READ THESE INSTRUCTIONS FIRST

This Insert contains the case study material. Anything the candidate writes on the Insert will not be marked.
ACE Engineering (ACE)

ACE is a public limited company located in country Z. It makes large ovens which are sold mainly to restaurants and hotels in many different countries.

The main components used to make the ovens are metal. There are also rubber components which fit around the oven doors and electrical components for the temperature controls. Only the electrical components are imported. All other components are purchased locally.

ACE employs 200 production workers in its factory and 50 office workers. A high proportion of the workforce leaves each year and the Human Resources department has frequently to recruit and train new employees. All employees are members of a trade union. The directors of ACE have held meetings to discuss how to manage the employees effectively. They want to improve the employees’ motivation. The managers expect workers to follow instructions and the workers are told they will be dismissed if they do not follow orders.

Appendix 1

Financial information on ACE Engineering

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales revenue</td>
<td>$ 200 m</td>
<td>$ 250 m</td>
</tr>
<tr>
<td>Gross profit</td>
<td>$ 150 m</td>
<td>$ 200 m</td>
</tr>
<tr>
<td>Expenses</td>
<td>$ 130 m</td>
<td>$ 160 m</td>
</tr>
<tr>
<td>Capital employed</td>
<td>$ 100 m</td>
<td>$ 120 m</td>
</tr>
<tr>
<td>Gross profit margin</td>
<td>75%</td>
<td>100%</td>
</tr>
<tr>
<td>Net profit margin</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>Return on capital employed (ROCE)</td>
<td>20%</td>
<td>20%</td>
</tr>
</tbody>
</table>
Appendix 2

Information about country Z

The main industries in country Z were agriculture, rubber plantations and iron ore mining. Towns and cities have expanded as many people have moved from farms to find jobs that pay higher wages. Consumer incomes are rising rapidly in country Z.

Pattern of employment

1988
- Primary: 70%
- Secondary: 20%
- Tertiary: 10%

2013
- Primary: 40%
- Secondary: 40%
- Tertiary: 20%

Appendix 3

To: Operations Manager of ACE
From: Managing Director of ACE
Date: 4 October 2014
Re: Efficiency improvements

We need to be efficient to remain competitive. We should be using lean production methods.

All our competitors use lean production methods such as just-in-time and waste reduction. Please research this for me and let me know what you think.