

Q.P. Code: 103001

Reg. No.: .....

**First Professional MBBS Degree Regular/Supplementary Examinations  
August 2019**

**Physiology - Paper I**

**Time: 3 Hours**

**Total Marks: 50**

- Answer all questions
- Draw Diagrams wherever necessary

**Long essay**

**(10)**

1. Eighteen hours after arrival at an altitude of 12000 feet, a man has headache, irritability, insomnia, breathlessness, nausea and vomiting. Answer the following:
  - What is he suffering from
  - What are the changes taking place in the body systems during acclimatization to high altitude
  - Explain the physiological basis of these changes (1+4+5)

**Short essays**

**(2x5 =10)**

2. Short term regulation of blood pressure
3. Reticulo-endothelial system

**Answer briefly**

**(5x3=15)**

4. Defecation reflex
5. Fibrinolytic system
6. Roll of skin in heat loss mechanisms
7. Factors affecting venous return
8. Pacemaker potential

**Draw and label**

**(2x2½ =5)**

9. Cystometrogram
10. Physiological organization and relationship between respiratory centers

**Explain the physiological basis of the following**

**(5x2=10)**

11. Physiological dead space
12. Neutrophilia in acute bacterial infections
13. SA node acts as the pacemaker in human heart
14. Entero-hepatic circulation
15. Severe tachycardia is harmful to the individual

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