

**Practice questions from former midterms:**

**Part II: Answer the following on the paper provided**

**Question 1:** Suppose that Caitlyn has an after tax income of \$510 per week and that she must spend it all on GAS or Rent.

(i) Draw the following graph: (2 marks)

If gas is \$1.75 per litre and rent is \$25 per day, draw her budget line on a graph where the amount of gas is measured along the vertical axis and the amount of rent is measured along the horizontal axis.

(ii) Determine the equation for the budget line. (2 Marks)

**Question 2:** Frank has budgeted a total of \$51 to spend on two goods, bagels and cream cheese. He likes to consume one bagel in combination with a unit of cream cheese. Any unit of bagel that he cannot consume in combination with a unit of cream cheese is useless. Similarly, any unit of cream cheese that he cannot consume in combination with a bagel is useless. If the price of a bagel is \$2.50 and the price of a unit of cheese is \$1.75, how many units of each good will he purchase? Draw Frank's indifference curve at the point of consumption.

***Marks: 5***

**Question 3: Explain and illustrate:** (5 marks)

- (i) How an individual demand curve is derived using indifference curves and budget constraints.

**Question 4: (6 marks)**

The Soy-It Company, a manufacturer of soy cheese for people that do not eat milk based cheese, expects its 2008 demand curve for its product is

$$P = 1605 - 8Q,$$

where P is the price (in dollars) of a package of cheese, and Q is the number of packages sold per month.

- a) To sell 200 packages per month, what price would the company have to charge? (1 mark)
- b) If it sets a price of \$10, how many packages of cheese will the company sell per month? (1 mark)
- c) What is the price elasticity of demand if price equals \$5? (2 marks)

Using this formula:  $\left(\frac{\partial Q}{\partial P}\right)\left(\frac{P}{Q}\right)$

- d) At what price, if any, will the demand for the company's product be of unitary elasticity? (*Hint: Price will be rather large.*) Use a diagram to illustrate.) (2 Marks)

**Question 1:** Suppose that Cathy has an after tax income of \$750 per week and that she must spend it all on GAS or Rent.

(i) Draw the following graph: (2 marks)

If gas is \$1.25 per litre and rent is \$25 per day, draw her budget line on a graph where the amount of gas is measured along the vertical axis and the amount of rent is measured along the horizontal axis.

(ii) Determine the equation for the budget line. (2 Marks)

**Question 2:** Frank has budgeted a total of \$50 to spend on two goods, bagels and cream cheese. He likes to consume one bagel in combination with a unit of cream cheese. Any unit of bagel that he cannot consume in combination with a unit of cream cheese is useless. Similarly, any unit of cream cheese that he cannot consume in combination with a bagel is useless. If the price of a bagel 25 cents and the price of a unit of cheese is 30 cents, how many units of each good will he purchase? Draw Frank's indifference curve at the point of consumption.

**Marks: 5**

**Question 3:** Define **one** of the following terms: (5 marks)

- (ii) Giffin Good
- (iii) Cross price elasticity of demand
- (iv) Complement good
- (v) Individual demand curve
- (vi) Income consumption curve