Instructions:

1. Answer ALL questions in Section A and Any two questions in Section B
2. Candidates are advised not to write on question paper
3. Candidates must hand in their answer booklets to the invigilator while in the examination room
SECTION A: ASHORT NSWER QUESTIONS (3O MARKS)

1. a) Define meristem  
   (1 Mark)  
   b) Describe the meristem regions that produce the primary plant body.  
   (3 Marks)

2. Distinguish between:
   a) Tracheid and vessel member  
   (1 Mark)  
   b) Epidermis and periderm  
   (1 Mark)  
   c) Pericycle and endodermis  
   (1 Mark)

3. Describe the root meristems.  
   (3 Marks)

4. Describe any four specific roles that mineral ions play in plant functioning.  
   (4 Marks)

5. Describe the Cohesion-Tension theory.  
   (4 Marks)

6. Describe any three photosynthetic pathways.  
   (3 Marks)

7. Describe the pressure-flow hypothesis.  
   (3 Marks)

8. Describe any three conditions that trigger active transport mechanisms.  
   (3 Marks)

   (3 Marks)

SECTION B: ESSAY QUESTIONS (40 MARKS)

10. Discuss the main energy-releasing pathway in plants.  
    (20 Marks)

11. Discuss membrane transport.  
    (20 Marks)

12. Discuss the different types of seed dormancy.  
    (20 Marks)

13. Discuss transpiration and water absorption in plant.  
    (20 Marks)