



**Complete, fold and seal
(see note 2 below)**

SURNAME:

Lord

FORENAME(S):

Owen

Lynlon

1. Please give the information requested in the boxes below.
2. Enter your name in the space provided to the right, fold over and seal down (using the label provided) to hide your name.
3. The answers must be legibly written. The Examiners can either ignore illegible script or have it typed and the expense of typing charged to the candidate.
4. Write your answers in ink.
5. Begin each answer on a fresh page. Do all rough work in the answer book and cross it through.
6. No part of this book is to be torn out; it must be handed in complete.
7. If more books than one are used, fasten them together using the tags available from the invigilator(s).
8. **Every book must be handed in. In no circumstances may answer books, used or unused, be taken out of the examination venue.**

List the numbers of the questions you have attempted	Office Use
1	16
7	19 1/2
—	35 1/2
Total	47.5%

Mark Saultford

Q1

- a) £500,000 Fixed Costs
 £7 per unit Variable
 60,000 units per year
 £20 Sale Price per unit

$$\text{Revenue} \\ \text{Profit Per unit} = 20 - 7 = £13 \text{ Per unit}$$

$$1 \text{ year} = 60,000 \times 13 = £780,000$$

$$1 \text{ month} = \frac{60,000}{12} = 5000 \text{ units per month}$$

$$\therefore \frac{1 \text{ month}}{\text{Revenue}} = 5000 \times 13 = £65,000$$

$$\text{Break even Point} = \frac{500,000}{65,000} = 7.692307 \text{ in months}$$

