## HUL 211: Introduction to Economics IIT Delhi Practice Problems

## January 12, 2025

- 1. An outward shift of production possibility frontier may be caused by:
  - (a) An increase in demand
  - (b) More government spending
  - (c) Technological innovation
  - (d) Production inefficiency
- 2. You are a taxi driver in Melbourne who earns 50 dollars for a day's work. You have been offered a one-day ticket to the Australian Open for 40 dollars. As a tennis fan, you value the experience at 100 dollars. With this information, what can we say?
  - (a) The opportunity cost of the day at the Open is 40 dollars.
  - (b) The economic cost of the day at the Open is 40 dollars.
  - (c) The economic rent of the day at the Open is 10 dollars.
  - (d) You would have paid up to 100 dollars for the ticket.
- 3. For each of the following goods or bads, decide whether they are rival and whether they are excludable, and explain your answer. If you think the answer depends on factors not specified here, explain how.
  - (a) A free public lecture held at a university lecture theatre
  - (b) Noise produced by aircraft around an international airport
  - (c) A public park
  - (d) A forest used by local people to collect firewood
  - (e) Seats in a theatre to watch a musical
  - (f) Bicycles available to the public to hire to travel around a city
- 4. If the economy is operating at point E, which of the following statements regarding the opportunity cost is true:

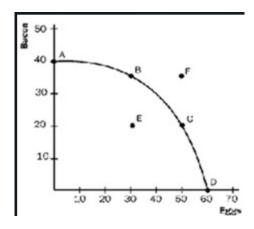


Figure 1: Figure

- (a) The opportunity cost of 20 additional units of eggs is 10 units of bacon.
- (b) The opportunity cost of 20 additional units of eggs is 20 units of bacon
- (c) The opportunity cost of 20 additional units of eggs is 20 units of bacon.
- (d) 20 additional units of eggs can be produced with no impact
- 5. Explain how a production possibility curve for agriculture goods and manufacturing goods would shift after each of the events described below:
  - (a) A drought in the Midwest reduces agricultural yield per acre.
  - (b) Advances in computer technology lower the cost of producing manufactured goods but do not affect the cost of producing agricultural goods.
  - (c) Civil war disrupts the production of all goods equally in the United States.
- 6. A clothing accessory company produces scarves and earrings. Below are the production possibility combinations it can produce with the resources that it has.
  - (a) Draw the production possibility curve in the space below placing "earrings" on the vertical axis.
  - (b) Suppose technological advances increase production of both earrings and scarves by 10without increasing costs. Demonstrate the effect of this innovation on the production possibility curve you drew above.
  - (c) What is the slope of the PPF between points e and f? What does this slope mean?

Point	Scarves	Earrings
a	10	0
b	9	50
c	8	90
d	7	120
e	6	145
f	5	165
g	4	185
h	3	200
i	2	215
j	1	225
k	0	230

Figure 2: Table

- (d) Suppose the slope of the PPF were constant. (It isn't) If it were, what would this indicate?
- 7. Why is the distribution of wealth typically more unequal than that of income?
- 8. What determines the curvature of PPC? Can you think of any factor that might lead to the change of this curvature?
- 9. Do we always get gains from specialization? Can there be losses from specialization?
- 10. In Fantasia there is a debate about educational policy. The current situation is that there are two equal-sized groups of people, the Blues who all get an income of 200 dollars and the Reds who all get an income of 600 dollars, as in the top part of the accompanying diagram, labelled "Parents." One group of educational experts argue that if the Fantasian government adopts policy A then the future outcome for the next generation will be as shown on the left side of the diagram, labelled "Children"; another group of experts argue that if policy B is adopted, the outcome for the next generation will be that on the right side of the diagram [colours are used to show whether the children come from blue families or red families]. According to your view:
  - (a) which of policies A and B would produce lower inequality of outcome?
  - (b) which policy produces higher social mobility?
  - (c) which policy is characterized by lower inequality of opportunity?

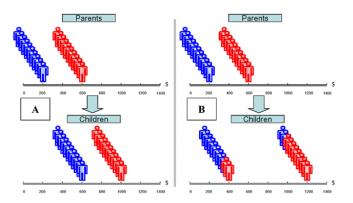


Figure 3: Figure