

Econ 631
4th Exam

Key
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Version 1

1. Which of the following concerning urban auto commuting costs is correct?
 - a. as traffic congestion increases, private money costs increase while private time costs decreases
 - ☒ b. as traffic congestion increases, the difference between MSC and MPC gets larger
 - c. as traffic congestion increases, external trip cost increases and private trip cost decreases
 - d. as traffic congestion increases, MPC increases but MSC decreases
 - e. at high congested levels of road use, MSC equals MPC
2. Which of the following regarding automobile commuting costs is correct?
 - ☒ a. the monetary value of the congestion externality is equal to external trip cost (time cost)
 - b. private money trip cost is the monetary value of the congestion externality
 - c. at congested traffic volume the MSC curve lies below the MPC curve
 - d. private trip costs include only the money costs incurred by motorists by making a commuting trip
 - e. MSC is equal to marginal private trip cost (MPC)
3. Which of the following concerning the causes and solutions of urban road congestion is correct?
 - a. congestion occurs because MSC is equal to external cost
 - b. congestion occurs because commuters consider only the private time costs of their trips
 - c. congestion occurs because commuters consider only the private monetary costs of their trips
 - ☒ d. congestion occurs because commuters don't pay the external time costs they inflict on other commuters
 - e. the long run solution to congestion is to widen the roads
4. Which of the following concerning the social optimum auto traffic volume and social optimum transit ridership is correct?
 - a. social optimum is achieved for both auto traffic and transit ridership if $MPC = MB$ for auto traffic and $MSC = MB$ for transit ridership
 - b. social optimum is achieved for both auto traffic and transit ridership if $MSC = MB$ for auto traffic and $MPC = MB$ for transit ridership
 - c. the social optimum for both auto traffic and transit ridership can only be achieved if there is no congestion tax
 - d. social optimum is achieved for auto traffic and transit ridership if $MPC = MB$ for both types of travel
 - ☒ e. social optimum is achieved for both auto traffic and transit ridership if $MSC = MB$ for auto traffic and $MB = MSC$ for transit ridership

5. Which of the following concerning the relative cost of BART plus feeder bus and an integrated bus system is correct?
- a. the operating cost and access time cost of the BART is less than the bus system
 - b. the capital cost of the BART is greater than the bus system but BART has lower operating costs than the bus system
 - ☒ c. both the capital cost and operating cost of BART are higher than that of the bus system
 - d. both the access time cost and the capital cost of the bus system are higher than that of the BART
 - e. the operating cost, capital cost, and access time cost of the BART are all lower than that of the bus system
6. An increase in the number of stops and an increase in mass transit service frequency would have which of the following effects?
- a. increase access time and reduce line haul time
 - b. reduce both access time and line haul time for all riders
 - c. reduce access time and have no effect on line haul time
 - d. reduce line haul time and have no effect on access time
 - ☒ e. reduce access time and increase line haul time for some riders
7. Which of the following concerning the price elasticity of demand for auto trips in urban areas is correct?
- a. commuting trips and non-commuting trips are both price inelastic
 - b. an increase in the gas tax is more likely to reduce the number of commuting trips than the number of non-commuting trips
 - ☒ c. commuting trips are price inelastic while non-commuting trips are price elastic
 - d. the price elasticity of demand for non-commuting trips is perfectly price inelastic (i.e., zero)
 - e. commuting trips and non-commuting trips have equal price elasticity
8. Which of the following concerning alternatives to congestion taxes is correct?
- a. raising the gas tax is the preferred alternative to the congestion tax since the gas tax raises the cost of peak period driving by more than other types of driving
 - ☒ b. a disadvantage of raising the motor fuel tax is that it is a regressive tax
 - c. charging a parking tax in the downtown area is the preferred alternative to the congestion tax since the parking tax can't be evaded by any peak period auto commuters
 - d. the demand for mass transit would increase (shift to the right) if there are no congestion taxes placed on peak period auto use
 - e. a mass transit subsidy is the preferred alternative to the congestion tax since the subsidy would result in the social optimum amounts of highway use (auto traffic) and transit riders if there is no congestion tax.

