MULTIPLE CHOICE

1. Which of the following is a foramen contained within the sphenoid bone?
   a. Foramen lacerum
   b. Foramen ovale
   c. Jugular foramen
   d. Mental foramen

   ANS: B
   OBJ: Identify the location and unique structures of each cranial and facial bone.

2. The cribriform plate is part of which cranial bone?
   a. Sphenoid
   b. Temporal
   c. Ethmoid
   d. Occipital

   ANS: C
   OBJ: Identify the location and unique structures of each cranial and facial bone.

3. The lower portion of the bony nasal septum is formed by which facial bone?
   a. Maxilla
   b. Vomer
   c. Palatine bone
   d. Lacrimal bone

   ANS: B
   OBJ: Identify the location and unique structures of each cranial and facial bone.

4. The zygomatic arch is formed by the zygoma and the:
   a. Maxilla
   b. Parietal bone
   c. Temporal bone
   d. Mandible

   ANS: C
   OBJ: Identify the location and unique structures of each cranial and facial bone.

5. The anterior surface of the temporomandibular articular disk attaches to which muscle?
   a. Temporalis
   b. Medial pterygoid
   c. Lateral pterygoid
   d. Masseter

   ANS: C OBJ: Describe the structures that constitute the temporomandibular joint.

6. The osteomeatal unit is located in which portion of the maxillary sinus?
   a. Superior medial

b. Superior lateral
c. Inferior medial
d. Inferior lateral

ANS: A OBJ: Identify the structures of the osteomeatal unit.

7. Which of the following is a structure of the osteomeatal unit?
a. Vestibule
b. Oval window
c. Uncinate process
d. Condyloid process

ANS: C OBJ: Identify the structures of the osteomeatal unit.

8. Which of the following are the structures of the inner ear?
a. Semicircular canals, malleus, vestibule
b. Cochlea, incus, oval window
c. Vestibule, cochlea, malleus
d. Semicircular canals, cochlea, vestibule

ANS: D
OBJ: Identify the structures of the external, middle, and inner ear and describe their functions.

9. Which opening is located between the greater and lesser wings of the sphenoid bone?
a. Superior orbital fissure
b. Optic canal
c. Inferior orbital fissure
d. Optic foramen

ANS: A OBJ: Identify the bones that form the orbit and their associated openings.

10. Which of the following is not a muscle of the eye?
a. Superior rectus
b. Lateral rectus
c. Superior oblique
d. Lateral oblique

ANS: D OBJ: List the muscles of the eye and describe their functions and locations.

11. Which of the following cranial bones form the largest portion of the sides of the cranium?
a. Parietal bones
b. Temporal bones
c. Occipital bones
d. Sphenoid bones

ANS: A
OBJ: Identify the location and unique structures of each cranial and facial bone.

12. The parietal bones articulate with the _____, and temporal bones.
a. Ethmoid, frontal, occipital
b. Sphenoid, occipital, frontal
c. Ethmoid, frontal, maxillary
d. Sphenoid, frontal, maxillary

ANS: B
OBJ: Identify the location and unique structures of each cranial and facial bone.

13. The lateral masses and the superior and middle nasal conchae are part of which cranial bone?
    a. Ethmoid
    b. Sphenoid
    c. Temporal
    d. Frontal

    ANS: A
    OBJ: Identify the location and unique structures of each cranial and facial bone.

14. Which structure of the sphenoid bone houses the pituitary gland?
    a. Foramen ovale
    b. Pterygoid process
    c. Sella turcica
    d. Anterior clinoid process

    ANS: C
    OBJ: Identify the location and unique structures of each cranial and facial bone.

15. The petrosal nerve passes through the:
    a. Foramen rotundum
    b. Foramen spinosum
    c. Optic canal
    d. Pterygoid canal

    ANS: D
    OBJ: Identify the location and unique structures of each cranial and facial bone.

