



QP Code 1301

Register No.:.....

**First Professional MBBS Degree Examinations, September - 2011****PHYSIOLOGY - PAPER 1**

Time : 3 hrs

Max marks : 50

- Answer all questions
- Draw diagrams wherever necessary

**Long essay**

(10)

1. A 55 year old obese man, complained of headache, giddiness, irritability for the last two months. On examination by a doctor, his BP was found to be 130/100 mm Hg by auscultatory method. Three days later he visited another doctor. According to him, his BP was found to be 170/100 mm Hg after using both palpatory and auscultatory methods.

- What is the correct BP in this patient and why
- What is the cause for this difference in the recording
- Define mean arterial pressure & pulse pressure giving their values
- Describe the possible renal mechanism causing hypertension
- Mention physiological basis for management of hypertension

(2+2+2+2+2 = 10)

**Short essay**

(2x5=10)

2. Describe the role of chemo-receptors in regulation of respiration  
3. Describe the functions and regulations of pancreatic juice secretion

**Write Briefly on**

(5x3=15)

4. Special features of coronary circulation  
5. Vital capacity and timed vital capacity as lung function tests  
6. Role of lymphocytes in immune functions  
7. Intrinsic mechanism of coagulation  
8. Renal plasma clearance values for inulin, PAH and glucose giving their significance

**Draw and label**

(2x2 ½=5)

9. Right ventricular pressure curve during a normal cardiac cycle  
10. Figure showing counter current multiplier & exchange system in renal tubules

**Explain the physiological basis of the following**

(5x2=10)

11. Anaemia following partial gastrectomy  
12. Post prandial alkaline tide  
13. Filling and emptying of urinary bladder  
14. Caisson disease or decompression sickness  
15. Purpura and Hemophilia

\*\*\*\*\*

