Code: 104001 Reg. no.: ..... First Professional MBBS Degree Supplementary Examinations, February 2013 **PHYSIOLOGY-PAPER II** Time: 3 Hours Total Marks: 50 Answer all questions Draw Diagrams wherever necessary Long essay (10)1. A 45 year old man has come to the hospital for remarkable changes in his appearance. Physical examination: tongue is enlarged, hands and feet are enlarged with spade like fingers and presence of hepatomegaly. Fasting blood glucose is 150mg%. Fasting growth hormone level is 60ng/ml. Answer the following questions based on your knowledge in physiology: Name the probable condition. Mention the normal fasting blood glucose value. • Which is the hormone involved in this condition and what is the defect. Explain the actions of the hormone involved. (1+1+2+6=10)**Short essays** (2x5=10)2. Describe the mechanism of action and regulation of aldosterone secretion. 3. Describe connections and functions of thalamus. **Answer briefly** (5x3=15)4. Stretch reflex. 5. Hypo function of thyroid gland. 6. Functions of sertoli cells. 7. Taste buds. 8. Waves in EEG Draw and label  $(2x2\frac{1}{2} = 5)$ 9. Visual pathway. 10. Lateral spinothalamic tract. Explain the physiological basis of the following (5x2=10)11. Trousseau's sign. 12. Macular sparing. 13. Contraceptive pills. 14. Pain in the arm during cardiac angina. 15. Left internal capsule lesion produces right hemiplegia.

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