

Enrollment No.....



## Faculty of Science

End Sem (Odd) Examination Dec-2019

FS3CO03 Human Anatomy

Programme: B.Sc. (Forensic) Branch/Specialisation: Forensic

Duration: 3 Hrs.

Maximum Marks: 60

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d.

- Q.1 i. Fats are stored in human body as **1**  
 (a) Cuboidal epithelium (b) Adipose tissue  
 (c) Bones (d) Cartilage
- ii. Total number of bones in adult is **1**  
 (a) 208 (b) 206 (c) 213 (d) 220
- iii. What type of joint is the shoulder? **1**  
 (a) Ball and Socket (b) Ellipsoidal  
 (c) Hinge (d) Pivot
- iv. Which bone protects the brain? **1**  
 (a) Calcium (b) Cranium  
 (c) Cerebellum (d) Cerebrum
- v. Nervous system consists of **1**  
 (a) Brain (b) Spinal Cord  
 (c) Nerves (d) All of these
- vi. Which nerves are attached to the brain and emerge from the skull? **1**  
 (a) Cranial Nerves (b) Spinal Nerves  
 (c) Thoracic Nerves (d) Sacral Nerves
- vii. Which type of blood vessels carries blood away from the heart? **1**  
 (a) Arteries (b) Veins (c) Capillaries (d) All of these
- viii. Oxygen and hemoglobin bind in a reversible manner to form \_\_\_\_\_ **1**  
 (a) Carboxyhemoglobin (b) Oxyhemoglobin  
 (c) Methoglobin (d) BPG
- ix. In which part of the body digestion of protein begins? **1**  
 (a) Pancreas (b) Stomach  
 (c) Small Intestine (d) Large Intestine

P.T.O.

- x. In which part of our body food gets absorbed? **1**  
 (a) Small Intestine (b) Large Intestine  
 (c) Stomach (d) Liver
- Q.2 i. Define anatomy and physiology. **2**  
 ii. Write the functions of vacuoles, cell membrane in the cell. **3**  
 iii. Write short note on: **5**  
 (a) Nucleus (b) Mitochondria  
 (c) Endoplasmic reticulum
- OR iv. Explain the animal cell structure and their function. **5**
- Q.3 i. Why locomotion is necessary for organism? **2**  
 ii. Discuss the different types of skeletal systems. What are the functions of skeletal systems? **8**
- OR iii. Explain different types of joints in the human body. **8**
- Q.4 i. How many parts are there in human brain? Write the function of each part. **3**  
 ii. What is meant by reflex action? With the help of labelled diagram trace the sequence of events when we touch hot object. **7**
- OR iii. What is synapse? What is the role of synapse in neuronal cell in context to electrical impulse? Draw a well labelled diagram of neuron. **7**
- Q.5 i. What are the three types of circulation? Draw a well labelled diagram of human heart. **4**  
 ii. Describe the events in cardiac cycle. Explain "double circulation". **6**
- OR iii. Explain internal and external respiration. Describe the anatomy of the lung along with figure. **6**
- Q.6 Attempt any two:  
 i. Explain the process of digestion in the buccal cavity with a note on the arrangement of teeth. **5**  
 ii. Explain digestion process in intestines. **5**  
 iii. What is the significance of the gall bladder? Explain the role of bile juice in digestion. **5**

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**Marking Scheme**  
**FS3CO03 Human Anatomy**

Q.1	i.	Fats are stored in human body as (b) Adipose tissue	<b>1</b>
	ii.	Total number of bones in adult is (b) 206	<b>1</b>
	iii.	What type of joint is the shoulder? (a) Ball and Socket	<b>1</b>
	iv.	Which bone protects the brain? (b) Cranium	<b>1</b>
	v.	Nervous system consists of (d) All of these	<b>1</b>
	vi.	Which nerves are attached to the brain and emerge from the skull? (a) Cranial Nerves	<b>1</b>
	vii.	Which type of blood vessels carries blood away from the heart? (a) Arteries	<b>1</b>
	viii.	Oxygen and hemoglobin bind in a reversible manner to form_____ (b) Oxyhemoglobin	<b>1</b>
	ix.	In which part of the body digestion of protein begins? (b) Stomach	<b>1</b>
	x.	In which part of our body food gets absorbed? (a) Small Intestine	<b>1</b>
Q.2	i.	Definition of anatomy Definition of physiology	1 mark 1 mark
	ii.	Introduction of cell Vacuoles and its functions Cell membrane & its function	1 mark 1 mark 1 mark
	iii.	Write short note on: (a) Nucleus and its introduction (b) Mitochondria and its function (c) Endoplasmic reticulum	<b>5</b> 1 mark 2 marks 2 marks
	OR	iv. Animal cell Introduction structure Their function and Structure	2.5 marks 2.5 marks
			<b>5</b>
Q.3	i.	Introduction to organism Locomotion	1 mark 1 mark
			<b>2</b>

	ii.	Skeletal systems introduction and structure Introduction of Axial Introduction to appendicular Function of skeletal system	2 marks 2 marks 2 marks 2 marks	<b>8</b>
	OR	iii. Introduction to joints and its function Types of joints	4 marks 4 marks	
	Q.4	i. Human brain and its parts Function of each part	1.5 marks 1.5 marks	
		ii. Introduction to reflex action Structure and function Diagram Event of reflex as example	4 marks 2 marks 1 mark	
	OR	iii. Introduction of synapse and function Diagram	5 marks 2 marks	<b>7</b>
	Q.5	i. Three types of circulation with explanation 1 mark for each (1 mark * 3) Diagram of human heart	 3 marks 1 mark	
		ii. Cardiac cycle “Double circulation”	3 marks 3 marks	
	OR	iii. Internal and external respiration Anatomy of the lung Diagram	3 marks 2 marks 1 mark	
Q.6		Attempt any two:		<b>5</b>
	i.	Process of digestion in the buccal cavity Arrangement of teeth	3 marks 2 marks	
	ii.	Process digestion explanation Diagram	4 marks 1 mark	
	iii.	Gall bladder structure and function Role of bile juice and function	3 marks 2 marks	

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