

XIII. Respiratory system

Choose the best correct answer:

- 1- The respiratory portion of respiratory system includes:
 - a. Alveolar duct
 - b. Alveolar sacs
 - c. Alveoli
 - d. All of the above

- 2- The vestibule of the nose is formed of:
 - a. Modified skin
 - b. Modified respiratory mucosa
 - c. Stratified squamous epithelium
 - d. Ciliated columnar epithelium

- 3- The lamina propria of respiratory nasal fossae contains-----
while the lamina propria of olfactory nasal fossae contains-----
 - a. Sebaceous gland; Bowman's gland
 - b. Mucoserous gland; Bowman's gland
 - c. Bowman's gland; Mucoserous gland
 - d. Sebaceous gland; Mucoserous gland

- 4- Cells of olfactory mucosa include:
 - a. Goblet cells
 - b. Sustentacular cells
 - c. Serous cells
 - d. Ciliated columnar cells

- 5- Yellowish color of olfactory mucosa due to the presence of yellow pigments in:
 - a. Its lamina propria
 - b. Olfactory cells
 - c. Supporting cells
 - d. Basal cells

- 6- Olfactory vesicles are found in:
 - a. Olfactory lamina propria
 - b. Dendrites of olfactory cells
 - c. Axon of olfactory cells
 - d. Cell body of olfactory cells

- 7- What the structure in olfactory mucosa is responsible for receiving odorous stimulus?
 - a. Microvilli of sustentacular cells
 - b. Microvilli of olfactory cells
 - c. Cilia of sustentacular cells
 - d. Cilia of olfactory cells
- 8- The main difference between olfactory cells and other neurons:
 - a. They have unmyelinated axons
 - b. They have dendritic vesicles
 - c. They can regenerate
 - d. They joined with adjacent cells by junctional complex
- 9- The obstructed nose in common cold is due to:
 - a. Swell bodies in nasal conchae
 - b. Mucous secretions of goblet cells
 - c. Serous secretion of bowman's gland
 - d. Trapped dust & pathogens in hair of vestibule
- 10- The type of cartilages in the larynx is:
 - a. Hyaline cartilage
 - b. Elastic cartilage
 - c. Hyaline & elastic cartilage
 - d. Hyaline & white-fibro cartilage
- 11- The respiratory epithelium covers -----of epiglottis:
 - a. The whole anterior surface
 - b. The basal part of anterior surface
 - c. The whole posterior surface
 - d. The basal part of posterior surface
- 12- Vestibular folds are:
 - a. True vocal cord
 - b. Covered by respiratory epithelium
 - c. Covered by stratified squamous epithelium
 - d. Its lamina propria contains vocal ligaments
- 13- Vocalis muscle is found in -----& they are -----muscle.
 - a. Vocal fold; skeletal
 - b. Vocal fold; smooth
 - c. Vestibular fold; skeletal
 - d. Vestibular fold; smooth

- 14- Which cell of respiratory epithelium has afferent nerve fibers on their basal surface?
- Basal cells
 - Small granule cell
 - Serous cell
 - Ciliated columnar cell
- 15- Brush cells of respiratory epithelium have apical-----
- Microvilli
 - Cilia
 - Sterocilia
 - Granules
- 16- ----- constitutes 30% of cell population of respiratory epithelium.
- Ciliated columnar cell
 - Mucous goblet cell
 - Basal cell
 - All of the above
- 17- Which cell of respiratory epithelium constitutes 3% of cell population?
- Brush cell
 - Mucous goblet cell
 - Basal cell
 - None of the above
- 18- Chronic cough of cigarette smokers is mainly due to:
- Increased percentage of ciliated cell
 - Decreased percentage of goblet cell
 - Increased mucous secretion
 - Decreased mucous secretion
- 19- The intrapulmonary bronchus differs from trachea in:
- It has bundles of smooth muscle layer
 - It has an elastic membrane in its mucosa
 - It has mucoserous gland in its submucosa
 - It has wide lumen with few folds
- 20- The distal part of bronchial tree show the following changes in the structure:
- Increased number of ciliated cells
 - Increased number of goblet cells
 - Increased number of elastic fibers
 - Increased number of small cartilage plates

