Head and Neck Anatomy MCQ
(Multiple Choice Questions)
*with Answers*

Answers at End

All Cervical Vertebra have a:
- body
- spine
- bifid spinous process
- carotid tubercle
- transverse foramen

If you rotate your head as in indicating a “no” response, most of the movement occurs at this joint:
- atlanto-occipital (skull-C1)
- atlanto-axial (C1-C2)
- C2-C3
- C3-C4
- C7-T1

The carotid body and sinus are innervated by this cranial nerve:
- a. V
  - VII
  - IX
  - X
  - XI

The cephalic vein:
- drains venous blood mainly from the medial side of the hand
- lacks valves
- ends in the arm by joining the brachial vein
- empties directly into the subclavian vein
- pierces the clavipectoral fascia

The ligament that connects adjacent vertebral laminae is the anterior longitudinal
posterior longitudinal flavum nuchae tectorial

The normal curvature found in the young adult cervical vertebral column is present at birth
a scoliosis a spondylothesis a kyphotic type a lordotic type

The posterior belly of the digastric muscle is innervated by a branch of this cranial nerve:
V VII IX X XI

The branch of the external carotid artery that passes posterosuperiorly along the inferior (lower) border of the posterior belly of the digastric muscle is the
superior thyroid lingual maxillary occipital posterior auricular

The cricoid cartilage lies at this vertebral level
C2 C4 C6 C8 T2

The internal carotid nerve arises from the superior cervical sympathetic ganglia arises from the middle cervical sympathetic ganglia arises from the inferior cervical sympathetic ganglia is a branch of CN IX is mainly a parasympathetic nerve
An artery that supplies the thyroid gland is sometimes found anterior to the trachea and is named the
superior thyroid artery
inferior thyroid artery
thyroidea ima
anterior ascending cervical artery
superficial ascending cervical artery

The isthmus of the thyroid gland
lies directly anterior to the thyroid cartilage
lies directly anterior to the cricoid cartilage
lies directly anterior to the 2nd, 3rd, and 4th tracheal rings
is the same as the pyramidal lobe
contains the superior pair of parathyroid glands

The layer of the scalp containing the ramifying arteries, veins, and nerves is the
epidermis
aponeurotic layer
loose areolar layer
pericranium
fibro-fatty connective tissue layer

The veins that directly connect the veins of the scalp to the dural venous sinuses are
emissary veins
cerebral veins
diploic veins
subarachnoid veins
valved

The muscle which protrudes the tongue and its tip toward the opposite side
hyoglossus
genioglossus
palatoglossus
styloglossus
geniohyoid

The sublingual caruncle (papilla)
receives the parotid duct
receives the sublingual duct
receives the submandibular duct
is formed by the sublingual gland
is formed by the submandibular gland
The fold of dura separating the cerebrum from the cerebellum is the
falx cerebri
falx cerebelli
tentorium cerebelli
diaphragma sellae
incisura

The sites where cerebrospinal fluid passes from around the brain into the venous system is/are called
choroid plexuses
lateral apertures
median aperture
arachnoid villi
arachnoid cisterns

The dural venous sinus found on the floor of the middle cranial fossa is the
sigmoid
superior petrosal
straight
cavernous
occipital

The cerebral artery supplying most of the lateral surface of the cerebrum is the
anterior cerebral
middle cerebral
posterior cerebral
anterior choroidal
posterior choroidal

Which is the correct statement concerning the carotid plexus:
contains parasympathetic fibers destined for the eyeball
is a system of small arteries surrounding and supplying the walls of the internal and external carotid arteries
contains synapses between pre- and post-ganglionic sympathetic neuron fibers
receives postganglionic fibers from the superior cervical ganglion
sends preganglionic fibers to sweat glands

The prefix intra means wholly inside of. The prefix inter means in between. Which of the following named foramina is interosseous?
foramen magnum
foramen rotundum
foramen ovale
jugular foramen
superior orbital fissure

Which of the following nerves is not a branch of cranial nerve VII?
temporal
mental
buccal
cervical
zygomatic

Which statement is correct?
the facial nerve (VII) being completely motor, possesses no ganglion
b. the trigeminal ganglion contains some parasympathetic cells supplying structures in the hand
c. a portion of the facial nerve has a ganglion containing cells whose fibers bring taste information from the anterior 2/3 of the tongue
d. the foramen rotundum is located in the posterior part of the frontal bone
e. none of the above are correct

