



First Professional MBBS Degree Supplementary Examinations, February 2014

PHYSIOLOGY- PAPER II**Time: 3 Hours****Total Marks: 50**

- Answer all questions
- Draw Diagrams wherever necessary

Long essay**(10)**

1. A 70 years old hypertensive male has come to the hospital with complaints of inability to use the right upper and lower limb. Physical examination revealed hypertonia + and exaggerated deep tendon reflexes on the right side. Babinski's sign was positive on the right side. Answer the following questions based on your knowledge in physiology :

- Name the clinical condition
- Explain the physiological basis of the above findings
- Differentiate between upper and lower motor neuron lesion.
- Why Babinski's sign is positive.

(1+5+3+1=10)**Short essays****(2x5=10)**

2. Describe about spermatogenesis and the hormonal factors regulating it.
3. Name the nuclei of hypothalamus. Enumerate the functions of hypothalamus and describe any one in detail.

Answer briefly**(5x3=15)**

4. Functions of growth hormone
5. Aphasia.
6. Functions of limbic system.
7. Functions of placenta.
8. Intra uterine contraceptive devices.

Draw and label**(2x2½ =5)**

9. Functional areas of cerebral cortex.
10. Organ of corti.

Explain the physiological basis of the following**(5x2=10)**

11. Lumbar puncture is done at L₂ - L₃ level.
12. Dark adaptation.
13. Pain disappears by rubbing the affected area.
14. Body temperature is slightly elevated after ovulation
15. Pigmentation is seen in Addison's disease.