

**SS/MBBS/PHY-II/7-16**

**First Professional MBBS Examination**

**2016**

**(July)**

**PHYSIOLOGY**

**Paper-II**

**Full Marks: 50**

**Time: 2 hours**

**The figures in the margin indicate**

**full marks for the questions**

**Write the answers to the two Halves in separate books**

**Answer all questions**

**FIRST HALF**

1. What are the components of basal ganglia? Write in brief its functions and mention the features of basal ganglia lesion.

[ 2+(5+3)=10 ]

Or

Describe neuromuscular junction and explain how action potential in motor neuron leads to contraction of skeletal muscle. What are the medicolegal importances of rigor mortis? (3+5)+2=10 ]

2. Write short notes on any three of the following : \_\_\_\_\_

3×3=9

(a) Lumbar puncture and its clinical importance

(b) Effect of yoga and meditation on CVS

(c) Babinski's sign and its importance

(d) Exposure to cold environment

3. Differentiate between the following (any three) \_\_\_\_\_  $2 \times 3 = 6$

- (a) Clasp-knife rigidity and Lead-pipe rigidity
- (b) Primary memory and Secondary memory
- (c) Adrenergic nerve fibre and Cholinergic nerve fibre
- (d) REM sleep and NREM sleep

### SECOND HALF

4. How many parathyroid glands are there? In what way parathyroid gland is useful to human being? How can you diagnose a patient with hypoparathyroidism from its clinical signs and symptoms? \_\_\_\_\_  $2+3+5=10$

Or

Define menstrual cycle. Describe the role of hormone in bringing about the endometrial changes during menstrual cycle. What is menopause?  $2+6+2=10$

5. Explain the physiological basis of following:  $3 \times 2 = 6$

- (a) Glucocorticoid used as an anti-inflammatory drug
- (b) Activity of vision is maximum when image formed on fovea

6. Write short notes on any three of the following:  $3 \times 3 = 9$

- (a) Cerebellar nystagmus
- (b) Blood-brain barrier
- (c)  $\alpha$  block
- (d) Conductive deafness

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