

Sl.No. M21006

Course Code : 161021T04

VINAYAKA MISSION'S RESEARCH FOUNDATION, SALEM

MBBS DEGREE EXAMINATION – February 2019

First Year

HUMAN PHYSIOLOGY INCLUDING BIOPHYSICS - PAPER II

SECTION A

Time: Fifteen Minutes

Maximum: 15 marks

Register Number :

--	--	--	--	--	--	--	--	--	--

Signature of the candidate

Signature of the Invigilator

Instructions to the candidates

1. Write your Register Number and sign at the place specified on the first page of this Question Booklet.
2. Do not open this question booklet until Invigilator announces the commencement of the examination.
3. Answer ALL the Fifteen questions. They carry equal marks. No negative marking for wrong answers.
4. Answers should be marked legibly in the SHEET provided in capital letters.
5. THE QUESTION BOOKLET SHOULD NOT BE TAKEN OUT OF THE EXAMINATION HALL.
7. Questions should not be copied and taken out of the Examination Hall. Any one found violating this rule shall not be permitted to write the examination and shall be sent out of the Hall.
8. At the end of 15 minutes, when the Invigilator announces 'STOP WRITING' you must stop writing immediately. If the candidate tries to attempt to answer the questions after the prescribed time, their answer script becomes invalid.
9. Hand over the questions booklet containing answer sheet to the invigilator when you finish answering or immediately after 15 minutes.

HUMAN PHYSIOLOGY INCLUDING BIO PHYSICS - PAPER II
SECTION-A (15X1-15 MARKS)
(Multiple choice questions)

Time: Fifteen Minutes

Maximum: 15 marks

Select the most appropriate answer and answer in the answer sheet attached:

1. The normal cardiac output is
 - A. 5 litres/ minute
 - B. 5ml/minute
 - C. 500ml/minute
 - D. 50ml/minute
2. Peripheral resistance is due to
 - A. Large arteries
 - B. Capillaries
 - C. Veins
 - D. Arterioles
3. "P" wave in ECG is due to
 - A. Ventricular depolarization
 - B. A-v nodal depolarization
 - C. Bundle of his
 - D. Atrial depolarization
4. Stimulation of vagus nerve causes
 - A. Increase in the heart rate
 - B. Increase in the force of contraction of heart
 - C. Decreases the heart rate
 - D. Increases blood pressure
5. Surfactant helps in
 - A. Prevention of collapse of the lungs
 - B. Causes collapse of the lungs
 - C. Increases respiratory rate
 - D. Decreases respiratory rate
6. Normal anatomical dead space is
 - A. 1500ml
 - B. 50ml
 - C. 200ml
 - D. 150ml
7. Hypoxia is classified into except
 - A. Hypoxic hypoxia
 - B. Histotoxic hypoxia
 - C. Stagnant hypoxia
 - D. Asphyxia

(p.t.o.)

8. Cyanosis occurs due to
 - A. Increase in the reduced haemoglobin
 - B. Increase in the partial pressure of oxygen
 - C. Increase in the partial pressure of carbon dioxide
 - D. Increase in the partial pressure of nitrogen
9. Sensory relay station of brain is
 - A. Cerebellum
 - B. Thalamus
 - C. Hypothalamus
 - D. Basal ganglia
10. The following sensory receptor adapts faster
 - A. Free nerve endings
 - B. Pacinian corpuscles
 - C. Meissner's corpuscles
 - D. Muscle spindle
11. Parkinsonism occurs in
 - A. Cerebellar lesion
 - B. Lesion of thalamus
 - C. Hypothalamic lesion
 - D. Basal ganglia lesion
12. Sensation of crude touch is carried by
 - A. Tract of Goll and Burdach
 - B. Corticospinal tract
 - C. Anterior spinothalamic tract
 - D. Lateral spinothalamic tract
13. Maximum visual acuity is seen in
 - A. Fovea centralis
 - B. Blind spot
 - C. Ciliary body
 - D. Cornea
14. Receptor for hearing is
 - A. Organ of Corti
 - B. Rods and cones
 - C. Taste buds
 - D. Utricle
15. Aqueous humour nourishes
 - A. Conjunctiva
 - B. Retina
 - C. Cornea
 - D. Sclera

VINAYAKA MISSION'S RESEARCH FOUNDATION, SALEM

MBBS DEGREE EXAMINATION – February 2019

First Year

HUMAN PHYSIOLOGY INCLUDING BIO PHYSICS – PAPER II

Time : Three hours

Maximum : 80 marks

Answer ALL Questions

Answer Section A in the Answer Sheet attached to it 15 marks – 15 minutes to be handed over to the invigilator immediately after 15 minutes

Answer Section B in the same answer book

Time : 2 hours 45 minutes

SECTION – B

Maximum : 65 marks

I. Write essays on:

(2 x 15=30)

1. Define blood pressure? What is the normal blood pressure? What are the factors that influences systolic blood pressure and diastolic blood pressure? Explain short term regulation of blood pressure? (1+1+5+4+4=15)
2. Describe the structure and functions of middle ear? (3+3+9=15)

II. Write short notes on:

(5 x 5=25)

3. Surfactant
4. Asphyxia
5. Differences between upper motor neuron lesion and lower motor neuron lesion
6. Composition and functions of cerebrospinal fluid
7. Neuroglial cells

III. Write briefly on:

(5 x 2=10)

8. A-v nodal delay
9. Bhor effect
10. Four properties of sensory receptors
11. Functions of cerebellum
12. Functions of aqueous humour.
