

**Q.P. Code: 104001**

**Reg. no.:** .....

First Professional MBBS Degree Examinations, August 2014

**PHYSIOLOGY – Paper II**

**Time: 3 Hours**

**Total Marks: 50**

- *Answer all questions*
- *Draw Diagrams wherever necessary*

**Long essay**

**(10)**

1. A 40 years old man came to the OPD with a gait characterized by raising his feet unnecessarily high and bringing it down in a stamping manner (stamping gait). He also stood with his feet wide apart and tended to fall to the right with the eyes closed. Answer the following questions based on your knowledge in physiology :
- Where is the lesion in this patient.
  - Describe the neural tract involved in this patient with the help of a diagram.
  - What are the sensations carried by this tract
  - What is dissociated anesthesia
- (1+5+2+2=10)

**Short essays**

**(2x5 =10)**

2. Describe hormonal and endometrial changes during menstrual cycle.  
3. Describe the auditory pathway. List the types of deafness with a note on audiometry

**Answer briefly**

**(5x3=15)**

4. Sensory homunculus  
5. Dark adaptation  
6. Role of the cerebellum in motor control  
7. Physiological actions of growth hormones  
8. Steps of spermatogenesis and list the hormones involved.

**Draw and label**

**(2x2½=5)**

9. Feedback regulation of thyroid hormone secretion  
10. Corticospinal tract

**Explain the physiological basis of the following**

**(5x2=10)**

11. End plate potential  
12. Clasp knife rigidity  
13. Contraceptive pills  
14. Excitation contraction coupling.  
15. Pigmentation in Addison's disease.

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