16. The foramen magnum is a structure of which cranial bone?
    a. Sphenoid
    b. Ethmoid
    c. Frontal
    d. Occipital

    ANS: D
    OBJ: Identify the location and unique structures of each cranial and facial bone.

17. The hypoglossal canals are located within which cranial bone?
    a. Sphenoid
    b. Ethmoid
    c. Frontal
    d. Occipital

    ANS: D
    OBJ: Identify the location and unique structures of each cranial and facial bone.

18. Cranial nerve XII passes through the _____ canal.
    a. Vidian
    b. Pterygoid

c. Hypoglossal
d. Optic

ANS: C
OBJ: Identify the location and unique structures of each cranial and facial bone.

19. The basilar portion of the occipital bone forms the anterior margin of the foramen magnum and slopes superiorly and anteriorly to meet with the dorsum sella to form which structure?
a. Clivus
b. Lateral condyle
c. Internal occipital protuberance
d. Sella turcica

ANS: A
OBJ: Identify the location and unique structures of each cranial and facial bone.

20. Which portion of the temporal bone is pyramidal in shape and situated at an angle between the sphenoid and occipital bones?
a. Squamous
b. Tympanic
c. Mastoid
d. Petrous

ANS: D
OBJ: Identify the location and unique structures of each cranial and facial bone.

21. The internal auditory canal transmits cranial nerves:
a. VI and VII
b. VII and VIII
c. VIII and IX
d. IX and X

ANS: B
OBJ: Identify the structures of the external, middle, and inner ear and describe their functions.

22. The stylomastoid foramen constitutes the end of the _____ canal.
a. Optic
b. Pterygoid
c. Facial nerve
d. Hypoglossal

ANS: C
OBJ: Identify the location and unique structures of each cranial and facial bone.

23. The middle ear, or tympanic cavity, communicates with _____ and the nasopharynx.
a. The mastoid antrum
b. The frontal sinus
c. The sphenoid sinus
d. Meckel’s cave

ANS: A
OBJ: Identify the structures of the external, middle, and inner ear and describe their functions.

24. Which structure of the inner ear is responsible for hearing?
    a. Vestibule
    b. Semicircular canal
    c. Incus
    d. Cochlea

    ANS: D
    OBJ: Identify the structures of the external, middle, and inner ear and describe their functions.

25. Two openings of the vestibule are the:
    a. Round window and internal auditory canal
    b. Oval window and internal auditory canal
    c. Oval window and vestibular aqueduct
    d. Round window and vestibular aqueduct

    ANS: C
    OBJ: Identify the structures of the external, middle, and inner ear and describe their functions.

26. Which suture is located posterior in the cranium and joins the occipital and parietal bones?
    a. Squamous
    b. Coronal
    c. Sagittal
    d. Lambdoidal

    ANS: D OBJ: Identify the cranial sutures.

27. Which of the following is a point on the skull that corresponds to the posterior end of the parietomastoid suture?
    a. Asterion
    b. Pterion
    c. Bregma
    d. Lambda

    ANS: A OBJ: Identify the cranial sutures.

28. The term for the anterior fontanel is the:
    a. Asterion
    b. Pterion
    c. Bregma
    d. Lambda

    ANS: C OBJ: Describe the six fontanels within the infant cranium.

29. Which fontanel is located at the junction of the parietal and occipital bones?
    a. Asterion
    b. Pterion
    c. Bregma
    d. Lambda

    ANS: D OBJ: Describe the six fontanels within the infant cranium.

30. The infraorbital foramen is part of which facial bone?

a. Mandible
b. Maxillary
c. Zygomatic
d. Nasal

ANS: B
OBJ: Identify the location and unique structures of each cranial and facial bone.

31. The ethmoid sinuses are contained in which portion of the ethmoid bone?
a. Body
b. Vertical portion
c. Horizontal portion
d. Lateral masses

ANS: D
OBJ: Identify the location of each paranasal sinus and the meatus into which it drains.

