

Chapter  
15-17

# Nervous System II

## Study Guide 7

### Diagrams (50 points)

Figure 17-1

- |                             |                    |
|-----------------------------|--------------------|
| 5. Olfactory nerve fibers   | 1. Olfactory Gland |
| 6. Olfactory bulb           | 2. Supporting Cell |
| 7. Ethmoid bone             | 3. Olfactory Cilia |
| 8. Lamina Propria           | 4. Olfactory Tract |
| 9. Olfactory Epithelium     |                    |
| 10. Olfactory Receptor Cell |                    |

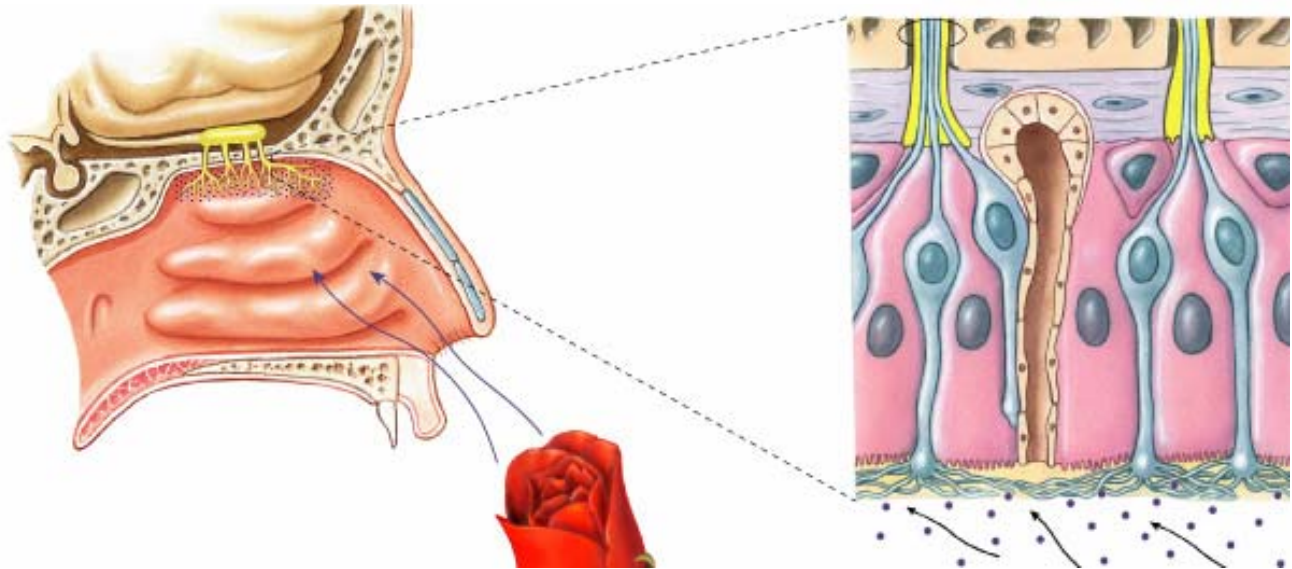


Figure 17-2

11. Taste Buds
12. Sour
13. Bitter
14. Umami
15. Circumvallate Papilla
16. Water Receptors
17. Filiform Papilla
18. Salty
19. Sweet
20. Fungiform Papilla

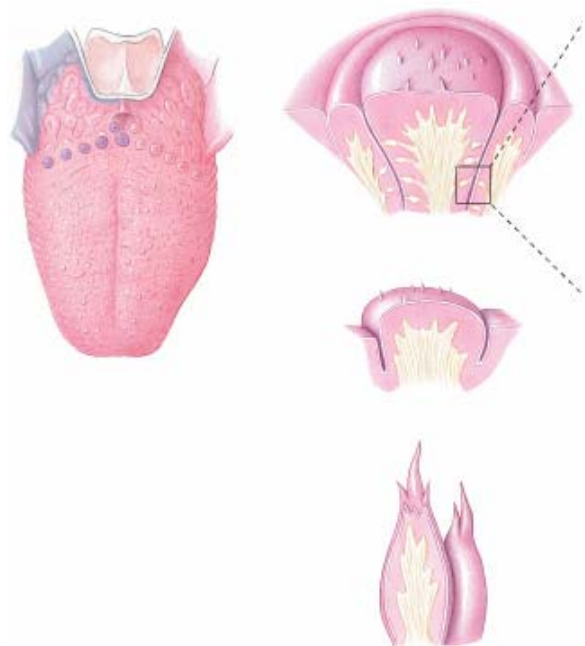


Figure 17-3

21. Lacrimal Gland
22. Lateral Canthus
23. Medial Canthus
24. Lacrimal Caruncle
25. Superior Lacrimal Canaliculus
26. Inferior Lacrimal Canaliculus
27. Lacrimal Sac
28. Nasolacrimal Duct
29. Palpebral Conjunctiva
30. Ocular Conjunctiva

