

Total No. of Questions: 3

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Enrollment No.....



Faculty of Pharmacy  
End Sem Examination Dec-2023

PY3CO01 Human Anatomy & Physiology -I

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
- Write the scope of anatomy and physiology. 2
  - Write any four differences between smooth muscle and cardiac muscle. 2
  - Give any four functions of skin. 2
  - Enlist the bones of upper limb. 2
  - Write the normal value of RBC in male and female. 2
  - Write the composition and function of lymph. 2
  - Write the name of any four cranial nerves. 2
  - Draw neat labelled diagram of tongue. 2
  - Define heart rate and stroke volume. 2
  - Write the four differences between arteries and vein. 2

- Q.2 Attempt any two:
- Explain structure and functions of cell. Discuss about transport across cell membrane. 10
  - Describe structure and functions of bones of axial and appendicular skeletal system. 10
  - Discuss in detail about types of connective tissue. 5
    - Write a note on structure and functions of synovial joints. 5

- Q.3 Attempt any seven: Two questions from each section is compulsory.

Section - A

- What is hemopoiesis? Explain the steps of hemopoiesis. 5
- Discuss about mechanism of coagulation. 5
- Define composition and function of blood. 5

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Section - B

- Discuss about origin and functions of spinal and cranial nerves. 5
- Explain about structure and functions of parasympathetic nervous system. 5
- Write anatomy and physiology of eye. 5

Section - C

- Explain the conduction system of heart. 5
- Describe the electrocardiogram with diagram. 5
- Explain about anatomy of heart with neat labelled diagram. 5

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## Marking Scheme

### PY3CO01 - Human Anatomy & Physiology –I

Q.1	i)	Explain the scope of anatomy and physiology.	2 Marks	2
	ii)	four differences of smooth muscle and four differences of cardiac muscle.	1 Mark 1Mark	2
	iii)	Enlist the bones of upper limb (e.g. clavicle, scapula, humerus, radius, ulna and phalanges).	2 Marks	2
	iv)	four functions of skin (protection, temperature regulate, Prevents loss of moisture, Sensation)	Each 0.5 Marks	2
	v)	Write the normal value of RBC in male and female ( <b>Male: 4.7 to 6.1 million(cells/mcL) (1 mark),Female:4.2 to 5.4 million cells/mcL.</b>	1 Mark	2
	vi)	Write the composition and function of lymph.(composition 1 Mark)	(Function 1 Mark)	2
	vii)	Write the name of any four cranial nerves	(Each 0.5 mark)	2
	viii)	Draw labelled diagram of tongue.	(2 Marks)	2
	ix)	Definition of heart rate and stroke volume	(1 Mark) (1 Mark).	2
	x)	two difference of artery and two difference of vein.	(1 Mark) (1 Mark )	2
	Q.2 Attempt any two:			
	i.	Structure and functions of cell?	(6 Marks)	10
	ii.	Describe structure and functions of axial bone and Describe structure and functions appendicular bone	(4 Marks). ( 5 Marks) (5 Marks)	10
	iii.	Definition of connective tissue types and subtypes	(2 Marks) (3 Marks)	5
				5
	Q.3 Attempt any seven: Two questions from each section is compulsory.			
	Section - A			
	i.	Definition of hemopoiesis?	2 Marks	5
		steps of hemopoiesis	3 Marks	
	ii.	mechanism of coagulation intrinsic and extrinsic pathway	( 2.5 ,2.5 Marks)	5
	iii.	Composition of blood	3 Marks	5

Function of blood.

2 Marks

#### Section – B

iv.	Discuss about Origin and functions of spinal and Discuss about Origin and functions cranial nerves	2.5 Marks 2.5 Marks	5
v.	Explain structure of parasympathetic nervous system and functions of parasympathetic nervous system	3 Marks 2 Marks	5
vi.	Anatomy with diagram of eye and physiology of eye	3 Marks 2 Marks	5

#### Section - C

vii.	Explain the conducting system of heart	5 Marks	5
viii.	Describe the electrocardiogram procedure.	5 Marks	5
ix.	Explain anatomy of heart with neat labelled diagram.	5 Marks	5

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