32. The frontal sinuses drain into the:
a. Sphenoethmoidal recess
b. Superior nasal meatus
c. Middle nasal meatus
d. Inferior nasal meatus

ANS: C
OBJ: Identify the location of each paranasal sinus and the meatus into which it drains.

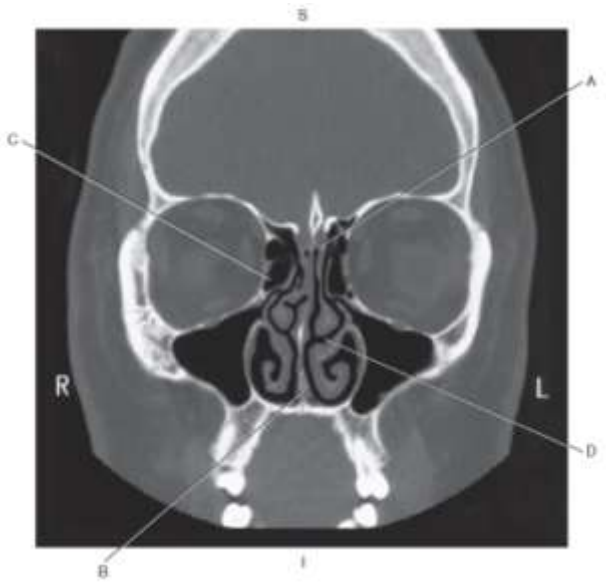
33. Which cranial fossa is formed primarily by the body of the sphenoid and temporal bones and houses the pituitary gland, hypothalamus, and temporal lobes of the brain?
a. Anterior
b. Posterior
c. Middle
d. Lateral

ANS: C OBJ: Differentiate between the three cranial fossae.

34. Which cranial fossa is formed by the occipital and temporal bones and contains the cerebellum and brainstem?
a. Anterior
b. Posterior
c. Middle
d. Lateral

ANS: B OBJ: Differentiate between the three cranial fossae.

The following questions refer to the figure below of a coronal CT of the ethmoid bone.



35. Which line points to the ethmoid sinuses?
    a. A
    b. B
    c. C
    d. D

    ANS: C
    OBJ: Identify the location of each paranasal sinus and the meatus into which it drains.

36. Which line points to the vomer?
    a. A
    b. B
    c. C
    d. D

    ANS: B
    OBJ: Identify the location and unique structures of each cranial and facial bone.

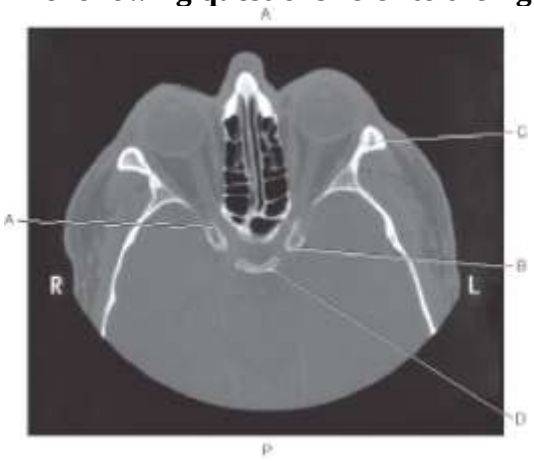
37. Which line points to the cribriform plate?
    a. A
    b. B
    c. C
    d. D

    ANS: A
    OBJ: Identify the location and unique structures of each cranial and facial bone.

38. Which line points to the middle nasal meatus?
    a. A
    b. B
    c. C
    d. D

    ANS: D OBJ: Identify the structures of the osteomeatal unit.

The following questions refer to the figure below of an axial CT of the orbit.



39. Which line points to the dorsum sellae?
    a. A
    b. B
    c. C
    d. D

    ANS: D
    OBJ: Identify the location and unique structures of each cranial and facial bone.

40. Which line points to the optic canal?
    a. A
    b. B
    c. C
    d. D

    ANS: A OBJ: Identify the bones that form the orbit and their associated openings.