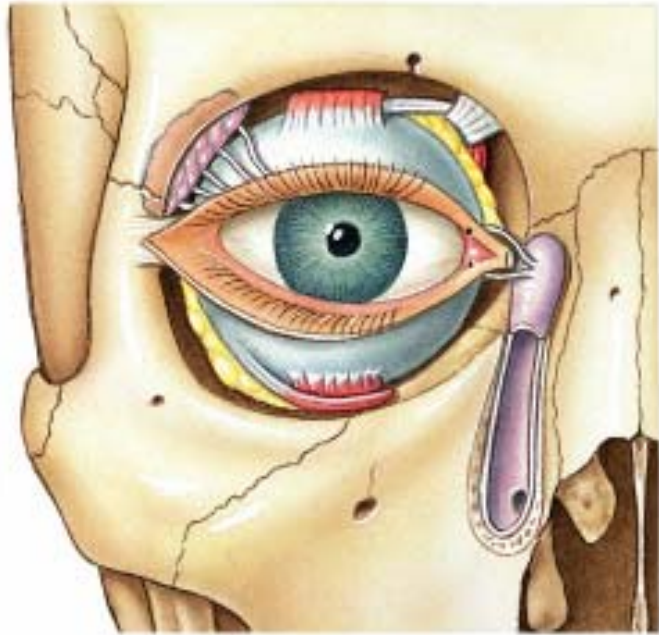


Figure 17-4

31. Pupil
32. Cornea
33. Sclera
34. Lens
35. Retina
36. Fovea
37. Choroid