25. Which statement is incorrect?
a. parasympathetic outflow in the vagus nerve causes a decrease in the rate of heartbeat
b. the pterygopalatine ganglion contains both parasympathetic fibers of the 7th nerve, as well as sensory fibers whose cells of origin are in the Trigeminal ganglion
c. the lacrimal gland receives secretomotor fibers from cranial nerve III
d. the zygomatic branch of the facial nerve innervates the orbicularis oculi muscle

26. Which statement is incorrect?
a. two cranial nerves (VII and VIII) leave the posterior cranial fossa through the internal acoustic meatus
b. three cranial nerves pass through the jugular foramen
c. the trigeminal nerve is exclusively sensory
d. the abducens nerve is cranial nerve VI
e. the pterygomaxillary fissure serves as an aperture to permit the terminal part of the maxillary artery to leave the infra-temporal fossa
Superficial Arteries and Veins of Face and Scalp

- Epineural sphenouestis (Saka sphenouestis) [cut]
- Middle temporal artery and vein
- Zygomaticofacial artery
- Transverse facial artery and vein
- Supraorbital artery and vein
- Nasolabial vein
- Dorsal nasal artery and vein
- Angular artery and vein
- Zygomaticofacial artery and vein
- Zygomaticotemporal artery and vein
- Infrasellary artery and vein
- Deep facial vein (from pharyngoid plexus)
- Facial artery and vein
- Lingual artery and vein
- Common carotid artery
- Internal carotid artery
- External jugular vein
- Internal jugular vein
- Occipital artery and vein [cut]
- Posterior auricular artery and vein
- External jugular vein [cut]
- Retromandibular vein
- Medial occipital artery
- Anterior auricular artery
- Dorsal occipital artery and vein
- Occipital sinus
- Transverse sinuses
- Anterior and posterior human sinuses
- Middle meningeal artery and vein
- Sinus cavernous
- Sylvian vein
- Venous sinuses of the scalp
- Superior sagittal sinus
- Inferior sagittal sinus
- Straight sinus
- Superior petrosal sinus
- Anterior petrosal sinus
- Crown sinus
- Rarefied bone
- Inner ear
- Inner ear opening
- Eustachian tube
- Nasal cavity
- Oropharynx
- Nasopharynx
- Oral cavity
- Palatine tonsil
- Hard palate
- Soft palate
- Maxillary sinus
- Ethmoid sinus
- Sphenoid sinus
- Sinus cavernous
27. Which statement below is correct:
   a. cranial nerve VII emerges from the skull through the foramen spinosum
   b. the superior cervical sympathetic ganglion receives white communicating rami from the first four cervical spinal nerves
   c. the internal carotid artery enters the middle cranial fossa through the floor of the foramen lacerum
   d. stylopharyngeus is the one muscle innervated by cranial nerve IX

28. Choose the correct statement
   a. the right and left transverse sinuses lie wholly on the inner surface of the temporal bone
   b. blood from the superior petrosal sinuses drains directly into the jugular foramen
   c. the sphenoidal sinuses lie below the sella tursica
   d. the vomer articulates with the greater wing of the sphenoid
   e. the foramen rotundum communicates directly with the infratemporal fossa

29. Which statement is incorrect?
   a. the zygomatic bone articulates with 4 other bones of the skull
   b. the nasal bones form portions of the medial margin of the orbits
   c. the occipital condyles are inferior to the hypoglossal canals
   d. the groove for the mylohyoid nerve lies inferior to the mylohyoid line

30. Choose the correct statement
   a. the cribiform plate is a part of the frontal bone of the skull
   b. the infraorbital foramen conveys motor nerve branches to the levator labii superioris
   c. the deep cervical lymph nodes receive lymph from the neck only
   d. some branches of the facial nerve occur within the facial canal

31. Choose the best statement
   a. the clivus is a portion of the sphenoid bone
   b. the frontal sinus lies deep to the floor of the sella turcica
   c. cranial nerves X, XI, and XII all leave the skull through the jugular foramen
   d. hiatus semilunaris is another name for the superior orbital fissure
   e. the inferior petrosal sinus marks the attachment of part of the tentorium cerebelli
32. Choose the best response
a. the pterygoid processes of the sphenoid bone are located anterior to the palatine bone
b. the foramen rotundum passes through the root of the pterygoid process
c. the hamulus of the pterygoid process is a part of the medial plate of the pterygoid

d. the medial pterygoid muscle originates from the medial plate of the pterygoid process
e. the medial (internal) pterygoid muscle is inserted on the articular disk of the temporo-mandibular joint