9. Suppose that access time of mass transit service decreases by 8 percent and simultaneously line haul time is increased by 8 percent. What is the net effect on the number of transit trips of the two changes?
- ☒ a. a 2.56 percent increase
 - b. a 3.04 percent increase
 - c. an 8 percent increase
 - d. an 8 percent decrease
 - e. no change
10. Which of the following statements concerning commuting collection cost, line haul cost, and distribution cost is correct?
- a. bus systems have higher collection costs than rail systems
 - ☒ b. autos have higher line haul costs than bus systems
 - c. autos have higher distribution costs than bus systems and rail systems
 - d. rail systems have lower line haul costs than autos and buses
 - e. autos have higher collection costs than bus and rail systems
11. Based on the time and price elasticities of mass transit, which of the following must occur for commuters to switch from the automobile to mass transit?
- a. a relatively larger change in access time costs
 - b. a relatively smaller change in transit price
 - c. a relatively smaller change in both access time and line-haul time costs
 - ☒ d. a relatively larger change in both transit price and line haul time costs
 - e. a relatively larger change in both line haul time costs and access time costs
12. Which of the following regarding Keeler's San Francisco study of the resource costs per passenger trip of autos, BART, and integrated bus systems is correct?
- a. the private automobile is the least cost mode for all passenger volumes less than 22,000 passengers per peak hour because of its low access time
 - ☒ b. integrated bus is the least cost mode for all passenger volumes greater than 1,100 passengers per peak hour
 - c. BART has higher costs than integrated bus because of BART's high line haul time costs
 - d. BART is the least cost mode for all passenger volumes greater than 22,000 passengers per peak hour because BART has greater scale economies than auto and bus
 - e. the private automobile is the least cost mode for passenger volumes between 1,100 and 22,000 passengers per peak hour
13. In class we discussed the *Wall Street Journal* article titled, "Stockholm's Syndrome," which discussed Stockholm, Sweden's experiment with congestion pricing in 2006. Based on the article, which of the following is correct?
- ☒ a. the Stockholm experiment used a dynamic pricing system in which drivers were charged different congestion fees depending on the time of day
 - b. the congestion taxes on commuters were the same regardless of the time of day
 - c. the congestion taxes were collected using the conventional toll booth method
 - d. during the experiment, auto traffic into central Stockholm was unchanged
 - e. ridership on inner city bus routes decreased during the experiment

14. Which of the following concerning widening the roads to reduce congestion is correct?
- a. consumer surplus is the difference between what the buyer actually pays (from the demand curve) and what the buyer is willing to pay
 - b. this policy seeks to reduce congestion by raising the money cost of the auto
 - c. historically, widening the road has reduced congestion in the long run but not in the short run
 - d. this policy seeks to reduce congestion by raising the time cost of the auto
 - ☒ e. widening the road is an efficient use of resources if consumer surplus is greater than the cost of widening the road
15. Which of the following concerning government spending on transportation facilities and services is correct?
- a. state and local government spending on the airway system has exceeded federal government spending
 - b. taken together, the airport and airway programs account for the largest percentage of government transport expenditure on transportation facilities and services
 - ☒ c. highway spending accounts for the largest percentage of government expenditure on transportation facilities and services
 - d. the federal government spends nearly five times as much as state and local government on airports
 - e. the federal government spends nearly four times as much money on highways as state and local government
16. One of the arguments for government promotion of transportation is to speed development of transportation. Which of the following is correct?
- a. government promotion is unnecessary since private firms can afford to pay for the rights of way
 - ☒ b. government promotion is necessary since right of way financing requires large amounts of capital and thus high financial risk
 - c. government promotion is necessary due to high interest rates on transportation loans for right of way investment
 - d. government promotion is unnecessary since venture capital firms will provide private firms with capital to finance investment in right of way
 - e. government promotion is unnecessary since private financing of right of way has minimal financial risk
17. Which of the following concerning government expenditures for railroads and mass transit is correct?
- ☒ a. the operating deficits and capital expenditures of Amtrak are financed by the federal government
 - b. railroad commuter capital grants are financed solely by the federal government
 - c. railroad commuter capital grants are financed solely by state and local governments
 - d. operating subsidies of urban mass transit systems are financed entirely by the federal government
 - e. the Northeast Corridor Project is financed jointly by the states of Connecticut, Massachusetts, Pennsylvania, Virginia, and New York