38. Optic Disc
39. Optic Nerve
40. Iris

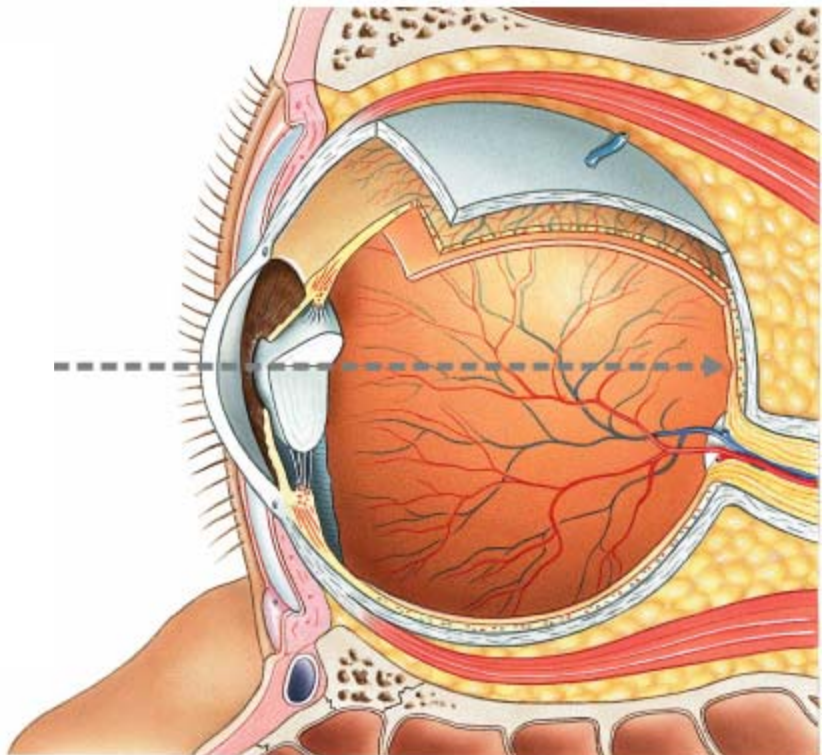
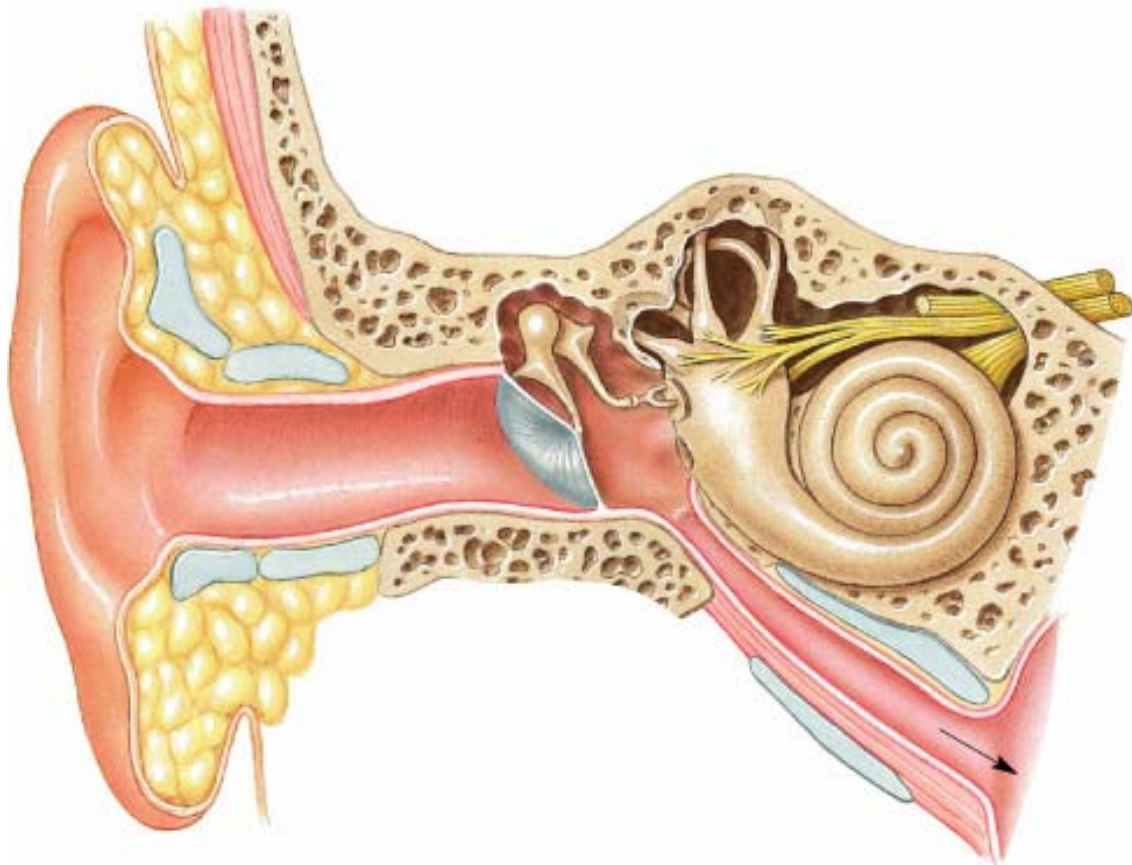