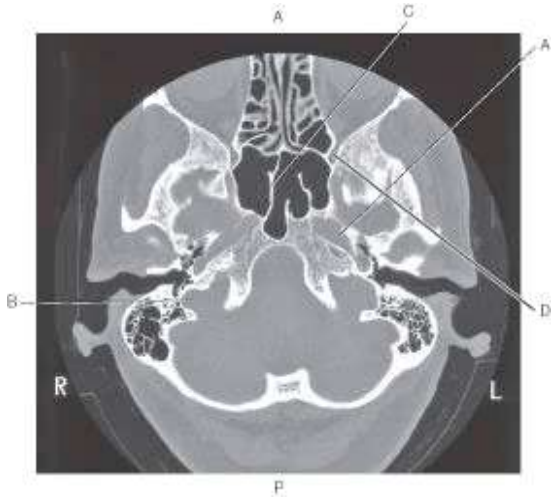
41. Which line points to the anterior clinoid process?
    a. A
    b. B
    c. C
    d. D

    ANS: B
    OBJ: Identify the location and unique structures of each cranial and facial bone.

42. Which line points to the zygoma?
    a. A
    b. B
    c. C
    d. D

    ANS: C OBJ: Identify the bones that form the orbit and their associated openings.

The following questions refer to the figure below of an axial CT of the temporal bone.



43. Which line points to the carotid canal?
    a. A
    b. B
    c. C
    d. D

    ANS: A
    OBJ: Identify the location and unique structures of each cranial and facial bone.

44. Which line points to the jugular foramen?
    a. A
    b. B
    c. C
    d. D

    ANS: B
    OBJ: Identify the location and unique structures of each cranial and facial bone.

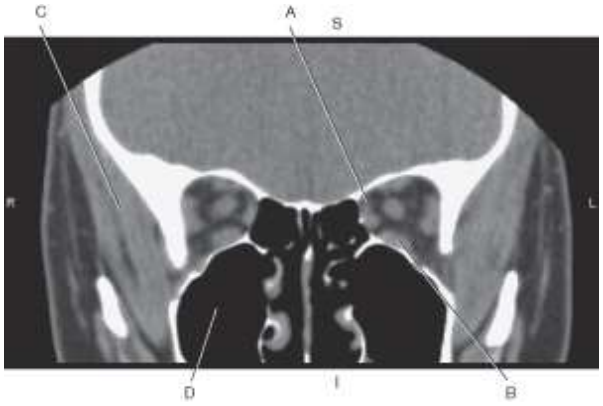
45. Which line points to the sphenoid sinus?
    a. A
    b. B
    c. C
    d. D

    ANS: C
    OBJ: Identify the location of each paranasal sinus and the meatus into which it drains.

46. Which line points to the inferior orbital fissure?
    a. A
    b. B
    c. C
    d. D

    ANS: D OBJ: Identify the bones that form the orbit and their associated openings.

The following questions refer to the figure below of a coronal CT of the orbit.



47. Which line points to the temporalis muscle?
    a. A
    b. B
    c. C
    d. D

    ANS: C OBJ: List the muscles of the eye and describe their functions and locations.

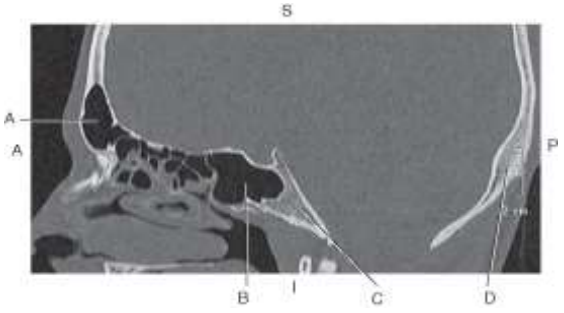
48. Which line points to the inferior rectus muscle?
    a. A
    b. B
    c. C
    d. D

    ANS: B OBJ: List the muscles of the eye and describe their functions and locations.

