

# **RESPIRATORY SYSTEM**

**TEST BANK chatgpt** 

SUBJECT: ANATOMY 1-4
 BY: Lujain Al-ashhab



## ANATOMY LECTURE 1 :

- 1. The nasal septum is composed of which of the following?
  - A) Vomer, maxilla, and frontal bone
  - B) Septal cartilage, vomer, and perpendicular plate of the ethmoid bone
  - C) Ethmoid labyrinth, vomer, and septal cartilage
  - D) Nasal bone, perpendicular plate, and palatine bone
    Answer: B
- 2. The posterior openings of the nasal cavities, connecting to the nasopharynx, are called:
  - A) Nares
  - o B) Choanae
  - C) Meatuses
  - D) Conchae
    Answer: B
- 3. Which of the following forms the lateral wall of the nasal cavity?
  - A) Horizontal plate of the palatine bone
  - B) Ethmoidal labyrinth
  - o C) Vomer
  - D) Nasal spine of the frontal bone
    Answer: B

- 4. The largest artery supplying the nasal cavity is:
  - A) Greater palatine artery
  - B) Anterior ethmoidal artery
  - C) Sphenopalatine artery
  - D) Superior labial artery
    Answer: C
  - 0
- 5. Structures forming the floor of the nasal cavity include:
  - A) Palatine process of the maxilla and horizontal plate of the palatine bone
  - B) Perpendicular plate of the palatine bone and vomer
  - C) Nasal spine of the frontal bone and ethmoid labyrinth
  - D) Septal cartilage and palatine process of the maxilla
    Answer: A
- 6. Paranasal sinuses and their drainage include:
  - A) Maxillary sinus draining into the superior meatus
  - B) Frontal sinus draining into the middle meatus via the infundibulum
  - C) Ethmoidal sinuses draining into the sphenoethmoidal recess
  - D) Sphenoidal sinus draining into the middle meatus
    Answer: B
- 7. Which of the following is NOT a function of the paranasal sinuses?
  - A) Decreasing the weight of the skull
  - B) Providing a route for olfactory nerves
  - C) Resonance of the voice
  - D) Protection
    Answer: B

- 8. Structures related to the maxillary sinus include:
  - A) Orbit above and nasal cavity medially
  - B) Frontal sinus below and ethmoidal sinuses laterally
  - C) Mandible below and maxilla medially
  - D) Sphenoidal sinus posteriorly and roots of teeth laterally
    Answer: A
- 9. The arterial supply to the nasal cavity includes which of the following?
  - A) Middle meningeal artery
  - B) Sphenopalatine artery
  - C) Subclavian artery
  - D) Vertebral artery
    Answer: B

10. The roof of the nasal cavity is formed by which of the following structures?

- A) Palatine process of the maxilla and horizontal plate of the palatine bone
- B) Body of the sphenoid bone, cribriform plate, and nasal bones
- C) Septal cartilage, perpendicular plate of ethmoid, and vomer
- D) Frontal process of the maxilla and ethmoidal labyrinth Answer: B

11. Epistaxis (nosebleeds) most commonly occur in:

- A) Kiesselbach's area
- B) Sphenoethmoidal recess
- C) Middle meatus
- D) Frontal sinus
  Answer: A

- 12. The anterior ethmoidal artery supplies which part of the nasal cavity?
  - A) Posterior-inferior quadrant
  - B) Anterior-superior quadrant
  - C) Lateral wall near the inferior concha
  - D) Floor of the nasal cavity
    Answer: B

- 16. The vestibule of the nasal cavity is:
  - A) Lined with respiratory mucosa
  - B) Covered with modified skin containing thick hairs (vibrissae)
  - C) Located between the choanae and the nasopharynx
  - D) Responsible for the resonance of the voice
    Answer: B
- 17. Which of the following forms part of the medial wall of the nasal cavity?
  - A) Medial pterygoid process
  - B) Perpendicular plate of the ethmoid bone
  - C) Horizontal plate of the palatine bone
  - D) Maxillary sinus
    Answer: B
- 18. The ethmoidal bulla is:
  - A) Part of the lateral wall of the middle meatus
  - B) Found in the vestibule of the nasal cavity
  - C) Drains directly into the inferior meatus
  - D) Formed by the frontal sinus
    Answer: A