Figure 17-20

- 41. Auricle
- 42. External Acoustic Canal
- 43. Incus
- 44. Stapes
- 45. Malleus
- 46. Tympanic Membrane
- 47. Cochlea
- 48. Round Window
- 49. Oval Window
- 50. Auditory Tube



Name: \_\_\_\_\_ Date: \_\_\_\_\_ Class: \_\_\_\_\_

Page Score: \_\_\_\_\_ Total Score: \_\_\_\_\_

**Clinical Terminology** (20 points/2 points each)

1. **Astigmatism**

a. Book Definition: \_\_\_\_\_

\_\_\_\_\_

b. Clinical Application/Procedure: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2. **Cataract**

a. Book Definition: \_\_\_\_\_

\_\_\_\_\_

b. Clinical Application/Procedure: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3. **Conductive Deafness**

a. Book Definition: \_\_\_\_\_

\_\_\_\_\_

b. Clinical Application/Procedure: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

4. **Detached Retina**

a. Book Definition: \_\_\_\_\_

\_\_\_\_\_

b. Clinical Application/Procedure: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5. **Glaucoma**

a. Book Definition: \_\_\_\_\_

\_\_\_\_\_

b. Clinical Application/Procedure: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Class: \_\_\_\_\_

Page Score: \_\_\_\_\_ Total Score: \_\_\_\_\_

6. **Hyperopia**

a. Book Definition: \_\_\_\_\_

\_\_\_\_\_

b. Clinical Application/Procedure: \_\_\_\_\_

\_\_\_\_\_

7. **Myopia**

a. Book Definition: \_\_\_\_\_

\_\_\_\_\_

b. Clinical Application/Procedure: \_\_\_\_\_

\_\_\_\_\_

8. **Night Blindness**

a. Book Definition: \_\_\_\_\_

\_\_\_\_\_

b. Clinical Application/Procedure: \_\_\_\_\_

\_\_\_\_\_

9. **Otitis Media**

a. Book Definition: \_\_\_\_\_

\_\_\_\_\_

b. Clinical Application/Procedure: \_\_\_\_\_

\_\_\_\_\_

10. **Scotomas**

a. Book Definition: \_\_\_\_\_

\_\_\_\_\_

b. Clinical Application/Procedure: \_\_\_\_\_

\_\_\_\_\_

**Multiple Choice Review Questions (20 points / 1 point each)**

1. \_\_\_\_\_ The term general senses refers to sensations of all of the following, **except** sensitivity to:
  - a. Temperature
  - b. Light
  - c. Touch
  - d. Vibration
2. \_\_\_\_\_ The special senses include all of the following, **except**
  - a. Tissue damage
  - b. Sight
  - c. Gustation
  - d. Equilibrium
3. \_\_\_\_\_ The general senses:
  - a. Involve receptors that are relatively simple
  - b. Are located in specialized structures
  - c. Are localized in specific areas of the body
  - d. Do not conduct action potentials
4. \_\_\_\_\_ The division of the autonomic nervous system that maintains homeostasis during resting conditions is the \_\_\_\_\_ division
  - a. Sympathetic
  - b. Parasympathetic
  - c. Intramural
  - d. Somatomotor
5. \_\_\_\_\_ Nerves that innervate organs in the ventral body cavities are the \_\_\_\_\_ nerves
  - a. Cervical plexus
  - b. Thoracic spinal
  - c. Cranial
  - d. Autonomic
6. \_\_\_\_\_ Almost 75% of all parasympathetic outflow travels along the:
  - a. Splanchnic nerves
  - b. Facial nerves
  - c. Vagus nerve
  - d. Glossopharyngeal nerve
7. \_\_\_\_\_ Neurons of the sympathetic branch of the autonomic nervous system release the neurotransmitter \_\_\_\_\_ at their effectors
  - a. Acetylcholine
  - b. Epinephrine
  - c. Adrenalin
  - d. Norepinephrine
8. \_\_\_\_\_ Nicotinic receptors
  - a. Respond to epinephrine
  - b. Respond to norepinephrine
  - c. Open sodium channels
  - d. Open calcium channels
9. \_\_\_\_\_ Endorphins can inhibit impulses initiated by
  - a. Nociceptors
  - b. Mechanoreceptors
  - c. Thermoreceptors
  - d. Chemoreceptors
10. \_\_\_\_\_ Nociceptors
  - a. Are common in internal organs
  - b. Usually have large receptive fields
  - c. Are large, complex receptors
  - d. Respond to light touch

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Class: \_\_\_\_\_

Page Score: \_\_\_\_\_ Total Score: \_\_\_\_\_

11. \_\_\_\_\_ A reduction in sensitivity in the presence of a constant stimulus is:
- a. Transduction
  - b. Adaptation
  - c. Line Labeling
  - d. Sensory Coding
12. \_\_\_\_\_ A blind spot in the retina occurs where:
- a. The optic nerve attaches to the retina
  - b. Ganglion cells synapse with bipolar cells
  - c. The fovea is located
  - d. Rod cells are clustered to form the macula
13. \_\_\_\_\_ Sound waves are converted into mechanical movements by the:
- a. Auditory ossicles
  - b. Cochlea
  - c. Tympanic Membrane
  - d. Round Window
14. \_\_\_\_\_ A better than average visual acuity rating is
- a. 20/20
  - b. 20/30
  - c. 20/15
  - d. 15/20
15. \_\_\_\_\_ The malleus, incus, and stapes are the tiny bones located in the:
- a. Outer ear
  - b. Inner ear
  - c. Middle ear
  - d. Membraneous labyrinth
16. \_\_\_\_\_ Auditory information about the frequency and intensity of stimulation is relayed to the CNS over the cochlear branch of cranial nerve:
- a. VIII
  - b. IV
  - c. VI
  - d. X
17. \_\_\_\_\_ When viewing an object close to you, your lens should be more:
- a. Flattened
  - b. Rounded
  - c. Concave
  - d. Lateral
18. \_\_\_\_\_ At sunset your visual system adapts to:
- a. Fovea vision
  - b. Macular vision
  - c. Cone-based vision
  - d. Rod-based vision
19. \_\_\_\_\_ The basic receptors in the inner ear are the:
- a. Utricles
  - b. Saccules
  - c. Ampullae
  - d. Hair cells
20. \_\_\_\_\_ The organ of Corti is located in the \_\_\_\_\_ of the inner ear.
- a. Cochlea
  - b. Bony labyrinth
  - c. Utricle
  - d. Vestibule

