[Additional Exam]

105	S VCD // S.Y.B.Se-SEM IV - BIOCHEMIS	TRY I -75 MARKS - 2 1/2 HRS 25	
rigat t	Note: 1. Figures to right indicate m		
	2. All questions are compul-	sory.	
		ed diagrams wherever necessary.	
	Q I) A. Define the following (any Four)	AND COMPANY OF THE PARTY OF THE	
7.7	i. Gram equivalent.		[8]
	ii. Isotonic solution.	v. Diffusion coefficient.	
	iii. Capillary active substances iv. Emulsoid	vi Critical temperature	
		vii. Osmosis	
	IV. Emuisoid	viii. Osmotic pressure	
	B. Explain the following: (any Tw	o) with the first the contract of	
100	i. Write down the stalagmometric method for surface tension		[6]
	n. what do you mean by flocculation?		
	iii. Briefly mentioned about any two prop	perties of colloids?	
iv. Describe percentile method of solute concentration. C. Answer in brief: (any One)		concentration	
			[6]
	i. Explain: Van't Hoff,s law		
	ii. Briefly describe how different factors a	ffecting diffusion of solute in solution.	
	Land C. Aday in a Marie Mari T. 164	Sold State of the	
QII) A. Answer the following (any Four) i. What is a suspension medium?			[8]
	ii. Define isotonic solution		
1	iii. Name any 2 properties of C. elegans v	which makes it a model arganism	
	iv. Explain the process of sonication.	men makes it a model organism.	
0.00	v. What is osmosis?		
1	vi. Give any 4 advantages of D. melano	gaster as a model organism.	
	vii. What are tissue studies?		
	viii. Give examples of cell fractionation te	chniques.	
X	B. Explain the following: (any Two)		
	i. What is cell rupture?		
	ii. What is significance of organ studies?		
	III. Importance of a model organism.		
	iv. What are factors of suspension mediu	그는 아이들이 아이들이 아는 점점 되어 되었다면 보면 되어 가장되었다면 하는데 하는데 아이들이 아이를 하는데 그렇지 않는데 아이들이 없었다면 하는데 되었다면 하는데 되었다.	
	C. Answer in brief: (any One)	The second secon	
	i. Write a note on significance of <i>Drosophila melanogaster</i> as model organi		[6]
1	The state of the s	다리 하는 경기 원수들은 이번 경기에 가는 전혀 되었다. 19 전에 보면 V. 10 전시되었다. 19 전에 되었다.	isms in
1.34	ii. Write a brief note on tissue technique	s and significance of cell disruption	
	Q III) A. Answer the following (any Four)		
4	i. How does the distance between specimen affect the resolution of image formed?		[8]
	ii. What is the RI of air?	in affect the resolution of image formed?	
	iii. Define condenser.		
	iv. What is the function of a prism?		
	v. What is the function of objective lens	s? ,	
10	vi. Define focal length.		
		이번 나는 아니는 아이들이 얼마 아니는 아이를 생각하는 아이들이 아름답니다. 아이들은 아이들은 아이들은 아이들은 아이들이 아니는	

흥미분을 하고 있다면 하는 이렇게 생활되면 모양하는 생활들이 되고 있다고 있다. 경상하는 생활 없다	これのませんではかかかります。 サイナー	
vii. What is the function of Dissection micro	oscone?	
viii. Name the lens used by Leewenhoek	seope.	
and the tens used by Leewenhoek		
B. Answer the following: (any Two)	CALL OF THE STATE	
i. Illustrate the working of Scanning electron microscope.		
ii. Draw the focussing of light with the help of	아들이 그는 그녀를 살아가지 못할 것을 것이다. 아픈 아픈 아픈 아름다는 그리지 않는 것이 아들이 아들이 그렇게 하는데 아들이 없었다.	
iii. Define refractive index with an example.		
iv. Explain the phenomenon of fluorescence.		
	(any One)	
C. Answer in brief:	(any One) ii. Explain the working of TEM	
i. Explain the working of confocal microscope	II. Explain the Working of TEM	
Q IV 1.(A) Answer any one of the following:		
i. What is unit of viscosity?	ii. How osmosis help in diagnosis of [2]	
	cerebral edema?	
1 (D) Anguar of the following:	(any Three)	
1. (B) Answer of the following: i is 1 mole of solute dissolved in 1000g of solv		
ii. 9ml saline dissolved in 100 ml water means	saline.(9%/ 9gm%/ 9mi%)	
iii. Gram equivalent wt of fumeric acid is(126		
iv. Colloidial state is denoted by particle size i		
Imμ/0,001mμ-0.1mμ)	The state of the second state of the second	
v. Rate of diffusion is proportiotional to	size of particle (inversely)	
directly/ diagonally)	of participation (miverscry)	
vi. The energy of denoted by γ (surface tension	d viscosity/ osmotic processor	
vi. The energy of denoted by Asurface tension	ii viscosity osmone pressure)	
2.(A) Give example of one the following	[2]	
Market and the first of the fir	unicellular model organism [2]	
	The same of the sa	
2. (B) Answer of the following: (any Three)	[3]	
I. Name a model organism which is easy to store.	The second second second second	
ii. Name a cell rupture technique which involves fre	eezing and crushing.	
iii. Name any one eukaryotic model organism.	TO SHE WAS THE WAY OF THE	
iv. Name any one organism which has homologous go. Give any use of homegeniser.	genes with human genes.	
vi. Give any one importance of biochemical investigation		
없이 가능한 보통은 하는 것이 없었다. 모델레드를 살게 되었다고 하는 것이		
3.(A) Give application in industry of one the follow	ing: -[2]-	
i. Microorganisms ii. Magnificat		
The state of the s	· 李子·	
3. (B) Answer of the following: (any Three)	[3]	
i. What is the function of the mechanical stage in a m		
ii. Give examples of simple stains used in the laborator	ry.	
ii. What is the highest magnification of objective lens in a v. Name the lens employed in electron arise.	a compound microscope?	
	(B. B.) - 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	
v. Name the compound used in shadowing a specimen	in TEM.	
i. Which kind of microscope is used in the laboratory for	Studying simple atmost	
	-J S simple structures.	

iii. iv. v. vi.