Part (a)

<table>
<thead>
<tr>
<th>Variable costing basis</th>
<th>Units input</th>
<th>Eq units</th>
<th>Eq Units</th>
<th>Per Eq unit</th>
<th>Per input unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw materials</td>
<td>40 700</td>
<td>2 000</td>
<td>35 000</td>
<td>8 140 000</td>
<td>220.00</td>
</tr>
<tr>
<td>Conversion costs:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labour</td>
<td>1 000</td>
<td>35 000</td>
<td>3 060 000</td>
<td>85.00</td>
<td></td>
</tr>
<tr>
<td>Water &amp; electricity</td>
<td>1 000</td>
<td>35 000</td>
<td>1 080 000</td>
<td>30.00</td>
<td></td>
</tr>
<tr>
<td>Waste disposal costs</td>
<td>1 000</td>
<td>35 000</td>
<td>1 800 000</td>
<td>50.00</td>
<td></td>
</tr>
<tr>
<td>Other overheads</td>
<td>1 000</td>
<td>35 000</td>
<td>1 260 000</td>
<td>35.00</td>
<td></td>
</tr>
<tr>
<td>Variable production costs</td>
<td>1 000</td>
<td>35 000</td>
<td>15 340 000</td>
<td>420.00</td>
<td></td>
</tr>
<tr>
<td>Fixed manufacturing overheads</td>
<td>1 000</td>
<td>35 000</td>
<td>4 140 000</td>
<td>115.00</td>
<td></td>
</tr>
</tbody>
</table>

Workings - fixed manufacturing costs
Total: 5 440 000
Less: depreciation of transport fleet (750 000)
Less: r&m of transport fleet (550 000)
Total: 4 140 000

Closing inventory of finished product
2 000
1 070 000
535

Part (b)

Advantages of standard costing:
- Provide detailed benchmarks for all manufacturing cost components, enabling a basis for reviewing actual costs incurred against budget
- assist in setting budgets (underlying assumptions in budget)
- provide targets for managers to achieve
- highlight variances and assist in identifying problem areas such as
  - production facility or labour efficiencies
  - raw materials wastage or quality issues
  - purchasing / price variances on input costs
  - production capacity being over / under utilised
- facilitate tracing costs for inventory valuation and external reporting purposes
- enables the extraction of information for decision making purposes eg. Special order etc

Other valid points will be awarded marks

#66609v3
Part (c)

General comment:
The required in the question is framed widely and candidates can interpret the required in a variety of manners, resulting in a number of alternative solutions, all of which will be considered on merit with 1 mark per valid point:

Alternatives include:

Discussion of using accounting profits to arrive at a decision; points that would earn marks include:
- Analysis done on the same basis and method as top management would see in earnings numbers
- Avoids complications of discounting
- Will be distorted by once-off items
- Involves subjectivity / judgement in measurement process
- Need to compare differences in costs and revenues per alternatives
- Marks will be awarded where candidates describe how the analysis would be performed, which costs to include and exclude.
- Generally does not exclude sunk costs
- Does not consider net income items over the full decision horizon

Discussion of using relevant costing to arrive at a decision; points that would earn marks include:
- Intuitive and simple, only looks at numbers that differ between alternatives
- Avoids complications of discounting
- Will be distorted by once-off items
- Need to compare differences in costs and revenues per alternatives
- Marks will be awarded where candidates describe how the analysis would be performed, which costs to include and exclude.
- Excludes sunk costs
- Does not consider cash flows over full decision horizon

Discussion of using discounted cash flow analysis to arrive at a decision; points that would earn marks include:
- More complex method but conceptually the most appropriate
- Requires discounting
- Will not be distorted by once-off items
- Need to compare differences in cash flows per alternatives
- Marks will be awarded where candidates describe how the analysis would be performed, which costs to include and exclude.
- Excludes sunk costs
- Need to estimate discount rate

Discussion (incorporating points above or others) of the relative merits or otherwise of the methods above.

Marks are awarded at 1 mark per valid point

Actual solutions may contain other valid points, or valid points that are framed differently from the above. They will be awarded marks where appropriate.
Part (d)
- what is most important reason for outsourcing? Financial or operational decision?
- 5 year contract sensible?
- Can the contract be cancelled early; at what cost; at whose instance?
- Chem's recourse in event of poor service by TRB?
- Measurement of distances travelled
  = How will distances be measured?
  = How objective and "auditable" is that process?
- Loss of control over delivery process
- TRB's service levels in peak periods?
- Chem's core business is manufacturing fertiliser, not transport
- Does Chem receive a credit where TRB have a payload for all or part of the return leg of a journey?
- Who is liable for environmental damage and clean-up in the event of an accident and spillage?
- Who is responsible for arranging insurance cover of cargo while in transit?
- Are kilometer charges fixed for the contract period or subject to escalation?
- Labour issues
  = What happens to redundant workers (retrenched, redeployed, assistance in finding alternative employment etc?)
  = Impact on staff morale of remaining workforce
  = Has trade union been consulted and what is its view?
  = Compliance with labour laws?
- Selection of TRB as a counterparty
  = TRB's reputation?
  = Reliability of TRB?
  = Have TRB concluded and operated an outsourcing deal previously?
  = Have other service providers been considered / competitive tenders solicited
  = Is TRB financially sound or is it likely to go out of business soon?
- What contingency plans are necessary should there be a service failure?
- What is the cost of maintaining contingency plans?
- Any competitive bids obtained to test TRB's pricing?
- Reason for minimum monthly fee? Seems as if TRB are to attempting to finance purchase of fleet?

Any other valid point will be awarded marks; one mark per valid point for the above or other valid points