

Test 3 – Econ 4020  
 Fall 2012 – Dr. Rupp  
 40 Multiple Choice questions (2.5 points each)

Name \_\_\_\_\_

Signature \_\_\_\_\_

“I have neither given nor received aid on this exam”

(Keep your answers covered. Bubble in name: last, first)

- The Civil Aeronautics Board (CAB) established in 1938 was created to:
  - ensure the growth and profitability of airline industry.
  - establish safety standards in the airline industry.
  - promote competition in the airline industry.
  - monitor customer service in the airline industry.
  - inform the public of the risks of flying.
- The deregulation act of 1978 allowed existing carriers to adjust their route structure, how did carriers respond?
  - They left their routes unchanged.
  - They offered more flights on leisure routes (Florida and Las Vegas)
  - They developed hub-spoke flight networks
  - They offered more point to point service
  - They offered more flights on business routes (Northeast corridor and within California)

Matrix 1:

		Toyota		
		Build Large	Build Small	Do not build
Honda	Build Large	0, 0	12, 8	18, 9
	Build Small	8, 12	16, 16	20, 15
	Do not build	9, 18	15, 20	18, 18

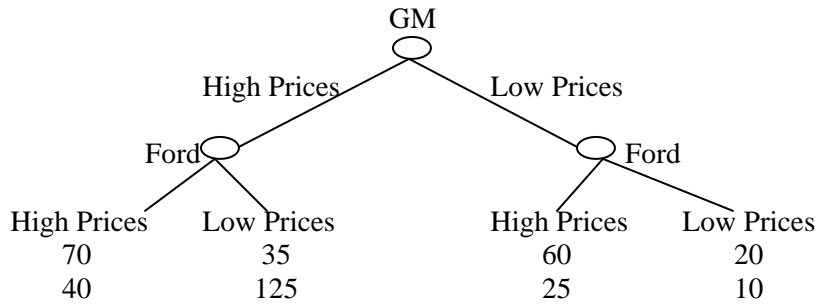
- In matrix 1, identify the (pure strategy) equilibrium solution for Honda & Toyota:
  - Build Large, Build Small
  - Build Small, Build Large
  - Do not build, Build Small
  - Do not build, Do not build
  - Build Small, Build Small
- In matrix 1, identify the **strongest** equilibrium concept used to solve this game:
  - Sub-game Perfect Equilibrium
  - Iterative Dominance Equilibrium
  - Dominant Strategy Equilibrium
  - Nash Equilibrium
  - Perfect equilibrium
- Which of the following strategies is Delta employing to become profitable?
  - Buying an oil refinery
  - Buying an online travel agency
  - Buying older aircraft
  - I only
  - I & II
  - II only
  - II & III
  - I & III
- After airline deregulation in 1978, a wave of new carriers entered the market. Which of the following carriers traces its origin to this post-deregulation period?
  - US Airways
  - Southwest
  - American Airlines
  - Delta Airlines
  - United Airlines
- What is the scope clause in the airline industry?
  - Requirement that every flight have at least 1 pilot, 1 co-pilot, and 1 stewardess
  - Requirement that no airline can operate a computer reservation system
  - The agreement that allowed the airlines to turn their pensions over to Pension Guarantee Corporation
  - The agreement to restrict the usage of large regional jets
  - The agreement that turned airport safety over to the Transportation Safety Administration

Matrix 2:

		Coke's Prices			
		\$10.50	\$11.50	\$12.50	\$13.50
Pepsi's Prices	\$7.50	66, 190	68, 199	70, 198	73, 191
	\$8.50	79, 201	82, 211	85, 214	89, 208
	\$9.50	82, 212	86, 224	90, 229	95, 225
	\$10.50	75, 223	80, 237	85, 244	91, 245

