***Open Ended Questions.***

1. Helen Keller is a blind woman. There are two goods she consumes: red socks and blue socks. Those socks are indifferent to her as she cannot see the different colors. Draw her indifference over these two goods and discuss whether she has diminishing marginal rate of substitution between two goods.
2. Instant noodle (cup noodle) is usually considered as an inferior good. Assume that price of instant noodle is increased. Draw the graph and show direction of income effect and direction of substitution effect are opposite to each other.
3. Let’s assume that Charlie’s utility function is denoted as Uc while Sam’s utility function is denoted as Us. There are two goods: Apple and Banana. Apple will be denoted as A, while Banana is denoted as B. Utility of Charlie and Sam from two goods are as follows.

Uc(A) = 100 Uc(B) = 0

Us(A) = 10 Us(B) = 5

Can we say that Charlie values Apple more than Sam does?

1. Let’s assume that Dean has the following two options.

Option A: 50%chance of $400

50%chance of $200

Option B: 50%chance of $600

50%chance of $100

Please give a brief explanation in which cases Dean is risk neutral; risk averse; or risk loving?

1. What is the price elasticity of demand of following demand curve? Provide

real life example of such demand curve.



1. Let’s assume that firm has following isoquants. Explain the characteristics of production function of this firm and suggest real life example of such production function.



1. The following graph shows indifference curve with diminishing marginal rate of substitution (MRS). Please explain diminishing MRS with plain language using real-life example.



1. What is the first order condition for utility maximization? Also please explain why point A, B, and C can/cannot be an utility maximization under budget constraint.



1. Jane has following indifference curve over two goods: left shoes and right shoes. Will Jane choose the point where her MRS is equal to relative price Px/Py to maximize her utility?



1. Let’s assume that firm has following change in its isoquant. (moving from q0 to q1)? Explain the meaning of the change in production function and also provides real-life example.



1. What is the price elasticity of demand in this case? What will happen to equilibrium quantity and equilibrium market price if supply curve moves from S0 to S1?



1. Explain “Economics of Scope” and provide real-life example.
2. What happens to the budget line if the price of good 2 increases, but the price of good 1 and income remain constant? (Support your answer with graph considering the budget constraint)

***Analytical questions*** will cover the following topics.

1. Calculation of “Lump-sum Principle” (taxes).
2. Utility maximization (MRS and marginal utility)
3. Utility maximization (MRS and marginal utility)
4. Calculation of “Lump-sum Principle” (subsidies).
5. Calculation of insurance premium.
6. Expected money value
7. Expected utility
8. Expected utility
9. Fair and unfair insurance premium
10. Cost minimization (rate of technical substitution)
11. Cost minimization (rate of technical substitution)
12. Constant return to scale
13. Problem set on the profit maximization under the perfect competition.
14. Problem set on the profit maximization under the perfect competition.
15. Problem set on the profit maximization under the perfect competition.
16. Problem set on the profit maximization under the perfect competition.
17. Problem set on the profit maximization under the perfect competition.
18. Problem set on the profit maximization under the perfect competition.
19. Problem set on the profit maximization in the monopolistic market.
20. Problem set on the profit maximization in the monopolistic market.
21. Problem set on the profit maximization in the monopolistic market.
22. Problem set on the profit maximization in the monopolistic market.
23. Problem set on the profit maximization in the monopolistic market.
24. Calculation of total social surplus, socially optimal output and the compensation ranges for the sufferers.
25. Calculation of total social surplus, socially optimal output and the compensation ranges for the sufferers.
26. Calculation of total social surplus, socially optimal output and the compensation ranges for the sufferers.
27. Calculation of total social surplus, socially optimal output and the compensation ranges for the sufferers.
28. Game Theory: Normal form of game: Strategies and payoff functions.
29. Game Theory: Normal form of game: Strategies and payoff functions.
30. Game Theory: Normal form of game: Strategies and payoff functions.
31. Game Theory: Normal form of game: Strategies and payoff functions.
32. Game Theory: Normal form of game: Strategies and payoff functions.
33. Iterated Elimination.
34. Iterated Elimination.
35. Iterated Elimination.
36. Iterated Elimination.
37. Iterated Elimination.
38. Mixed strategy Nash Equilibrium
39. Mixed strategy Nash Equilibrium
40. Mixed strategy Nash Equilibrium
41. Mixed strategy Nash Equilibrium
42. Mixed strategy Nash Equilibrium
43. Cournot Duopoly model
44. Cournot Duopoly model
45. Cournot Duopoly model
46. Cournot Duopoly model
47. Cournot Duopoly model
48. Cournot model with n-firms
49. Cournot model with n-firms
50. Cournot model with n-firms
51. Cournot model with n-firms
52. Cournot model with n-firms
53. Stackelberg duopoly model
54. Stackelberg duopoly model
55. Stackelberg duopoly model
56. Stackelberg duopoly model
57. Stackelberg duopoly model
58. Extensive form game: Backward Induction
59. Extensive form game: Backward Induction
60. Extensive form game: Backward Induction
61. Extensive form game: Backward Induction
62. Extensive form game: Backward Induction