

Reg. No.

**MANIPAL ACADEMY OF HIGHER EDUCATION**

**FIRST SEMESTER M.Sc. YOGA THERAPY DEGREE EXAMINATION – MARCH 2021**

**SUBJECT: MYT 507 - PHYSIOLOGY**

Saturday, March 27, 2021

Time: 10:00 – 12:30 Hrs.

Max. Marks: 50

**1. Answer the following multiple choice questions:**

1A. Which of the following part of the brain is responsible for planning and programming of movements?

- i) Cerebrum      ii) Hypothalamus      iii) Medulla oblongata      iv) Basal Ganglia

1B. The functions of a Thrombocyte is all of the below except

- i) Clot retraction      ii) Haemostasis      iii) Phagocytosis      iv) Anti-allergic

1C. A person with 'O' negative blood group will be having the following agglutinins in plasma

- i) Anti B only      ii) No agglutinins      iii) Anti A only      iv) Anti A & Anti B

1D. The normal value of Glomerular Filtration Rate is

- i) 75ml/min      ii) 125ml/min      iii) 175ml/min      iv) 225ml/min

1E. When the muscle contracts

- i) Two adjacent Z lines move apart      ii) A band shortens  
iii) I band expands      iv) Two adjacent Z lines move closer

1F. The condition Diabetes Insipidus is due to

- i) Hyposecretion of Insulin      ii) Hypersecretion of ADH  
iii) Hypersecretion of Vasopressin      iv) Hyposecretion of ADH

1G. Under physiological conditions, the ultra-filtrate will not consist of the following

- i) Sodium      ii) Potassium      iii) Urea      iv) Protein

1H. The 'P' wave of ECG is due to

- i) Ventricular repolarization      ii) Atrial repolarization  
iii) Atrial depolarization      iv) Ventricular depolarization

1I. The kidneys do not secrete which of the following hormones?

- i) Renin      ii) Erythropoietin  
iii) Anti Diuretic Hormone      iv) 1, 25 Dihydrocholecalciferol

- 1J. Color blindness is due to defect in  
i) Cones    ii) Rods    iii) Retina    iv) Rodopsin

(1 mark  $\times$  10 = 10 marks)

2. **Answer the following:**

- 2A. Name any two common defects of image formation and give their correction.  
2B. List any two ascending tracts with one function of each.  
2C. List four functions of the large intestine.  
2D. Name the four types of plasma proteins and give one function each.  
2E. List four actions of Testosterone hormone in males.

(2 marks  $\times$  5 = 10 marks)

3. **Write short notes on the following:**

- 3A. Functions of Hypothalamus.  
3B. Hormones regulating Calcium metabolism.  
3C. Types of Hypoxia and its causes.  
3D. Factors maintaining cardiac output.  
3E. The events occurring at Neuro Muscular Junction on arrival of a Nerve Action Potential.  
3F. Composition and functions of saliva.

(5 marks  $\times$  6 = 30 marks)

