

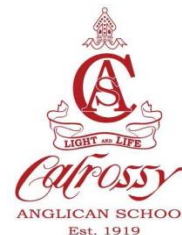
# Assessment task Notification

All Students are asked to sign the teachers copy to verify this notification has been distributed at least two weeks before the task date.

Course	Stage 6 Industrial Technology
Task Number	2
Due Date of Task	Monday 7 <sup>th</sup> November 2016
Nature of Task	To complete Industry Study
Outcomes Assessed	Outcomes H1.1, H1.2, H2.1, H6.1, H6.2, H7.1, H7.2
<b>Weighting</b>	<b>15%</b>

# Industrial Technology Assessment task 2

**Due date Monday 7<sup>th</sup> November 2016**



## Your task

Each student is to conduct a broad study of a business within your focus area. Below is an excerpt from the Industrial Technology syllabus in regard to the material that needs to be addressed. Once students have researched the business, they are to present a report in a professional and comprehensive manner addressing the following criteria.

Students learn about:	Students learn to:
<p><b>Structural factors</b></p> <ul style="list-style-type: none"> <li>• organisation and management</li> <li>• marketing and sales</li> <li>• production and efficiency</li> <li>• technology and restructuring</li> <li>• quality control</li> </ul> <p><b>Technical factors</b></p> <ul style="list-style-type: none"> <li>• mechanisation, specialisation</li> <li>• mass production and automation</li> <li>• emerging technologies</li> </ul> <p><b>Environmental and sociological factors</b></p> <ul style="list-style-type: none"> <li>• resources, alternatives, limitations</li> <li>• recycling</li> <li>• pollution</li> <li>• government legislation</li> <li>• Environmental Impact Studies (EIS)</li> <li>• sustainable development</li> </ul> <p><b>Personnel issues</b></p> <ul style="list-style-type: none"> <li>• industrial relations</li> <li>• entry-level training requirements</li> <li>• retraining and multiskilling</li> <li>• unions</li> <li>• roles of industry personnel</li> <li>• equity/EEO</li> </ul> <p><b>Occupational health and safety</b></p> <ul style="list-style-type: none"> <li>• government legislation</li> <li>• industry requirements (standards)</li> <li>• first aid</li> <li>• safety training and human factors</li> <li>• materials handling</li> <li>• workplace culture</li> <li>• Workplace communication</li> </ul>	<ul style="list-style-type: none"> <li>• prepare a report on the organisation and structure of a range of businesses related to the specific organisation studied in the Preliminary course</li> <li>• identify factors that affect quality control within the industries</li> </ul> <ul style="list-style-type: none"> <li>• describe the significance that the various technical factors have in the efficiency of the industries studied</li> </ul> <ul style="list-style-type: none"> <li>• distinguish between the approaches to the various environmental and sociological factors adopted by each industry studied</li> <li>• discuss and justify the ramifications of Environmental Impact Statements (EIS) and sustainable development when studying the overall industry</li> </ul> <ul style="list-style-type: none"> <li>• describe the personnel issues that businesses have to address in their organisation</li> <li>• identify government legislation and policies that ensure the rights and protection for employees</li> </ul> <ul style="list-style-type: none"> <li>• discuss the importance of OH&amp;S factors in a successful business</li> <li>• identify significant government legislation and industry requirements that ensure a safe working environment</li> </ul>

**Weighting 15%**

## **Suggestions of how to do your Industry Study assignments:**

For the **Preliminary Year Industry Study** assignment:

- Select a business which is convenient and related to your focus area. Go through the questions on the next few pages and tick the ones you need answered (**Note that some questions may not be appropriate for some firms so make sure you take the time to check the questions**)
- Visit the firm and explain to the owner/manager what you are required to do and ask if he/she would help by answering a few questions about their firm.
- Using a word processor, write your report and use the same headings and subheadings as shown in the questions and the sample report as this is the information prescribed by the Industrial Technology Syllabus.

When finished, send a letter of thanks as well as a copy of your report to the owner/manager of the business.

**The series of questions below has been taken from Industrial Technology A Student's Workbook by John Rochford.**

**In addition a sample report copy is attached to the back of the assessment task.**

## Marking Criteria

For a student to achieve maximum marks in each section a high level of understanding must be demonstrated diminishing through to the progressing stage where the marks are in the low end.

