ECON 210C PROBLEM SET # 4

MINKI KIM

1. Labor supply problem

(a) individuals with time-separable utility solve the following maximization problem:

$$\mathcal{L} = \sum_{t=0}^{\infty} \beta^t \Big(\log C_t + \log(1 - L_t) \Big) + \lambda \sum_{t=0}^{\infty} \beta^t \left(C_t - w_t L_t \right)$$

Since the future wage schedule is known in advance, the problem is translated into the following form:

(b)

2. Demand shock

(a)

(b)

(c)

(d)

(e)

3. Business cycle and external returns to scale

(a)

(b)

(c)

(d)

(e)

4. Problems from Romer

4.1. **Problem 6.10.**

4.2. **Problem 6.11.**

4.3. **Problem 6.12.**