## QUESTIONS

## 1.1 Respiratory System

- 462. The olfactory epithelium has:
  - (a) columnar, pseudostratified epithelium
  - (b) columnar, stratified epithelium
  - (c) basal cells with branching processes
  - (d) supporting cells with a well-developed terminal
  - (e) bipolar neurons
- 463. The lamina propria of the olfactory mucosa contains:
  - (a) tubuloalveolar glands
  - (b) mucus-secreting cells
  - (c) bundles of nerve fibers
  - (d) taste buds
  - (e) vascularization
- 464. Stratified, squamous, non-keratininzed epithelium is found in the:
  - (a) nasopharynx
  - (b) oropharynx
  - (c) laryngeal pharynx
  - (d) larynx
  - (e) trachea
- 465. The epithelium of the internal nostrils is:
  - (a) pseudostratified
  - (b) stratified
  - (c) ciliated
  - (d) keratinized
  - (e) with goblet cells
- 466. Functions of the lining of the nasal cavity include:
  - (a) warming inspired air
  - (b) moisterning inspired air
  - (c) desiccation of inspired air
  - (d) trapping of foreign bodies
  - (e) secretion of surfactant

- 467. Dust entering the respiratory passage and lungs is trapped by:
  - (a) cilia
  - (b) mucus
  - (c) stereocilia
  - (d) microvilli
  - (e) dust cells
- 468. The respiratory epithelium of the conducting portion of the respiratory tract has:
  - (a) stratified squamous epithelium
  - (b) pseudostratified columar epithelium
  - (c) ciliated cells
  - (d) goblet cells
  - (e) microvilli forming a 'brush border'
- 469. The larynx:
  - (a) connects the pharynx to the trachea
  - (b) has a single sort of epithelial lining throughout its length
  - (c) has a well-defined submucosa
  - (d) is the site of the vocal cords
  - (e) has both hyaline and elastic cartilage in its walls
- 470. The true vocal cords are structures:
  - (a) composed of bundles of elastic fibers
  - (b) containing cartilage
  - (c) lined with stratified squamous epithelium
  - (d) linked to smooth muscle fibers
  - (e) built from muscle
- 471. The trachea possesses:
  - (a) hyaline cartilage
  - (b) elastic cartilage
  - (c) complete rings of cartilage
  - (d) incomplete rings of cartilage
  - (e) cartilage connected by smooth muscle fibers
- 472. The trachea has:
  - (a) stratified columnar epithelium
  - (b) pseudostratified columnar epithelium
  - (c) abundant goblet cells
  - (d) mucous glands that open into the lumen
  - (e) a dense elastic membrane separating the mucosa from the submucosa

- 473. Which of the following structures are part of the conducting portion of the respiratory system?
  - (a) nasopharynx
  - (b) larynx
  - (c) trachea
  - (d) bronchi
  - (e) terminal bronchioles
- 474. Gaseous exchange occurs in the:
  - (a) primary bronchi
  - (b) secondary bronchi
  - (c) terminal bronchioles
  - (d) respiratory bronchioles
  - (e) alveolar sacs
- 475. Large bronchi of the respiratory tract have:
  - (a) pseudostratified ciliated epithelium
  - (b) smooth muscle
  - (c) hyaline
  - (d) perichondrium
  - (e) adventita.
- 476. Bronchioles:
  - (a) are intralobular tubular structures
  - (b) contain thin cartilaginous rings
  - (c) contain glands
  - (d) contain mainly elastic fibers in their lamina propria
  - (e) have a layer of smooth muscle which is better developed than that of the bronchi
- 477. Alveolar ducts are:
  - (a) continuous with the respiratory bronchioles
  - (b) the ducts into which alveoli open
  - (c) built with a wall containing elastic fibers, collagen and smooth muscle
  - (d) lined with ciliated epithelium
  - (e) primarily involved in gaseous exchange with the blood.
- 478. The interalveolar wall in the lung contains:
  - (a) a basal lamina
  - (b) alveolar pores
  - (c) ciliated cells
  - (d) phagocytic cells
  - (e) smooth muscle cells.

- 479. The great alveolar cells (septal or type II cells) have:
  - (a) tight junctions binding them to adjacent epithelial cells
  - (b) a rounded or cuboid shape
  - (c) an elongated or flattened shape
  - (d) multilamellar bodies believed to contain phospholipids
  - (e) abundant microvilli on their free surfaces.
- 480. Respiratory surfactant is:
  - (a) secreted by epithelial type 11 cells (septal cells)
  - (b) a glycoprotein
  - (c) a phospholipids
  - (d) important in increasing the surface tension of alveoli
  - (e) essential for correct respiratory function
- 481. The dust cells in lung alveoli:
  - (a) are phagocytic
  - (b) secrete surfactant
  - (c) produce antibodies
  - (d) participate directly in gaseous exchange
  - (e) develop from monocytes
- 482. The pleura is:
  - (a) a serous membrane
  - (b) a mucous membrane
  - (c) found around the lungs
  - (d) lined with mesothelium
  - (e) composed of visceral and parietal components