

- minimization by firms (C)profit maximization by consumers (D)utility maximization by consumers. (94成大財金)
5. If a consumer is a net seller of a good and the price of the good falls then which of the following will occur? (A)The consumer sells even more units of the good (B)The consumer becomes a net buyer (C)The consumer remains at initial position (D)Not enough information to determine the answer. (95中山企研)
6. In free exchange among two individuals the position on the contract curve finally arrived at will, among other things, depend on:
 I The bargaining strength of each individual.
 II The initial endowments of the individuals.
 III The individuals' preferences.
 Which of these correctly completes the statement? (A)Only III (B)Only II (C) I and III, but not II (D) II and III, but not I (E) I, II, and III. (93、94政大企研)
7. "In a competitive exchange economy, all Pareto-improving moves will be made ensuring that the economy will be Pareto-efficient in its final equilibrium." This statement refers to: (A)the contract curve (B)the social welfare function (C)the second theorem of welfare economics (D)the first theorem of welfare economics. (95成大財金)
8. A competitive equilibrium is Pareto efficient because at the competitive equilibrium: (A)prices have been allowed to adjust (B)there are no further gains from trade (C)the final outcome is different from the original inefficient endowment (D)all members of society can be made better off. (95交大財金)
9. 當財貨的邊際效用恆大於零時，Pareto最適資源分配必然將所有的財貨分配完。 (96政大國貿)
10. 在一個經濟體系裡，Pareto最適資源分配下，每個人不同消費財間的邊際替代率必然相等。 (96政大國貿)
11. 魯賓遜和Friday在荒島上發現了80根香蕉及一個瀑布，若令魯賓遜食用香蕉數量為 B_R ，效用函數為 $U_R = \log(B_R)$ ，Friday食用香蕉數量為

B_F ，效用函數為 $U_F = \sqrt{B_F}$ ，同時瀑布對兩者的邊際效用同為1，則符合 Pareto optimal 的香蕉分配方法為：(A) $B_R = 20$ ， $B_F = 60$ (B) $B_R = 64$ ， $B_F = 16$ (C) $B_R = 60$ ， $B_F = 20$ (D) $B_R = 16$ ， $B_F = 64$ 。

(95交大經管)

12. 下列何者為真？(A) Pareto efficient 的解一定唯一 (B) 如果必須損害某人的效用才能增加其他人的效用時，此時就能認定社會處於 Pareto efficient 的狀態 (C) Pareto efficient 的解一定不唯一 (D) 對某一個人而言，在 Pareto efficient 下解的效用可能低於不是 Pareto efficient 下解的效用。(複選題)

(93台大財金乙組)

13. There are two individuals A 、 B and two goods x 、 y in a small society. $x = 10$ and $y = 10$ are the endowments of the society and will be distributed to A 、 B . Assume that the utility functions of A and B are $U^A = x_A + 2y_A$ 、 $U^B = x_B y_B$ ，which of the following distributions for A is Pareto optimal? (A) $(x_A, y_A) = (9, 6)$ (B) $(x_A, y_A) = (7, 4)$ (C) $(x_A, y_A) = (6, 2)$ (D) $(x_A, y_A) = (5, 0)$ 。

(100高雄經管)

Ans：

1. (D)，此人對兩財貨的毛需求 (gross demand) 函數可求解如下：

$$\begin{cases} MRS = \frac{P_x}{P_y} \\ P_x X + P_y Y = P_x w_x^0 + P_y w_y^0 \end{cases} \Rightarrow \begin{cases} \frac{2}{3} \frac{Y}{X} = \frac{P_x}{P_y} \\ P_x X + P_y Y = 5P_x + 5P_y \end{cases} \Rightarrow \begin{cases} X^* = 2 + 2 \left(\frac{P_y}{P_x} \right) \\ Y^* = 3 + 3 \left(\frac{P_x}{P_y} \right) \end{cases}$$

∴ (1) 當 $P_x = P_y = 1$ 時， $X^* = 4$ ， $Y^* = 6$ ，效用 $U = 4^2 \cdot 6^3 = 3,456$ 。

(2) 當 $P_x = 2$ ， $P_y = 1$ 時， $X^* = 3$ ， $Y^* = 9$ ，效用 $U = 3^2 \cdot 9^3 = 6,561$ 。

2. (D)，第一福利定理指的是：「若競爭性均衡存在，則其必為柏萊圖效率狀態」。

3. (D)，Spillover effect 為外溢效果。

4. (D)，全面均衡達成時，廠商與消費者分別達到利潤極大與效用極大均衡，而後者又可導出財貨需求線。

5. (D)，消費者反應不確定的原因是因為此處替代效果與所得效果可能反向