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Question Paper Code: 53B02

B.E./B.Tech. DEGREE EXAMINATION, APRIL 2019

Third Semester

Biomedical Engineering

	15UBN	и 302 -HUMAN A	NATOMY AND PHYSIOLOG	Y
		(Reg	ulation 2015)	
Dura	ation: Three hours	100 Marks		
		PART A - ($10 \times 1 = 10 \text{ Marks}$	
1.	scien	CO1- U		
	(a) Psychology	(b) Philosophy	(c) Physiology	(d) Paleontology
2.	is the oute	er layer of a cell		CO1- U
	(a) cell membrane	(b) cell wall	(c) cell layer	(d)cellulose
3.	one of the heart v a stethoscope.			
	(a) adventious sound			
	(c) Heart murmurs		(d) normal sounds	
4.			f three stages: glycolysis, citric etron transport with oxidative	
	(a) Aerobic	(b) External	(c) Internal	(d) Anaerobic
5.		_	f the human that coordinates it om different parts of its body.	s CO3- U
	(a) endocrine	(b) nervous	(c) cardiovascular	(d) immune
6.	Thener the sympathetic and	vous system is the parasympatheti		CO3- U
	(a) somatic	(b)enteric	(c) spinal	(d) autonomic

7.		acid is so blishes an extrem	•			the lumen wh	nere it		CO4- U	
		Vitric	(b) Hydrod			lphuric		(d) chloric	;	
8.		is the kidney.	microscopic	structural	and	functional u	nit of		CO4 -U	
	(a) c	capillary	(b) epitheli	al	(c) ne	phron		(d) endoth	elial	
9.	Hing	ge, e.g. interpha	langeal joints	for					CO5- U	
	(a) f	ingers and toes	(b) thumb		(c) an	kle		(d) neck		
10.	Tact	tile is the act of							CO5- U	
	(a) ł	nearing	(b) touching	ıg	(c) sm	nelling		(d) feeling	5	
			PAR	T - B (5 x)	2 = 10N	Marks)				
11.	List	the different typ	pes of cells					CO1- U		
12.	Wri	te the properties	of cardiac mu	scle.				CO2- U		
13.	. Define reflex.								CO3- U	
15.	. Write the special thing in cartilage								CO5- U	
14.	Wri	te the functions	of nephron						CO4- U	
			PA	RT - C (5	x 16= 3	80Marks)				
16.	(a)	With neat sket	ch, describe th	e cell struc	ture an	d its functions	5.	CO1- App	(16)	
	(b)	Explain the act	tion potential i	Or n cell				CO1- App	(16)	
17.	(a)	With neat sket	ch, explain the		f heart			CO2- App	(16)	
	(b)	Discuss the me	echanism of br	Or eathing.				CO2- Ana	(16)	
18.	(a)	With neat sket	ch, explain the	anatomy o	of brain	ı .		CO3 -APF	(16)	
	(b)	Explain the sy	mpathetic and		thetic 1	nervous system	n.	CO3- APP	(16)	
19.	(a)	With neat sket	ch, discuss the	gastrointe: Or	stinal t	ract.		CO4- U	(16)	
	(b)	Explain the regulation	mechanism o	f urine f	ormatio	on and acid	base	CO4 -Ana	(16)	

20.	(a)	Explain the functions of skeletal system.	CO5- U	(16)
		Or		
	(b)	Describe the sensory organs in detail.	CO5- U	(16)