18. Which of the following concerning government financing of highway transportation is correct?

- a. federal aid highways that are not part of the National Highway System receive 50 percent of their funding from the federal government and 50 percent from state and local government
- b. there is no common cost problem with regard to allocating the costs of highways to various vehicle classes since government finances the roads
- ☒ c. according to the 1997 Federal Highway Cost Allocation Study, cross subsidy exists with regard to the assignment of road damage cost shares among vehicle classes in the financing of highways
- d. the roads in the 155,000 mile National Highway System receive 50 percent of their financing from the federal government
- e. road mileage in the federal aid highway system is greater than that of the non-federal aid system

19. Which of the following statements concerning highway finance is correct?

- a. roads should be financed with income taxes since benefits received taxation cannot be applied to highway finance since highways are a quasi-public good
- b. roads should be financed with general sales taxes since user taxes are more difficult to collect than general sales taxes
- c. general sales taxes should be used to finance roads since the demand for gasoline is price elastic, so the gas tax would result in too little tax revenue for financing the roads
- ☒ d. roads should be financed with user fees to place rail and truck on a more equal competitive basis
- e. roads should be financed by local property taxes since the primary beneficiaries of the roads are local property owners not the highway users

20. Which of the following concerning 2017 state and federal highway user fees paid by commercial trucks is correct?

- a. compared to the federal government, the states rely less heavily on truck registration fees
- b. the state governments have a sales tax on truck trailers and the federal government has truck trailer registration fees
- c. the state governments have a heavy truck use tax while the federal government does not
- d. the federal government relies less heavily on excise taxes on tires compared to the states
- ☒ e. compared to the states, the federal government obtains a higher percentage of its user fees from gasoline and diesel fuel taxes

21. According to research by Michael Babcock what would be the impact if water carriers were required to pay 100 percent of the costs of operating and maintaining the inland waterway system?

- ☒ a. there would be a minor diversion (4 to 5 percent) of water carrier traffic to railroads since the demand for barge transport is price inelastic
- b. there would be a diversion of 25 percent of the water carrier traffic to railroads since the demand for barge transport is price elastic
- c. the water carrier industry would lose 33 percent of its market share to the oil pipeline industry
- d. there would be no effect on the traffic of water carriers since the demand for barge transport is perfectly price inelastic (i.e., elasticity = 0)
- e. one-fourth of the water carrier industry would be forced into bankruptcy

22. Which of the following regarding government promotion of water transport is correct?

- a. the federal waterway program is financed entirely (100%) by a diesel fuel tax levied on water carriers
- b. state governments finance ports by levying user fees on water carriers that use the port
- c. water ports are financed and operated jointly by the federal, state, and local governments
- ☒ d. prior to 1980 the federal waterway program was financed entirely by the general taxpayer whereas since 1980 the program is financed partly by water carriers
- e. local port authorities finance ports primarily with local property taxes

23. Which of the following concerning government promotion of air transportation is correct?

- a. the federal and state governments share the financial responsibility for airports but state government expenditures are more than that of the federal government
- ☒ b. the federal government has sole financial responsibility for the airway system
- c. total government expenditures (all levels of government) for the airport and airway system exceed government expenditures on highways
- d. the federal government conducts aircraft research and development programs for exclusive use by the U.S. military
- e. to finance the airport and airway programs the federal government collects user fees only from the scheduled airlines and airline passengers

24. Which of the following concerning the financing of government promotion of air transportation is correct?

- a. the method of financing the federal airway and airport programs has been the same throughout the post WWII era
- b. the only user fees paid into the Airway and Airport Trust Fund are excise taxes on passenger tickets, and the jet fuel tax
- ☒ c. the capital costs of the federal government's airway and airport programs are paid by user fees paid by the major airlines, airline passengers, and air freight carriers
- d. all local government airport programs are financed solely by user fees levied on airlines and air passengers that use the airport regardless of the size of the airport
- e. the operating costs of the federal government's airport and airway programs are paid solely by the airlines

