



First Professional MBBS Degree Examinations, August 2014

**PHYSIOLOGY – Paper I**

**Time: 3 Hours**

**Total Marks: 50**

- Answer all questions
- Draw Diagrams wherever necessary

**Long essay**

**(10)**

1. Oxygen delivery to tissues will be greatly reduced in a patient with carbon monoxide poisoning. Answer the following:
  - What is the physiological basis for reduced oxygen delivery to the tissues.
  - Describe the functional significance of oxygen-hemoglobin dissociation curve
  - Mention the factors which will shift oxygen dissociation curve to right and left

**(2½+5+2½=10)**

**Short essays**

**(2x5 =10)**

2. Regulation of pancreatic exocrine secretion
3. Jugular venous pulse

**Answer briefly**

**(5x3=15)**

4. Venous return
5. Fetal hemoglobin
6. Periodic breathing
7. Post prandial alkaline tide
8. Micturition reflex

**Draw and label**

**(2x2½ =5)**

9. Draw and label diagram of lung volumes and capacities
10. Draw ECG recorded in lead II

**Explain the physiological basis of the following**

**(5x2=10)**

11. Splay in renal glucose re-absorption curve
12. Dicumarol as an anticoagulant
13. Leucocytosis
14. Dead space
15. Tubulo glomerular feedback

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