Topic	Criteria	Available marks	Description
<b>Structural factors</b>  <b>15 Marks</b>	<ul style="list-style-type: none"> <li>prepare a report on the organisation and structure of a range of businesses related to the specific organisation</li> <li>identify factors that affect quality control within the industries</li> </ul>	15	Students competently address <ul style="list-style-type: none"> <li>organisation and management</li> <li>marketing and sales</li> <li>production and efficiency</li> <li>technology and restructuring</li> <li>quality control</li> </ul>
<b>Technical factors</b>  15 Marks	<ul style="list-style-type: none"> <li>describe the significance that the various technical factors have in the efficiency of the industries studied</li> </ul>	15	Students competently address <ul style="list-style-type: none"> <li>mechanisation, specialisation</li> <li>mass production and automation</li> <li>emerging technologies</li> </ul>
<b>Environmental and sociological factors</b>  15 Marks	<ul style="list-style-type: none"> <li>distinguish between the approaches to the various environmental and sociological factors adopted by each industry studied</li> <li>discuss and justify the ramifications of Environmental Impact Statements (EIS) and sustainable development when studying the overall industry</li> </ul>	15	Students competently address <ul style="list-style-type: none"> <li>resources, alternatives, limitations</li> <li>recycling</li> <li>pollution</li> <li>government legislation</li> <li>Environmental Impact Studies (EIS)</li> <li>sustainable development</li> </ul>
<b>Personnel issues</b>  15 Marks	<ul style="list-style-type: none"> <li>describe the personnel issues that businesses have to address in their organisation</li> <li>identify government legislation and policies that ensure the rights and protection for employees</li> </ul>	15	Students competently address <ul style="list-style-type: none"> <li>industrial relations</li> <li>entry-level training requirements</li> <li>retraining and multiskilling</li> <li>unions</li> <li>roles of industry personnel equity/EEO</li> </ul>
<b>Occupational health and safety</b>  15 Marks	<ul style="list-style-type: none"> <li>discuss the importance of OH&amp;S factors in a successful business</li> <li>identify significant government legislation and industry requirements that ensure a safe working environment</li> </ul>	15	Students competently address <ul style="list-style-type: none"> <li>government legislation</li> <li>industry requirements (standards)</li> <li>first aid</li> <li>safety training and human factors</li> <li>materials handling</li> <li>workplace culture</li> <li>Workplace communication</li> </ul>
<b>Workplace communication and Presentation</b>  25 Marks	<ul style="list-style-type: none"> <li>Demonstrate computer usage.</li> <li>Present report in a professional and ordered manner.</li> </ul>	25	Students present their work <ul style="list-style-type: none"> <li>Well laid out</li> <li>Concise and succinct</li> <li>Language that is grammatically correct.</li> <li>No spelling errors</li> <li>Provide accurate information</li> <li>Provide presentation folder</li> </ul>

# Background information on the organisation:

Name of organisation:

.....

Location:

.....

Obtain a copy of the firm's business card.

Describe exactly what the organisation does.

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.....  
.....

Is the organisation an Australia wide corporation, a multi-national company, a public company, a private company, a partnership or a single person operation?

.....

How and when was the organisation started?

.....  
.....

## **Structural Factors**

### **Organisation and Management**

Investigate the overall organisation and structure of the business.

### **Finance:**

How is the organisation financed?

.....

Who monitors the financial running of the company and how is it done?

Who:

.....

How:

.....  
.....  
.....

What is the organisation's gross turnover per year?

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What percentage of the profits is allocated to Research & Development?

.....

What else is done with the profits each year? (Probably shareholder return)

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.....

**Management:**

What is the current management structure of the firm? (use a flow chart)

How are management decisions made?

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.....

**Marketing and sales**

**Marketing:**

What is the organisation's share of the market?

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How does the firm advertise their products and/or services?

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What is the target market?

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.....  
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How does the firm make sure that their goods and/or services are still suitable for the target market?

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.....

**Sales:**

How are the firm's goods/services sold?

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Are there any plans for the broadening of markets or developing new markets?

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.....  
.....

How and when are the sales figures monitored?

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.....

## **Production & Efficiency**

### **Production:**

Make a labelled flow chart of the production process.

How is the quality of the goods/services checked at the end of the production process?

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.....  
.....

What government regulations affect this organisation? (eg. Pure Food Act, working conditions, health & safety, environmental protection authority, copyright, patents, quality assurance, etc.)

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.....

How are these regulations monitored by the organisation and the government?

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.....  
.....

How do these regulations affect production?

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.....

### **Efficiency:**

Does the organisation set growth targets each year? If yes, how is this done?

.....  
How?  
.....

Is it hoped that productivity will be improved next year? If yes, how?

.....

Are there any productivity incentives for workers?

.....

Are there any plans for development in the future?

.....

Is the organisation always going to be this size?

.....

If it is, why will it remain this size?

.....

.....

.....

How is the efficiency of the firm monitored?

.....

.....

.....

## **Technology and restructuring:**

### **Technology:**

List the **main** tools (= devices, utensils, gadgets, instruments etc. which are generally operated by hand) and equipment (such as furniture, computers, fork lifts, exhaust fans, spray booth etc.) used by the organisation.

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.....

Describe the function of **major** tools and items of equipment.

