VI. The Respiratory Apparatus

1. The following are interested in the anatomical breath, except:
a. vocal cords;
b. diaphragm;
c. pleura;
d. larynx;
e. vertebrae;

2. Pulmonary ventilation
a. supposes the air movement toward the alveoli;
b. supposes the air movement in both directions between the atmosphere and the pulmonare alveoli;
c. supposes cyclical variations in the chest volume ;
d.involves two opposite movements;
e.involves only inspiration;

3. The respiratory apparatus comprises:
a. lungs;
b. aesophagus;
c.airways;
d.oral cavity;
e.bronchi;

4. Airways include the following structures:
a. nasal cavity;
b. pharinx;
c. larynx;
d. trachea;
e. lungs;

5. The lungs are composed of the following elements:
a. bronchial tree;
b. pulmonary acini;
c. the ramifications of pulmonary and bronchus vessels;
d. hyaline cartilage;
e. main bronchi;

6. Lobar bronchi:
a. derive from main bronchi;
b. continue with the main bronchi;
c. continue with lobular bronchi;
d. continue with segmental bronchi;
e. continue with terminal bronchi;

7. Segmental bronchi:
a. continue lobar bronchi;
b. continua main bronchi;
c. continue with lobar bronchi,
d. continue with lobular bronchioles;
e. continue with respiratory bronchioles,

8. Lobular bronchioles:
a. derive from lobar bronchi;
b. derive from main bronchi;
c. derive from segmental bronchi;
d. are divided into segmental bronchi;
e. are branched in terminal bronchioles.

9. Terminal bronchioles:
a. originate from lobular bronchioles;
b. originate from respiratory bronchioles;
c. originate from lobar bronchi;
d. communicate directly with alveolar ducts;
e. are branched in respiratory bronchioles.

10. Pulmonary vasculature:
a. belongs to large circulation;
b. belongs only to small circulation;
c. belongs to small circulation;
d. is only nutritious;
e. each lung receives blood with O2 and with CO2;

11. Bronchial arteries;
a. originate in the aortic cross;
b. originate in the descending thoracic aorta;
c. belong to large circulation;

d. bring to the lung blood with O2;
e. bring to the lung blood with CO2;

12. The following statements about the bronchial arteries are true:
a. they bring to the lung blood with O2;
b. they bring to the lung blood with CO2;
c. they belong to the large circulation;
d. they get into the lung through the hile;
e. they belong to the small circulation;

13. Pulmonary circulation:
a. belongs to small circulation;
is provided by the pulmonary artery which originates in the left ventricle;
c. brings to the lung blood with O2;
d. brings to the lung blood with CO2;
e. is provided by the pulmonary artery which originates in the right atrium;

14. Pulmonary arteries:
a. begin at the level of the left ventricle;
b. belong to small circulation;
c. are two- right and left;
d. through their terminal branches reach the alveoli providing O2;
e. originate in the pulmonary trunk;

15. Pulmonary veins:
a. take oxygenated blood;
b. transport blood with CO2;
c. are two, one for each lung;
d. transport oxygenated blood in the left atrium;
e. unite and form the pulmonary vein trunk;

16. The following statements concerning the pleura are false:
a. are two foils, parietal and visceral;
b. presents a parietal foil which is glued to the lung;
c. presents a visceral foil which is glued to the thorax walls;
d. is a serous which wraps the lungs;
e. is only one for both lungs;

17. The following statements concerning the pleura are true:
a. each lung is wrapped in pleura;

b. between the pleural foils is the pericardial cavity;
c. in the pleural cavity is a pleural liquid;
d. pleura presents two foils, serous and fibrous;
e. it is only one for both lungs.

18. The lungs:
a. have a total capacity of 5000L;
b. are situated in the abdominal cavity;
c. present a pleura with two foils- visceral and parietal;
d. between the two foils is the pleural liquid;
e. are wrapped in pleura.

19. Choose the false statements:
a. trachea is a tubular organ with a length of 13 cm;
b. at level T12 trachea is divided is its two main bronchi;
c. the larynx also has a fonatory function;
d. trachea has a double function;
e. trachea continues in its upper part with segmental bronchi;

20. The nasal passages are placed:
a. posterior nasopharynx;
b. under the skull base;
c. over the hard palate;
d. over the oral cavity;
e. lower the hyoid bone:

21. About the lungs, we can state the following, excepting:
a. they are the main respiratory organs;
b. they are situated at the neckline;
c. they have a total capacity of 5L;
d. they do not have individual variations;
e. they are wrapped by a serous, pericardium;

22. Trachea:
a. is situated at the skull base;
b. is situated anterior to the esophagus;
c. connects the bronchi and the pulmonary alveoli;
d. communicates with the pharynx;
e. communicates with the larynx;

23. The current volume:
a. is the volume of air inspired and expired during a normal respiration;
b. is the volume of air inspired during a normal respiration;
c. cannot be measured with a spirometer;
d. is on average 500 ml;
e. is a supplementary volume;

24. Inspiratory reserve volume:
a. is a supplementary volume;
b. is a current volume;
c. is 500 ml;
d. is a volume which can be inspired over the current volume- 1500 ml;
e. forms the inspiratory capacity together with the residual volume;

25. The CO_2 transport through blood is done:
a. dissolved in plasma;
b. under oxyhemoglobin form;
c. under Na bicarbonate form;
d. under K bicarbonate form;
e. under carbamates form;

26. The total pulmonary capacity:
a. is the sum between the vital capacity and the residual volume;
b. represents the quantity of air which a person can take out from the lungs after a maximal inspiration;
c. has a value of $5000cm^3$;
d. is the sum between the current volume and the reserve inspiratory volume;
e. has a value of $3500cm^3$;

