

R-3801-02

M. Sc. Biotechnology (Sem. III) (ATKT) Examination May/June - 2010

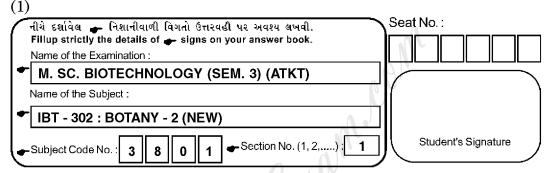
IBT - 302 : Botany - II

(New Course)

Time: 3 Hours] [Total Marks: 70

R-3801

Instructions:



- (2) Figures to the right indicate full marks of the question.
- (3) Draw neat and labelled diagrams whenever necessary.
- (4) Both sections must be written in separate answer books.
- 1 Answer the following:

5

- (i) Define Water potential.
- (ii) Define Wilting coefficient.
- (iii) What are Hydathodes?
- (iv) Define photorespiration.
- (v) Write the function of enzyme Chlorophyllase.
- 2 Explain in detail process of cellular respiration.

OR

- 2 Describe the following:
 - (a) Structure of Mitochondria.

5

10

(b) Write brief account on types of transpiration.

5

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[Contd...

3	(a)	Enlist the significance of micro elements in plant nutrition.	5
	(b)	In brief write various photosynthetic pigments found in plants.	5
		OR	
3	Exp	lain the following:	
	(a)	Types of commercial Auxins and its physiological functions.	5
	(b)	Active and Passive Transport.	5
4	Wri	te brief notes on following: (any two)	10
	(a)	Mechanism of stomatal opening and closing	
	(b)	Exosmosis and Endosmosis	
	(c)	Internal factors affecting photosynthesis.	

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R-3802

Instructions:

(1)						
		લ → નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી. ictly the details of → signs on your answer book.				
Na	Name of the Examination :					
	M. SC. BIOTECHNOLOGY (SEM. 3) (ATKT) Name of the Subject :					
I —		802 : BOTANY - 2 (NEW)				
-		code No. : 3 8 0 2 - Section No. (1, 2,) : 2	gnature			
(2)	Fig	ures to the right indicate full marks of the question				
(3)	_	Draw neat and labelled diagrams whenever necessary.				
(4)		h sections must be written in separate answer be				
1	Ans	swer the following:	5			
	(i)	Define Porous wood.				
	(ii)	Define Abnormal growth.				
	(iii)	Define Photo sensitivity.				
	(iv)	Name the enzyme associated with Xylem elements	3.			
	(v)	Define Stress.				
2	_	olain secondary growth in Bougainvillea and rhaavia. OR	10			
2	Describe the following:					
	(a)	Various methods of overcome seed dormancy.	5			
	(b)	Plant responses to environmental pollutants.	5			
3	(a)	Explain abnormal secondary growth in Salvadora stem.	5			
	(b)	Write in brief about basic structure of wood.	5			
		OR				
3	Exp	Explain the following:				
	(a)	Flavanoids and Carotenoids as photoreceptors.	5			
	(b)	Movement of plants away from stimulus.	5			
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4 Write brief notes on following: (any two)

10

- (a) Photo inductive cycles.
- (b) Florigen concept
- (c) Histogen and Tunica corpus theory.

Jan Sham.

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