

1. All about nasal fossae is **true except**:
 - a) Posterior portion of nasal cavity
 - b) It is divided into 2 areas, respiratory and olfactory areas
 - c) Anterior portion of nasal cavity
 - d) Its lateral wall contains 3 projections called conchae (superior, middle and inferior)

2. Sustentacular (supporting) cells of Olfactory epithelium, **all true except**:

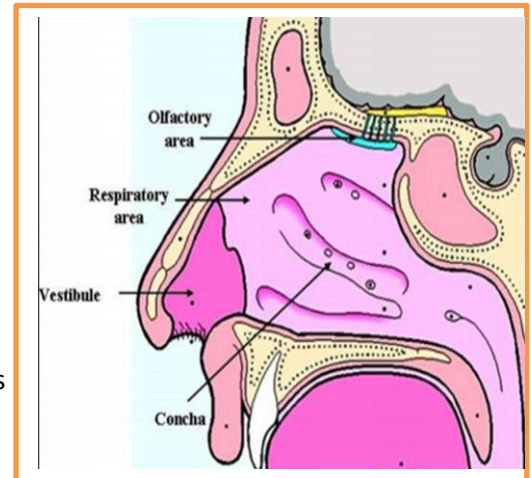
- a) They have broad cylindrical apices and narrow bases
- b) Their free surfaces have cilia
- c) Their cytoplasm contains yellowish pigment
- d) They bind with adjacent olfactory cells by junctional complexes

3. Olfactory (chemoreceptor) cells , **all true except**:

- a) They are sensory – bipolar nerve cells
- b) dendrites ending with vesicles (olfactory vesicles)
- c) unmyelinated axons directed to the olfactory bulb
- d) olfactory vesicles bear long, tapering, motile cilia

4. The only neurons that can be regenerated in postnatal life:

- a) olfactory receptor cells by differentiation from basal cells
- b) gustatory cells of taste bud by differentiation from basal cells
- c) astroglial cells
- d) sympathetic ganglion cells



5. Lamina propria of Olfactory epithelium, **all true except**:

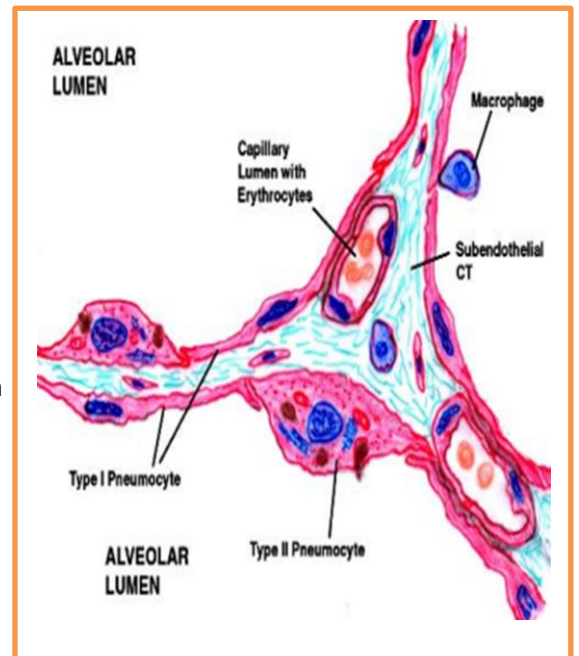
- a) Formed of dense fibro-elastic connective tissue.
- b) Contains serous Bowman's glands
- c) Attached to the fibrous periosteum of underlying bone.
- d) Contains mucous Bowman's glands

6. Olfactory area, **all true except**:

- a) present at the roof of the nasal cavity
- b) superior conchae are covered with olfactory epithelium
- c) sensory cells carry long microvilli
- d) sensory cells are bipolar nerve cells

7. swell bodies, , **all true except**:

- a) venous plexus in the lamina propria of bony conchae
- b) They warm the incoming air.
- c) Could be engorged with allergic reaction , reducing air flow
- d) Swelling at the end of olfactory cells dendrites



8. Trachea, **all true except:**

- a) lumen is kept open by a series of 20 C-shaped rings of hyaline cartilages.
- b) bundles of smooth muscle (trachealis muscle) connect the posterior ends of the C-shaped rings.
- c) fibrocartilagenous coat is formed by the c shaped cartilage rings, the muscle & fibrous tissue connecting them.
- d) Fibrocartilaginous is formed white fibrocartilage

9. Kulchitsky cells, **all true except:**

- a) neuroendocrine cells present throughout epithelium of conducting airway
- b) dense cored secretory vesicles in their apical parts
- c) release calcitonin, serotonin, somatostatin & bombisin
- d) They are numerous in fetal life

10. Respiratory epithelium, **all true except:**

- a) Brush cells (3%):act as chemoreceptors.
- b) Serous cells (3%):secrete serous fluid.
- c) Intraepithelial Migratory cells (1%):They include lymphocytes, plasma cells.
- d) K cell (1%):neuroendocrine cells.

11. Respiratory epithelium, **all true except:**

- a) normal ratio of goblet to ciliated cells is(1:1)
- b) chronic irritation increases the ratio of goblet cells (metaplasia)
- c) basal cells represent 3% of of the cells in respiratory epithelium
- d) normally goblet cells represent 30% of the cells in respiratory epithelium

12. Respiratory portion of respiratory system includes the following except:

- a) Intrapulmonary bronchi
- b) Respiratory bronchioles.
- c) Alveolar ducts
- d) Alveoli & Alveolar sacs

13. Type II pneumocytes, **all true except:**

- a) Have apical microvilli.
- b) Contain lamellar bodies that contain pulmonary surfactant
- c) can divide and regenerate both types of pneumocytes
- d) flattened cells act in gas exchange

14. Type I and Type II pneumocytes are joined by:

- a) Tight junction
- b) Gap junctions
- c) Adherent junctions
- d) Junctional complex

- 1) C
- 2) B
- 3) D
- 4) A
- 5) D
- 6) C
- 7) D
- 8) D
- 9) B
- 10) D
- 11) C
- 12) A
- 13) D
- 14) A