19	19U463	(Pages: 2)	Name:	
			Reg.No:	
FOURTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2021				
(CBCSS - UG)				
CC19U BOT4 C04 - PLANT PHYSIOLOGY, ECOLOGY AND GENETICS				
(Botany - Complementary Course)				
	(2019 Ac	lmission - Regular)		
Tim	Time: 2.00 Hours			Maximum: 60 Marks
				Credit: 2
	Part A (Sh	ort answer questions)		
Answer all question. Each question carries 2 marks.				
1.	1. Describe the structure of ribosomes.			
2.	2. Differentiate active and passive absorption.			
3.	3. What is ascent of sap?			
4.	4. What is absorption spectrum?			
5.	5. Explain carboxylation.			
6.	6. What is a short day plant?			
7.	7. What are the factors causing seed dormancy?			
8.	8. What are the morphological adaptations of xe	erophytes?		
9.	9. What is haustorium? Give one example.			
10.	0. Explain homozygosity.			

(Ceiling: 20 Marks)

11. Define the law of unit characters.

12. What is complementary gene?

Part B (Short essay questions - Paragraph)

Answer all question. Each question carries 5 marks.

- 13. Explain exosmosis and endosmosis.
- 14. What is meant by criteria of essentiality?
- 15. Describe the C₄ pathway of photosynthesis.
- 16. Which are the different phases of growth?
- 17. Briefly explain the types of senescence.
- 18. Explain the components of ecosystem.
- 19. What is test cross? Explain test cross with an example.

(Ceiling: 30 Marks)

Part C (Essay questions)

Answer any *one* question. Each question carries 10 marks.

- 20. Explain the light reaction of photosynthesis.
- 21. Explain plant succession with reference to hydrosere.

 $(1 \times 10 = 10 \text{ Marks})$
