(1)  Suppose a firm in a monopolistically competitive market is producing in a profit maximising manner. It suddenly experiences a simultaneous increase in demand and increase in marginal costs. What do we expect to happen to Price and Quantity produced as the firm attempts to maximize profits in this new situation?

* a. Price increases, change in Quantity is ambiguous.
* b. Quantity increases, change in Price is ambiguous.
* C. Price decreases, change in Quantity is ambiguous.
* D. Quantity decreases, change in Price is ambiguous.
* E. None of the above.

(2) A firm in perfect competition needs to decide whether to exit the market in the long run. The firms costs are described by TC = 120 + 6Q + 2Q2. Price in the market is 14. Should the firm exit the industry?

* a. Yes.
* B. No.
* C. The firm is indifferent between staying or exiting the industry.
* D. There is not enough information.
* E. None of the above.

(3) Consider the market for Totoro dolls. It is perfectly competitive, with 96 firms currently in the market. Each firm is identical and has a cost structure of TC = 50 + 4Q + ½ Q2. The demand curve is given by P = 3175-11Q. How much does each firm produce in the short-run (SR) equilibrium?

* a. 1
* b. 2
* c. 3
* d. 4
* e. 5

(4) What is long run price in this market if the cost structure does not change from TC = 50 + 4Q + ½ Q2 ?

* a. 14
* b. 15
* c. 16
* d. 17
* e. 18

(5) What is the number of firms in the long run equilibrium in this market if a typical firm’s cost structure does not change from TC = 50 + 4Q + ½ Q2 and the demand curve is now given by P = 3424-11Q?

* a. 29
* b. 31
* c. 33
* d. 35
* e. 37

(6) Consider a monopolist who faces a demand curve P = 44.76 – 2/7Q. Its total cost function is given by TC = 5 + 2Q + 1/4 Q2 + 1/296 Q4. In this market, if the monopolist decides to adopt perfect price discrimination, will it produce a higher quantity or a lower quantity, relative to charging a single price? Will it make a higher or lower profit, relative to charging a single price? (You can safely assume that it will always produce some units, and that the monopolist can prevent resale.)

* a. Higher quantity, Lower Profit
* b. Lower quantity, Higher Profit
* c. Lower quantity, Lower Profit
* d. Higher quantity, Higher Profit
* e. None of the above.

(7) Due to the success of the TV show My Little Pony: Friendship is Magic, Hasbro decides to launch a large range of toy figurines based on the characters in the show. Since they own the rights, they have a monopoly on producing these figurines, and the demand curve is described by P = 100 - 1/20 Q. These figurines are produced at a tiny factory in Kuala Lumpur, and Hasbro pays a fixed cost of 300 dollars for the factory and an additional 4 dollars for each figurine produced. What is the deadweight loss caused by monopoly in this market?

* a. 23,040
* b. 22,040
* c. 21,000
* d. 20,040
* e. 19,000

(8) After doing extensive market research, Hasbro find that some of the demand for My Little Pony figurines is from the expected demographic of young girls, but an unexpectedly large proportion of demand is made up of 20-30 year old male enthusiasts of the show who call themselves “bronies”. Suppose that the little girls demand for the figurines is P = 30 - 1/10 Q, while the costs stay the same (TC = 300 +4Q). If they were able to sell to only this group, what would their total profits be?

* a. 3760
* b. 3260
* c. 2360
* d. 1390
* e. 1090

(9) When Hasbro realises that the demand from bronies is actually larger, they shift their attention to selling only to bronies. The demand from bronies is given by P= 170 - 1/10Q , and the costs stay the same at TC = 300+4Q. What are price and quantity sold in this case?

* a. P = 80, Q = 830
* b. P = 67, Q = 1020
* c. P = 38, Q = 1750
* d. P = 18, Q = 2800
* e. None of the above

(10) Hasbro is approached by a savvy economist who has figured out a way to identify each market and segregate them. The demand from bronies and little girls is as indicated above. The production costs stay the same at TC = 300+4Q, and the firm only needs to pay the fixed cost of 300 once for both markets. What is the maximum amount that Hasbro is willing to pay for this service (and therefore the maximum amount that the economist could charge)?

* a. 20,000
* b. 22,500
* c. 24,000
* d. 24,500
* e. Not enough information has been given to answer this question.