19. Which of the following nerves provides general sensation to the nasal cavity?

- A) Olfactory nerve
- o B) Facial nerve
- C) Maxillary nerve
- D) Hypoglossal nerve
  Answer: C
- 20. The sphenoidal sinuses open into:
  - A) The middle meatus
  - B) The inferior meatus
  - C) The sphenoethmoidal recess
  - D) The frontal sinus
    Answer: C
- 21. The parasympathetic innervation of the nasal mucosa comes from:
  - A) Trigeminal nerve
  - B) Facial nerve
  - C) Glossopharyngeal nerve
  - D) Vagus nerve
    Answer: B
- 22. The nasolacrimal duct drains into:
  - A) Superior meatus
  - B) Inferior meatus
  - o C) Middle meatus
  - D) Sphenoethmoidal recess
    Answer: B

- 23. Which of the following sinuses is most commonly affected in sinusitis due to its poor drainage?
  - A) Frontal sinus
  - B) Sphenoidal sinus
  - C) Maxillary sinus
  - D) Ethmoidal sinus
    Answer: C

## ANATOMY LECTURE 2 :

- 1. The pterygopalatine fossa is:
  - A) Located between the frontal and ethmoid bones
  - B) In the anterior cranial fossa
  - C) Immediately posterior to the maxilla
  - D) Within the orbit
    Answer: C
- 2. The walls of the pterygopalatine fossa include:
  - A) Maxilla anteriorly, palatine bone medially, and sphenoid bone posteriorly
  - B) Mandible laterally, frontal bone superiorly, and ethmoid bone inferiorly
  - C) Zygomatic bone anteriorly, nasal bone medially, and vomer posteriorly
  - D) Lacrimal bone medially, sphenoid bone inferiorly, and maxilla laterally
    Answer: A

- 3. The foramen rotundum communicates with the:
  - A) Orbit
  - B) Middle cranial fossa
  - C) Nasal cavity
  - D) Oral cavity
  - Answer: B
- 4. The pterygoid canal transmits:
  - A) Only sympathetic fibers
  - B) Only parasympathetic fibers
  - C) The nerve of the pterygoid canal (greater and deep petrosal nerves)
  - D) The maxillary artery
    Answer: C
- 5. The sphenopalatine foramen opens into the:
  - A) Nasopharynx
  - B) Oral cavity
  - C) Lateral wall of the nasal cavity
  - D) Infratemporal fossa
    Answer: C
- 6. The following structure is NOT contained in the pterygopalatine fossa:
  - A) Maxillary nerve
  - B) Pterygopalatine ganglion
  - C) External carotid artery
  - D) Veins and lymphatics
    Answer: C

- 7. The terminal part of the maxillary artery is located:
  - A) In the pterygopalatine fossa
  - o B) In the infratemporal fossa
  - C) Within the middle cranial fossa
  - D) In the orbit Answer: A
- 8. The pterygopalatine ganglion is associated with which cranial nerve?
  - A) Trigeminal nerve (V)
  - B) Facial nerve (VII)
  - C) Glossopharyngeal nerve (IX)
  - D) Vagus nerve (X)
    Answer: B
- 9. Parasympathetic fibers of the pterygopalatine ganglion originate from:
  - A) Deep petrosal nerve
  - B) Greater petrosal nerve
  - C) Maxillary nerve
  - D) Infra-orbital nerve
    Answer: B
- 10. The greater palatine nerve supplies the:
  - A) Soft palate and uvula
  - B) Mucosa of the hard palate and gingiva
  - C) Inferior meatus of the nasal cavity
  - D) Lacrimal gland
    Answer: B

