **5 Marks**

---

www.vchowk.com

To gain the economies of scale. A firm will produce products that are complementary in the sense that producing them together costs less than producing them individually.

**Question: Write basic features of Bertrand model. 5Marks**

**Question: Behavioral school of theory. 3 Marks**

The main features of the Behavioural School are:

- Firms are multi-goal, multi-decision, multi-product organizational coalitions
- Imperfect knowledge and bounded rationality. Managers have imperfect knowledge.
- Managers cannot meet the aspiration levels of all stakeholders. Managers can never really know if they are maximizing profits, sales or growth (of the firm) or not
- Managers cannot maximize, instead they have to satisfice

## Define Investment Opportunity Schedule and Marginal Cost of Capital? (3 Marks)

IOS shows the pattern of returns (IRR) for all potential investment projects.
Marginal cost of capital is the extra financing cost necessary to fund an additional investment project.
Optimality requires setting **IRR = MCC.**

**The investment opportunity schedule (IOS)** shows the pattern of returns for all of the firm's potential investment projects.
**The marginal cost of capital (MCC)** is the extra financing cost necessary to fund an additional investment project, expressed on a percentage basis.

www.vchowk.com