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(Pages: 3)

Name......55 Reg. No.....

SECOND SEMESTER B.Sc. DEGREE EXAMINATION, MAY 2014

(UG-CCSS)

Complementary Course—Botany

BO 2C 02—PLANT PHYSIOLOGY AND ECOLOGY

Maximum: 30 Weightage me : Three Hours

Illustrate if necessary.

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Answer	all que	actions			
the correct answer:					
Water potential of a solution:			it.		
	(b)	Negative.			
	(d)	Both positive and negative.			
	(b)	Lysenko.			
(c) Charles Darwin.	(d)	Went. I drword to easing gol at sadW			
Calvin cycle is also known as:					
(a) EMP pathway.	(b)	TCA cycle.			
(c) Co cycle.					
Vivipary is seen in:		Wille a pote on yearlanding a pirtW			
(a) Hydrophytes.	(b)	Halophytes.			
(c) Xerophytes.	(d)	Eninhytes.			
the blanks:		Explain fermentation			
Net gain of ATP in the oxidation of a gl	ucose	molecule in glycolysis is ———.			
Scarification is a technique employed in	n remo	oving ——— in seeds.			
Epiphytes absorbs atmospheric moistu	re thro	bugh o golddosde svissed alekaxi			
. First stable product of C ₄ cycle is ——					
	Answer the correct answer: Water potential of a solution: (a) Positive. (c) Neutral. Phenomenon photoperiodism was first di (a) Garner and Allard. (c) Charles Darwin. Calvin cycle is also known as: (a) EMP pathway. (c) C ₃ cycle. Vivipary is seen in: (a) Hydrophytes. (c) Xerophytes. I the blanks: Net gain of ATP in the oxidation of a glange of the second of the seco	the correct answer: Water potential of a solution: (a) Positive. (b) (c) Neutral. (d) Phenomenon photoperiodism was first discover (a) Garner and Allard. (b) (c) Charles Darwin. (d) Calvin cycle is also known as: (a) EMP pathway. (b) (c) C ₃ cycle. Vivipary is seen in: (a) Hydrophytes. (b) (c) Xerophytes. (d) The blanks: Net gain of ATP in the oxidation of a glucose Scarification is a technique employed in remove. Epiphytes absorbs atmospheric moisture three	Water potential of a solution: (a) Positive. (b) Negative. (d) Both positive and negative. Phenomenon photoperiodism was first discovered by: (a) Garner and Allard. (b) Lysenko. (c) Charles Darwin. (d) Went. Calvin cycle is also known as: (a) EMP pathway. (b) TCA cycle. Vivipary is seen in: (a) Hydrophytes. (b) Halophytes. (c) Xerophytes. (d) Epiphytes. (e) Xerophytes. (f) The oxidation of a glucose molecule in glycolysis is ———. Scarification is a technique employed in removing ——— in seeds. Epiphytes absorbs atmospheric moisture through ————.		

Answer in one word:

- 9. Who coined the term mitochondria?
- 10. Apparatus used to measure the growth.
- 11. Succession starts in a virgin land.
- 12. Who proposed cohesion tension theory?

 $(12 \times \frac{1}{4} =$

Part B (Short Answer Questions)

Answer all questions.

Each question carries 1 weightage.

- 13. What are antitranspirants?
- 14. What is Emerson effect?
- 15. What is absorption spectrum?
- 16. What is a short day plant?
- 17. What is a sere?
- 18. What is diffusion?
- 19. What is symplast?
- 20. What is senescence?
- 21. What is log phase of growth?

 $(9 \times 1 =$

Part C (Paragraph Questions)

Answer any **five** questions.

Each question carries 2 weightage.

- 22. Write a note on vernalization.
- 23. Law of limiting factors.
- 24. Describe a synthetic hormone.
- 25. Explain fermentation.
- 26. Explain K+ ion theory of stomatal movement.
- 27. Write a note on Abscisic acid.
- 28. Explain passive absorption of water.

 $(5 \times 2 = 1$

Part D (Essay Questions.

Answer any **two** questions.

Each question carries 4 weightage.

- 29. Give a detailed account of glycolysis...
- 30. Briefly describe the ecological adaptations of hydrophytes.
- 31. Explain photophosphorylation.

 $(2 \times 4 = 8 \text{ weightage})$