Key Terms

- Ability-to-Pay Principle
- Benefits Principle
- Coase Theorem
- Consumer Surplus
- Deadweight Loss
- Elasticity and Slope
- Excess Burden
- Excise Tax
- Fiscal Illusion
- Income Tax
- Indifference Curve
- Lindahl Pricing
- Lump Sum Tax
- Marginal and Average Tax Rates
- Marginal Benefit, Marginal Cost
- Marginal Excess Burden
- Net Social Benefit
- Pareto Optimality & Superiority
- Positive vs. Normative
- Property Rights
- Ramsey Tax
- Regressive/Proportional/Progressive
- Social Welfare
- Sumptuary Taxes
- Tax Base
- Tax Shifting
- Tragedy of the Commons
- Transactions Costs

True—False Questions

1. If transactions costs are high and the number of individuals involved is large, initial assignment of property rights is important to economic efficiency.
2. Perpetual debt roll overs are possible, provided the indebted government is large enough.
3. Equity issues in taxation are inherently positive in nature.
4. Positive real interest rates increase the likelihood of default by future generations.
5. As the size of government and its tax take increases, excess burden decreases proportionally.
6. If the demand curve in a market has a slope of \(-0.50\) while supply curve slope is 2.0, suppliers will bear the excess burden of a tax imposed on this market at a ratio of 4-to-1.
7. As long as there is some substitution effect in response to a change in the relative price of a good, there will be an excess burden from a tax.
8. Welfare programs satisfy the criteria of the benefit principle.
9. The only way that consumption can be taxed is through a general sales tax.
10. Workers work for what they can keep, thus an income tax represents a reduction in the effective wage rate.

Multiple Choice Questions

11. Total government revenues (at all levels of government) in the US are about ______ percent of GDP.
   a. 17
   b. 25
   c. 35
   d. 50

12. When isolating the substitution effect of a change in an individual’s budget constraint, ______ is held constant.
   a. utility
   b. budget
   c. income
   d. consumption

13. Ricardian Equivalence refers to the:
   a. ability of politicians to clear up any fiscal illusion
   b. equivalence of taxes and borrowing so long as interest rates are positive \(r > 0\)
   c. equivalence of taxes and borrowing, provided citizens are economically forward-looking
   d. benefits of public spending passed to future generations as a legacy of public improvements
14. An income tax provides an incentive to
   a. work for large companies
   b. increase investment
   c. substitute away from being self-employed
   d. consume more and save less
15. Since there are many special interests lobbying in favor of different tax changes but no special interests
    lobbying in favor of the public interest, this suggests that tax code changes will _____.
   a. lead towards more regressive taxation
   b. will favor special interests
   c. not be in the direction of efficiency
   d. b and c
16. Outcomes are likely to be Pareto superior if they were
   a. enacted by a bureaucrat
   b. approved of by a unanimous vote
   c. decreed by a judge
   d. enacted by bipartisan legislation
17. The excess burden of an income tax is a function of the _____.
   a. average tax rate
   b. flat tax rate
   c. marginal tax rate
   d. Laffer curve
18. Suppose Seth and Nathan are college students with the same annual income, yet Seth pays half of the annual
    income tax that Nathan does. Which statement best summarizes a possible issue with this outcome from a
    principle of tax policy perspective?
   a. It violates the principle of vertical equity.
   b. It violates the principle of diagonal equity.
   c. It violates the principle of horizontal equity.
   d. It violates the benefit principle.
19. The Coase Theorem states that:
   a. in the absence of transactions costs, the allocation of resources will be independent of property rights
      assignment
   b. in the absence of transactions costs, the allocation of resources will be dependent on property rights
      assignment
   c. with transactions costs, the allocation of resources will be independent of property rights assignment
   d. with transactions costs, the allocation of resources is not related to the property rights assignment
20. Entitlements
   a. give some individuals a command over the economic resources of others
   b. do not require others to take action
   c. are analogous to property rights
   d. have not expanded during the twentieth century
21. Consider a world with two income earners and an income tax. Individual A earns $25,000 and pays $1,000 in
    taxes. Individual B earns $100,000 and pays $4,000 in taxes. Which of the following best classifies the income
    tax system in this world?
   a. proportional
   b. progressive
   c. regressive
   d. sumptuary
22. In spite of the stated goal of discouraging behavior, if a sumptuary tax is applied on _____, behavior will not
    change very much.
   a. a good with elastic demand
   b. a good with inelastic demand
   c. income
   d. wealth
23. An analysis of the incidence of a unit tax on suppliers versus a unit tax on demanders shows us that the _____ of a tax may be different from the _____ of a tax.
   a. actual burden; distribution
   b. payment; distribution
   c. amount; incidence
   d. actual burden; legal assignment

24. The key idea behind a flat tax (on income) is to
   a. cut taxes on high-income taxpayers
   b. to raise taxes on high-income taxpayers
   c. increase progressivity
   d. minimize the excess burden of the income tax

25. An inelastic supply schedule means that
   a. suppliers are unwilling to substitute away from producing the good
   b. demanders are unwilling to substitute away from consuming the good
   c. demanders are unwilling to substitute towards consuming the good
   d. suppliers are unwilling to shift any portion of an imposed tax onto demanders

26. The tax with the minimum excess burden of taxation is most desirable from an efficiency standpoint because
   a. it ensures that people substitute away from the tax by a considerable amount
   b. it minimizes tax shifting
   c. it produces the least social cost per dollar of revenue raised
   d. it will raise the most revenue for government

**Short Answer/Problems**

27. Define the benefit principle. List two real world taxes that have the features of a tax based on the benefit principle. Why can’t the benefit principle be the sole principle of taxation?

28. What is the common pool problem? Provide some examples.

29. Briefly explain why Ricardian Equivalence might NOT hold.

30. What is the deadweight loss of taxation? Assume a goods market with roughly unit elastic demand and supply curves. Now impose a unit tax on suppliers. Illustrate the deadweight loss from the tax on a supply-demand graph.
**Answer Key:**

1. True
2. False
3. False
4. True
5. False
6. True
7. True
8. False
9. False
10. True
11. C
12. A
13. C
14. D
15. D
16. B
17. C
18. C
19. A
20. A
21. A
22. B
23. D
24. D
25. A
26. C
27. The benefit principle states that the people who benefit from the government’s expenditures should be the ones who pay for them. Two real world examples of taxes that have features based on the benefit principle are entry fees for public parks and tolls for government turnpikes. The benefit principle is difficult to apply in all situations because it is often difficult to determine who is actually benefiting from a government activity and it is often in conflict with other goals such as redistribution.

28. The common pool problem exists when many individuals share ownership of a common resource and cannot exclude or limit the others from using the resource. This creates a strong incentive to utilize the resource as much as possible before other individuals do. Inevitably this leads to depletion of the resource. Some examples include the air, common grazing areas, and some animal populations.

29. Ricardian equivalence may fail to hold if (a) present generations are unwilling or unable to transfer sufficient resources to the future to cover the repayment of debt taken out today; (b) if present generations inaccurately assess the resources required in the future to cover the repayment of debt taken out today; (c) government imposes taxes on intergenerational gifts or bequests.

30. The deadweight loss of taxation (also referred to as the excess burden) is the loss in welfare that results from individuals changing their behavior to avoid a tax.