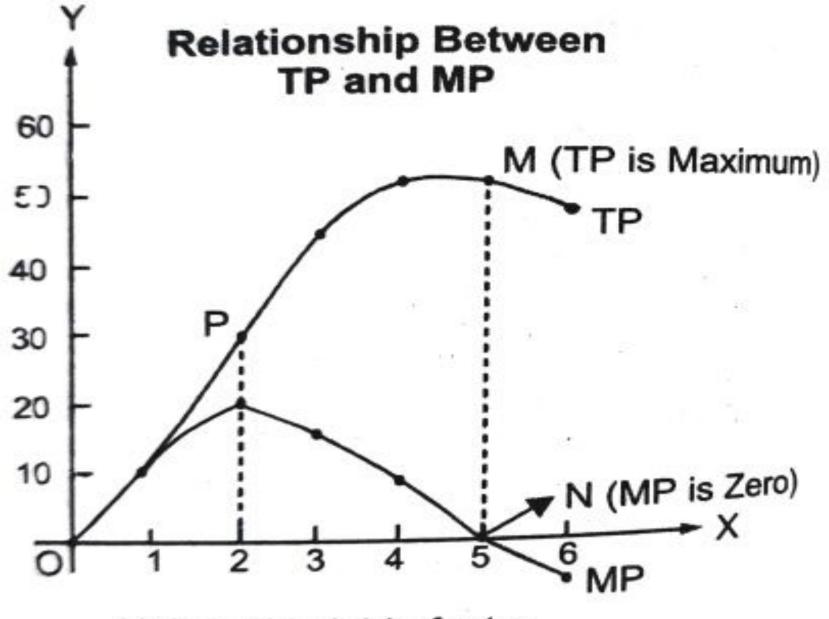
PRODUCTION FUNCTION

RELATIONSHIP BETWEEN TP AND MP

| Fixed factor (land) (in acres) | Variable factor (labour) (in units) | TP (units) | MP (units) |
|--------------------------------------|---|---------------|---------------|
| 1 | 0 | 0 | _ |
| 1 | 1 | 10 | 10 |
| 1 | 2 | 30 | 20 |
| , 1 | 3 | 45 | 15 |
| 1 | 4 | 52 | 7 |
| 1 | 5 | 52 | 0 |
| 1 | 6 | · 48 | - 4 |

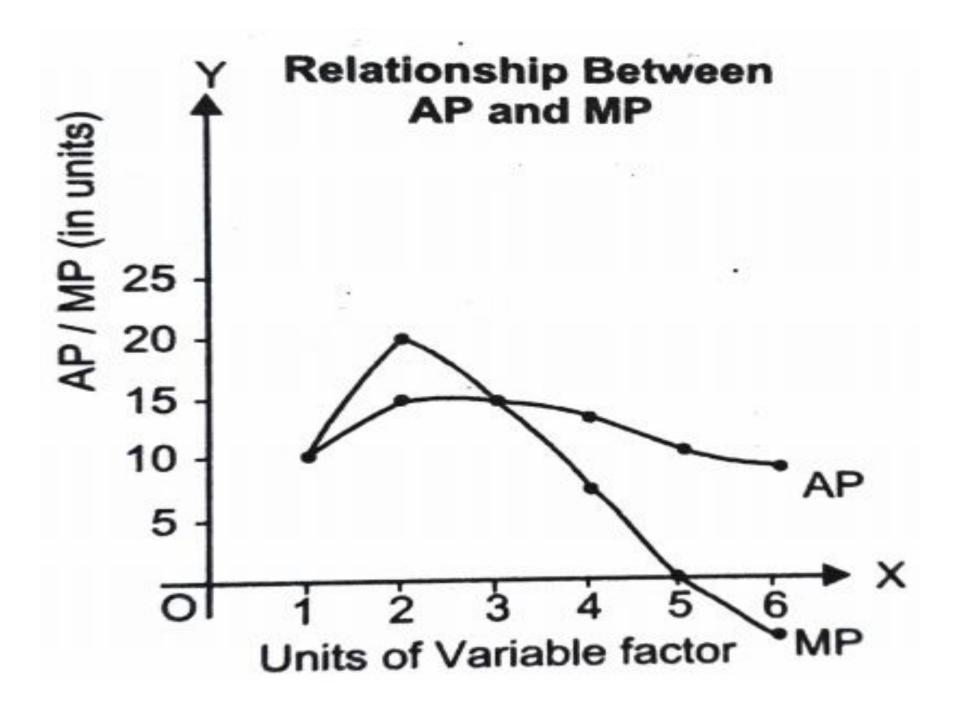


Units of Variable factor

- As long as TP increases at increasing rate (till point P), MP also increases.
- When TP increases at diminishing rate, MP decreases.
- When TP reaches its maximum point, MP becomes zero.
- When TP starts decreasing, MP becomes negative.

RELATIONSHIP BETWEEN AP AND MP

| Fixed factor (land) (in acres) | Units of Variable factor (labour) | AP (units) | MP (units) |
|--------------------------------------|---|---------------|---------------|
| 1 | 0 | _ | _ |
| 1 | . 1 | 10 | 10 |
| 1 | 2 | 15 | 20 |
| 1 | 3 | 15 | 15 |
| 1 | 4 | 13 | 7 |
| 1 | 5 | 10.40 | 0 |
| 1 | 6 | 8 | - 4 |



- As long as MP is more than AP, AP rises.
- When MP is equal to AP, AP falls.
- When MP is less than AP, AP falls.
- Thereafter, both AP and MP fall, MP becomes negative, whereas, AP remains positive. MP falls at faster rate in comparison to fall in AP.