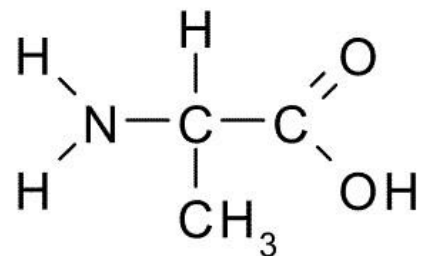
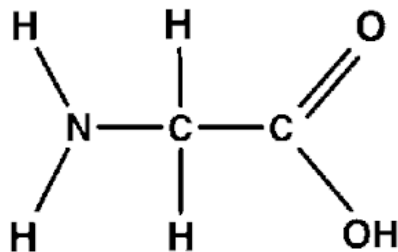


## **CEMEG**

**Amser - 1.5 awr**

**Atebwch ddau gwestiwn. Cewch ddefnyddio cyfrifiannell a chopi o'r tabl cyfnodol.**

1. Defnyddir nifer o dechnegau, gan gynnwys sbectrosgopeg cyseiniant magnetig niwclear (NMR), sbectromedreg màs (MS) a sbectrosgopeg isgoch (IR), i ganfod adeileddau moleciwlau. Gan ddefnyddio bwtanol fel enghraifft, esboniwch sut y defnyddir y technegau hyn.
2. Ysgrifennwch draethawd am ddatblygiad y tabl cyfnodol, a'r modd y'i defnyddir.
3. P'un o'r asidau amino isod sy'n girol? Amlinellwch bwysigrwydd ciroledd.



4. Mae ïon ffosffad yn rhan bwysig o sawl system fiolegol. Cafodd hydoddiant 25 cm<sup>3</sup> (MI) o asid ffosfforig (H<sub>3</sub>PO<sub>4</sub>) ei ditradu gyda 0.1 M o sodiwm hydrocsid (NaOH) gan ddefnyddio ffenolffthalein fel dangosydd. Cymerodd 21.0 cm<sup>3</sup> o hydoddiant NaOH i newid lliw'r dangosydd.
  - (a) Beth yw asid a beth yw bas?
  - (b) Ysgrifennwch yr hafaliad cytbwys ar gyfer yr adwaith asid-bas hwn.
  - (c) Cyfrifwch grynodiad yr asid ffosfforig yn yr hydoddiant mewn unedau molar (M).
  - (d) Pa fàs o asid ffosfforig oedd wedi'i hydoddi yn y 25 cm<sup>3</sup> o hydoddiant?

**DIWEDD Y PAPUR**

# Y TABL CYFNODOL

## Grŵp

1 2 3 4 5 6 7 0

Cyfnod

Bloc s

1	1.01 <b>H</b> Hydrogen 1											4.00 <b>He</b> Heliwm 2																																																																																																
2	6.94 <b>Li</b> Lithiwm 3	9.01 <b>Be</b> Beryliwm 4											19.0 <b>F</b> Fflworin 9																																																																																															
3	23.0 <b>Na</b> Sodiwm 11	24.3 <b>Mg</b> Magnesiwm 12											16.0 <b>O</b> Ocsigen 8																																																																																															
4	39.1 <b>K</b> Potasiwm 19	40.1 <b>Ca</b> Calsiwm 20											14.0 <b>N</b> Nitrogen 7																																																																																															
5	85.5 <b>Rb</b> Rwibidiwm 37	87.6 <b>Sr</b> Strontiwm 38											12.0 <b>C</b> Carbon 6																																																																																															
6	133 <b>Cs</b> Cesiwm 55	137 <b>Ba</b> Bariwm 56											10.8 <b>B</b> Boron 5																																																																																															
7	(223) <b>Fr</b> Ffranciwm 87	(226) <b>Ra</b> Radiwm 88											27.0 <b>Al</b> Alwminiwm 13																																																																																															
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