

**First B.Sc Optometry Degree Examinations -September 2013**

**GENERAL PHYSIOLOGY**

**Time : 3 hrs**

**Max marks : 80**

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

**Essays**

**(2x15=30)**

1. Name thyroid hormones. Explain the steps in the synthesis of thyroid hormones. Mention their physiological actions. **(3+7+5=15)**
2. Name the condition due to lesion in pyramidal tract. Describe the pathway of right pyramidal tract with the help of an illustrated diagram. **(2+8+5=15)**

**Short notes**

**(6x5=30)**

3. Vital capacity and factors affecting it
4. Heart sounds
5. Glomerular filtration rate and factors affecting it
6. Oxygen transport in blood
7. Aldosterone escape
8. Regulation of salivary secretion

**Answer briefly**

**(5x2 = 10)**

9. Physiological dead space
10. Packed cell volume
11. Residual volume
12. Cardiac output
13. Astigmatism

**One word answer**

**(10x1 = 10)**

14. Normal clotting time
15. The enzyme present in saliva
16. Normal venous PO<sub>2</sub>
17. The part of brain that helps in initiation and coordination of movements
18. Hormone that lowers blood calcium level
19. The only pathway that doesn't have a relay in thalamus
20. Normal WBC count in adult
21. The heart sound that cannot be heard using stethoscope
22. Size of a normal RBC
23. The hormone that helps in the secretion of pancreatic juice rich in enzymes