

**VINAYAKA MISSION'S RESEARCH FOUNDATION, SALEM
(Deemed to be University)**

MBBS DEGREE EXAMINATION – June 2021

First Year

HUMAN PHYSIOLOGY - PAPER II

SECTION A

Time: Fifteen Minutes

Maximum: 15 marks

Register Number :

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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.**
- 6. 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.**
- 7. 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.**
- 8. Hand over the questions booklet containing answer sheet to the invigilator when you finish answering or immediately after 15 minutes.**

HUMAN PHYSIOLOGY - 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. Sensation for which no adaptation occurs

- A. Touch
- B. Taste
- C. Smell
- D. Pain

2. The junctional region between 2 neurons where information from one neuron is transmitted to another is called

- A. Neuromuscular junction
- B. Synapse
- C. Gap junction
- D. Tight junction

3. Paralysis of one half of the body is called

- A. Paraplegia
- B. Monoplegia
- C. Hemiplegia
- D. Spastic paralysis

4. Muscarinic and nicotinic receptors are present for the neurotransmitter

- A. Dopamine
- B. Serotonin
- C. Acetylcholine
- D. Adrenaline

5. The type of refractive error in which the parallel rays are focused in front of the retina

- A. Myopia
- B. Hypermetropia
- C. Astigmatism
- D. Presbyopia

(p.t.o.)

6. Loudness of the sound depends on

- A. Frequency
- B. Pitch
- C. Amplitude
- D. Tone

7. Abnormal smell sensation is called

- A. Anosmia
- B. Parosmia
- C. Ageusia
- D. Hypogeusia

8. Volume of air inspired or expired during an ordinary quiet breathing is called

- A. Vital capacity
- B. Inspiratory reserve volume
- C. Tidal volume
- D. Expiratory reserve volume

9. Insufficient oxygen supply to the tissues, commonly seen in heart failure is called

- A. Hypoxic hypoxia
- B. Stagnant hypoxia
- C. Anemic hypoxia
- D. Histotoxic hypoxia

10. The major muscle of inspiration is

- A. Diaphragm
- B. External intercostal
- C. Sternomastoid
- D. Scalene

11. The normal respiratory rate is

- A. 5-9/min
- B. 12-16/min
- C. 20-26/min
- D. 40-45/min

12. The aorta and its major branches are called as the

- A. Windkessel vessels
- B. Conduit vessels
- C. Preferential channels
- D. Exchange vessels

13. Receptors present in the lung capillaries which get stimulated in pulmonary edema to cause tachycardia and tachypnea are called

- A. Mechano receptors
- B. J receptors
- C. Baro receptors
- D. Chemo receptors

14. In the normal heart, the pace maker is

- A. AV node
- B. SA node
- C. Purkinje fibres
- D. Bundle of His

15. The normal duration of a cardiac cycle is

- A. 0.1 sec
- B. 0.3 sec
- C. 0.5 sec
- D. 0.8 sec

(Sl.No. M2338)

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First Year

HUMAN PHYSIOLOGY – 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 Pain. Describe the origin, course and termination of pain pathway with the help of a neat labeled diagram. Add a note on referred pain. (2+7+3+3)
2. Name the medullary and pontine centres regulating respiration. Draw a neat diagram of the same. Explain the neural regulation of respiration. (4+3+8)

II. Short notes on :

(5 x 5= 25)

3. Taste pathway
4. Heart sounds
5. Functions of middle ear
6. Short term regulation of blood pressure
7. Colour blindness

III. Answer briefly on :

(5 x 2 = 10)

8. Components of reflex arc
9. Define cardiac output. Give its normal value.
10. Bohr effect
11. List two important functions of basal ganglia.
12. Accommodation reflex