- 11. The pharyngeal nerve leaves the pterygopalatine fossa via the:
  - A) Palatovaginal canal
  - B) Inferior orbital fissure
  - C) Pterygomaxillary fissure
  - D) Sphenopalatine foramen
    Answer: A
- 12. The nasopalatine nerve supplies:
  - A) Mucosa of the posterior nasal cavity
  - B) Mucosa and gingiva adjacent to the incisor teeth
  - C) Lacrimal gland
  - D) Maxillary molars
    Answer: B
- 13. The orbital branches of the pterygopalatine ganglion innervate:
  - A) Lacrimal gland and periosteum of the orbit
  - B) Posterior wall of the maxilla
  - C) Hard palate
  - D) Mucosa of the nasopharynx
    Answer: A
- 14. The maxillary nerve enters the pterygopalatine fossa via the:
  - A) Pterygoid canal
  - B) Foramen rotundum
  - C) Inferior orbital fissure
  - D) Sphenopalatine foramen
    Answer: B

15. The posterior superior alveolar nerve supplies the:

- A) Incisor and canine teeth
- B) Molar teeth and adjacent gingiva
- C) Palatine tonsils
- D) Hard palateAnswer: B

16. The sphenopalatine artery supplies the:

- A) Floor of the nasal cavity
- B) Posterior superior lateral nasal wall and septum
- C) Soft palate
- D) OrbitAnswer: B
- 17. The posterior superior alveolar artery supplies:
  - A) Orbital structures
  - B) Maxillary molar teeth and sinus
  - C) Inferior nasal meatus
  - D) Hard palateAnswer: B

18. The greater palatine artery supplies:

- A) Lacrimal gland
- B) Posterior part of the nasal septum
- C) Posterior and inferior parts of the hard palate
- D) Maxillary sinus
  Answer: C

19. The infra-orbital artery gives rise to:

- A) Posterior superior alveolar artery
- B) Anterior superior alveolar arteries
- C) Sphenopalatine artery
- D) Palatovaginal artery
  Answer: B
- 20. The pterygopalatine fossa communicates with the infratemporal fossa via the:
  - A) Inferior orbital fissure
  - B) Pterygomaxillary fissure
  - C) Foramen rotundum
  - D) Sphenopalatine foramen
    Answer: B

### ANATOMY LECTURES 3+4:

- 1. The larynx extends between which vertebral levels?
  - A) C2 to C4
  - $\circ$   $\,$  B) C3 to C6  $\,$
  - $\circ$  C) C1 to C5
  - D) C4 to C7
    Answer: B
- 2. The larynx continues inferiorly as the:
  - o A) Pharynx
  - B) Esophagus
  - o C) Trachea
  - D) NasopharynxAnswer: C

- 3. Which of the following is a primary function of the larynx?
  - A) Regulating blood flow to the brain
  - B) Acting as a valve during deglutition
  - C) Filtering air entering the lungs
  - D) Regulating diaphragm movement
    Answer: B
- 4. Which of the following is a single cartilage of the larynx?
  - A) Arytenoid
  - B) Corniculate
  - C) Thyroid
  - D) CuneiformAnswer: C
- 5. The cricoid cartilage:
  - A) Is the largest laryngeal cartilage
  - B) Is shaped like a signet ring
  - C) Lies superior to the thyroid cartilage
  - D) Forms the laryngeal inlet Answer: B
- 6. The thyroid cartilage:
  - A) Forms the laryngeal prominence ('Adam's apple')
  - B) Articulates with the arytenoid cartilages
  - C) Is fused posteriorly in men
  - D) Contains the epiglottic tubercle
    Answer: A

7.

