AS/ECON 2300   Mid–term Exam   February 28 2007

time : 50 minutes

Do all 4 questions. All count equally.

1. Suppose that a person consumes only food and telephone calls, and has $200 per week to spend on the two goods. The price of food is $1 per unit. If the person makes fewer than 20 telephone calls per week, she pays $5 per call. If she makes 20 calls or more, then she pays $100 for the first 20 calls, and $1 per call for any additional calls (in excess of 20).

Sketch the person's budget set.

2. What is a person's demand function for food, if her preferences can be represented by the utility function

$$u(F, C) = C + \ln F$$

where C is her clothing consumption, and F her food consumption?

[Note : the derivative of $\ln x$ with respect to x is $1/x$.]

3. If the federal government made food purchases subject to the GST (that is, if they imposed a 6 percent tax on all food purchases), but also gave a cash grant to people to compensate for the damage, what would happen to a person's food consumption, if the cash grant was exactly enough so that she could exactly afford her original consumption bundle?

Explain briefly.

4. If a person regarded leisure time as a normal good, must it be true that the person would choose to work more hours if she were paid a higher wage?

Explain briefly.