



Student Name:

ID:

A company produces electric devices, the fixed cost is 30,000 LE and the variable cost is 100 LE per unit. The market price r is given by $r = 500 - Q$, where Q is the production volume. **Determine,**

- (a) The breakeven production volumes Q_1 and Q_2 . (3 Marks)
 - (b) The production volume Q_0 that gives maximum profit (Pr_{\max}). (3Marks)
 - (c) The maximum profit (Pr_{\max}) when $Q = Q_0$. (2 Marks)
 - (d) Sketch the Total Cost (TC) and Total Revenue (TR) vs. Q showing Q_1 , Q_2 and Q_0 . (2 Marks)
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Solution: