



**Q.P. Code: 103001**

**First Professional MBBS Degree Supplementary Examinations -  
February 2016**

**PHYSIOLOGY- PAPER I**

**Time: 3 Hours**

**Total Marks: 50**

- Answer all questions
- Draw Diagrams wherever necessary

**Long essay**

**(10)**

1. A motor cyclist met with a road traffic accident and was admitted in the casualty. 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+2½ +5+1½ = 10)

**Short essays**

**(2x5=10)**

2. Describe the composition and regulation of pancreatic juice secretion
3. Describe the effect of hypoxia and vitamin B<sub>12</sub> deficiency on erythropoiesis

**Answer briefly**

**(5x3=15)**

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**

**(2x2½ =5)**

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.

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