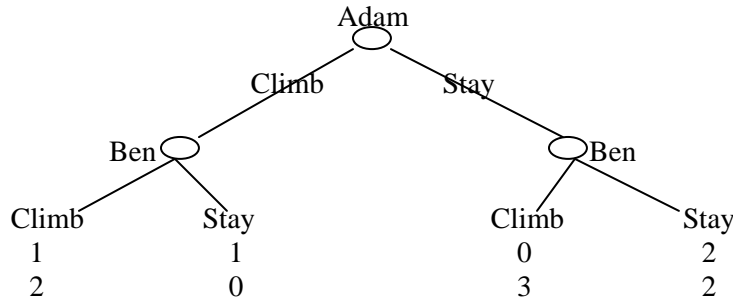
8. In Matrix 2, identify the (pure strategy) equilibrium strategy:
- \$10.50, \$13.50
  - \$9.50, \$12.50
  - \$9.50, \$11.50
  - \$7.50, \$13.50
  - \$8.50, \$12.50
9. In Matrix 2, identify the *strongest* equilibrium concept used to solve this game:
- Sub-game Perfect Equilibrium
  - Iterative Dominance Equilibrium
  - Dominant Strategy Equilibrium
  - Nash Equilibrium
  - Perfect equilibrium
10. What evidence do Economists typically cite as justification for deregulating the airline industry?
- airlines were making large profits
  - New more fuel efficient aircraft were not being deployed
  - airlines were charging higher prices on regulated routes vs. unregulated routes of similar distance
  - airlines would experience less airport congestion if deregulated
  - airline safety would improve from deregulation
11. What is Title IX?
- The rule that required football players to wear helmets
  - The rule that allowed college freshman to participate in athletics
  - The rule that required college students to obtain a minimum GPA to participate in athletics
  - The rule that required a minimum high school GPA in a set of core classes
  - The rule that promoted gender equity in collegiate athletics
12. The NCAA Board of Trustees initially approved (and have since put on "hold") which major change beginning with the 2012-13 season?
- Freshman are no longer eligible to participate in athletic contests
  - Freshman must maintain a 3.5 GPA to continue participation in athletic contests
  - Schools may grant scholarship athletes up to \$2,000 extra to meet expenses
  - Athletes may transfer to other schools without forgoing any eligibility
  - All incoming athletes will be tested for HGH
13. Why was the NCAA originally formed?
- To combat rampant gambling in college athletics
  - Due to the desire to increase television revenue
  - To make football safer for participants
  - To increase the academic performance of athletes
  - Due to a request by the NBA to have a training ground for potential NBA employees
14. What has happened to the efficiency of airlines after deregulation?
- it increased since planes are more full
  - it decreases since planes are less full
  - it has remained constant since deregulation
15. Comparing the airline industry with the auto industry what are the common traits of bankrupt automakers (GM and Chrysler) and bankrupt airlines (American, US Airways, etc.)
- both suffer from high tax rates
  - both have experienced declining productivity of workers
  - both experience high legacy costs (health care and pension expenses)
  - both suffer from a reduction in demand in autos and airline travel
  - both suffer from incompetent CEO's
16. Barriers to entry to join the highest level of competitive football (moving from I-AA to I-A) are said to be:
- minimal barriers to entry
  - considerable barriers to entry

17. Use the following game tree, GM sets prices first (high or low) and Ford moves second (high or low). (GM's payoffs are on top and Ford's are on bottom). Find the Sub-game perfect equilibrium strategy:



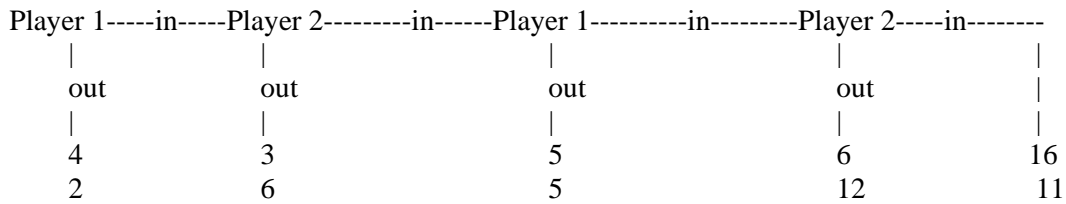
- a. (High, {Low, Low})
- b. (High, {Low, High})
- c. (Low, {High, High})
- d. (Low, {Low, High})
- e. (Low, {Low, Low})

18. In the following game tree, Adam moves first (climb or stay) followed by Ben (climb or stay). Adam's payoffs are listed on top while Ben's are listed on bottom. Find the Sub-game perfect equilibrium strategy.



