**ECN-100: Homework Week 5: Monopolistic and Oligopoly**

1. True or False? If False, explain why.

1. Like a firm in a perfectly competitive industry, a monopolistically competitive firm is willing to sell a good at any price that equals or exceeds its marginal cost.
2. Fads and fashions are more likely to arise in monopolistic competition or oligopoly than in monopoly or perfect competition.
3. Suppose there is a monopolistically competitive industry in long-run equilibrium that possesses excess capacity. All the firms in the industry would be better off if they merged into a single firm and produced a single product, but whether consumers are made better off by this is ambiguous.
4. In the long run, it is impossible for firms in a monopolistically competitive industry to create a monopoly by joining together to form a single firm.
5. A successful brand name is like a barrier to entry.

2. Use the table below to answer the following:

1. Which market structure – oligopoly or monopolistic competition – best characterizes each of the industries?
2. Which type of market (oligopoly or MC) has higher advertising expenditures? And, explain why the relationship might exist.

Industry HHI Ad expenditures ($millions)

Restaurants 179 $1,784

Cereal 2,098 732

Movie studios 918 3,324

Laundry detergent 2,068 132

3. Game Theory in Oligopoly.

The following payoff matrix is for two firms in a duopoly markets, and Firm A and B can either choose Low Price or High Price strategy with the following results reflecting their actions.

Firm B:

**Low Price High Price**

Firm A: **Low Price** Firm A’s profit: $1,600 Firm A’s profit: $1,800

Firm B’s profit: $2,500 Firm B’s profit: $2,800

**High Price** Firm A’s profit: $1,800 Firm A’s profit: $2,000

Firm B’s profit: $2,200 Firm B’s profit: $2,400

a) If the two firms collude and decide jointly on their pricing strategy, with the goal of maximizing their joint profits, what combination of strategies, and what’s the amount of the greatest joint profit?

b) Which strategy is Firm A’s dominant strategy?

c) Which strategy is Firm B’s dominant strategy?

d) What is the Nash Equilibrium for this game?