P3HL+SL Chemistry Leak

chem HL **p1** voltaic cell relationships but no calculation, all we know for p1 hl chem

Section A chem hl Paper 3

1. Its about rate of reaction.

You have to show how you would calculate the ror for bromine in mol-1dm3s-1

Then u have to calculate instanenous ror of bromine at [Br2] =0.008 or sum like dat(dw they will give u a graph

2. Alot about green chemistry

The first part is just maths, use ratio to determine its maximum green chemistry ?

Section B - option B

- the bond in primary structure of protein
- How dna determines primary structure of protein

-Bond in cellulose (beta glucose)

-Calculate C=C from iodine number

- How to remove xenobiotics from contaminated water

Things that didnt come out (dont need to learn) :

There are no drawings of any molecules (glucose , showing bonds,etc)

Determining straight chain from cylic molecule

Chemistry SL Paper 3

Section A: SL

Section A is pretty intuitive and does not really require a lot of prior knowledge, mostly contextual and intuitive questions.

There would be tasks regarding green chemistry where you need to calculate something but all the data will be given and you solve it based on your logical reasoning.

Section B, Option B:

- State the bonding in primary protein structure (peptide bonds)
- Determine the number of double carbon-to-carbon bonds in a molecule of some acid (from carboxylic group). You are given the molecular mass and Iodine number of this molecule. It is a long molecule with Molecular mass around ~308 g/mol (or something like this) and iodine number around ~168 (approximate numbers from my memory). Then, in the next

subquestion you will be introduced to another acid and asked to suggest a reason why this new acid has higher (or lower) melting point (hint: number of double bonds)
- Explain how/why globular proteins can be transported in the body (through the bloodstream if I am not wrong)
- Describe the structure of polysaccharides
- Explain why starch is digested faster than glucose in the stomach (in the context of drug delivery with tables)
- Determine giving a reason whether vitamin C is soluble in water.
- Suggest a reason for how cadmium (toxic heavy metal) could get into the environment
- Explain how host-guest chemistry can be used to remove toxic cadmium from waterways.

HL section B
Why vitamin a is fat soluble
: has long non polar chain and only 1 hydroxyl group

Why vitamin a has colour
:because of extensive conjgate system of alternating single and double bond

Why caratenoids increase efficiency for photosynthesis

HL SECTION C
Listing down all the questions we can recall
Question 1: what does chlorophyll produce when it reacts with sunlight 💀 and the equation of photosynthesis.

Question 11: they ask why is nuclear fission used with heavy nuclei
Another question: How to store nuclear rods and how they're disposed (there is a calculation question for 12) [3 Marks]

Question 12: how are aromatics are formed by alkanes? [3 marks]

Asks you to find the mass defect. Gives the value 1amu= 1.66, specific energy of Cf 234, 2 or 3 marker. If you didn't find m here, they give you a value of 5.00x10^-27. Then the nuclear fission equation of cf 234 and something
 = which is 118- mr value.

Another 1 mark question is finding the energy by using the E=mc^2 formula.

Another question asks you for the half equations of graphite and Licoco2

and then they also ask you what is one advantage of using lithium batteries

Section A Chem SL Paper 3

Chemistry SL
Part A
1.
a
(aq)+(aq) = (aq)+(aq)+(g)
How to measure the rate of such reaction?

*Graph

b
Determine the instantaneous rate of reaction at ...

c
Explain why is the graph build like that (reverse relationship of variables)
Explain why isn't it a straight line

2.
Green chemistry

a) 4 main factors that are used to measure the

b) Which one of them doesn't include any information in regards to reactant used

c) – simple calculation, you can figure it out (eco-score based on the given info)

d) Why would the scheme 2 have an eco-score lower than scheme 1 (both are the same but 1 required 400s, 100K, nitrogen gas; 2 required 1.5h, 180K and CO atmosphere.)