



Advanced Crop Physiology (EAG 356-1)

Instructions

Answer **all** questions

No. of questions : Two (02)

No. of pages : One (01)

Total marks allocated : 60%

Time : 30 minutes

Index No:

Part II- Essay

Question 1

- i. Briefly describe the major photoreceptor systems in plants (20 Marks)
- ii. Discuss the commercially available applications used in horticultural plant growing systems to regulate the light (15 Marks)

Question 2

- i. Thermal duration of a rice variety A grown in Anuradhapura and Hanguranketha is 1200 d⁰C (degree days). If the base temperature (T_b) is 10⁰C, calculate the time required to complete its life cycle in two different locations using the information given below (20 Marks)
- ii. Comment on your answer (05 Marks)

Days from planting	Daily Mean Temperature (T) °C	
	Anuradhapura	Hanguranketha
0-10	26	24
11-20	26	25
21-30	28	26
31-40	29	27
41-50	30	26
51-60	29	25
61-70	30	25
71-80	29	26