



**Code: 103001**

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

**First Professional MBBS Degree Examinations, August 2012**

**PHYSIOLOGY – Paper I**

**Time: 3 Hours**

**Total Marks: 50**

- Answer all questions
- Draw Diagrams wherever necessary

**Long essay**

**(10)**

1. A 60year old man presented with acute retro sternal chest pain radiating to the inner aspect of left arm. The ECG showed ST segment elevation in some of the leads.
  - What is the most probable diagnosis
  - What are the other ECG changes that may occur in this condition
  - Explain the leads used in recording ECG
  - With the help of a diagram describe the waves, intervals and segments of normal ECG recording in Lead I (1+1+2+6=10)

**Short essays**

**(2x5 =10)**

2. Describe the mechanism of water re-absorption from the different parts of the renal tubules
3. Explain the neural regulation of respiration

**Answer briefly**

**(5x3=15)**

4. Peptic ulcer
5. Rh blood group system
6. Micturition reflex
7. Hypoxia
8. Hypovolemic shock

**Draw and label**

**(2x2½ =5)**

9. O<sub>2</sub> – Hb dissociation curve
10. Pacemaker potential

**Explain the physiological basis of the following**

**(5x2=10)**

11. Clotting occurs when blood is kept in a glass tube
12. Steatorrhoea occurs after pancreatectomy.
13. Alveoli do not collapse during expiration
14. Anemia is seen in patients with renal disease
15. Edema in hypoproteinemia

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