- 21- Clara cells are found in:
- Bronchus
 - Bronchioles
 - Alveolar duct
 - Alveolar sac
- 22- Which of the following is an EM feature of clara cells?
- Numerous lysosomes
 - Many cilia
 - Apical electron dense granules
 - Numerous sER
- 23- Increased air way resistance in asthma attack is due to-----
- Decreased elastic fibers in bronchioles
 - Contraction of smooth muscle in bronchioles
 - Contraction of smooth muscle of bronchus
 - Increased mucous secretions in bronchus
- 24- The wall of alveolar duct has -----
- Elastic & smooth muscle fibers
 - Elastic & reticular fibers
 - Reticular & smooth muscle fibers
 - Elastic fibers only
- 25- The lining epithelium of alveolar sacs is:
- Simple columnar
 - Simple cuboidal
 - Simple low cuboidal
 - Simple squamous
- 26- One of the EM features of pneumocytes I is that :
- They are joined with adjacent cells by tight junction
 - They are joined with adjacent cells by gap junction
 - They have lamellar bodies
 - They have numerous mitochondria
- 27- In alveolar epithelium , pneumocytes I are----- while pneumocytes II are-----
- The minority ; the majority
 - Squamous cells; cuboidal cells
 - Dividable cells; non dividable cells
 - Secretory cells; non secretory cells

- 28- Which type of connective tissue fibers is found in inter alveolar septum?
- Collagen fibers
 - Reticular fibers
 - Elastic fibers
 - All of the above
- 29- Type of blood capillaries in the inter alveolar septum is:
- Continuous
 - Fenestrated without diaphragm
 - Fenestrated with diaphragm
 - Sinusoidal
- 30- The component/s of blood air barrier is/are:
- Pulmonary surfactant
 - Pneumocytes II
 - Endothelium of fenestrated blood capillaries
 - All of the above
- 31- Which of the following cells are found in alveolar septum?
- Pneumocytes I
 - Pneumocytes II
 - Endothelium of blood capillaries
 - All of the above
- 32- Heart failure cells are:
- Extravasated blood cells in alveoli
 - Alveolar macrophage
 - Monocytes
 - Leucocytes
- 33- The lung tissue that is supplied by a pre-terminal bronchioles is termed as -----
- Löbes
 - Lobules
 - Acinus
 - Segment
- 34- Cleaning the alveolar surface is considered a function of:
- Surfactant
 - Dust cells
 - Pneumocytes I
 - Pneumocytes II

- 35- In bronchial tree, lymphatic nodules are found in the wall of -----
- Intra pulmonary bronchus
 - Terminal bronchioles
 - Respiratory bronchioles
 - All of the above

Match the best correct answer:

36- Are precursors of pneumocytes I 37- Hormonal secretion 38- Rich with microtubules & filaments 39- Found in terminal bronchioles 40- Found pre-terminal bronchioles	a. Pneumocytes I b. Partially ciliated columnar epithelium c. Pneumocyte II d. Basal cells e. Non ciliated cuboidal epithelium f. K cells g. Clara cells
41- Lymph nodules are found in 42- Elastic membrane is found in 43- 1st place where gas exchange occur 44- Partially ciliated epithelium 45- Share in blood air barrier	a. Terminal bronchioles b. Respiratory bronchioles c. The trachea d. The intra pulmonary bronchus e. Alveolar duct f. Alveolar sacs g. Alveoli

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1- D	6- B	11- D	16- D	21- B	26- A	31- D	36- C	41- D	
2- A	7- D	12- B	17- A	22- C	27- B	32- B	37- F	42- C	
3- B	8- C	13- A	18- C	23- B	28- D	33- B	38- A	43- B	
4- B	9- A	14- B	19- A	24- B	29- A	34- B	39- B	44- A	
5- C	10- C	15- A	20- C	25- D	30- A	35- A	40- G	45- G	