## **ECONOMICS 101-03 MICROECONOMICS**

## EXAM 4 A

- 1. Taxes focus on the price of the pollutant; permits focus on the quantity of pollution emitted. Taxes are uniform and impose the same percentage of costs per unit of pollution (or production which involves pollution) on all emitters and are not efficient unless they are set at a level where pollution emitted has an equal cost of reduction for all emitters (producers). Buying and selling permits among polluters makes achieving an efficient allocation of pollution reduction possible reducing the cost of polluters. However, permits can result in hot spots and be subject to imperfect competition which are not issues for taxes.
- 2. Production of goods and services gives rise to environmental damage from pollution which benefits the producer and consumer through higher profits and lower prices respectively, but does not address the pollution which harms society (as well as the user of the good or services causing the pollution).
- 3. In theory, a perfectly competitive labor market would set wages and number of workers at an efficient level with no unemployment or underutilization of labor. There would be a very large number of identical jobs and workers (firms providing jobs) so no one worker or firm could affect the wage rate. The marginal revenue product (MRP) of labor would equal its marginal resource cost (MRC). A monopsonistic labor market would consist of a single employer so the number of jobs (workers hired) would be on the firm's supply curve for labor where MRP=MRC which would result in a lower than efficient wage and offer a smaller number of positions (workers hired).
- 4. Moral hazard: Price would be too low and not reflect the actual risk based on the behavior of the purchaser who would purchase a larger quantity than if the true risk were known by both the buyer and seller.

Information asymmetry: Buyer would pay a higher price than the good or service was worth for a quantity which could be higher or lower than if the true value was known by both the buyer and seller. Rent seeking: Price of good or service which is the object of rent seeking could be higher (e.g. less regulation) or lower (e.g. subsidy ) than if no rent seeking was present. The quantity would reflect the price.

Principal-agency: Most likely higher price and lower quantity

- 5. The positive sloping portion of the labor supply curve indicates the worker has a strong motivation or income effect to increase her or his hours of work even though earnings increase by only a small amount. The negative portion indicates a substitution effect as a larger increase in earnings allows the worker to decrease hours worked by a larger amount than along the positive portion of the labor supply curve.
- 6. In goods producing industries it is often possible to increase output by employing capital equipment to increase output thereby increasing productivity; labor and capital tend to be substitutes. In many service industries there is a low capital component and have a one-on-one relationship between providers of the service and its recipients, many of whom have different needs, which does not result in a productivity increase. Many services are provided by small firms which can not afford to purchase capital equipment.
- 7. The coordination tasks: output selection; input selection; allocation of inputs and products to specific firms, consumers. Market economies achieve these tasks efficiently by sending signals to resource

providers (including workers), firms (producers) and consumers through shifts in demand and supply which determine prices which encourage or discourage firms to seek to maximize their total economic profits and households to maximize their total satisfaction. Planned economies substitute decisions by bureaucrats who can not know all of the factors that lead to profit maximization and consumer satisfaction and hence can not achieve efficient allocations.

- 8. True, when P = MC in the long run perfectly competitive model, resources will be allocated efficiently because both allocative (lowest product price) and productive (lowest production cost) efficiency are achieved given the demand and supply relationships for each good or service.
- 9. Immigration: Short term benefit: could allow an economy to achieve MRP=MRC for jobs nativeborn workers do not wish or are not available to fulfill. Also more workers will increase GDP. Long term benefit: 2<sup>nd</sup> generation (and later) immigrants contribute to growth of economy and to government revenues to same (greater?) extent than native born workers
- 10. Positive consequences: households—many users make communication easier, more useful; firms—economies of scale reduce costs of providing service to additional users and increase profits from subsecribers and/or advertisers (the service acts like a public good with no additional costs to serve an additional user); once firms are providing service to large number of customers it is more difficult for additional firms to join industry. Negative consequences: households—reduced choices of providers, possible higher costs; firms potential antitrust and/or regulatory exposure.