BIOLOGY PAPER 3

Confidential Instructions

Apart from the usual laboratory apparatus and fittings each candidate will require the following;

- Germinating bean seed R_1 (About six days required to prepare this)
- Dry bean seed R_2
- Bean/pea (legume) pod R_3
- 2 fresh dicot leaves (medium size) U^*
- 2 fresh eucalyptus leaves W^*
- Photos of two different cervical vertebrae
    - P_1, P_2 and S (in the question paper)
  ~~(To be provided to each student)*~~
- Scalpel
- Means of timing (wall clock)
- Pair of forceps
- **2* Boiling tubes**
- 100ml beaker
- Hot water bath/source of hot water
- Graph paper

Legume (eg Pea)

Outline

Topic	objective	Content	Expectation	Marks	
germination	Drawing observation	Conditions for germination	-Physiological process -Conditions -Placentation		
support	Characteristics of vertebrae	2 Cervical vertebrae	Distinguishing features Identify views		
ecology	Adaptation of leaves	Gaseous exchange (counting bubbles),	Calculate surface area		