25. Which of the following regarding the "Transportation Fund" idea is correct?
- a. trust funds currently exist for motor carriers, waters carriers, airlines, and railroads
 - b. a major advantage of trust funds is that there is periodic program review of these funds
 - c. a major advantage of trust funds is that they have no impact on intermodal competition
 - d. motor carriers and airlines are most likely to support the concept of a "Transportation Fund"
 - ☒ e. trust fund financing facilitates long term planning of transportation facilities and increases government financial accountability
26. Assume two freight carrying modes of transportation (Mode A and Mode B) are substitutes for each other and initially receive no government promotion. Also assume that both modes are operating at maximum capacity. Now assume Mode A receives cost reducing government promotion not available to Mode B. Which of the following would occur?
- a. the demand curve for Mode A shifts to the right resulting in an increase in the price of Mode A and an increase in Mode A ton-miles, while Mode B demand is unaffected
 - b. the supply curve of Mode A shifts to the left while the demand curve for Mode B shifts to the right resulting in higher prices for both Mode A and Mode B
 - c. transportation resources are optimally allocated since shippers pay the full cost of the transportation service they buy
 - ☒ d. the supply curve for Mode A shifts to the right resulting in an increase in Mode A ton-miles, while the demand for Mode B declines resulting in a decrease in Mode B ton-miles
 - e. excess capacity will occur in Mode A and over-expansion occurs in Mode B
27. Which of the following is associated with "destructive competition"?
- a. low industry turnover rate
 - ☒ b. the supply of transportation service is greater than the demand for transport
 - c. monopoly transport prices
 - d. a low industry bankruptcy rate
 - e. high economic and regulatory barriers to entry
28. One of the arguments for economic regulation of transportation is that the market outcome would result in monopoly. If this is the case, which of the following is correct?
- a. the output of the monopoly (ton-miles) would be the same as would occur in a competitive market
 - b. the monopoly would achieve allocative efficiency ($P = MC$) but not productive efficiency ($P = \min ATC$)
 - c. the monopoly would achieve productive efficiency, but not allocative efficiency
 - d. the monopoly would achieve both productive and allocative efficiency
 - ☒ e. the monopoly would achieve neither productive nor allocative efficiency

29. Which of the following regarding Staggers Act regulation of railroad abandonments is correct?

- ☒ a. 330 days (about 11 months) is the maximum amount of time between application for abandonment and final ICC decision on the abandonment
- b. unprotested abandonments are permitted 30 days after the date of application for abandonment
- c. final ICC decisions on protested and uninvestigated abandonments must be made within 255 days after the date of application for abandonment
- d. unprotested abandonments are permitted 90 days after the date of application for abandonment
- e. protested but uninvestigated abandonments are permitted 75 days after the date of application for abandonment

30. Which of the following regarding Staggers Act regulation of mergers and minimum and maximum rail rates is correct?

- a. the Staggers Act exempted railroad mergers from regulation
- b. the Staggers Act provided no time limit for deciding rail merger cases
- ☒ c. the ICC has no regulatory jurisdiction over rail rates that are greater than variable costs but less than or equal to 180% of variable costs
- d. the Staggers Act has no minimum rate regulation
- e. if a railroad has market dominance and the rate is greater than 180% of railroad variable cost, the rate is illegal

31. Which of the following concerning Staggers Act rail rate regulation is correct?

- a. the Staggers Act permitted railroads to raise any rate by 7 percent per year
- b. the Staggers Act does not permit general rail rate increases, no exceptions
- c. local rail rates may be discussed in rate bureaus
- d. the Staggers Act prohibited railroads from offering contract rates to individual shippers since contract rates favored the large shipper
- ☒ e. local rail rates may not be discussed in rate bureaus but joint rates can be discussed by carriers involved in the shipment

32. Which of the following concerning Motor Carrier Act of 1980 rate regulation is correct?

- ☒ a. for common carriers, the act prohibits discussion of single carrier (local) rates in rate bureaus but allows discussion of joint rates
- b. the Motor Carrier Act of 1980 eliminated all rate regulation in the motor carrier industry
- c. contract motor carriers are entitled to rates that cover the costs of a well managed firm plus a fair return on investment
- d. the Motor Carrier Act of 1980 permits motor common carriers to raise or lower any rate by 25% without ICC suspension or investigation
- e. regulated motor common carriers may not set rates below variable cost nor above 180% of variable cost

