

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

MBBS DEGREE EXAMINATION – August 2018
FIRST YEAR

HUMAN PHYSIOLOGY INCLUDING BIO PHYSICS – PAPER II

Time : Three hours

Maximum : 80 marks

Answer ALL questions
Draw diagrams wherever necessary

SECTION – A

I. Write essay on : **(1 x 10 = 10)**

1. Describe the factors that affect the rate of Gas diffusion across the respiratory membrane.
Draw and label the layers of respiratory membrane.

II. Write short notes on : **(4 x 5 = 20)**

2. Discuss the regulation of cardiac output.
3. Excitatory postsynaptic potential and inhibitory post synaptic potential
4. Discuss Heart Block
5. Artificial respiration

III. Answer briefly : **(5 x 2 = 10)**

6. Myopia and hypermetropia
7. Deafness – Types and causes
8. Medical longitudinal fasciculus
9. Renshaw cells
10. Cyanosis

SECTION – B

I. Write essay on : **(1 x 10 = 10)**

11. Describe the reflex mechanism for maintaining Normal Arterial Pressure.

II. Write short notes on : **(4 x 5 = 20)**

12. Chemical regulation of respiration
13. Physiology of olfaction
14. What are the ascending tracts? Trace the dorsal column pathway.
15. Discuss the lesions of Basal Ganglia.

III. Answer briefly : **(5 x 2 = 10)**

16. Aqueous humor and its functions
17. Functions of cerebro spinal fluid
18. Respiratory exchange ratio
19. Refractory period of cardiac muscle
20. Functional residual capacity (FRC).