## 21819

## 3 Hours / 80 Marks

Seat No.

- Instructions (1) All Questions are Compulsory.
  - (2) Answer each next main Question on a new page.
  - (3) Illustrate your answers with neat sketches wherever necessary.
  - (4) Figures to the right indicate full marks.
  - (5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

## 1. Attempt any EIGHT of the following:

16

- a) Define tissue. Name fundamental tissues of the body.
- b) State the functions of plasma proteins.
- c) Give the functions of skeleton.
- d) Name the arteries supplying blood to liver, intestine diaphragm and kidneys.
- e) Draw a neat labeled diagram of L.S of Kidney.
- Compare the anatomy of sympathetic nervous system with that of parasympathetic nervous system.
- Give functions of Bile.
- Why pituitary gland is known as master gland.
- i) Name different organs of respiratory system.
- i) Describe Neuro-muscular junction in short.
- k) Explain how skin helps in maintaining body temperature.
- 1) Define: Anatomy and Physiology.

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			Marks
2.		Attempt any FOUR of the following:	12
	a)	Discuss physiology of menstrual cycle.	
	b)	Define endocrine gland. Enlist endocrine glands of human body.	
	c)	Describe composition and functions of Gastric juice.	
	d)	What is Hypothalamus? Give its functions.	
	e)	Discuss the physiology of muscular contraction.	
	f)	Explain the process of urine formation.	
3.		Attempt any <b>FOUR</b> of the following:	12
	a)	Describe physiology of respiration.	
	b)	Describe in brief the cardiac cycle.	
	c)	What are lymph nodes. Give their functions.	
	d)	Discuss in brief the process of coagulation of blood.	
	e)	Name any six cranial nerves with their functions.	
	f)	Give composition and function of saliva.	
4.		Attempt any <b>FOUR</b> of the following:	12
	a)	Describe the structure and function of mitochondria.	
	b)	Write functions and classification of WBC's.	
	c)	Classify joints with examples of each class.	
	d)	Describe the terms Angina Pectoris and Stenosis.	
	e)	Discuss different functions of kidneys.	
	f)	Give the microscopic structure of skeletal muscles.	

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5.		Attempt any <u>FOUR</u> of the following:	2
	a)	Name different organs of male reproductive system with their functions.	
	b)	What is Reflex action? Draw a neat labeled structure of Reflex arc.	
	c)	Explain the terms-vital capacity, tidal volume and residual volume.	

- d) Describe digestion of carbohydrates.
- e) Explain the terms universal donor and universal recipient.
- f) Describe different layers of stomach.

## 6. Attempt any FOUR of the following:

**16** 

- a) Describe microscopic structure of the bone.
- b) Explain role of haemoglobin in the process of respiration.
- c) Name the abnormal constituent of urines with name of disease they signify.
- d) Discuss choroid, ciliary body and iris of eye.
- e) Discuss structural and functional differences between artery and vein.
- f) Explain in short, factors affecting on Heart rate.