Q9. Suppose a consumer wants to consume two goods which are available only in integer units. The two goods are equally priced at Rs 10 and the consumer's income is Rs 40.
(i) Write down all the bundles that are available to the consumer.
(ii) Among the bundles that are available to the consumer, identify those which cost her exactly Rs 40.

Ans:

(i) P_1 = Rs. 10

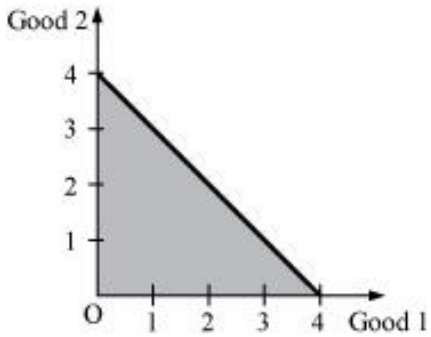
P_2 = Rs. 10

M = Rs. 40

Budget set = $P_1x_1 + P_2x_2 \leq M$

$10x_1 + 10x_2 \leq 40$

The bundles that are available to the consumer should cost less than or equal to Rs 40.



Horizontal intercept = $\frac{M_2}{P_1} = \frac{40}{10} = 4$

Vertical intercept = $\frac{M_2}{P_2} = \frac{40}{10} = 4$

Slope = $\frac{-P_1}{P_2} = \frac{-10}{10} = -1$

The bundles in the shaded region (ΔAOB) are all available to the consumer, including the bundles lying on the line AB.

(0, 0) (0, 1) (0, 2) (0, 3) (0, 4)
(1, 0) (1, 1) (1, 2) (1, 3) (1, 4)
(2, 0) (2, 1) (2, 2) (2, 3) (2, 4)
(3, 0) (3, 1) (3, 2) (3, 3) (3, 4)

(4, 0) (4, 1) (4, 2) (4, 3) (4, 4)
(ii) The coordinates that lie on the line AB cost exactly the same as the income of the consumer. The bundles are as follows:
(0,4) (1,3) (2,2) (3,1) (4,0)

Q10. What do you mean by 'monotonic preferences'?
Ans: It means that the consumer prefers a particular bundle over the other bundle if the former consists of at least more of one good and no less of the other good.
Example: If bundle A (3, 5) and bundle B (3, 2) are available to the consumer, then he/she will prefer bundle A over bundle B as bundle A consists of more units of good 2 than bundle B.

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