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)(2x5 = 10)Short essays 2. Describe the mechanism of water re-absorption from the different parts of the renal tubules 3. Explain the neural regulation of respiration (5x3=15)**Answer briefly** 4. Peptic ulcer 5. Rh blood group system 6. Micturition reflex 7. Hypoxia 8. Hypovolemic shock Draw and label $(2x2\frac{1}{2} = 5)$ 9. O₂ – 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