

First Professional MBBS Degree Supplementary Examinations
March 2021

Physiology – Paper II

Time: 3 Hours

Total Marks: 50

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers*
- *Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

Long essay

(10)

1. A 55 year old man, known hypertensive comes to emergency department with altered consciousness and weakness of right side of the body. On examination there is increased muscle tone in the right upper and lower limbs, exaggerated deep tendon reflexes and absent superficial reflexes.

- What is he suffering from
- What are the differences between UMN and LMN lesions
- What is Babinski's sign
- What are the physiological and pathological causes of Babinski's sign (1+5+2+2)

Short essays

(2x5=10)

2. Explain the steps of neuromuscular transmission
3. Actions of hormones of posterior pituitary

Answer briefly

(5x3=15)

4. Accommodation reflex
5. Tests for ovulation
6. Active transport
7. Functions of middle ear
8. Hormones regulating calcium homeostasis

Draw and label

(2x2½=5)

9. Lateral Spinothalamic tract
10. Hormonal and uterine changes in Menstrual cycle

Explain the physiological basis of the following

(5x2=10)

11. Myasthenia gravis
12. Goitre
13. Myopia and Hypermetropia
14. Referred pain
15. Safe period as a contraceptive method