INDIAN SCHOOL DARSAIT
DEPARTMENT OF COMMERCE

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

S.No.		Marks
1.	Give the meaning of Production Function.	1
2.	What is the marginal product of an input?	1
3.	Give the meaning of "Return to a factor'.	1
4.	What change will take place in marginal product when total product increases at a diminishing rate?	1
5.	Distinguish between short run and long run production function.	3
6.	Explain the relationship between Marginal Product and Average Product. Use diagram.	3
7.	Complete the following table:	3

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

8.	From the following table, find out the phase during which there are increasing returns to a factor? Give reasons for your answer.	3

Units of labour	Average Product (units)
1	10
2	12
3	14
4	14.5
5	14

9. Complete the following table; 3

Units of labour	Average Product (units)	Marginal Product (units)
1	16	-
2	20	-
3	-	20
4	18	-
5	-	8
6	14	-

10. Explain the changes that take place in total product and marginal product under diminishing returns to a factor. 3

11. Explain the relationship between the marginal product and the total product of an input. 3

12. Define Marginal Product. State the behavior of marginal product when only one input is increased and other inputs are held constant. 4

13. State the phases in the behavior of Total Product as per the Law of Variable Proportions. Give a numerical example. 4

14. Giving reasons, state whether the following statements are true or false: 4
    (a) If marginal product falls, average product must also fall.
    (b) Increase in total product always indicates that there are increasing returns to a factor.
    (c) When there are diminishing returns to a factor, total product first increases and then starts falling.
    (d) When total product is constant average product will fall.

15. Explain the Law of Variable Proportions with the help of total product and marginal product curves. 6

16. Giving reason, explain the behavior of total product and marginal product under the Law of Variable Proportions. 6