33. The dura matter of the posterior cranial fossa is supplied by the meningeal branch of this nerve
a. mandibular
b. ophthalmic
c. maxillary
d. DPR of C2-C3
e. facial
34. The nerve supplying the carotid artery and sinus is a branch of cranial nerve
   a. V  
   b. VII  
   c. IX  
   d. X  
   e. XI

35. The mucous membrane of the larynx below the vocal folds is supplied by this nerve
   a. pharyngeal  
   b. recurrent laryngeal  
   c. internal laryngeal  
   d. external laryngeal  
   e. glossopharyngeal

36. The sensory nerve supply to the skin overlying the angle of the mandible is by the
   a. greater occipital nerve (C2)  
   b. lesser occipital nerve (C2)  
   c. buccal branch of mandibular division of the trigeminal nerve  
   d. great auricular nerve (C2-C3)  
   e. mandibular ramus of the facial nerve

37. The highest cervical spinous process that is easily felt is that of
   a. C1  
   b. C2  
   c. C5  
   d. C7  
   e. C8

38. The parotid duct opens into the
   a. floor of the mouth at the sublingual fold  
   b. floor of the mouth at the sublingual caruncle  
   c. vestibule of the mouth opposite the second maxillary molar tooth  
   d. vestibule of mouth opposite the second mandibular premolar tooth  
   e. foramen cecum

39. Most of the lateral surface of the cerebrum is supplied by this large artery’s branches
   a. anterior cerebral  
   b. middle cerebral  
   c. posterior cerebral  
   d. vertebral  
   e. anterior choroidal

40. Cerebrospinal fluid normally is found in the ventricles of the brain and in this space around the CNS
a. subarachnoid  
b. subdural  
c. epidural  
d. subpial
41. The 2 important structures found in the suboccipital triangle are the vertebral artery and the
   a. lesser occipital nerve
   b. greater occipital nerve
   c. suboccipital nerve
   d. spinal accessory nerve
   e. occipital artery

42. Choose the best statement concerning the pterygopalatine ganglion
   a. it contains some sympathetic fibers from the lesser petrosal nerve
   b. all fibers entering or leaving the ganglion have synapses within the ganglion
   c. some fibers of V-2 pass through the ganglion without synapsing
   d. the pterygopalatine ganglion lies immediately posterior to the pterygoid process of the sphenoid bone

43. Choose the best statement concerning the inferior nasal conchae
   a. the inferior nasal conchae is the most inferior part of the ethmoid bone
   b. the inferior conchae is part of the nasal septum
   c. the inferior conchae is a separate bone, and it is attached to the medial side of the medial wall of the maxilla
   d. none of the above is correct

44. Name 2 bones which have parts that form the septum dividing the nose into right and left passages
   a. palatine and sphenoid
   b. maxilla and sphenoid
   c. lacrimal and nasal
   d. vomer and ethmoid

45. The pterygoid process of what bone forms the posterior wall of the pterygopalatine fossa
   a. palatine
   b. maxilla
   c. sphenoid
   d. inferior nasal conchae
   e. pterygoid

46. The number of unpaired bones in the cranium is
   a. 1
   b. 2
   c. 3
   d. 4

47. The occipital condyles articulate with which bone
a. axis  
b. clavicles  
c. vertebra prominens  
d. atlas
48. The number of unpaired bones in the skeleton of the adult human face is two. They are the vomer and the
   a. zygomatic
   b. maxilla
   c. palatine
   d. lacrimal
   e. mandible

49. Choose the correct statement concerning the palatine bones
   a. they lie immediately posterior to the pterygoid processes of the sphenoid
   b. they form part of the lateral wall of the oropharynx
   c. they form part of the lateral wall of the nasopharynx
   d. they form part of the lateral wall of the nasal cavity (nose)

50. Which statement is correct
   a. the internal acoustic meatus has 2 nerves passing through it
   b. the facial artery is a branch of the internal carotid artery
   c. the facial artery passes superficial to the submandibular gland
   d. the chorda tympani, a branch of the facial nerve, enters the temporal bone through the
      sphenopalatine foramen

