

EASTERN UNIVERSITY, SRI LANKA
Special Degree Examination in Science 2004/2005
BT 403 -Seed Physiology & Technology

Answer ALL questions

Time: 03 Hours

1. a. What is a seed? (25 marks)
- b. Describe a named endospermic and non-endospermic seed with suitable diagrams (50 marks)
- c. List out the uses of seed (25 marks)
2. a. "Viability and vigour of a seed lot are a function of seed deterioration". Comment on this statement. (50 marks)
- b. Explain the principle of Topographical Tetrazolium Test (TTT) in seed Viability determination. (50 marks)
3. Discuss the following:
 - a. Effect of storage temperature and seed moisture on the vigour of a seed lot during storage. (50 marks)
 - b. Influence of microorganisms on deterioration of a seed lot. (50 marks)
4. a. Define "a dormant seed". (20 marks)
- b. List the different types of seed dormancy and the cause for each type. (40 marks)
- c. Describe embryo seed dormancy and the methods to overcome it. (40 marks)
5. Write short notes on
 - a. Orthodox and recalcitrant seeds. (30 marks)
 - b. Normal and abnormal seedlings. (30 marks)
 - c. Certified seeds and their advantages. (40 marks)
5. Discuss the importance of quality seed in crop production. (100 marks)
