

Microeconomics, Module 15: "Oligopolies" (Chapter 11)

*Illustrative Test Questions*

(The attached PDF file has better formatting.)

Question 15.1: Entry and Exit

Which model highlights the effect that costless entry and exit have on firms' behavior?

- A. The Prisoner's Dilemma model of cartels
- B. The contestable market model of oligopoly
- C. The Cournot oligopoly model
- D. The Bertrand oligopoly model
- E. The monopolistic competition model

Answer 15.1: B

Question: Does the contestable market model apply to the insurance industry:

Answer: Sometimes only one or two insurers sell in a given town, but since there are no major barriers to entry, they charge the competitive price. More advanced economic texts quantify the maximum difference from the competitive price that a firm can charge without encouraging entry of competitors.

Question 15.2: Monopolistic Competition

Which of the following is the defining characteristic of monopolistic competition?

- A. Tit-for-tat strategies
- B. High levels of vertical integration
- C. Price-taking behavior
- D. High levels of horizontal integration
- E. Product differentiation

Answer 15.2: E

*Question:* The readings posting says that monopolistic competition is not that relevant for the insurance industry; why is that?

*Answer:* Insurance products have little product differentiation. Even the actuaries who price the products of their employers rarely know of material differences in the policies; most consumers have no idea how these policies differ.

*Question:* Are all insurance companies the same?

*Answer:* Insurers differentiate themselves in other ways. Some insurers say they provide better service. The service provided by insurers differs: tax advice to buyers of permanent life insurance, loss engineering services to buyers of workers' compensation, and so forth.

Question 15.3: Oligopoly Models

What may be inferred from comparing the Cournot and Bertrand oligopoly models?

- A. An oligopolistic equilibrium is always less efficient than a competitive equilibrium.
- B. Free entry and exit causes oligopolies to have excess capacity in the long run.
- C. The outcome depends on the assumptions about firms' reactions to rivals' behavior.

- D. Tit-for-tat is a superior strategy to predatory pricing, buy-outs, or collusion.
- E. Successful oligopolies produce the monopolistic quantity at the monopoly price.

Answer 15.3: C

Statement A is not true for the Bertrand oligopoly.

Statement B: Oligopolies don't have free entry and exit.

Statement C: The Cournot oligopoly and Bertrand oligopoly have different outcomes, based on whether competitors are assumed to set prices or quantities.

Statement D: None of these strategies necessarily works. They are used in different scenarios, and they cannot be compared.

Statement E: No oligopolies produce the monopolistic quantity.

Question 15.4: Cournot Oligopoly

Let  $Q_C$  be the competitive quantity,  $Q_M$  be the monopolistic quantity,  $Q_B$  be the Bertrand oligopolistic quantity, and  $Q_R$  be the Cournot oligopolistic quantity. Rank these quantities in order of size.

- A.  $Q_M < Q_B < Q_R < Q_C$
- B.  $Q_M < Q_R < Q_B < Q_C$
- C.  $Q_M < Q_B < Q_R = Q_C$
- D.  $Q_M < Q_R < Q_B = Q_C$
- E.  $Q_M < Q_B = Q_R < Q_C$

Answer 15.4: D

If the demand curve is downward sloping, we can show a similar relation for the equilibrium prices. Know these four equilibrium quantities and prices for the final exam.

Question 15.5: Bertrand Model

In the Bertrand model of oligopoly, firms produce

- A. The competitive quantity.
- B. The monopoly quantity.
- C. More than the monopoly quantity, but less than the competitive quantity (but not necessarily the average).
- D. Less than the monopoly quantity.
- E. The average of the competitive quantity and the monopoly quantity.

Answer 15.5: A

Question 15.6: Cournot Model

In the Cournot model of oligopoly, firms produce

- A. The competitive quantity.
- B. The monopoly quantity.
- C. More than the monopoly quantity, but less than the competitive quantity (but not necessarily the average).
- D. Less than the monopoly quantity.
- E. The average of the competitive quantity and the monopoly quantity.

Answer 15.6: C

Question 15.7: Cournot Model

In the Cournot model of oligopoly, each firm chooses its output assuming that its rivals

- A. Do not change their prices.
- B. Do not change their output.
- C. Can enter and exit the industry costlessly.
- D. Use the tit-for-tat strategy.
- E. Act myopically.

Answer 15.7: B

Question 15.8: Monopolistic Competition

Which of the following statements about monopolistic competition is false?

- A. Firms in monopolistic competition, like competitive firms, earn zero profits in the long run because of entry and exit.
- B. The industry's output in monopolistic competition, like that in competition, is produced at the lowest possible cost.
- C. Firms in monopolistic competition, like monopolies, face downward sloping demand curves for their products.
- D. Firms in monopolistic competition, like monopolies, charge prices higher than their marginal costs.
- E. Firms in monopolistic competition, like monopolies, set marginal revenue equal to their marginal costs.

Answer 15.8: B

Monopolistic competition is common. An excellent example is beer.

*Illustration:* Most beer drinkers say that the different brands have different tastes, and their brand tastes best. In blind-fold tests, many beer drinkers can't differentiate among brands and can't pick out the brand that they drink.

- By promoting different brands, beer producers can charge higher prices.
- Since it is not expensive to brew beer, firms do not earn above average profits.

*Question:* If beer producers can charge higher prices, why don't they make higher profits?

*Answer:* They spend much advertising brands and persuading consumers that they differ.

*Question:* Is it bad social policy to allow different brands of beer?

*Answer:* Countries which regulate brands end up with poor products. It is best for firms to compete fiercely, even if some of the competition is for similar products with different names. Unrestricted competition allows a product that is better to dominate the market. This happens in beer just as in other products. If one firm makes a better beer, other firms must produce equally good products or go out of business.

*Question:* So how to consumers lose from monopolistic competition?

*Answer:* If firms focused all their efforts on quality and price instead of trying to persuade consumers that one brand is better than another, consumers would get higher quality beer at lower prices.

Question 15.9: Monopolistic Competition and Social Welfare

What are the welfare consequences of monopolistic competition?

- A. The Invisible Hand Theorem shows that monopolistic competition, like competition, makes social gain as large as possible.
- B. Social welfare would be improved if a monopolistically competitive industry were replaced by a competitive industry.
- C. The welfare consequences of monopolistic competition, like those of monopoly, depend on the firms' source of market power.
- D. The welfare consequences of monopolistic competition are ambiguous, because its inefficiencies must be weighed against the benefits of having differentiated products.
- E. The dead weight loss is reduced by a reduction in prices.

Answer 15.9: D