



INDIAN SCHOOL DARSAIT DEPARTMENT OF COMMERCE



Subject : Economics	Topic : Production Function	Date of Worksheet : _____
Resource Person: Ekta Gautam	Date of Submission: _____	
Name of the Student : _____	Class & Division : _____	Roll Number : ____

- | S.No. | | Marks |
|-------|---|-------|
| 1. | Give meaning of 'returns to a factor'. | 1 |
| 2. | Define production function. | 1 |
| 3. | How is marginal product calculated? | 1 |
| 4. | Define marginal product. | 1 |
| 5. | Define average physical product. | 1 |
| 6. | What change will take place in marginal product when total product increases at a diminishing rate? | 1 |
| 7. | Explain with the help of a total product curve the meaning of increasing returns to a factor | 3 |
| 8. | Explain the relationship between total product and marginal; product. | 3 |
| 9. | Giving reasons, state whether the following statements are true or false:
(i) Average product will increase only when marginal product increases.
(ii) Under diminishing returns to a factor, total product continues to increase till marginal product reaches zero. | 3 |
| 10. | Complete the following table: | 3 |

Units of Labour (units)	Average Product (units)	Marginal Product (units)
1	8	----
2	10	----
3	----	10
4	9	----
5	---	4
6	7	----

- | | | |
|-----|---|---|
| 10. | State the behavior of marginal product in the Law of Variable Proportions. Explain the causes of this behavior. | 4 |
| 11. | What type of changes take place in total product and marginal product when there are
(a) Increasing returns to a factor?
(b) Diminishing returns to a factor? | 4 |
| 12. | Differentiate between Short Period production and Long Period production function. | 4 |

13. State the different phases of changes in Total Product and Marginal Product in the Law of Variable Proportions. Also show it in a diagram. 4
14. Giving reasons, explain the 'Law of Variable Proportions'. 6
15. What are the different phases in the Law of Variable Proportions in terms of marginal product? Give reasons behind each phase. Use diagram. 6
16. Identify different phases of the Law of Variable Proportions from the following schedule. Give reasons for your answer. 6

Variable Inputs (units)	Total Physical Product (units)
1	4
2	9
3	13
4	15
5	12