27. The lungs dimensions:
a. are fixed;
b. vary through the diaphragm movement;
c. can vary through retraction;
d. vary acyclically;
e. can vary through distention;

28. The lungs dimensions vary through distension and retraction in several ways:
a. through abdomen elongation;
b. through the downward movements of the diaphragm;
c. the lifting of the ribs;

d. through the lowering of the ribs;
e. through the upward movements of the diaphragm;

29. The variations of the anterior-posterior diameter of the chest are done by:
a. the lifting of the ribs;
b. the upward movements of the diaphragm;
c. abdominal muscles contraction;
d. the lowering of the ribs
e. the downward movements of the diaphragm;

30. During expiration:
a. the thorax returns to its size of rest;
b. the diaphragm is contracted;
c. the respiratory muscles are relaxed;
d. the pressure in the lungs is superior to the atmospheric pressure;
e. the volume of the thorax does not modify.

31. Part of the respiratory muscles are:
a. neck muscles;
b. rectus abdominis;
c. internal intercostals;
d. diaphragm;
e. external intercostals;

32. In forced exhalation:
a. a supplementary volume of air is eliminated;
b. the rectus abdominis are contracted;
c. a reserve expiratory volume is eliminated;
d. 1000 cm3 of air is eliminated;
e. 1500 cm3 of air is eliminated;

33. Pulmonary volumes are:
a. residual;
b. current;
c. inspiratory reserve;
d. current reserve;
e. residual reserve;

34. The expiratory reserve volume:

a. is the supplementary volume which can be expired as a result of a forced exhalation, after the expiration of a volume;
b. current;
c. is 1500 cm3;
d. is a supplementary volume which can be inspired as a result of a forced inspiration, after the expiration of a volume;
e. current;

35. The residual volume:
a. is part of its vital capacity;
b. is the volume of air which is present in the lungs after a forced inspiration;
c. is the volume of air which is present in the lungs after a forced expiration;
d. is of 500 ml;
e. is of 1500 ml;

36. The pulmonary capacities are:
a. reserve pulmonary volumes;
b. sum of two pulmonary volumes;
c. difference lung volume;
d. they can be measured with a spirometer;
e. sum of several pulmonary volumes.

37. The nasal passages:
a. form the nasal cavity:
b. are symmetrical:
c. are situated over the skull base;
d. are situated over the oral cavity;
e. are situated under the skull base;

38. The nasal passages:
a. are situated under the skull base;
b. communicate with the esophagus;
c. communicate with the exterior through the narinare holes;
d. are situated over the oral cavity;
e. communicate with the pharynx;

39. The pharynx:
a. is a crossroads between the airway and the digestive;
b. is only a digestive organ;
c. does not communicate with the nasal passages;

d. is only a respiratory organ;
e. communicates with the larynx;

40. The larynx:
a. has only a respiratory function;
b. does not communicate with the nasal passages;
c. is only a digestive organ;
d. is involved in phonation;
e. communicates with the trachea;

41. The larynx:
a. communicates with the pharynx;
b. communicates directly with the nasal passages;
c. continues with the trachea;
d. continues with the main bronchi;
e. continues with the alveolar ducts;

42. The larynx communicates with the pharynx through a hole:
a. the larynx doesn't communicate with the pharynx;
b. previously defined by epiglottis;
c. disposed in the upper part of the larynx;
d. disposed in the lower part of the larynx;
e. disposed in the lower part of the pharynx;

43. The epiglottis:
a. has a fibrous cartilage structure;
b. delimitates the hole between the pharynx and the larynx;
c. delimitates the hole between the pharynx and the nasal passage;
d. has an elastic cartilage structure;
e. is a semi-hard cartilaginous tissue;

44. The larynx is formed by:
a. hyaline cartilage;
b. elastic cartilage;
c. smooth muscle;
d. mucosa;
e. striated muscles;

45. Sounds are produced through:
a. the vibration of vocal cords in inspiration;

b. the vibration of vocal cords in expiration;
c. the participation of sinus bone;
d. the participation of resonator role organs;
e. the closure of the epiglottis.

46. To sound production participate:
a. the oral cavity;
b. the nasal cavity;
c. the trachea;
d. the tongue;
e. the lips;

47.The trachea:
a. is a tube shaped organ;
b. is formed by elastic cartilages;
c. continues the larynx until T4;
d. has a length of 10-12 cm;
e. divides the two main bronchi;

48. The main bronchi:
a. continue upwards with the larynx;
b. originate at the level of T4 vertebra;
c. are two, right and left;
d. enter the lung through hil;
e. branch out extrapulmonary;

49. The bronchial tree:
a. originates in the main bronchi branching intrapulmonary;
b. is located extrapulmonary;
c. exits the lung through hile;
d. is located intrapulmonary;
e. contains the trachea;

50. The lungs:
a. are the main respiratory organs;
b. are situated in the thoracic cavity;
c. have a total capacity of 5000ml;
d. have a role in speaking;
e. can vary from one individual to another;

51. The lungs:
a. the right lung has 3 lobes;
b. the left lung has 2 lobes;
c. the left lung has 3 lobes;
d. the right lung has 2 lobes;
e. are wrapped in pleura.

52. The total pulmonary capacity:
a. equals the sum between the reserve expiratory volume and the residual volume;
b. equals the sum between the vital capacity and the residual volume;
c. represents the maximum volume to which the lungs can be expanded through a maximum inspiratory effort;
d. is of 5000 ml;
e. is of 3500 ml;