49. Which line points to the superior oblique muscle?
    a. A
    b. B
    c. C
    d. D

    ANS: A OBJ: List the muscles of the eye and describe their functions and locations.

The following questions refer to the figure below of a sagittal CT reformat of the cranium.



50. Which line points to the frontal sinus?
    a. A
    b. B
    c. C

d. D

ANS: A
OBJ: Identify the location of each paranasal sinus and the meatus into which it drains.

51. Which line points to the sphenoid sinus?
a. A
b. B
c. C
d. D

ANS: B
OBJ: Identify the location of each paranasal sinus and the meatus into which it drains.

52. Which line points to the clivus?
a. A
b. B
c. C
d. D

ANS: C
OBJ: Identify the location and unique structures of each cranial and facial bone.

53. Which line points to the occipital bone?
a. A
b. B
c. C
d. D

ANS: D
OBJ: Identify the location and unique structures of each cranial and facial bone.

The following questions refer to the figure below of the coronal CT of the dorsum sella.

54. Which line points to the temporal bone?
a. A
b. B
c. C
d. D

ANS: A

OBJ: Identify the location and unique structures of each cranial and facial bone.

55. Which line points to the posterior clinoid process?
    a. A
    b. B
    c. C
    d. D

    ANS: B
    OBJ: Identify the location and unique structures of each cranial and facial bone.

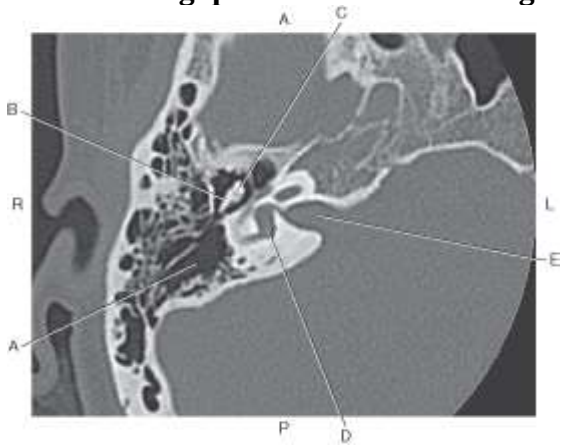
56. Which line points to the condyloid process of the mandible?
    a. A
    b. B
    c. C
    d. D

    ANS: C OBJ: Describe the structures that comprise the temporomandibular joint.

57. Which line points to the foramen lacerum?
    a. A
    b. B
    c. C
    d. D

    ANS: D
    OBJ: Identify the location and unique structures of each cranial and facial bone.

The following questions refer to the figure below of an axial CT of the inner ear.



58. Which line points to the mastoid antrum?
    a. A
    b. B
    c. C
    d. D
    e. E

    ANS: A
    OBJ: Identify the structures of the external, middle, and inner ear and describe their functions.

59. Which line points to the incus?
    a. A
    b. B
    c. C
    d. D
    e. E

    ANS: B
    OBJ: Identify the structures of the external, middle, and inner ear and describe their functions.

60. Which line points to the malleus?
    a. A
    b. B
    c. C
    d. D
    e. E

    ANS: C
    OBJ: Identify the structures of the external, middle, and inner ear and describe their functions.

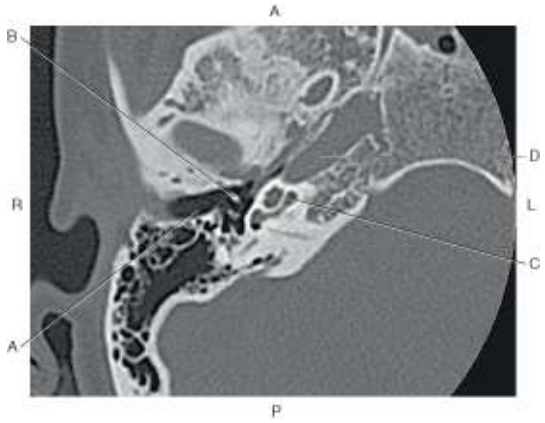
61. Which line points to the vestibule?
    a. A
    b. B
    c. C
    d. D
    e. E

    ANS: D
    OBJ: Identify the structures of the external, middle, and inner ear and describe their functions.