51. Which statement is incorrect
   a. the zygomaticofacial nerve is a branch of the trigeminal nerve
   b. the chorda tympani joins the lingual nerve within the infratemporal region
   c. the maxillary artery is one of the 2 terminal branches of the external carotid artery
   d. the otic ganglion is a sympathetic ganglion

52. The following nerves are found in the posterior triangle of the neck
   a. lesser occipital nerve
   b. recurrent laryngeal nerve
   c. spinal accessory nerve
   d. all of the above
   e. only a and c

53. All cervical vertebrae have a(n)
   a. spine
   b. bifid spine
   c. foramen transversium
   d. body attached to its pedicles
   e. intervertebral disk adjacent to their inferior surface

54. The spinal nerve emerges between this part of adjacent vertebra
   a. lamina
   b. pedicle
   c. articular process
   d. body
e. spine
55. The articular facets of the superior articular processes of cervical vertebra face
a. superiorly and posteriorly
b. inferiorly and anteriorly
c. posteriorly and laterally
d. posteriorly and medially
e. anteriorly and medially

56. The intervertebral disks
a. form about one-fourth the length of the vertebral column
b. are found between all cervical vertebrae
c. are important for maintaining normal curvatures of the vertebral column
d. a, b, and c
e. only a and c

57. The ligament that is the most important for preventing posterior displacement of the odontoid process from the anterior arch of the atlas is the
a. posterior atlanto-occipital membrane
b. alar ligament
c. cruciate ligament
d. posterior longitudinal ligament
e. anterior longitudinal ligament

58. “Secondary curves” of the vertebral column is (are) in this (these) portion(s) of the column
a. cervical
b. thoracic
c. lumbar
d. a, b, and c
e. a and c

59. Flexion and extension of the head occur mainly in these joints
a. atlanto-occipital
b. atlanto-axial
c. C2-C3 vertebral bodies
d. C2-C3 articular processes
e. C7-T1 articular processes

60. The superficial veins of the scalp are
a. connected to the dural venous sinuses by valveless emissary veins
b. found mainly in the subcutaneous connective tissue layer
c. named according to the nerve they accompany in the region above and behind the external ear
d. all of the above
e. only a and b

61. The auriculotemporal nerve of the scalp is a branch of the
a. glossopharyngeal nerve
b. ophthalmic division of V
c. maxillary division of V
d. mandibular division of V
e. cervical plexus

62. This muscle receives its motor supply by 2 cranial nerves
a. buccinator
b. trapezius
c. digastric
d. omohyoid
e. thyrohyoid

63. The muscles forming the floor of the submandibular (digastric) triangle are the hyoglossus and the
a. sternohyoid
b. thyrohyoid
c. mylohyoid
d. stylohyoid
e. omohyoid

64. The common carotid artery usually divides into the external carotid and internal carotid arteries within this cervical triangle
a. digastric
b. occipital
c. carotid
d. muscular
e. supraclavicular

65. The infrahyoid muscles (strap muscles of the neck)
a. are the sternohyoid, sternothyroid, omohyoid and thyrohyoid
b. are all innervated by the ansa cervicalis
c. include one muscle that attaches to the scapula
d. a and b only
e. a and c only

66. The cranial nerve that is sensory to the carotid body and sinus is the
a. trigeminal
b. facial
c. hypoglossal
d. glossopharyngeal
e. vagus

67. This arterial branch of the external carotid artery originates at the level of the hyoid bone and forms a loop before passing deep to the hyoglossus muscle to enter the submandibular region
a. ascending pharyngeal
b. lingual
c. facial
d. occipital
e. maxillary
68. The inferior petrosal sinus connects the cavernous sinus to the
a. straight sinus
b. transverse sinus
c. inferior sagittal sinus
d. internal jugular vein
e. vertebral vein

69. This (these) structure(s) is (are) found in the jugular foramen
a. internal jugular vein
b. vagus nerve
c. hypoglossal nerve
d. all of the above
e. only a and b

70. The nerve that supplies all the muscles in the larynx except for the cricothyroid muscle is the
a. superior laryngeal n.
b. pharyngeal n.
c. recurrent laryngeal n.
d. external laryngeal n.
e. internal laryngeal n.

