(A12)

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SARDAR PATEL UNIVERSITY

M. Sc. (Integrated) Biotechnology – Sixth Semester Examination Saturday, 2nd May, 2015

2:30 p.m. to 5:30 p.m.

PS06CIGB06: ANIMAL PHYSIOLOGY

I	Note:	1) Figures to the right indicate marks				
		2) Draw diagram wherever necessary		Total marks: 70		
) - 1	Cho	ose the most appropriate alternative for t	e following:	(08)		
	1.	Salivary amylase secreted into the oral cav	ty, starts the digestion of	•		
		a) proteins	b) lipids			
		e) starch	d) amino acids			
	2.	Which digestive organ mechanically and chyme?	•	ood bolus into		
		a) Esophagus	b) Stomach			
	•	c) Small intestine	d) Large Intestine			
	3.	Which of the following are granulocytes?	1.) P 41			
		a) Monocytes	b) Erythrocytes			
	Æ	c) Neutrophils The substance that delay suppresses or pre-	d) Platelets	-d		
	4.	The substance that delay, suppresses or pro a) coagula	b) agglutinin	-u		
		a) coagulac) agglutinogen	d) anticoagulant			
	5.	organelle is absent in matu	,			
	٥.	a) mitochondria	b) ER			
		c) ribosome	d) centriole			
	6.	Resting membrane potential of neuron is	•			
	v.	a) -55mV	b) -70mV			
		c) -90mV	d) +30mV			
	7.	The following structures are components of	··· y	· 1		
	/•	a) Nephron	b) Urethras	·•		
		c) Ureters	d) Gall bladder			
	۵	<i>'</i>	,			
	8.	Which of the following is NOT strictly a t a) Growth hormone	- -	ting harmone		
		a) Growth hormonec) Thyroid stimulating hormone	b) Follicle stimula d) Luteinizing hor			
		•	u) Luteniizing non			
2 – 2	Atte	empt ANY SEVEN from the following:		(14)		
	1.	Write the composition and functions of sal	va.			
	2.	Define the term deglutition and write the phases of it.				
	3.	Give names of blood clotting factors.				
	4.	Narrate about the blood vessels.				
	5.	Define neurotransmitter with examples.				
	6.	Draw and label the diagram of Neuron.				
	7.	Enlist the functions of kidneys				
	8.	Where is the Juxtaglomerular apparatus lo physiology?	ated and what is its role in	renal		
	9.	Which gland maintains biological clock of	body? Write the location of	f this gland.		

-(a) -	Write an explanatory note on gastric digestion.	(06)
(b)	Describe the process of absorption in small intestine.	(06)
` .	OR	
(b)	Explain the structure and functions of liver.	(06)
(a)	Explain the mammalian heart with suitable diagram.	(06)
(b)	Describe the blood clotting mechanism.	(06)
` ,	OR	
(b)	Write an explanatory note on cellular components of blood.	(06)
(a)	Discuss the physiology of impulse conduction through the chemical synapse.	(06)
(b)	(i) Explain physiological types of neuron.	(03)
`.'	(ii) Write the functions of cerebrum.	(03)
	OR	` ,
(b)	Expiain action potential in neuron.	(06)
(a)	Describe the types and structure of nephron.	(06)
(b)	Give a detailed account on Adrenal gland.	(06)
` '	OR	,
	(b) (b) (a) (b) (b) (a) (b) (b)	(a) Explain the mammalian heart with suitable diagram. (b) Describe the blood clotting mechanism. OR (b) Write an explanatory note on cellular components of blood. (a) Discuss the physiology of impulse conduction through the chemical synapse. (b) (i) Explain physiological types of neuron. (ii) Write the functions of cerebrum. OR (b) Explain action potential in neuron. (a) Describe the types and structure of nephron. (b) Give a detailed account on Adrenal gland.

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(b) (i) Write a note on filtration membrane.(ii) Write the synthesis and functions of thyroid hormones.