

BREATHING & EXCHANGE OF GASES

1. Which of the following is a common passage for food and air ?
 (1) External nostrils
 (2) Oesophagus
 (3) Trachea
 (4) Pharynx
2. Trachea is a straight tube extending up to the....
 (1) end of thoracic cavity
 (2) anterior of thoracic cavity
 (3) end of the neck
 (4) middle of the neck
3. Primary, secondary, tertiary bronchi and initial bronchioles are supported by :
 (1) Complete cartilaginous rings
 (2) Incomplete cartilaginous rings
 (3) Complete chitinous rings
 (4) Incomplete chitinous rings
4. Which statement is true ?
 (1) By the contraction in diaphragm, volume of thoracic cavity increases dorso-ventrally.
 (2) By the contraction in diaphragm, volume of thoracic cavity increases antero-posterior axis.
 (3) By the contraction in EICM, volume of thoracic cavity increases antero-posterior axis
 (4) By the contraction in IICM, volume of thoracic cavity increases in antero-posterior axis.
5. A - Diaphragm
 B - EICM
 C - IICM
 D - Abdominal muscles
 We have the ability to increase the strength of expiration by the contraction of which set of muscles?
 (1) A, B, C and D (2) A, C and D
 (3) C and D (4) A and D
6. Which of the following muscles help to increase the volume of thoracic cavity ?
 (1) Diaphragm and EICM
 (2) EICM and IICM
 (3) Diaphragm and Abdominal muscles
 (4) IICM and abdominal muscles

7. Match the column-A with column-B

	Column-A		Column-B
i	IRV	a	1200 ml
ii	ERV	b	1000 ml
iii	TV	c	2500 ml
iv	RV	d	500 ml

- (1) i - c, ii - b, iii - d, iv - a
 (2) i - a, ii - c, iii - d, iv - b
 (3) i - b, ii - c, iii - a, iv - d
 (4) i - d, ii - b, iii - d, iv - a
8. The total volume of air accommodated in the lungs at the end of forced inspiration is sum total of :
 (1) IRV + TV + ERV
 (2) ERV + TV + RV + IRV
 (3) TV + IRV
 (4) IRV + TV + RV
9. Which of the following is primary muscle of inspiration ?
 (1) Abdominal muscles (2) Oblique muscles
 (3) Intercoastal muscles (4) Diaphragm
10. The partial pressure of oxygen in alveolar air and oxygenated blood respectively :
 (1) 40 mm Hg, 45 mm Hg
 (2) 104 mm Hg, 95 mm Hg
 (3) 159 mm Hg, 104 mm Hg
 (4) 104 mm Hg, 40 mm Hg
11. Which of the following statement is/are true ?
 (1) Diffusion capacity of CO_2 is 20-25 times higher than that of O_2
 (2) The solubility of CO_2 is 20-25 times higher than that of O_2
 (3) The diffusion capacity of O_2 is 20-25 times higher than that of CO_2
 (4) More than one statements are correct.
12. Which of the following statement are/is true ?
 (1) Alveolar wall is one celled thick.
 (2) The total thickness of diffusion membrane is much less than a millimeter.
 (3) At the level of alveoli gaseous exchange occurs by simple diffusion.
 (4) All of these

- 13.** Find out correct statement :
- (1) About 97 percent of O_2 is transported by RBCs in the blood
 - (2) About 90-93 percent of CO_2 is transported by RBCs in the blood
 - (3) About 7 percent of O_2 and 3 percent of CO_2 is carried in dissolved form through plasma
 - (4) More than one are correct

- 14.** The amount of O_2 delivered by 100 ml blood to the tissue under normal physiological condition :
- (1) 200 ml
 - (2) 5 ml
 - (3) 1.34 ml
 - (4) 20 ml

ANSWERS KEY														
Que.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Ans.	4	2	2	2	3	1	1	2	4	2	4	4	1	2