71. This (these) muscle(s) receive(s) motor fibers derived from the cervical plexus
a. respiratory diaphragm
b. levator scapulae
c. omohyoid
d. all of the above
e. a and b only

72. Which one of the following vessels is most likely to be cut when doing a tracheostomy (opening the trachea from the front?)
 a. superior thyroid vein
 b. inferior thyroid artery
c. thyroidea ima artery
d. middle thyroid vein
e. external jugular vein

73. The cranial nerve that supplies the sensory innervation to the dura above the level of the tentorium cerebelli is the
a. trigeminal
b. facial
c. glossopharyngeal
d. vagus
e. hypoglossal

74. The cerebrospinal fluid is in this space
a. epidural
75. The largest structure passing through the cavernous sinus is the

a. internal carotid artery
b. internal jugular vein
c. abducens nerve
d. trigeminal (mandibular division)
e. greater petrosal nerve

76. The supraorbital foramen of the skull provides an exit from the orbit for which of the following

a. the oculomotor nerve
b. a branch of V-2
c. the supratrochlear branch of V-1
d. a continuation of the ophthalmic nerve fibers

77. Which of the following structures leaves or enters the middle cranial fossa by way of the foramen spinosum?

a. middle meningeal artery
b. internal carotid artery
c. the motor division of V-3
d. the auriculotemporal nerve

78. Choose the name of the opening if the skull through which a continuation or branch of the maxillary artery reaches the inside of the nasopharynx (or nose)

a. pterygopalatine fossa
b. pterygoid canal
c. nasopalatine canal
d. sphenopalatine foramen

79. The greater superficial petrosal nerve contains autonomic fibers from which of the following nerves?

a. V-3
b. V-2
c. VII
d. IX
e. none of the above

80. The deep petrosal nerve

a. contains parasympathetic fibers from VII
b. carries preganglionic sympathetic fibers from the sympathetic plexus on the internal carotid artery
c. carries postganglionic parasympathetic fibers from cranial nerve IX
d. carries postganglionic sympathetic fibers from the superior cervical ganglion
81. The pterygopalatine ganglion is suspended from which of the following nerves?
a. the nerve of the pterygoid canal
b. the main trunk of V-1
c. the main trunk of V-2
d. the main trunk of V-3
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Head and Neck Anatomy MCQs

82. The nerve which carries sensations of taste from the area of the tongue posterior to the row of vallate papillae is
   a. chorda tympani (from VII)
   b. branches of vagus (X)
   c. glossopharyngeal nerve (IX)
   d. the buccal branch of V-3

83. Sensation (heat, cold, touch) of the gingiva of the hard palate is carried to the brain through
   a. the nerve of the pterygoid canal
   b. nerves in the greater palatine canals
   c. the nasociliary branch of V-1
   d. the greater superficial branch of the vagus nerve
   e. the lesser superficial petrosal nerve

84. The mandibular nerve leaves the cranium via the
   a. superior orbital fissure
   b. inferior orbital fissure
   c. foramen ovale
   d. foramen rotundum
   e. foramen spinosum

85. The sinus that directly connects the cavernous sinus to the internal jugular vein is the
   a. occipital
   b. inferior sagittal
   c. inferior petrosal
   d. transverse
   e. sigmoid
86. The blood vessel supplying most of the medial surface of the cerebrum is the
   a. anterior cerebral artery
   b. middle cerebral artery
   c. posterior cerebral artery
   d. middle meningeal artery
   e. vertebral artery

87. The veins and arteries of the scalp lie mainly in the
   a. aponeurotic layer
   b. periosteal layer
   c. loose connective tissue layer (subaponeurotic)
   d. subcutaneous connective tissue layer
   e. both a and c

88. The ansa cervicalis is usually found in the
   a. submandibular triangle
   b. muscular triangle
   c. supraclavicular triangle
   d. carotid triangle
   e. occipital triangle

89. The only cranial nerve to emerge from the dorsal side of the brain stem is the
   a. oculomotor
   b. facial
   c. trigeminal
   d. trochlear
90. The veins that form a plexus in the spongy bone of the skull are
   a. venous lacunae
   b. diploic veins
   c. meningeal veins
   d. emissary veins
   e. cerebral veins

91. The bone forming the anterior part of the nasal septum is the
   a. inferior conchae
   b. sphenoid
   c. vomer
   d. palatine
   e. maxillary

