

[LO 0519]

MAY 2019

Sub. Code: 1001

**FELLOWSHIP IN CRITICAL CARE MEDICINE EXAMS  
FINAL YEAR  
PAPER I - BASIC SCIENCES APPLIED TO CRITICAL CARE**

*Q.P. Code :231001*

**Time : Three hours**

**Maximum : 100 marks**

**I. Elaborate on :**

**(2 x 20=40)**

1. What is Preload? How does it differ from Preload responsiveness? How can one utilize Heart Lung interactions to predict fluid responsiveness in mechanically ventilated patient? Describe a technique to predict fluid responsiveness in a spontaneously breathing patient.
2. Impulse generation in the Heart. Discuss briefly various mechanism of Arrhythmogenesis.

**II. Write notes on:**

**(10 x 6 = 60)**

1. Mixed venous oxygen saturation.
2. Plateau airway pressure – its measurement and significance.
3. Hypomagnesemia.
4. Internal Jugular Vein and its Clinical Anatomy.
5. Broncho Alveolar Segments.
6. Significance of lactic acidosis.
7. What are supraglottic airways? Mention its types.
8. Pain pathway.
9. Class III anti Arrhythmic agents.
10. Lung volumes and their significance.

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