SMU
SINGAPORE MANAGEMENT UNIVERSITY

Economics & Society
Singapore Management University
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Homework 5

Due on 14/2/2023, by 23:00

This assignment is optional but STRONGLY RECOMMENDED. If you do not submit the answers till the deadline, the score of your final exam will substitute for the score for this assignment. Submit only the correct letter for each task on eLearn under 'Quizzes' within 'COR2100-Economics and Society G9-10-11-12'. Note that the actual text of questions and answers is not supposed to appear on the eLearn quiz. You have unlimited attempts. The system is programmed to credit your last attempt. Be informed that if you submit an attempt and afterwards you re-open the quiz, you must submit your answers AGAIN. Otherwise, the system will grade the unfinished attempt with 0 (because it is the last one) and there is NOTHING I can do to fix this after the fact. Late homework or homework submitted outside eLearn cannot be accepted as this would violate SMU official policy for fairness and transparency in grading. This assignment is protected by Grade Insurance™: If the assignment's average turns out to be below 75, an equal amount of bonus points will be given to every work, for the average to become 75. Direct any homework questions to your TA.

Scenario 5.1: *Firm 1 and firm 2 share a market with demand* $p = 2{,}000 - 10Q$*, where* Q *denotes the total quantity sold in the market. Each firm's costs are* $FC = 4{,}000$ *and* $MC = 200$*.*

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1. According to scenario 5.1, what is the AVC for each firm, when each of them produces 70 units?
    A. Zero.
    B. Around 35 dollars.
    C. Around 70 dollars.
    D. Around 100 dollars.
    E. Around 200 dollars.
    F. Around 400 dollars.

2. According to scenario 5.1, if the two firms acted as PC competitors, what quantity would each sell?
    A. Around 30 units.
    B. Around 60 units.
    C. Around 90 units.
    D. Around 120 units.
    E. Around 150 units.
    F. Around 180 units.

3. According to scenario 5.1, if the two firms act as PC competitors, what will be the price?
    A. Around 100 dollars.
    B. Around 200 dollars.
    C. Around 300 dollars.
    D. Around 400 dollars.
    E. Around 500 dollars

4. According to scenario 5.1, if the two firms acted as PC competitors, what would the profit for each firm be?
    A. Around -4,000 dollars.
    B. Around -2,000 dollars.
    C. Zero.
    D. Around 2,000 dollars.
    E. Around 4,000 dollars.

5. According to scenario 5.1, if the two firms competed in quantities and you know that at equilibrium they would produce equal quantities, how much would each firm produce?
    A. Around 30 units.
    B. Around 60 units.
    C. Around 90 units.
    D. Around 120 units.
    E. Around 150 units.

6. According to scenario 5.1, if the two firms compete in quantities, what will be the price?
    A. Around 200 dollars.
    B. Around 400 dollars.
    C. Around 600 dollars.
    D. Around 800 dollars.
    E. Around 1,000dollars.
    F. Around 1,200 dollars.

7. According to scenario 5.1, if the two firms compete in quantities, what will the profit for each firm be?
    A. Zero.
    B. Around 8,000 dollars.
    C. Around 16,000 dollars.
    D. Around 24,000 dollars.
    E. Around 32,000 dollars.
    F. Around 40,000 dollars.

8. According to scenario 5.1, if the two firms colluded, what would the total quantity in the market (Q) be?
    A. Around 100 units.
    B. Around 150 units.
    C. Around 200 units.
    D. Around 250 units.
    E. Around 300 units.
    F. Around 350 units.
    G. Around 400 units.

9. According to scenario 5.1, if the two firms colluded, what would be the price?
    A. Around 200 dollars.
    B. Around 500 dollars.
    C. Around 800 dollars.
    D. Around 1,100 dollars.
    E. Around 1,400 dollars.
    F. Around 1,800 dollars.

10. According to scenario 5.1, if the two firms colluded, what would profit be for each firm?
    A. Around 9,000 dollars.
    B. Around 18,000 dollars.
    C. Around 27,000 dollars.
    D. Around 36,000 dollars.
    E. Around 45,000 dollars.

11. According to scenario 5.1, the two firms collude but firm 1 alone decides to 'cheat'. How much will firm 1 produce?
    A. Around 35 units.
    B. Around 70 units.
    C. Around 100 units.
    D. Around 130 units.
    E. Around 165 units.
    F. Around 200 units.

12. According to scenario 5.1, the two firms collude but firm 1 alone decides to 'cheat'. What will the price be?
    A. Around 250 dollars.
    B. Around 450 dollars.
    C. Around 650 dollars.
    D. Around 850 dollars.
    E. Around 1,050 dollars.

13. According to scenario 5.1, the two firms collude but firm 1 alone decides to 'cheat'. By how much the profit of firm 1 will exceed that of firm 2?
    A. By around 5,000 dollars.
    B. By around 10,000 dollars.
    C. By around 15,000 dollars.
    D. By around 20,000 dollars.
    E. By around 25,000 dollars.
    F. By around 30,000 dollars.

14. According to scenario 5.1, the two firms collude but they both 'cheat'. What will the profit for each firm be?
    A. Around 2,000 dollars.
    B. Around 8,000 dollars.
    C. Around 14,000 dollars.
    D. Around 20,000 dollars.
    E. Around 26,000 dollars.
    F. Around 32,000 dollars.
    G. Around 38,000 dollars.

15. Which of the following market structures has the highest market price in the long-run, given the same demand and cost curves?
    A. Perfect Competition.
    B. Monopoly.
    C. Monopolistic Competition.
    D. Bertrand oligopoly.

16. Which of the following market structures has the highest total quantity traded, given the same demand and cost curves?
    A. Monopoly.
    B. Monopolistically competitive market.
    C. Cournot oligopoly.
    D. Perfect Competition.

17. Which of the following market structures brings about the highest profit in the long-run for the firm(s) who operate in it, given the same demand and cost curves?
    A. Perfect Competition.
    B. Monopolistic competition.
    C. Monopoly.
    D. Bertrand Oligopoly.

18. Which of the following market structures brings about zero DWL, given the same demand and cost curves?
    A. Perfect Competition.
    B. Monopoly.
    C. Monopolistically competitive market.
    D. Cournot oligopoly.
    E. None of the above.

19. Which of the following is a characteristic of monopolistic competition?
    A. Barriers to entry.
    B. Large number of firms.
    C. Homogeneity of products.
    D. All of the above.
    E. None of the above.

20. A monopolistically competitive firm produces its optimal long-run quantity. Which of the following is true?
    A. $P > LAC$ and $MR = LMC$.
    B. $P > LAC$ and $MR > LMC$.
    C. $P = LAC$ and $MR = LMC$.
    D. $P = LAC$ and $MR > LMC$.

Good afternoon! If you had a chance to take a red pill and automatically wake up on the morning of your graduation being able to receive the SMU Bachelor's degree without having to go through any classes and nobody would ever know about it, would you take it? What is the primary reason for which you enrolled in SMU? The degree or the knowledge? Have you ever observed those around you who have succeeded in whatever you want to succeed? What mattered more in their success: their knowledge and experiences or their titles? Why will an employer hire you some day: for your skillset or for the diplomas? Why will a potential client give you their business: just because you are a university graduate? Why will your friends appreciate your company: for your intellectual capacity or because you are an SMU alumnus? Think about those questions. The answers may help you understand where you are heading in life. *Kosmas*