First Professional MBBS Degree Supplementary Examinations -February 2016

PHYSIOLOGY- PAPER I

Time: 3 Hours

• Answer all questions

• Draw Diagrams wherever necessary

Long essay

- 1. A motor cyclist met with a road traffic accident and was admitted in the causality. Clinical examination revealed, cold and clammy extremities, rapid thready pulse, and a blood pressure of 70/50mm of Hg. Answer the following :
 - What is the probable clinical condition.
 - Define shock and name the different stages of shock.
 - Describe the compensatory mechanisms in shock
 - What is neurogenic shock. $(1+2\frac{1}{2}+5+1\frac{1}{2}=10)$

Short essays

- 2. Describe the composition and regulation of pancreatic juice secretion
- 3. Describe the effect of hypoxia and vitamin B₁₂ deficiency on erythropoiesis

Answer briefly

- 4. Mechanism of gastric hydrochloric acid secretion
- 5. Surfactant
- 6. Fibrinolytic system
- 7. Ventilation perfusion ratio and its importance
- 8. Water re-absorption by renal tubules.

Draw and label

- 9. Cystometrogram
- 10. Jugular venous pressure tracing

Explain the physiological basis of the following (5x2=10)

- 11.Administration of sodium and glucose together in oral rehydration.
- 12. Cardiac muscle cannot be tetanized.
- 13. Change in bladder function in spinal shock.
- 14. Role of oxygen in treatment of carbon monoxide poisoning.
- 15. Law of intestine.

Reg. no.:

Total Marks: 50

(10)

(2x5=10)

(5x3=15)

(2x2½ =5)