

UNIVERSITY OF RUHUNA
BACHELOR OF SCIENCE (SPECIAL) DEGREE LEVEL I (SEMESTER I)
EXAMINATION - OCTOBER 2021
11/10/2021

SUBJECT: BOTANY

COURSE UNIT: BOT4242 (Seed Physiology and Technology)

Time: Two hours

Answer all four (04) questions.

1.
 - a) What do you mean by abnormal seedlings? (10 marks)
 - b) Name three main types of abnormal seedlings. (20 marks)
 - c) How do you manifest seed deterioration? (30 marks)
 - d) Explain briefly how you could reduce seed deterioration of a given seed sample. (20 marks)
 - e) What is imbibition injury? Describe the process you propose to avoid it. (20 marks)

2.
 - a) Define seed vigor and mention the importance of testing seed vigor. (24 marks)
 - b) List four major types of seed vigor tests. (16 marks)
 - c) Describe one of the seed vigor tests from the above briefly. (60 marks)

3. Discuss the factors affecting seed longevity during storage. (100 marks)

4.
 - a) What do you mean by seed processing? (10 marks)
 - b) Explain briefly the different seed treatment steps applied in seed processing. (55 marks)
 - c) What are the main factors to be considered in establishing a seed processing plant? (35 marks)