62. Which line points to the internal auditory canal (IAC)?
    a. A
    b. B
    c. C
    d. D
    e. E

    ANS: E
    OBJ: Identify the structures of the external, middle, and inner ear and describe their functions.

The following questions refer to the figure below of an axial CT of the inner ear.



63. Which line points to the external auditory meatus (EAM)?
    a. A
    b. B
    c. C
    d. D

    ANS: A
    OBJ: Identify the structures of the external, middle, and inner ear and describe their functions.

64. Which line points to the malleus?
    a. A
    b. B
    c. C
    d. D

    ANS: B
    OBJ: Identify the structures of the external, middle, and inner ear and describe their functions.

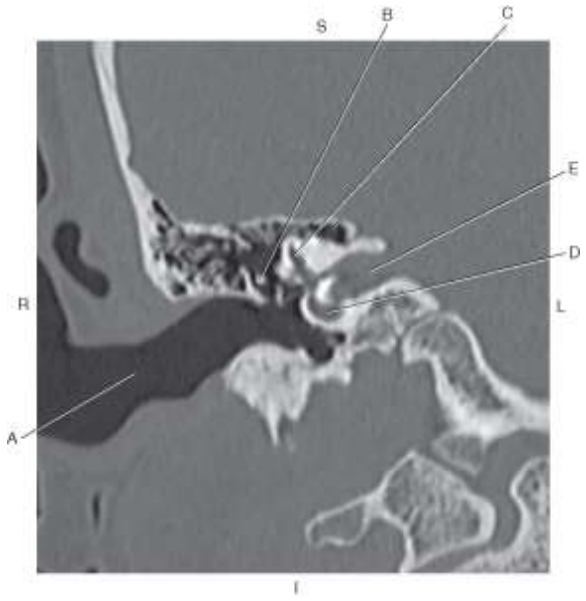
65. Which line points to the cochlea (basal turn)?
    a. A
    b. B
    c. C
    d. D

    ANS: C
    OBJ: Identify the structures of the external, middle, and inner ear and describe their functions.

66. Which line points to the carotid canal?
    a. A
    b. B
    c. C
    d. D

    ANS: D
    OBJ: Identify the location and unique structures of each cranial and facial bone.

The following questions refer to the figure below of a coronal CT reformat of the inner ear.



67. Which line points to the external auditory meatus (EAM)?
    a. A
    b. B
    c. C
    d. D
    e. E

    ANS: A
    OBJ: Identify the structures of the external, middle, and inner ear and describe their functions.

68. Which line points to the incus?
    a. A
    b. B
    c. C
    d. D
    e. E

    ANS: B
    OBJ: Identify the structures of the external, middle, and inner ear and describe their functions.

69. Which line points to the superior semicircular canal?
    a. A
    b. B
    c. C
    d. D
    e. E

    ANS: C
    OBJ: Identify the structures of the external, middle, and inner ear and describe their functions.