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Are any tools or items of equipment going to be replaced in the near future? If so which ones, why and with what will they be replaced?

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Has the development of new materials affected this firm in any way? If yes, what are the new materials and how have they affected production?

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**Restructuring:**

Describe any future plans for restructuring the business. Give reasons for any proposed changes.

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**Quality control** (= maintenance of acceptable quality of products and services)

What are the factors which affect quality control within the business?

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How is the quality of the goods and/or services controlled in the business?

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.....  
.....

# Technical Factors

Describe the significance that the various technical factors have in the efficiency of the business.

**Mechanisation:** (= machines replacing human muscle but still requiring human control)

Describe any process which was once done by hand but is now done by machine.

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.....

How many employees did this replace?

.....  
.....

How has mechanisation improved the productivity of the organisation?

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.....  
.....

## Specialisation:

(Focusing tasks on one particular skill, product, process or resource)

Does specialisation exist in the business? If yes, list the areas of specialisation.

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.....

How does specialisation improve the efficiency of the business?

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## Mass production:

(= high volume production of a highly standardised product)

If mass production is used as a production method in this organisation describe the areas where it is used and explain the reason and benefits for using this method.

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.....  
.....

Construct a labelled flow chart showing the mass production process if it is used here.

**Automation:**

(= machines which replace human judgment and perception i.e. senses)

Is any part of the production process automated? If yes describe this/these areas.

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.....  
.....

Has automation increased productivity? How?

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.....  
.....

Has automation improved the quality of products? How and why?

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.....  
.....

**Emerging technologies** (= the use of new or developing technologies)

What are the new or developing technologies in use in the business?

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.....  
.....

How have these emerging technologies improved productivity?

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**Environmental and sociological factors**

**Resources, alternatives, limitations:**

What impact (if any), does the resources used by the business have on the environment and society.

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.....

What are the alternatives to the resources mentioned above? Give their limitations (i.e. why they are not used by the business)

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.....

**Recycling:**

Does the firm have any waste products? List these.

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What is done to minimise waste?

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What is done with all waste products?

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.....

Are there any plans to recycle more waste products in the future?

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**Pollution:**

Effects on the environment:

Describe the outside features of the building/s and comment on whether you feel that the buildings blend with or detract from the environment.

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Does the production of goods from this organisation affect the environment? How and why? (list both positive and negative effects on the environment)

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.....  
.....

What steps are taken by the organisation to reduce pollution of the environment?

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.....  
.....

**Effects on society:**

What effect does the operation of this organisation have on the local and/or wider community?

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.....

Does the firm sponsor community projects, clubs, sporting teams etc.?

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**Government legislation:**

What government legislation makes an impact on the decision-making process of the business?

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**Environmental Impact Studies (EIS):** (= a study of the impact of the business on the environment and society for Development Approval)

What effect has an Environmental Impact Study had on the business?

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**Sustainable development:** (= consideration of long term environmental, social and economic issues related to the business)

What steps does the firm take to preserve the environment?

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.....  
.....

How does the business make a positive impact on society?

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.....  
.....

# Personnel Issues

How many people are employed here?..... How many men and how many women?

men = ..... women . =

What is the average length of service? .....

List the jobs and the roles (=what they do) of employees.

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.....  
.....

## Industrial relations:

Describe how employees in the business negotiate wages and conditions with the employer. Is this successful?

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.....  
.....

## Entry level training requirements:

List the entry level training for employees (i.e. on-the-job training, T.A.F.E. trained, university trained etc).

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.....

## Retraining and multiskilling:

Does the firm retrain and/or undertake multiskilling of employees if required?

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.....

## Unions:

What unions are involved with this organisation?

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.....

## Roles of industry personnel:

Are representatives from the focus industry or industry associations involved with this business? If yes, what are their roles?

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.....  
.....

**Equity and Equal Employment Opportunity (EEO):**

(= equal employment opportunity regardless of race, religion, gender and social status)

What does the business do to ensure equal opportunity of employment?

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.....

**Occupational health and safety (OH&S)**

Government legislation:

How does the firm respond to government OH & S requirements?

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.....

Industry requirements (standards):

How does the firm respond to the OH & S industry requirements (standards)?

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.....

**First Aid:**

How does the firm provide first aid in the workplace?

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.....

**Safety training and human factors:**

How does the firm respond to the OH & S committee requirements?

\* is there a committee? ..... If yes, how often does the committee meet; if no why not?

.....

If there is no committee, how is workplace safety monitored?

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.....

How does the firm provide OH & S training for employees?

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.....

**Materials handling:**

How does the firm ensure safe and efficient handling of materials?

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**Workplace culture:** (= the habits of workers and atmosphere of the workplace to promote a safe work environment)

How does the firm promote a safe workplace with employees?

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.....

**Workplace communication:**

How does the firm communicate OH & S requirements to employees?

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