1										
(1)	Pri	Printed Pages: 3				Roll No.				
(ii)	Qu	estion	15	:9	Sub.	Cod	e: 0 4 5 4			
		F. THE		n Janes	Exam.	Cod	e: 0 0 0 5			
						otto				
			B.A	/B.Sc. (0	General) 5 <sup>t</sup>	h Sem	iester			
					(1129)		The second second			
					BOTANY		MULTINE STREET			
							ysiology—I			
Time Allowed: Three Hours]						[Maximum Marks: 36				
Note	-	(1)	Attempt <b>five</b> questions in all, selecting <b>one</b> from each Unit.							
		(2)	Question No. 1 is compulsory.							
1.	(A)	Pick								
		(i)	Water potential of pure water at standard temperature							
			is:							
			(a)	22.4		(b)	11.2			
			(c)	5.6		(d)	Zero			
		(ii)	Whi	ro nutrient?						
			(a)	Zn		(b)	Mo			
			(c)	Ca		(d)	Mn			
		(iii)	i) Pigment Leg hemoglobin is present in:							
			(a)	Blood		(b)	Bacteria			
			(c)	Inside N	odule	(d)	In soil			
		(iv)	Oleic acid is an unsaturated fatty acid with:							
			(a)				Two double bond			
			(c)	Three do	ouble bond	(d)	Four double bond			

		(v)	Mo	lecular Scissors are			~	
			(a)	Proteins *	(b)	Carbohydrates		
			(c)	Fats	(d)	Nucleic Acid		
		(vi)	Conjugated Enzymes have non protein part, called:					
			(a)	Apoenzyme	(b)	Co-factor		
			(c)	Holoenzyme	(d)	Zymogen		
	(B)	Fill in the blanks:						
		(vii) Fats and oils are ester of Fatty Acids and						
		(viii) Enzymes where catalytic function is not done by Proteins						
		(ix) Deficiency Symptoms are also known as						
		(x)	The	place on enzymears	whe	re catalytic enz	yme	
		(xi)	Fats	are rich in F	atty A	cids.		
		(xii)	Puls	ation theory was pr	opose	d by		
					92	12×1	=12	
				UNIT—I				
2.	(a)	Define Osmosis. What are its types? Demonstrate by Thistle funnel experiment.						
	(b)	Write	piration.	2				
3.	(a)	What is Ascent of Sap? How will you prove that it occurs through Xylem?						
	(b)	Wha	placed in Hypert	onic				
		Soln	? Na	me the process and	write	its uses.	3	

## UNIT—II

4.	Wri	Write short notes on:							
	(a)	Criteria for Essentiality							
	(b)	Difference between Macro and Micro nutrient							
	(c)	Deficiency Symptoms.	2×3=6						
5.	(a)	What is Hydroponics? What is its importance?	3						
	(b)	Explain the passive absorption of Minerals by Ionic E	Exchang						
		Process.	3						
		UNIT—III							
6.	Describe the process of Nodule formation in a legume plant. How								
	Noc	lule is suitable for N <sub>2</sub> fixation.	6						
7.	(a)	What are Lipids? Describe its types.	4						
	(b)	Differentiate between saturated and unsaturated fat	ty acids						
			2						
		UNIT—IV							
8.	Explain the modern system of Nomenclature and classification o								
	Enzymes with examples.								
9.	(a) Explain the process of action of enzyme by Activ								
		Energy.	4						

(b) Describe the structure of tertiary proteins with examples.