SS1

BIOLOGY

1. Draw and label fully, the front view of the following vertebrae;
   Atlas and axis
   Cervical vertebra
   Thoracic vertebra
   Lumber vertebra
   The sacrum
   The coccyx
2. Draw the diagram of the human skeleton and label fully.
   (**Note**; all drawings are to be drawn in your drawing books)

CHEMISTRY

1. (a)Elements **R** and **Q** have atomic numbers 13 and 8 respectively.
   i.   Write the electronic configurations for **R** and **Q**.
   ii.   State the valencies of **R** and **Q**.
   iii.   Write the formula of the compound formed between **R** and **Q**.
   iv.   Predict the physical state of the compound formed in 1(a)iii.

2. State Avogadro's law.

MATHEMATICS

1. Briefly discuss the concept of Logical reasoning.
   b. Explain with relevant examples, five (5) logical connectives.

2. What is the truth value of a statement?
   b. Construct the truth tables for the following:
   i. $P \lor Q$ ii. $\sim P \lor Q$ iii. $P \lor \sim Q$

PHYSICS

1. a. State the fundamental law of electrostatic

   b. With the aid of a diagram define the following

    i. Open circuit

    ii. Close circuit

   iii. Short circuit