



1. Describe the various methods to assess diaphragm function.
2. What are the components and functions of pulmonary surfactant? Write a note on disorders of surfactant homeostasis.
3. Describe Mucociliary clearance in the airways. What are the strategies to manage Mucociliary dysfunction?
4. Explain the pressure-volume loop, hysteresis and their clinical implications.
5. What is loop gain? Explain its role in the control of ventilation during sleep.
6. A 50-year-old man is posted for right upper lobectomy for a SPN. How will you evaluate him preoperatively?
7. Bronchial challenge test – indications, agents, procedure and interpretation.
8. Describe the control of circadian rhythm and list the disorders of circadian sleep rhythm.
9. Explain the oxygen dissociation curve.
10. Discuss the effect of aging on the lung and enumerate age-related changes in lung function.

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