- 7. Which of the following is an extrinsic ligament of the larynx?
  - A) Quadrangular membrane
  - B) Thyrohyoid membrane
  - C) Cricothyroid ligament
  - D) Vocal ligament
    Answer: B
- 8. The cricothyroid ligament:
  - A) Forms the vestibular ligament
  - B) Forms the vocal ligament in its free upper margin
  - C) Runs between the thyroid cartilage and hyoid bone
  - D) Is part of the quadrangular membrane
    Answer: B
- 9. The quadrangular membrane:
  - A) Forms the vestibular ligament along its free lower margin
  - B) Runs between the epiglottis and cricoid cartilage
  - C) Forms the vocal ligament
  - D) Supports the cricothyroid joint Answer: A
- 10. The intrinsic muscles of the larynx:
  - A) Open and close the rima glottidis
  - B) Elevate the larynx during swallowing
  - C) Move the hyoid bone
  - D) Adjust head position
    Answer: A

- 11. The cricothyroid muscles:
  - A) Relax the vocal cords
  - B) Rotate the arytenoid cartilage
  - C) Tense the vocal cords
  - D) Close the rima vestibuli Answer: C
- 12. The posterior crico-arytenoid muscles:
  - A) Abduct the vocal cords
  - B) Adduct the vocal cords
  - C) Are innervated by the superior laryngeal nerve
  - D) Originate from the thyroid cartilage
    Answer: A
- 13. The regions of the laryngeal cavity include:
  - A) Vestibule, middle chamber, and infraglottic cavity
  - B) Vestibule, rima glottidis, and vocal chamber
  - C) Vestibular space, infraglottic cavity, and cricothyroid space
  - D) Vestibule, nasopharynx, and vocal chamber
    Answer: A

14. The vocal folds consist of:

- A) Stratified squamous epithelium
- o B) Submucosa
- C) Vocal ligament
- D) Elastic cartilage
  Answer: C

### 15. The vestibular folds:

- A) Are vascularized and appear red
- B) Are also known as true vocal cords
- C) Are inferior to the vocal cords
- D) Are movable structures
  Answer: A
- 0
- 16. Blood supply to the larynx is primarily provided by:
  - A) Superior and inferior laryngeal arteries
  - B) External carotid artery directly
  - C) Ascending pharyngeal artery
  - D) Subclavian artery
    Answer: A
- 17. The recurrent laryngeal nerves are responsible for:
  - A) Motor innervation to all intrinsic laryngeal muscles except cricothyroid
  - B) Sensory innervation to the larynx above the vocal folds
  - C) Tension adjustment of the vocal cords
  - D) Abduction of the vocal cords
    Answer: A
- 18. The superior laryngeal nerve:
  - A) Provides sensory innervation below the vocal folds
  - B) Divides into internal and external branches
  - C) Innervates the posterior crico-arytenoid muscle
  - D) Innervates the thyroarytenoid muscle
    Answer: B

- 19. During quiet respiration, the rima glottidis is:
  - A) Narrow and closed
  - B) Open and rhomboid-shaped
  - C) Closed during effort closure
  - D) Closed during swallowing
    Answer: B
- 20. During swallowing:
  - A) The larynx moves down and backward
  - B) The epiglottis swings upward
  - C) The rima glottidis is closed
  - D) The esophagus remains closed
    Answer: C
- 21. In unilateral complete section of the recurrent laryngeal nerve:
  - A) One vocal fold remains in a mid-position
  - B) Both vocal folds remain in a mid-position
  - C) Speech is completely lost
  - D) Breathing is severely impaired
    Answer: A
- 22. Tension in the vocal folds during phonation is controlled by:
  - A) Cricothyroid muscle
  - B) Posterior crico-arytenoid muscle
  - C) Aryepiglottic muscle
  - D) Oblique arytenoid muscle
    Answer: A

- 23. The narrowest part of the laryngeal cavity is:
  - A) Rima vestibuli
  - o B) Rima glottidis
  - C) Infraglottic space
  - D) Vestibule
    Answer: B
- 24. Bilateral complete section of the recurrent laryngeal nerve results in:
  - A) Complete loss of speech
  - B) Both vocal cords in mid-position
  - C) Severe dyspnea and stridor
  - D) No effect on breathing
    Answer: C
- 25. The vocal folds appear white because they:
  - A) Lack blood vessels
  - B) Are composed of elastic cartilage
  - C) Contain stratified squamous epithelium
  - D) Have thick submucosa
    Answer: A