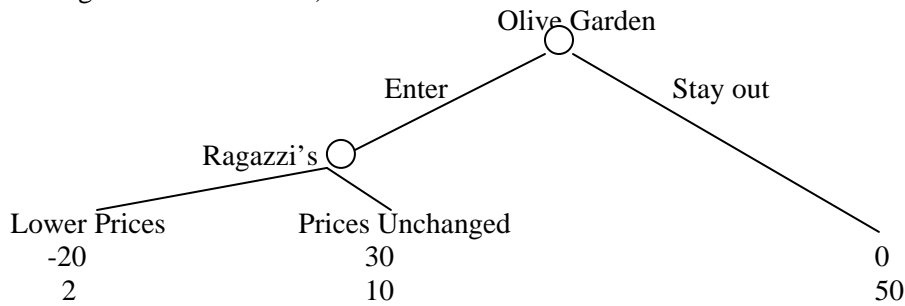
- a. (Stay, {Climb, Stay})
- b. (Climb, {Stay, Climb})
- c. (Stay, {Climb, Climb})
- d. (Climb, {Stay, Stay})
- e. (Climb, {Climb, Climb})

19. In the following game below: Player 1 makes the first decision: in or out. If Player 1 chooses "out" the game ends, if Player 1 chooses "in", then the game continues and Player 2 chooses: in or out. (The top payoff is for Player 1 and the bottom payoff is for Player 2.) Find the Subgame perfect equilibrium payoff for this game:



- a. (4, 2)
- b. (3, 6)
- c. (5, 5)
- d. (6, 12)
- e. (16, 11)

20. In the following game the entrant: Olive Garden is considering to enter the Greenville market to compete with the incumbent: Ragazzi's. Find the sub-game perfect equilibrium strategy (Olive Garden's payoff is listed on top and Ragazzi's is on bottom):



- (Enter, Lower Prices)
- (Enter, Prices Unchanged)
- (Stay out, Lower Prices)
- (Stay out, Prices Unchanged)

21. The first automaker to take advantage of specialization, standardization, and mass production was:

- Chrysler
- Ford
- General Motors
- Honda
- Toyota

22. Japanese imports experienced rapid growth in the U.S. following which event?

- CIA overthrew the Iranian government in 1954
- OPEC founded in 1960
- OPEC oil embargo in 1973
- National Highway Safety Administration began in 1966
- Consumer Union launches Consumer Reports in 1982

23. Recent developments in the car industry suggest that many domestic car companies are experiencing:

- constant returns to scale
- diseconomies of scale
- economies of scale

24. At the turn of the century in 1900 what industry structure best typified the cigarette industry?

- perfect competition
- oligopoly
- monopoly
- monopolistic competition

25. The first premium cigarette was:

- Lucky Strike
- Marlboro Light
- Winston
- Camel
- Chesterfield

26. In the 1930's what did tobacco companies do to combat the rising popularity of generic/budget cigarettes?

- Increased advertising expenditures
- Offered smokeless tobacco
- Began loyalty programs
- Offered coupons
- Reduced the price of premium cigarettes

27. In response to the Reader's Digest report that suggests smoking may cause cancer what did the tobacco companies do?

- They immediately discredited the Reader's Digest report
- They increased advertising expenditures
- They launched low tar/low nicotine cigarettes
- They issued the Frank Statement to cigarette smokers
- They launched electronic cigarettes

28. To combat the nation’s highest smoking rates per capita, what is the state of Kentucky considering?
- A) Banning all smoking in public buildings
  - B) Banning all smoking in restaurants and bars
  - C) Placing graphic images on cigarette packs
  - D) Banning all print media cigarette ads in Kentucky
  - E) Raising cigarette taxes by \$1
29. In 2004, British American Tobacco agreed to sell Brown and Williamson to RJ Reynolds. How much did RJ Reynolds pay?
- A) They gave British American Tobacco their line of smokeless tobacco products
  - B) They gave British American Tobacco their line of chewing tobacco products
  - C) They paid \$1.1 billion dollars
  - D) They paid \$72 million dollars
  - E) They paid nothing.

Consider the following situation. Dad moves first and his daughter (Madison) moves second. The Dad chooses the wedding location: Las Vegas or Greenville, NC. Madison moves second and chooses to marry: Steve or Fred. (Hint, draw a game tree).

