



21. The following table shows the total cost schedule of a competitive firm. It is given that the price of the good is Rs 10. Calculate the profit at each output level. Find the profit maximising the level of output.

Quantity Sold	TC
0	5
1	15
2	22
3	27
4	31
5	38
6	49
7	63
8	81
9	101
10	123

Ans:

Quantity Sold	Price	TC	$TR = P \times Q$	Profit = TR - TC
0	10	5	$10 \times 0 = 0$	$0 - 5 = -5$
1	10	15	$10 \times 1 = 10$	$10 - 15 = -5$
2	10	22	$10 \times 2 = 20$	$20 - 22 = -2$
3	10	27	$10 \times 3 = 30$	$30 - 27 = 3$

4	10	31	$10 \times 4 = 40$	$40 - 31 = 9$
5	10	38	$10 \times 5 = 50$	$50 - 38 = 12$
6	10	49	$10 \times 6 = 60$	$60 - 49 = 11$
7	10	63	$10 \times 7 = 70$	$70 - 63 = 7$
8	10	81	$10 \times 8 = 80$	$80 - 81 = -1$
9	10	101	$10 \times 9 = 90$	$90 - 101 = -11$
10	10	123	$10 \times 10 = 100$	$100 - 123 = -23$

Profit maximising output is where the difference between  $TR$  and  $TC$  is the maximum. This exists at 5 units of output, where firm is earning profit of Rs 12.

\*\*\*\*\* END \*\*\*\*\*