

## RESPIRATORY DISEASES

### PAPER – IV

Time : 3 hours

RPD/D/10/42/IV

Max. Marks : 100

Attempt all question in order.  
Each question carries 10 marks.

Write short notes on:

1. Oxygen uptake, transport and utilization in critically ill patients.
2. Clinical applications of spirometry.
3. Role of ultrasonography in respiratory diseases.
4. What are aerosols? Discuss the properties of aerosols that are important in inhalational therapy.
5. Define respiratory failure. What are the types of respiratory failures and list important causes and differentiating features for each?
6. Contraindications to use of non-invasive positive pressure ventilation (NIPPV).
7. Indications, contraindications and complications of medical thoracoscopy.
8. What is surfactant? Discuss its clinical utility.
9. Diagnosis and treatment of metabolic alkalosis.
10. Anatomical and physiological changes in the lungs in pregnant women.