Reg. No.:					

Question Paper Code: 93B02

B.E. / B.Tech. DEGREE EXAMINATION, DEC 2020

Third Semester

Biomedical Engineering

19UBM302 – HUMAN ANATOMY AND PHYSIOLOGY

		(Reg	ulation 2019)			
Dura	ation: One hour			Maximum: 3	0Marks	
		PART A -	$(6 \times 1 = 6 \text{ Marks})$			
		(Answer any six o	f the following questio	ons)		
1.	Who discovered co	ell?			CO1- R	
	(a) Robert Hook	(b) Robert Crook	(c) David Thomson	(d) Marie Francois		
2.	2. Sodium ions and calcium ions are examples of					
	(a) Cations	(b) Anions	(c) Salts	(d) Buffers		
3.	3. Which cells in the blood do not have a nucleus?					
	(a) Lymphocyte	(b) Monocyte	(c) Basophil	(d) Erythrocyte		
4.	Which of the follo	wing allows gas exch	nange in the lungs?		CO2- R	
	(a) Alveoli	(b) Bronchi	(c) Capillaries	(d) Bronchioles		
5.	5. The anatomic location of the spinal canal is					
	(a) Caudal	(b) Dorsal	(c) Frontal	(d) Transverse		
6.	An involuntary response by the nervous system to a stimulus is a					
	(a) Synapse		(b) Reflex			
	(c) Motor response	2	(d) Smooth muscle			
7.	. Which of the following is located in the abdomino-pelvic cavity?					
	(a) Heart	(b) Trachea	(c) Thymus gland	(d) Kidney		
8.	Which of the follo	wing structures is par	rt of the small intestine?	•	CO4- R	
	(a) Ileum	(b) Cecum	(c) Sigmoid colon	(d) Transverse colo	on	
9.	Number of bones in the human body is					
	(a) 260	(b) 370	(c) 306	(d) 206		

10.	Which of the following bones in the skull is movable?						
	(a) Mandible	(b) Nasal bone	(c) Maxilla	(d) Temporal bone			
		PART – I	3 (3 x 8= 24 Marks)				
		(Answer any three	e of the following questi	ons)			
11.	Illustrate the life cycle and process of cell division with diagrams.					(8)	
12.	Describe the events taking place during cardiac cycle and explain them in detail.					(8)	
13.		brain lobes with it brain body with clinic	s functional areas contral importance.	rolling	CO3- Ana	(8)	
14.	Describe the structure secretion and reabs	•	ts functions, explain file	tration,	CO4- Ana	(8)	

15. Describe the types of joints and draw diagrams wherever necessary.

CO5- U

(8)