92. The first lymph node group receiving lymphatic drainage from the most posterior portion of the tongue is
   a. submental
   b. juguloomohyoid
   c. parotid
   d. buccal
   e. jugulodigastric

93. Which of the following muscles is (are) attached to the spinous process of the axis?
   a. splenius capitus
   b. semisplenius capitis
   c. rectus capitis posterior major
   d. all of the above
   e. none of the above

94. The lesser occipital nerve is
   a. derived from posterior rami of C2-C3
   b. a motor nerve to part of the scalp
   c. a part of the cervical plexus
   d. a mixed nerve
   e. all of the above

95. The suboccipital nerve
   a. is sensory to the back of the neck
   b. emerges between the rectus capitis major and minor muscles
   c. supplies motor innervation to the splenius capitis
   d. supplies motor innervation to the muscles forming the suboccipital triangle
   e. none of the above

96. The phrenic nerve
a. is part of the cervical plexus  
b. is derived from spinal segments C3, C4, and C5  
c. lies on the belly of the anterior scalene muscle  
d. a and b only  
e. a, b, and c

97. The superior orbital fissure  
a. lies directly inferior to the greater wing of the sphenoid  
b. lies directly above the posterior portion of the maxilla  
c. lies directly between the orbit and the infratemporal fossa  
d. transmits the III, IV, and VI cranial nerves  
e. transmits the maxillary nerve

98. The optic canal transmits the  
a. optic n  
b. ophthalmic artery  
c. superior ophthalmic vein  
d. a and b only  
e. a, b, and c

99. The nerve of the pterygoid canal  
a. receives its contributions from a branch of the glossopharyngeal nerve  
b. contains only sympathetic fibers  
c. enters the pterygopalatine fossa  
d. is formed by the joining of the greater petrosal and lesser petrosal nerves

100. The posterior cranial fossa contains  
a. the cerebellum  
b. medulla oblongata  
c. pons  
d. only a and c  
e. a, b, and c

101. The cerebrospinal fluid is found in the  
a. subarachnoid space  
b. ventricles of the brain  
c. subdural space  
d. only a and b  
e. a, b, and c
102. The following muscles are innervated by the ansa cervicalis
   a. sternohyoid
   b. geniohyoid
   c. thyrohyoid
   d. only a and b
   e. a, b, and c
103. A branch of the external carotid artery in the neck is the
   a. superficial temporal artery
   b. vertebral artery
   c. subclavian artery
   d. occipital artery
   e. thyrocervical trunk

104. At the C5 vertebral level, the carotid sheath encloses the
   a. common carotid artery
   b. vagus nerve
   c. internal jugular vein
   d. a and b only
   e. a, b, and c

105. The following artery usually does not arise from the external carotid
   a. superior thyroid
   b. lingual
   c. superficial temporal
   d. middle meningeal
   e. occipital

106. The following cranial nerve(s) are considered to have a parasympathetic function
   a. III, IV, and V
   b. III, V, and VI
   c. III, V, and VII
   d. III, V, and IX
   e. III, VII, and IX

107. The periosteum of the skull is called
   a. arachnoid
   b. leptomeninx
   c. pia matter
   d. pericranium
   e. epicranius

108. The vertebral artery
   a. does not pass through the foramen transversum of the 1st cervical vertebrae
   b. is found deep in the occipital triangle
   c. is a branch of the maxillary artery
   d. enters the vertebral foramen at the C6 level
   e. does not have any branches

109. The cervical fascia that forms the sheath of the parotid gland is the
   a. investing
   b. superficial
   c. buccopharyngeal
d. pretracheal

e. prevertebral
110. This portion of this muscle retracts the mandible
   a. superficial head of medial pterygoid muscle
   b. posterior portion of temporalis
   c. upper head of the lateral pterygoid
   d. anterior portion of temporalis
   e. buccinator-posterior portion

111. In moving the head to indicate “no” this muscle is functioning strongly
   a. rectus capitus posterior major
   b. rectus capitus posterior minor
   c. obliquus capitis inferior
   d. semispinalis capitis

112. The lymph drainage of the upper central incisor teeth goes first to this group of nodes
   a. submental
   b. submandibular
   c. jugulo-digastric
   d. jugulo-omohyoid
   e. parotid node