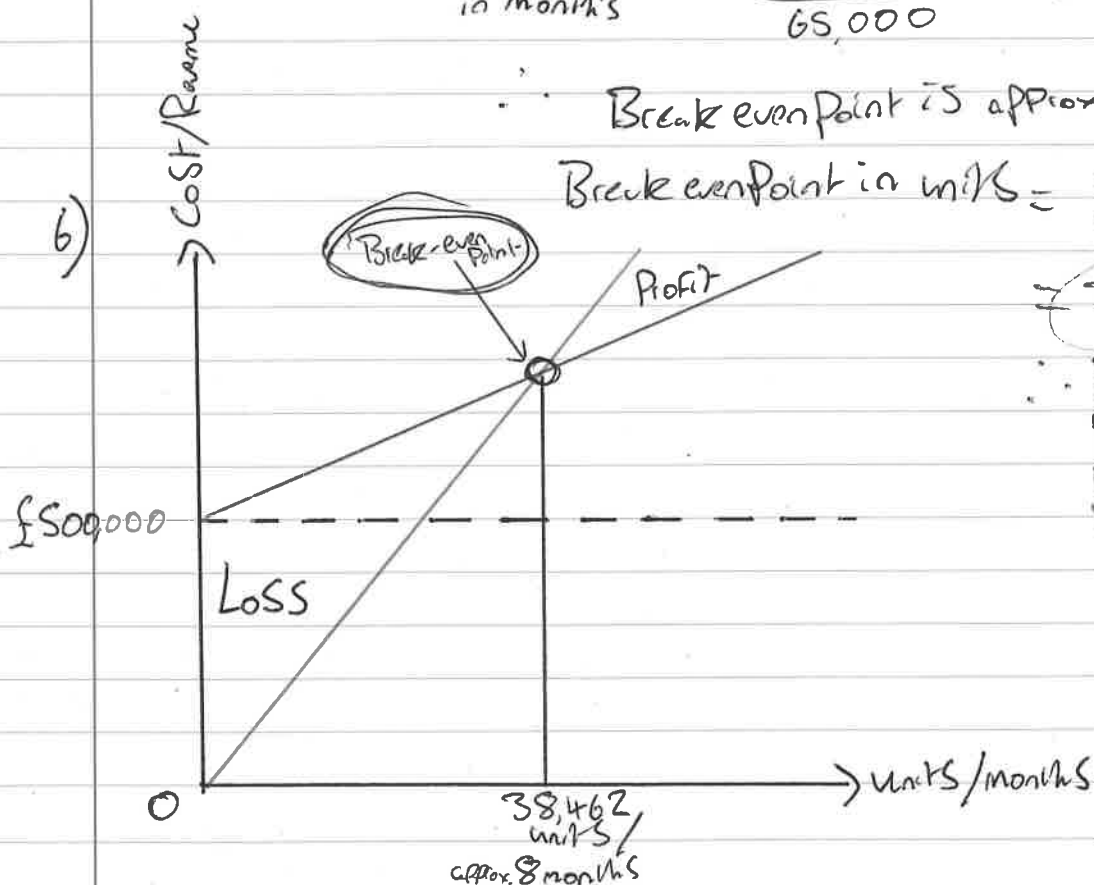
Break even point is approx 8 months

$$\text{Break even Point in units} = \frac{500,000}{13}$$

$$= 38461.5$$

∴ Break even Point in units is

$$\boxed{38,462}$$



— Sales Revenue — Variable Costs

Q4)

c)

$$45,000 \times 13 = \text{£}85,000$$

∴ The margin of Safety would

$$\text{be } \frac{\text{£}85,000}{500,000} = \text{£}85,000 \text{ over Payback/Break Even}$$

or in % $\boxed{17\%}$ Profit-margin @ 45,000 units

d)

$$60,000 \times 0.75 = 75\% \text{ output}$$

$$= 45,000 \text{ units per annum}$$

$$\therefore \text{Initial Profit} = \underset{\substack{\uparrow \\ (60,000 \times 13)}}{780,000} - 500,000 = \text{£}280,000$$

$$\text{Profit @ } 75\% \underset{\substack{\uparrow \\ (45,000 \times 13)}}{\text{Output}} = 85,000 - 500,000 = \text{£}85,000$$

If annual output falls to 75%
Profits will decrease to:

$$\frac{85,000}{280,000} \times 100 = 30.36\% \text{ of the original 100\% output profits.}$$

e)

- Not very accurate for time-based analysis
- Does not account for Depreciation
-

27)

- i) Possible reasons for changing could include:
- Corporate Support & Investment Incentives
 - Political Pressure From Governments/Authorities. ✓
 - Civil Pressure From Residents over cleaner living, Noise Pollution and air quality. ✓
 - Cost Effective/Economic Studies Showing a decrease in costs over traditional Diesel buses. ✓
 - Upgrading a dilapidated/outdated Fleet/Service. ✓
 - Monetary incentives such as subsidies and grants. ✓

4/4

- ii) Political ^{Operators}
 Pressure from neighbours ~~states~~ / Governments / Political organisations
 Grants/Subsidies
 Contract Allocation For "Cleaner Vehicles"
 Ambush Marketing by Competitors

2 1/2 / 4

Economic

- Tax Incentives/Exemptions ✓
 More costly / less costly repairs ✓
 Infrastructure changes due to new systems (Different repair equipment etc.) ✓
 Lower / Higher running costs ✓

3 1/2 / 4

Social

- Activist Support/opposition ✓
 Change in public opinion surrounding company (moral, ethics etc.) ✓
 Impact on everyday life (Quicker/quieter, less polluting etc.) ✓
 Conservative opinion on new technology (older generation sales) ✓

3 1/2 / 4

ii) cont)

Technological

Reliability Considerations ✓

Repairability Considerations ✓

Sourcing Parts/Vehicles ✓

Increased/Decreased Cost of Parts/Vehicles ✓

Training associated with New Systems ✓

2 1/2

4

iii)

The advice I would offer is:

- Aim For Reliable, Cost effective and Proven vehicles. ✓
- Explain Fully your reasoning to your customers for changes. ✓
- Aim to provide an identical or improved service offer Previous. (To add good Feedback/Opinion) ✓
- Try to negate ambush Marketing / Bad Press by keeping Vehicles in good order and repair. (a broken down, new vehicle, due to bad housekeeping garners Questions) ✓
- Try to avoid large Price hikes to accommodate Products in the short term, this will generate bad Press ✓
- Raise Awareness of the positives faced and explain Further work/Development. (Transparency) ✓

3 1/2

5

19 1/2
25