

**First Professional MBBS Degree Supplementary Examinations
November 2020**

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 patient with parathyroid hormone deficiency 10 days after inadvertent damage to parathyroid glands during thyroid surgery. Answer the following questions based on your knowledge in physiology:

- Explain the mechanisms underlying two clinical signs of parathyroid hormone deficiency
- Describe the physiological actions of parathyroid hormone
- Mention the normal blood calcium level and add a note on significance of intracellular calcium

(2+5+3)

Short essays

(2x5=10)

2. Describe any five functions of oestrogen
3. Describe colour blindness

Answer briefly

(5x3=15)

4. Functions of cerebellum
5. Impedence matching
6. Babinski sign
7. List clinical features of cretinism
8. Capacitation of sperms

Draw and label

(2x2½=5)

9. Nerve action potential in relation to ionic fluxes
10. Pyramidal tract

Explain the physiological basis of the following

(5x2=10)

11. Referred pain
12. Copper – T
13. Tympanic reflex
14. Vestibulo ocular reflex
15. Non shivering thermogenesis