70. Which line points to the cochlea (basal turn)?
    a. A
    b. B
    c. C

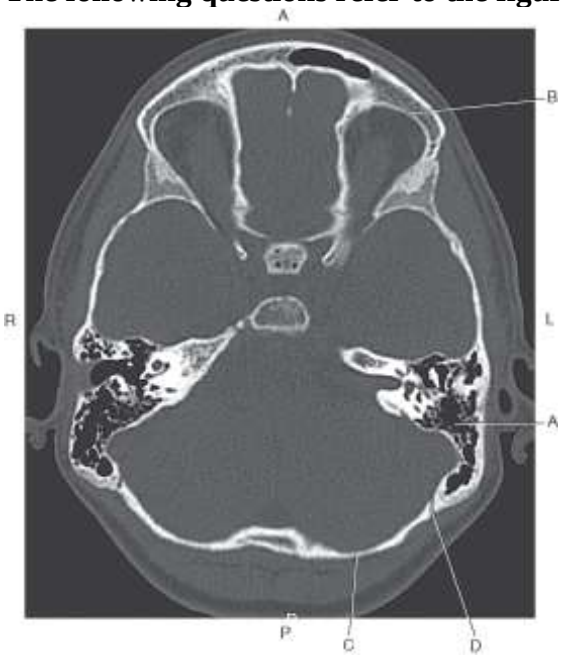
d. D
e. E

ANS: D
OBJ: Identify the structures of the external, middle, and inner ear and describe their functions.

71. Which line points to the internal auditory canal (IAC)?
a. A
b. B
c. C
d. D
e. E

ANS: E
OBJ: Identify the structures of the external, middle, and inner ear and describe their functions.

The following questions refer to the figure below of an axial CT of the cranium.



72. Which line points to the mastoid air cells?
a. A
b. B
c. C
d. D

ANS: A
OBJ: Identify the location and unique structures of each cranial and facial bone.

73. Which line points to the frontal bone?
a. A
b. B
c. C
d. D

ANS: B

OBJ: Identify the location and unique structures of each cranial and facial bone.

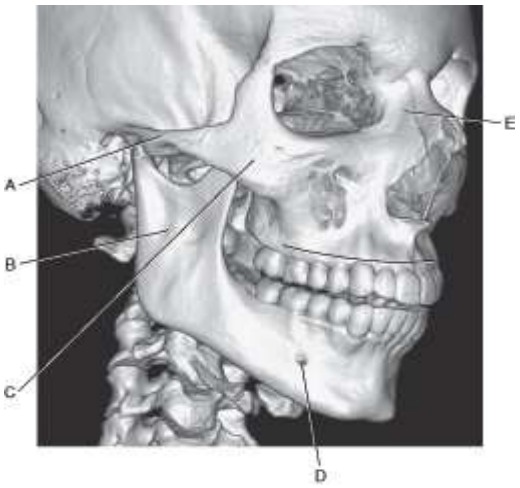
74. Which line points to the occipital bone?
    a. A
    b. B
    c. C
    d. D

    ANS: C
    OBJ: Identify the location and unique structures of each cranial and facial bone.

75. Which line points to the lambdoidal suture?
    a. A
    b. B
    c. C
    d. D

    ANS: D OBJ: Identify the cranial sutures.

The following questions refer to the figure below of a 3D CT of the oblique aspect of the facial bones.



76. Which line points to the zygomatic arch?
    a. A
    b. B
    c. C
    d. D
    e. E

    ANS: A
    OBJ: Identify the location and unique structures of each cranial and facial bone.

77. Which line points to the ramus of mandible?
    a. A
    b. B
    c. C
    d. D
    e. E

ANS: B
OBJ: Identify the location and unique structures of each cranial and facial bone.

78. Which line points to the zygoma?
    a. A
    b. B
    c. C
    d. D
    e. E

    ANS: C
    OBJ: Identify the location and unique structures of each cranial and facial bone.

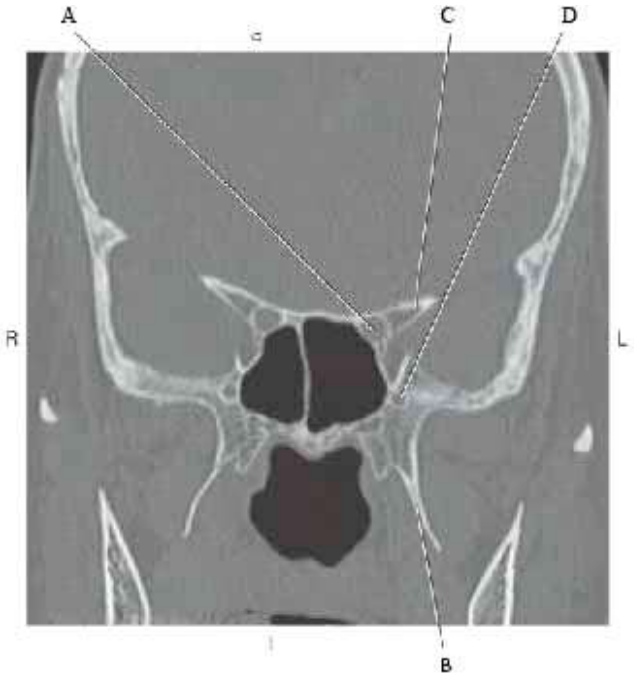
79. Which line points to the mental foramen?
    a. A
    b. B
    c. C
    d. D
    e. E

