MICROECONOMICS

CH- PRODUCER'S EQUILIBRIUM

1. Explain the concept of producer's equilibrium using the Total Revenue-Total Cost (TR-TC) approach. How is equilibrium achieved under this method?
2. Discuss the Marginal Revenue-Marginal Cost (MR-MC) approach to producer's equilibrium. How does a firm attain equilibrium using this approach?
3. What is the significance of the condition MR = MC in determining producer's equilibrium? Explain with the help of a diagram.
4. How does a producer achieve equilibrium in the short run under perfect competition using the MR-MC approach?
5. Explain the conditions for producer's equilibrium in terms of both the MR-MC and TR-TC approaches. How do these conditions differ?
6. Why is it important for the marginal cost curve to intersect the marginal revenue curve from below for a firm to be in equilibrium? Explain with an example.

STATISTICS

CH- ARITHMETIC MEAN:

1. Calculate the arithmetic mean of the following data: 12, 15, 18, 10, 25, 30 using Direct Method.
2. Find the arithmetic mean for the following set of numbers: 5, 8, 12, 20, 7, 16, 10 using Assumed Mean Method.
3. The following are the marks obtained by 5 students in an exam: 65, 75, 85, 70, 80. Calculate the mean marks.
4. A person travels 3 km at 6 km/h, 5 km at 10 km/h, and 2 km at 8 km/h. Find the average speed of the person.
5. Find the arithmetic mean of the following frequency distribution: using all three methods.

Class Interval	Frequency
0-10	5
10-20	7
20-30	8
30-40	10

6. In a class of 60 students, the following marks were obtained:

Class Interval	Frequency
20-30	5
30-40	10
40-50	20
50-60	15
60-70	10

Calculate the arithmetic mean.

Median:

7. Find the median of the following data: 45, 30, 25, 50, 40, 35.

8. Determine the median of the following set of numbers: 5, 8, 12, 15, 18, 20, 25.

9. Calculate the median from the following frequency distribution:

Class Interval	Frequency
10-20	3
20-30	6
30-40	8
40-50	5
50-60	3

10. Find the median of the following data set: 15, 25, 10, 35, 45, 50, 40, 30.

Mode:

11. Determine the mode of the following set of numbers: 8, 12, 15, 15, 20, 25, 15, 30.

12. Find the mode of the following data: 5, 7, 10, 7, 12, 7, 15, 10, 10.

13. For the following frequency distribution, calculate the mode:

Class Interval	Frequency
20-30	5
30-40	10
40-50	20
50-60	15
60-70	10

14. Find the mode of the following data set: 21, 35, 35, 21, 45, 45, 50, 35, 60, 45.