ECON 1

1)AB Inbev/Budweiser and Miller/Coors, together with their subsidiary brands and foreign corporate partner brands produce 80% of all beer consumed in the US. Each spends well over $600 million a year on television advertising campaigns,(not to mention spending in other media), promoting their beer brands. Do you think these firms would welcome congressional legislation which restricted the amount that any one firm could spend on advertising to $10 million yearly, and thereby allowed them all to reduce their costs dramatically without fear of losing ground to each other? Explain your answer. 4 pts.

2)”Most commercial fish species in nearly every ocean and sea are being rapidly depleted in what marine biologists and other specialists warn is evolving into one of the worst ecological disasters of modern times. According to the United Nations, the world’s 15 million fishermen and 23 million tons of fishing vessels represent twice as much fishing power as major stocks of fish can sustain.”

Assume that ocean fishing resembles a competitive market in the following ways…there are no significant barriers to entry and there are enough individual fishermen so that no one of them can affect the market price of fish.

a) Explain why the conditions characteristic of competitive markets normally lead profit maximizing firms to make choices about resource use that lead to an "efficient" allocation of resources. (4 pts)

b) Given your answer to (a) explain why unregulated competition has led to such serious overallocation of resources to fishing in the commercial fishing industry? (4 pts)

3) Burning of fossil fuels emits carbon oxides into the atmosphere, which many scientists believe increase the rate at which the earth’s climate is warming. Gasoline emissions from internal combustion engines also produce volatile organic compounds (voc’s) which contribute to smog creation when air inversion conditions are present. Which of the following two approaches to reducing harmful auto emissions is likely to be more efficient in achieving a desired target level of emissions reduction from internal combustion engines? Explain your answer in a paragraph or two. ( 4 pts)

a) Legislate that within 5 years all automobile manufacturers must meet some sharply higher minimum mileage standard averaged over all new vehicles sold by the manufacturer than is now customary in the industry or face heavy fines.

b) Raise the federal excise tax on gasoline sharply while reducing federal personal income tax rates such that the total amount of tax revenues collected by the federal government from all US households combined does not change. (Although of course the distribution of that overall tax burden across individual households will shift depending on household transportation choices).

4) Discuss the following excerpt from an article in the Wall Street Journal several years ago. In your discussion use information in the article and the concepts of: "price discrimination," “elasticity” and "barriers to entry" to explain both the current success of Harrah's strategy; and the prospects for continued success with the strategy. 6 pts

TUNICA, Miss. -- She doesn't know it, but Linda Maranees is the subject of a behavioral experiment that could change the odds of the gambling business. The Memphis, Tenn., retiree, her blouse bedecked with sequined cards and dice, has just received invitations to two nearby slot tournaments, along with vouchers for $200, all courtesy of Harrah's Entertainment Inc.

"Harrah's is savvy," says Ms. Maranees, who admits that once in the casino door, she is bound to spend much more than what Harrah's has given her. That is exactly what the Las Vegas-based company is banking on. Over the past two years, Harrah's has quietly conducted thousands of

clinical-style trials to determine what gets people to gamble more. Based on its findings, Harrah's has developed closely guarded marketing strategies tailored individually to the millions of low-rollers who make up its bread-and-butter business.

The results are impressive enough that other casino companies are copying some of Harrah's more discernible methods.

At the center of Harrah's strategy is a former Harvard professor named Gary Loveman and a vast mathematical model much like the ones that airlines use to fill seats with the highest-paying fliers. But this one scores gamblers on how profitable they can be to Harrah's. Richard Mirman, the company senior vice president who refined the model, boasts that it is Harrah's "secret recipe" -- on a par with the famous unrevealed formula of Kentucky Fried Chicken. The model tells Harrah's marketers how to appeal to gamblers such as Ms. Maranees, based on data tracking their previous behavior in casinos. Spitting out "behavior modification reports," Harrah's computers suggest that Ms. Maranees -- an avid slot-tournament player -- will respond best to a cash offer, while Tina Montgomery, a real-estate agent from nearby Oxford, Miss., is better motivated by a free hotel room. As Ms. Montgomery gambles downstairs, she explains, "my husband stays in the room."

5) Many automotive dealerships, such as BMW, sell low mileage late model used cars (often cars that were initially leased for 1-3 years) with warranties on defects and repairs that offer more coverage for longer periods of time than the warranties on their brand new cars. Explain the rationale for this practice using the concept of asymmetric information. Include in your explanation a discussion of who benefits from these extended warranties. Is there any group of individuals or firms who are hurt? 4pts

6)Assume the graph below represents the market demand for a patented prescription drug together with the firm-level marginal cost and average cost functions for producing the drug. Assume these cost curves do not reflect R&D costs of developing this drug, but only reflect production costs of the drug once the formula for it is known. (Note: the diagram assumes that in the output range from 250-400 thousand MC =ATC = $20). Rising MC at Q>400,000 increases ATC.)

1. Draw the marginal revenue function for this firm. 2 pts
2. What is the profit-maximizing output for this firm and what price should it charge to maximize profits? 4 pts
3. On the graph show the area that represents the economic profit resulting from the firm’s exercise of monopoly power conferred by its patent. Explain your answer briefly. 2 pts
4. If there were no patent to prevent entry, what would the “efficient” overall market level of output of this prescription drug be? 2pts
5. What do you predict will happen to the structure of competition and to the price in this market when the patent expires? (Hint: use the concept of "Minimum efficient scale " of production in your answer.) 4 pts.
6. Why does the US government create monopoly power through the patent system , given the net efficiency loss from monopoly power? Explain in a paragraph. 2pts

20

60

100

$P per presrip-tion

Q scripts/

week (1000’s)

100

300

500

700

D :(market)

ATC

MC

MC

ATC