First name……………………….... Last name…………………………. Major………..

 **Examen d’Anglais Technique 1h**

 Chemical industry, complex of processes, operations, and organizations engaged in the manufacture of chemicals and their derivatives. Although the chemical industry may be described simply as the industry that uses chemistry and manufactures chemicals, this definition is not altogether satisfactory because it leaves open the question of what is a chemical. Definitions adopted for statistical economic purposes vary from country to country. Also the Standard International Trade Classification, published by the United Nations, includes explosives and pyrotechnic products as part of its chemicals section. But the classification does not include the man-made fibres, although the preparation of the raw materials for such fibres is as chemical as any branch of manufacture could be.The scope of the chemical industry is in part shaped by custom rather than by logic. The petroleum industry is usually thought of as separate from the chemical industry, for in the early days of the petroleum industry in the 19th century crude oil was merely subjected to a simple distillation treatment. Modern petroleum industrial processes, however, bring about chemical changes, and some of the products of a modern refinery complex are chemicals by any definition. The term petrochemical is used to describe these chemical operations, but, because they are often carried out at the same plant as the primary distillation, the distinction between petroleum industry and chemical industry is difficult to maintain.

1. **Read the text and answer the questions**

**1pt**

1. How does the definition of the chemical industry vary between countries?

**Definitions adopted for statistical economic purposes vary from country to country**............

**0.5pt**

1. Why is the term "chemical industry" not entirely satisfactory?

**This definition is not altogether satisfactory because it leaves open the question of what is a chemical**…………………………………………

1. How does custom influence the scope of the chemical industry, as mentioned in the text?

**0.5pt**

**The scope of the chemical industry is in part shaped by custom rather than by logic** ………………………………………………...

1. What is a petrochemical, and how does it relate to the broader chemical industry?

**1 pt**

**The term petrochemical is used to describe these chemical operations, but, because they are often carried out at the same plant as the primary distillation, the distinction between petroleum industry and chemical industry is difficult to maintain**…….

1. Give the synonyms of these words from the text?

**2pt**

Aim= **purpose**  Field = **scope**  unrefined = **raw/crude** black gold=**crude oil/petrolium**

**1.5pt**

1. Give the opposite of these words from the text?

 Only ≠ **merely** Pure ≠ **crude/raw** Later period ≠ **early days**

**1.5pt**

1. Give the verb of these words

Massive: **amass** Application: **apply**  distillation: **distill**

**1.5pt**

1. Give the adjectives of these words

Approach: **approaching/approachable** Conversion: **converted** Procedural: **procedural**

1. **Complete each of these sentences with a word from this list below**

Dissertation, Abstract, Journal, thesis and article.

* **Abstract** is a short summary of a longer work (such as a thesis, dissertation or research paper).

**2.5pt**

* **Dissertation** is a long essay on a particular subject, especially one written for a university degree (pHD) but a **thesis** is a critically written scholarly piece of research work. Typically, it is submitted by students graduating from a master’s program.
* **Journal** is a scholarly periodical aimed at specialists and researchers. **Article** are generally written by experts in the subject, using more technical language.
1. **Give a brief definition of these words**
* **Sublimation: conversion of a substance from the solid to the gaseous state without its becoming liquid.**
* Raw material: **are unprocessed or minimally processed materials that serve as the fundamental substances essential for the production of goods**.

**2.5pt**

* Distillation: **is the process of separating the components or substances from liquid mixture by using selective boiling and condensation**.
* Purification: **process involves the removal of impurities by using disinfecting agents**.……
* Greenhouse gases **are gases in the earth’s atmosphere that trap heat** ……………
1. **Mathematics : Write in letters the following equations and numbers**

**2pt**

* $\frac{78}{1000}=0.078 $Seventy-eight over a thousand equals zero point zero seventy eight…
* $\sqrt{45+x}$: **The squared root of forty five plus x** ………………………………………..
* $\sqrt[5]{69}$: **The fifth root of sixty nine**
* $e^{πi} $= -1…**e to the power of pi I equals mines one**……………………..
1. **Explain what motivated you to pursue a career in process engineering?**

…………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

**3 pt**