33. Which of the following comparisons between regulation of railroads by the Staggers Act and regulation of motor common carriers by the Motor Carrier Act of 1980 is correct?
- a. the ICC had a maximum of 30 months to render a decision in both railroad and motor common carrier merger cases
 - ☒ b. the Motor Carrier Act of 1980 prohibits discussion of single carrier (local) rates in rate bureaus and the Staggers Act has the same prohibition
 - c. the Staggers Act permitted price flexibility for railroads but the Motor Carrier Act of 1980 did not permit price flexibility for motor common carriers
 - d. there are no similarities in the regulation of railroad and motor common carrier rate bureaus
 - e. the principal regulatory focus of the Staggers Act was railroad entry control while that of the Motor Carrier Act was motor common carrier pricing
34. According to the Motor Carrier Act of 1980, which of the following regarding regulation exemptions is correct?
- a. agricultural cooperatives are exempt from regulation only when hauling agricultural goods for their members
 - b. under the Act, both processed (i.e., corn syrup) and unprocessed (i.e., corn) agricultural commodities are exempt from regulation
 - c. the Motor Carrier Act of 1980 reduced the list of unprocessed agricultural goods eligible for regulation exemption
 - ☒ d. agricultural coops have a regulation exemption for hauling up to 25 percent of their total interstate traffic in non-member, non-agricultural goods
 - e. the Motor Carrier Act of 1980 exempts intercorporate motor carrier hauling for 51 percent owned subsidiaries
35. Which of the following concerning deregulation of airlines is correct?
- a. the Airline Deregulation Act of 1978 permitted airlines to raise or lower any rate by 10% without ICC review
 - b. in 1977, the CAB deregulated air cargo entry but air cargo rates are still regulated
 - ☒ c. the Airline Deregulation Act of 1978 provided for a phase out of the CAB and economic regulation of airlines
 - d. the Airline Deregulation Act of 1978 eliminated most economic regulations in air cargo service
 - e. the Airline Deregulation Act of 1978 prohibited differential pricing by airlines
36. Which of the following concerning the impacts of railroad, motor carrier, and airline deregulation is correct?
- a. in the first few years of deregulation, the number of entering motor and airline carriers decreased but the number of Class I railroads [large railroads] increased
 - ☒ b. interlining of commuter airline traffic to major airlines increased
 - c. deregulation has caused a decline in the financial condition of all three modes
 - d. interlining and joint movements have increased in all three modes since deregulation
 - e. decreases occurred in the number of short line railroads and low fare (discount) airlines after deregulation

37. Which of the following statements regarding the impact of deregulation is correct?
- ☒ a. the airlines and motor carriers benefitted less financially from deregulation than the railroads
 - b. the railroads benefitted from deregulation but the users of rail service did not
 - c. prices of railroad, motor carrier, and airline service fell in price inelastic markets and rose in price elastic markets
 - d. the airlines benefitted more from deregulation than the users of air service
 - e. motor carriers benefitted more from deregulation than the users of motor carrier service
38. Which of the following concerning the impact of regulation on the carriers and the users is correct?
- a. regulation increases uncertainty for transportation users and the transportation carriers
 - b. regulation reduces the flexibility of transportation users but does not affect the flexibility of transportation carriers
 - c. regulation tends to reduce the expense of shippers and the carriers
 - ☒ d. regulation tends to reduce the supply of transportation alternatives
 - e. regulated industries attract high quality management because of the difficulty of dealing with complex regulations
39. Regulation imposes additional expense (costs) on transportation firms. Thus if economic regulation is placed on a previously unregulated freight transportation industry, which of the following will occur?
- a. both the demand for transportation and the supply of transportation curves will shift to the left, resulting in no change in transportation price and ton-miles
 - b. the transportation supply curve will shift to the right causing a decrease in transportation price and an increase in ton-miles
 - ☒ c. the transportation supply curve will shift to the left causing an increase in transportation price and a decrease in ton-miles
 - d. the demand for transportation curve shifts to the right while the supply of transportation curve shifts to the left, causing an increase in transportation price and no change in ton-miles
 - e. the demand for transportation curve will shift to the left causing a decrease in transportation price and ton-miles
40. Which of the following concerning the impacts of railroad deregulation is correct?
- a. due to the expansion of the shortline railroad industry after deregulation the Class I railroads share of total railroad freight declined
 - b. the increase in intrarailroad competition following deregulation caused a decline in railroad financial condition
 - c. interlining of freight increased in the rail industry following deregulation due to the post-deregulation merger trend
 - d. deregulation allowed railroads to increase their share of the total national freight market resulting in an increase in railroad employment
 - ☒ e. the general trend in railroad prices was downward following deregulation, but prices rose in price inelastic markets