    ANS: D
    OBJ: Identify the location and unique structures of each cranial and facial bone.

80. Which line points to the frontal process of maxilla?
    a. A
    b. B
    c. C
    d. D
    e. E

    ANS: E
    OBJ: Identify the location and unique structures of each cranial and facial bone.

The following questions refer to the figure below of a coronal CT of the cranium.



81. Which line points to the optic canal?
    a. A
    b. B
    c. C
    d. D

    ANS: A OBJ: Identify the bones that form the orbit and their associated openings.

82. Which line points to the pterygoid process of the sphenoid bone?
    a. A
    b. B
    c. C
    d. D

    ANS: B
    OBJ: Identify the location and unique structures of each cranial and facial bone.

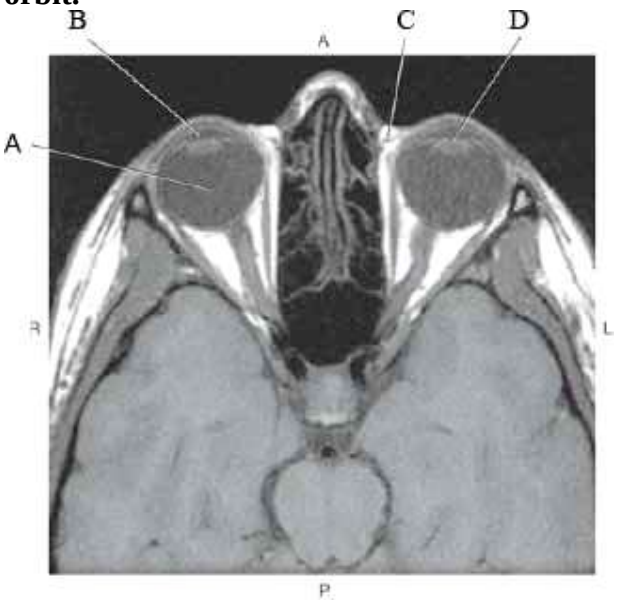
83. Which line points to the anterior clinoid process of sphenoid bone?
    a. A
    b. B
    c. C
    d. D

    ANS: C
    OBJ: Identify the location and unique structures of each cranial and facial bone.

84. Which line points to the foramen rotundum?
    a. A
    b. B
    c. C
    d. D

ANS: D
OBJ: Identify the location and unique structures of each cranial and facial bone.

The following questions refer to the figure below of an axial, T1-weighted MRI of the orbit.



85. Which of the following lines is pointing to the lens?
    a. A
    b. B
    c. C
    d. D

    ANS: D OBJ: Describe the structures that constitute the globe of the eye.

86. Which of the following lines is pointing to the lacrimal sac?
    a. A
    b. B
    c. C
    d. D

    ANS: C OBJ: Describe the structures that constitute the globe of the eye.

87. Which of the following lines is pointing to the anterior chamber?
    a. A
    b. B
    c. C
    d. D

    ANS: B OBJ: Describe the structures that constitute the globe of the eye.

88. Which of the following lines is pointing to the posterior chamber?
    a. A
    b. B
    c. C
    d. D

ANS: A OBJ: Describe the structures that constitute the globe of the eye.