Total No. of Questions: 3

Total No. of Printed Pages:2

Enrollment No.....



Faculty of Pharmacy

End Sem Examination May-2024

PY3CO05 Human Anatomy & Physiology -II

Programme: B. Pharm. Branch/Specialisation: Pharmacy

Duration: 3 Hrs.

Maximum Marks: 75

Note: All questions are compulsory. Internal choices, if any, are indicated. Assume suitable data if necessary. Notations and symbols have their usual meaning.

Q.1	i.	What is reflex arc?	2
	ii.	Define neurons with parts of neurons.	2
	iii.	Enlist two glands that secrets digestive juice into the alimentary canal.	2
	iv.	Describe the role of enzymes in digestion with an example.	2
	v.	Define three types of respiration.	2
	vi.	Explain re-absorption process in nephron.	2
	vii.	Discus about releasing of oxytocin.	2
	viii.	Give a brief detail about pineal gland.	2
	ix.	What is spermatogenesis?	2
	х.	Write about chromosomes.	2
Q.2		Attempt any two:	
	i.	Elaborate structure and functions of central nervous system.	10
	ii.	Explain the digestive system along with digestion and absorption of nutrients.	10
	iii.	(a) Write a detail on classification and properties of nerve fibre.(b) Discuss about formation and role of ATP.	5 5
Q.3		Attempt any seven: Two questions from each section is compulsory.	
		Section - A	
	i.	Draw a labeled diagram and explain the respiratory system.	5
	ii.	Explain re-absorption process with labeled diagram of nephron along with the physiology of urine formation.	5

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iii.	Explain micturition reflex and role of kidneys in acid base balance respect of urinary system.			
	Section - B			
iv.	Enlist the hormones secreted by pancreas, explain the function and mechanism of action of hormones.	5		
v.	What is considered "master gland" of the endocrine system and how it functions as master gland?	5		
vi.	Write about adrenal gland & thymus and their disorders with labeled diagram.	5		
	Section - C			
vii.	Elaborate the gonads and releasing hormones with functions.	5		
viii.	Draw a labeled diagram of female reproductive system and explain physiology of menstruation.	5		
ix.	Describe the genetic pattern of inheritance along with their modes.	5		

Marking Scheme

Human Anatomy & Physiology -II (T) - PY3CO05 (T)

Q.1	i)	reflex arc- definition	2Marks	2
	ii)	neurons	1 Marks	2
		parts of neurons	1 Marks	
	iii)	Two glands – name	2 Marks	2
	iv)	role of enzymes -1 Marks ,example	1 Marks	2
	v)	Definition -1 Marks ,three types of respiration-	1 Marks	2
	vi)	re-absorption process in nephron-	2 Marks	2
	vii)	releasing of oxytocin-	2 Marks	2
	viii)	Detail about pineal gland-	2 Marks	2
	ix)	Spermatogenesis -	2 Marks	2
	x)	Chromosomes- definition-	2 Marks	2
Q.2		Attempt any two:		
	i.	Defination-1, diagram-2, details of parts-4 and Fu	inctions of	10
		central nervous system-3		
	ii.	digestive system- definition-1,diagram-2,details of	of parts -4	10
		digestion and absorption		
		of nutrients-3		
	iii. (a) Nerve fibre-definition-1, classification -3, properties-1			
	(b) ATP -definition-1, formation-3, role of ATP-1			5
Q.3		Attempt any seven: Two questions from each	section is	
		compulsory.		
		Section - A		
	i.	Respiratory system-labeled diagram -2, explanation	1 - 3	5
	ii.	Re-absorption process with labeled diagram		5
		3-		
		physiology of urine formation-2		
	iii.	micturition reflex-3,role of kidneys in acid bas	se balance	5
		respect of urinary system-2		

Section - B

	iv.	Pancreas- 1, hormones secreted by pancreas-1, explain the function-2, mechanism of action of hormones-1	5
	v.	master gland- definition-1,location and releasing hormones- 1	5
		functions as master gland -3	
	vi.	Definition each (adrenal gland-1 pineal gland-1 thymus gland-	5
		1),Disorders-2	
		Section - C	
	vii.	Gonads- definition-1, releasing hormones -2, functions-2	5
	viii.	female reproductive system-Definition-1,labeled diagram-1 physiology of menstruation-3	5
	ix.	Genes-defiination-1, types-1, genetic pattern of inheritance-3	5
