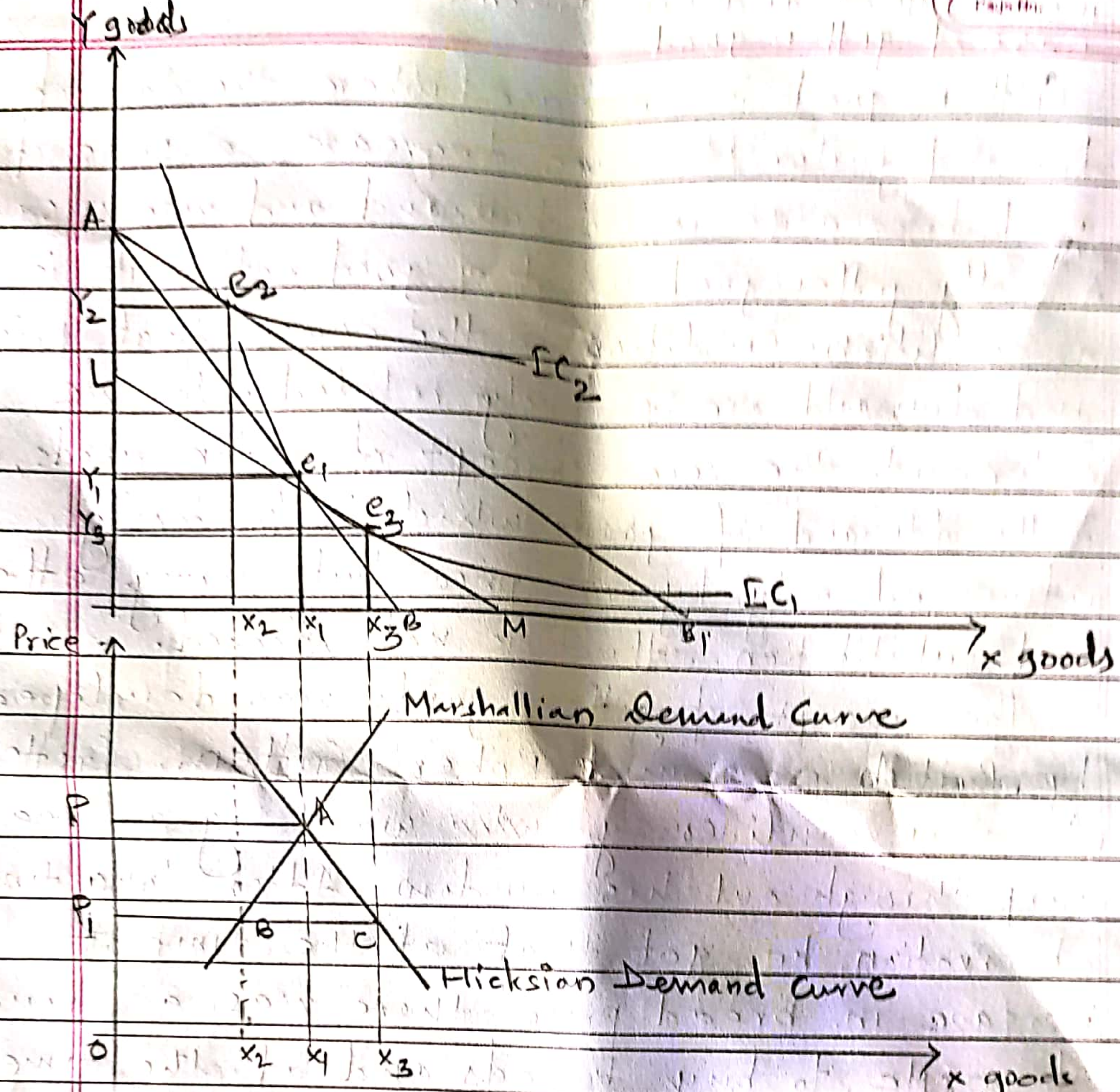
① (i) Derive the demand curve (Marshallian and Hicksian) for giffen good.
(ii) How the price effect is decomposed into income effect and substitution effect in case of giffen good.

Giffen good is the case where the law of demand fails. It means decrease in price of a good decreases in its demand and vice versa. Actually giffen good is not a good rather it is a condition. Condition in the sense that price and demand are positively related. If we enter into the core concept of giffen goods, it is the demand of goods which is positively influenced only by its price but money effect and substitution effect is not studied.

The concept of giffen goods was developed by British economist Robert Giffen. Giffen who was contineously ~~wasa~~ watching a bread shop through out his window. After long-time observation he got that at the time of increase in bread price there was a croud of people to buy breads and at the time of lower price of bread, there would be rare people to buy it. So, he came to the conclusion that the increase in prices of such goods leads to increase in its demand.

The following figure describes the decomposition of price effect into income effect and substitution effect for the giffen good.



In the above figure, the initial budget line is AB and initial utility curve is IC_1 where at point e_1 a consumer attains maximum utility. The price commodity combination is shown at lower panal at point e_1. It has supposed that the price of x has decreased so, the budget line has shifted rightward to AB_1. As it is the condition of gitten good, the decrease in ~~demand~~

Date / /

Page No.

price of x has also lead to decrease in demand of good x. So, the consumer attains new equilibrium at upper indifference curve with lower consumption of good x. The price commodity relationship has been presented in lower panel which is point B. If we draw a line from these two points (A and B) we get demand curve for good x-(Marshallian demand curve).

If we draw a ~~compensate~~ compensated budget line parallel to AB_1 which tangent to initial utility curve we can realize the substitution effect. In the above figure the shift from e_1 to e_3 is substitution effect. The corresponding price and demand for good x due to substitution effect is represented by point c in lower panel. So, the line that passes through A to c represents Hicksian demand curve for giffen good.

$e_1 \rightarrow e_2 \Rightarrow$ $x_1 x_2$ Price effect

$e_1 \rightarrow e_3 \Rightarrow$ $x_1 x_3$ Substitution effect

$e_2 \rightarrow e_3 \Rightarrow$ $x_2 x_3$ Income Effect.