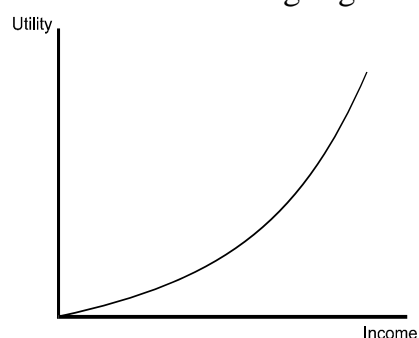


一、選擇題：共 15 題，每題 4 分。

1. When the price of a good increases:
  - A. the quantity demanded of the good will decrease.
  - B. the quantity demanded of the good will increase.
  - C. the demand for the good will increase.
  - D. the demand for the good will decrease.
  
2. Two goods, X and Y, are called complements if
  - A. an increase in  $P_X$  causes more Y to be bought.
  - B. an increase in  $P_X$  causes less Y to be bought.
  - C. an increase in  $P_Y$  causes less Y to be bought.
  - D. an increase in income causes more of both X and Y to be bought.
  
3. If income doubles and the quantity demanded of good X more than doubles, then good X can be described as a
  - A. substitute good.
  - B. complement good.
  - C. luxury.
  - D. necessity.
  
4. The demand for a product is described as inelastic if
  - A. when price is increased, the quantity demanded rises.
  - B. when the price is reduced the quantity demanded rises.
  - C. when price is increased, total revenue declines.
  - D. consumers are not very responsive to a price change.
  
5. The weighted average of all possible outcomes of a project, with the probabilities of the outcomes used as weights, is known as the
  - A. variance.
  - B. standard deviation.
  - C. coefficient of variation.
  - D. expected value.
  
6. The concept of a risk premium applies to a person that is
  - A. risk averse.
  - B. risk neutral.
  - C. risk loving.
  - D. all of these.
  
7. An individual whose attitude toward risk is illustrated in the following Figure is
  - A. risk averse.
  - B. risk loving.
  - C. risk neutral.
  - D. none of the above is necessarily correct.



8. A firm's marginal cost is defined as
- A. the ratio of total cost to total output.
  - B. the ratio of total output to total cost.
  - C. the additional cost of producing one more unit of output.
  - D. the reciprocal of total average cost.
9. A firm's isoquant shows
- A. the amount of labor needed to produce a given level of output with capital held constant.
  - B. the amount of capital needed to produce a given level of output with labor held constant.
  - C. the various combinations of capital and labor that will produce a given amount of output.
  - D. none of the above.
10. The firm's expansion path records
- A. profit-maximizing output choices for every possible price.
  - B. cost-minimizing input choices for profit-maximizing output levels.
  - C. cost-minimizing input choices for all possible output levels for when input rental rates expand along with production.
  - D. cost-minimizing input choices for all possible output levels for a fixed set of input prices.
11. In a market with a bilateral monopoly:
- A. there is a single buyer and a single seller.
  - B. there are many buyers and a single seller.
  - C. there is a single buyer and few sellers.
  - D. there are a few buyers and a few sellers.
12. The situation in which buyers are able to affect the price of a good is referred to as \_\_\_\_\_ power.
- A. monopoly
  - B. monopsony
  - C. purchasing
  - D. countervailing
13. If an individual's labor supply curve is backward bending, then
- A. the income effect associated with a higher wage is greater than the substitution effect.
  - B. the substitution effect associated with a higher wage is greater than the income effect.
  - C. the substitution effect associated with a higher wage encourages more leisure.
  - D. none of the above.

14. Because Don has health insurance, he is more likely to see the doctor when he has a cold. This is an example of
- private information.
  - moral hazard.
  - adverse selection.
  - all of the above.
15. An amusement park charges an entrance fee of \$75 per person, then \$2.50 per ride. This is an example of
- first-degree price discrimination.
  - second-degree price discrimination.
  - a two-part tariff.
  - bundling.
  - tying.

二、非選擇題：共 10 小題，每小題 4 分。

1. 珍妮消費食物  $F$  與衣服  $C$  的效用為  $U(F, C) = FC$ 。
- 請解釋珍妮的無異曲線是凸性(convex)的嗎？
  - 假設食物一單位花費\$2，衣服一單位花費\$4，珍妮有\$20 可花費在食物和衣服上。請繪圖並列出珍妮的預算線。
  - 珍妮最適的食物與衣服組合為何？
2. 假設「大掃把公司」在台灣掃毒軟體市場中為一獨佔廠商，已知其成本函數為  $TC = (1/4)Q^2 + 10Q + 5$ ，面對的需求函數為  $Q = 300 - 6P$ 。在最適決策下請求算廠商下列問題：
- 最適售價。
  - 最適產量。
  - 消費者剩餘。
  - 廠商利潤。
3. 假設廠商 A 與廠商 B 在固定的邊際成本與平均成本下營運，但是廠商 A 的邊際成本  $MC_A = 10$ ，而廠商 B 的邊際成本  $MC_B = 8$ 。市場的需求曲線為  $Q_D = 500 - 20P$ 。
- 若廠商 A 與廠商 B 均採取 Bertrand 競爭，則 Nash 均衡下的市場價格為何？
  - 試問每家廠商的利潤為何？
  - 請解釋這是 Pareto 均衡嗎？