The dad’s preferred outcomes, ranked from best (#1) to worst (#4) are as follows:

- #1: Madison marries Steve & wedding in Greenville
- #2: Madison marries Steve & wedding in Las Vegas
- #3: Madison marries Fred & wedding in Greenville
- #4: Madison marries Fred & wedding in Las Vegas

Madison’s preferred outcomes, ranked from best to worst, are as follows:

- #1: marry Fred & wedding in Las Vegas
- #2: marry Steve & wedding in Las Vegas
- #3: marry Fred & wedding in Greenville
- #4: marry Steve & wedding in Greenville

30. In your game tree diagram, how many decision nodes does the Dad have? (hint, draw a game tree)
- A) 0
  - B) 1
  - C) 2
  - D) 3
  - E) 4
31. Find the Subgame Perfect equilibrium strategy for this game (remember #1 is best and #4 is worst)
- A. {Las Vegas, (Steve if Las Vegas, Fred if Greenville)}
  - B. {Greenville, (Fred if Las Vegas, Steve if Greenville)}
  - C. {Greenville, (Fred if Las Vegas, Fred if Greenville)}
  - D. {Las Vegas, (Steve if Las Vegas, Steve if Greenville)}
  - E. {Las Vegas, (Fred if Las Vegas, Fred if Greenville)}

32. Is there another outcome that would make both Dad and Madison better off? If yes, then indicate:
- A. No.
  - B. Yes. Dad chooses Greenville & Madison chooses Steve.
  - C. Yes. Dad chooses Greenville & Madison chooses Fred.
  - D. Yes. Dad chooses Las Vegas & Madison chooses Steve.
  - E. Yes. Dad chooses Las Vegas & Madison chooses Fred.

Use this matrix to find the *mixed strategy Nash equilibrium* of this game.

		Column	
		Left	Right
Row	Up	4, 2	8, 1
	Down	7, 1	6, 2

33. Based on your mixed strategy Nash equilibrium, what is the probability that Row choose Up?
- A. 1/4
  - B. 1/2
  - C. 1/3
  - D. 2/3
  - E. 2/5
34. Based on your mixed strategy Nash equilibrium, what is the probability that Column choose Left?
- A. 1/4
  - B. 1/2
  - C. 1/3
  - D. 2/3
  - E. 2/5

35. What is a dominant strategy?
- A. A strategy that is never played
  - B. A strategy this is the best response to another player's strategy
  - C. A strategy that is played with a positive probability
  - D. A strategy this is always played, regardless of the other player's strategy
36. Why doesn't the NCAA currently have a playoff for Division 1 football?
- A. It would take away from academic performance of football players
  - B. It would cost too much to conduct a playoff
  - C. It would jeopardize the current bowl games
  - D. It would risk too many injuries for football players
  - E. Conference USA doesn't support a football playoff
37. What does it mean if you have a Nash Equilibrium?
- A. each player chooses their action regardless of what the other player is doing
  - B. one player receives a higher payoff than the other player
  - C. each player is best responding to what the other player is doing
  - D. both players could increase their payoffs by cooperating
38. Of the following industries, which has reportedly the highest profit margins?
- A. Autos
  - B. Airlines
  - C. Cigarettes
  - D. Beer
39. The NCAA has 35 bowl games this year. This year, one team is going to a bowl with a losing record. Which team is this?
- A. Georgia Tech
  - B. East Carolina Univ.
  - C. South Alabama
  - D. Louisiana Tech
  - E. Duke
40. What is the Master Settlement Agreement?
- A. Oil companies agree to pay this amount for each barrel of oil extracted from the host country
  - B. Beer companies agree to pay this amount for each barrel of beer produced
  - C. Automakers agree to reimburse consumers for faulty air bags deployed in minivans
  - D. Airline pilots agree to lower wage rates in return for job security
  - E. Tobacco companies agree to pay states for each pack of cigarettes sold
- Extra Credit (+2.5 points)
41. What is the driving force behind all of the recent conference realignment in college sports?
- A. Airline frequent flier programs
  - B. High gasoline prices
  - C. Television dollars
  - D. Enhancing the academic reputation
  - E. Title IX

Quick survey: Rank your top three industry studies: (there are no right/wrong answers)

Beer\_\_\_\_\_

Agriculture\_\_\_\_\_

Oil\_\_\_\_\_

Health Care\_\_\_\_\_

Automobiles\_\_\_\_\_

Cigarettes\_\_\_\_\_

Airlines\_\_\_\_\_

College Sports\_\_\_\_\_