CAMEROON GENERAL CERTIFICATE OF EDUCATION BOARD

General Certificate Of Education Examination

0715 CHEMISTRY 1

JUNE 2020 **ADVANCED LEVEL**

Centre Number	
Centre Name	
Candidate Identification No.	
Candidate Name	

Mobile phones are NOT allowed in the examination room.

MULTIPLE CHOICE QUESTION PAPER

One and a half hours

INSTRUCTIONS TO CANDIDATES

Read the following instructions carefully before you start answering the questions in this paper. Make sure you have a soft HB pencil and an eraser for this examination.

1. USE A SOFT HB PENCIL THROUGHOUT THE EXAMINATION.
2. DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

Before the examination begins:

3. Check that this question booklet is headed **"0715 CHEMISTRY 1 - Advanced Level"**
4. Fill in the information required in the spaces above.
5. Fill in the information required in the spaces provided on the answer sheet using your HB pencil:
   Candidate Name, Exam Session, Subject Code and Candidate Identification Number.
   Take care that you do not crease or fold the answer sheet or make any marks on it other than those asked for in these instructions.

How to answer the questions in this Examination

6. Answer **ALL** the **50** questions in this Examination. All questions carry equal marks.
7. Non-programmable calculators are allowed.
8. Each question has FOUR suggested answers: **A, B, C** and **D**. Decide which answer is appropriate. Find the number of the question on the Answer Sheet and draw a horizontal line across the letter to join the square brackets for the answer you have chosen.
   For example, if **C** is your correct answer, mark **C** as shown below:

   [A] [B] [C] [D]

9. Mark only one answer for each question. If you mark more than one answer, you will score a zero for that question. If you change your mind about an answer, erase the first mark carefully, then mark your new answer.
10. Avoid spending too much time on any one question. If you find a question difficult, move on to the next question. You can come back to this question later.
11. Do all rough work in this booklet using the blank spaces in the question booklet.
12. **At the end of the examination, the invigilator shall collect the answer sheet first and then the question booklet. DO NOT ATTEMPT TO LEAVE THE EXAMINATION HALL WITH IT.**

© 2020CGCEB

Questions 1 - 38 (Thirty eight questions).
Directions: Each of the questions or incomplete statements in this section is followed by four suggested answers. Select the best answer in each case.

1. Which one of the following processes is exothermic?
   A $O_2(g) \rightarrow O(g)$
   B $O^-(g) + e \rightarrow O^{2-}(g)$
   C $O(g) + e \rightarrow O^-(g)$
   D $O(g) \rightarrow O^+(g) + e$

2. Gun powder burns with a lilac (purple) flame. The metal in gunpowder that causes this flame colour is?
   A Sodium
   B Caesium
   C potassium
   D calcium

3. Which of the elements below exhibit the "inert-pair effect"?
   A sulphur
   B lead
   C sodium
   D magnesium

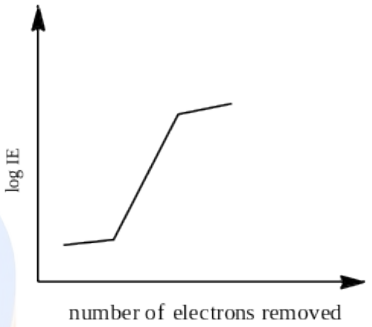
4. Give the name of the reaction that occurs when ethene reacts with aqueous bromine.
   A Electrophilic addition
   B Electrophilic substitution
   C Nucleophilic addition
   D Nucleophilic substitution

5. Choose the apparatus that can be used to easily monitor the rate of reaction between MnO_4^- ion and $C_2O_4^{2-}$ ions in acidic medium.
   A dilatometer
   B Calorimeter
   C Polarimeter
   D Colourimeter

6. What volume and concentration of H_2SO_4will be needed to exactly neutralize 20 cm^3 of 0.3 M NaOH?
   A 20 cm^3 of 0.3 M H_2SO_4
   B 10 cm^3 of 0.6 M H_2SO_4
   C 20 cm^3 of 0.6 M H_2SO_4
   D 10 cm^3 of 0.3 M H_2SO_4

7. Which of the reagents below can best be used to distinguish between propan-1-ol (1 propanol) and propan-2-ol (2-propanol)
   A I_2/NaOH(g)
   B $H^+/KMnO_4$
   C Conc H_2SO_4
   D Neutral $FeCl_3$

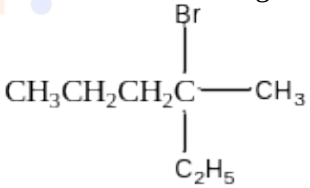
8. The graph below is part of a plot of log ionization energy against number of electrons removed for element X.



In which group of the periodic table is element X found?
   A I
   B II
   C III
   D IV

9. The number and types of particles emitted in the radioactive decay of $^{57}_{25}Mn$ to is (are)
   A 2α-particles
   B 1α-particle and 1β-particle
   C 2α-particles and 1β-particle
   D 2α-particles and 2β-particles

10. Give the IUPAC name of the following



compound.

   A 3-bromo-3-methylhexane
   B 2-bromo-2-ethylpentane
   C 4-bromo-4-ethylpentane
   D 4-bromo-4-methylhexane

11. Chlorine may be prepared in the laboratory from concentrated hydrochloric acid by heating it with
   A Concentrated H_2SO_4
   B Manganese (IV) oxide
   C Sodium chloride crystals
   D Lead (II) oxide