Write short notes on:

1. a) Nucleic acid amplification tests for the diagnosis of tuberculosis.
   b) Epidemiology of HIV related tuberculosis.

2. a) Indications of non-invasive ventilation in acute respiratory failure?
   b) Role of non-invasive ventilation in the management of COPD patients with acute exacerbation.

3. a) Enumerate recently developed anti-tuberculosis drugs.
   b) Management of MDR and XDR tuberculosis.

4. a) Infection control in ICU.
   b) Management of hyponatremia in ICU.

5. Clinical presentation, diagnosis and management of obesity hypoventilation syndrome.

6. How will you evaluate and manage a case of acute severe asthma in ICU?

7. a) Indications and types of sleep studies.
   b) Restless leg syndrome.

8. Current status of bed side ultrasound and echocardiography in ICU.

9. Cardiovascular and metabolic complications of obstructive sleep apnea.

10. Various prophylactic strategies used in the ICU to decrease morbidity and mortality.

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