

Chapter – 14 | Breathing and Exchange of Gases

QUIZ
PART-05

1. Tidal volume is the air inspired or expired during —
A. Normal breathing
B. Forced inspiration only
C. Forced expiration only
D. Coughing only (A)

Explanation : TV is the volume of air exchanged per normal breath.

2. Approximate tidal volume in a healthy person is —
A. 100 ml
B. 500 ml
C. 1500 ml
D. 3000 ml (B)

Explanation : Tidal volume is approximately 500 ml.

3. Inspiratory reserve volume is —
A. Extra air inspired during forced inspiration
B. Air left after forced expiration
C. Air expired during normal breathing
D. Air in dead space only (A)

Explanation : IRV is the additional air that can be inhaled forcefully.

4. Average IRV is about —
A. 100–200 ml
B. 500 ml
C. 2500–3000 ml
D. 7000 ml (C)

Explanation : Inspiratory reserve volume is about 2500–3000 ml.

5. Expiratory reserve volume is about —
A. 1000–1100 ml
B. 5000 ml
C. 100 ml
D. 3000 ml (A)

Explanation : ERV is the extra air forcefully expired after normal expiration.

6. Residual volume is —
A. Air remaining after forced expiration
B. Air inhaled in normal breathing
C. Air in nasal cavity only
D. Air used during speaking only (A)

Explanation : RV remains in lungs even after forceful expiration.

7. Inspiratory capacity is calculated as —
A. ERV + RV
B. TV + IRV
C. TV + ERV
D. VC + RV (B)

Explanation : IC is total air inhaled after normal expiration.

8. Functional residual capacity is calculated as —
A. TV + IRV
B. IRV + ERV
C. ERV + RV
D. TV + RV only (C)

Explanation : FRC is the air remaining after normal expiration.

9. Vital capacity is calculated as —
A. IRV + TV + ERV
B. ERV + RV
C. TV + RV
D. IRV + RV only (A)

Explanation : VC is maximum air expired after forced inspiration or inhaled after forced expiration.

10. Total lung capacity is —
A. TV only
B. VC + RV
C. ERV only
D. IRV + TV only (B)

Explanation : TLC includes all lung volumes: IRV, TV, ERV and RV.