113. If the facial nerve (VII) is injured just proximal to the origin of the chorda tympani nerve, the patient
   would experience which of the following symptoms?
   a. loss of taste sensation to the anterior 2/3 of the tongue
   b. decreased saliva from the submandibular salivary gland
   c. loss of lacrimation (tearing) from the lacrimal gland
   d. both a and b
   e. a, b, and c

114. The preganglionic parasympathetic fibers to the otic ganglion enter through the _______ nerve
   a. greater petrosal
   b. deep petrosal
   c. lesser petrosal
   d. chorda tympani
   e. none of the above

115. Which of the following is/are true of the parasympathetic division of the ANS
   a. originated from cranial nerves II, VI, XI
   b. is also referred to as the cranio-sacral division
   c. has long postganglionic fibers and short preganglionic fibers
   d. both a and b
   e. a, b, and c

116. Which of the following ganglia do not contain synapses?
   a. submandibular ganglion
   b. geniculate ganglion
   c. superior cervical sympathetic ganglion
117. The mandibular division of the trigeminal nerve (V3)
   a. provides general cutaneous fibers to the forehead above the orbit
   b. provides motor fibers to the masseter and temporalis muscle
   c. provides general sensation to the posterior 1/3 of the mouth
   d. provides general cutaneous sensory fibers to that portion of the neck that develops from the second pharyngeal (hyoid) arch in the embryo
   e. contains only muscle motor fibers

118. The facial nerve (VII)
   a. exits from the skull via the external auditory meatus
   b. contains only sensory nerve fibers
   c. provides motor fibers to the platysma and buccinator muscles
   d. provides parasympathetic secretomotor fibers to the parotid gland
   e. has a buccal branch that pierces the buccinator muscle and is sensory to the mucosa of the cheek

119. The following are characteristics of the facial artery
   a. it follows a convoluted (“zigzag” or “tortuous”) course over the body of the mandible
   b. it passes just anterior to the masseter muscle
   c. it is a branch of the internal carotid artery
   d. only a and b
   e. a, b, and c

120. The chorda tympani
   a. contains taste fibers to the anterior 2/3 of the tongue
   b. are preganglionic parasympathetic fibers to the pterygopalatine ganglion
   c. are secretomotor to the lacrimal gland
   d. innervates the platysma
   e. all of the above

121. The following structure(s) usually is/are found embedded in the parotid gland
   a. the common carotid artery
   b. the external jugular vein
   c. the retromandibular vein
   d. the buccal nerve of V
   e. all of the above

122. The following structure lies just deep to the submandibular gland
   a. the facial vein
   b. the facial artery
   c. the ansa cervicalis
   d. the platysma muscle
   e. the facial nerve
123. The following is a muscle of facial expression innervated by the facial nerve
   a. lateral pterygoid muscle
   b. stylohyoid muscle
   c. stapedius muscle
   d. orbicularis oris muscle
   e. all of the above

124. The carotid sheath and its contents may be safely retracted as a unit during surgical procedures of
   the neck. The contents of the carotid sheath include all of the following structures EXCEPT the
   a. common carotid artery
   b. internal carotid artery
   c. internal jugular vein
   d. sympathetic trunk
   e. vagus nerve

125. Which of the following is NOT formed from the cervical plexus
   a. greater occipital nerve
   b. ansa cervicalis
   c. supraclavicular nerves
   d. transverse cervical nerve
   e. greater auricular nerve

126. The retromandibular vein is formed by the junction of the maxillary vein and the
   a. facial vein
   b. middle temporal vein
   c. transverse facial vein
   d. posterior auricular vein
e. superficial temporal vein

127. The pterygomandibular raphe is an essentially vertical line of connective tissue indicating the plane of interconnection of the buccinator and the
a. palatoglossal muscle
b. palatopharyngeal muscle
c. superior pharyngeal constrictor muscle
d. middle pharyngeal constrictor muscle
e. inferior pharyngeal constrictor muscle

128. The following veins and/or dural venous sinuses may drain directly into the cavernous sinus except
a. ophthalmic veins
b. superior petrosal sinus
c. superior sagital sinus
d. pterygoid plexus of veins
e. inferior petrosal sinus

129. The following statements are true of the transverse sinuses EXCEPT
a. they drain into sigmoid sinuses
b. the right often drains primarily the superior sagittal sinus
c. the confluens of sinuses joins these with the straight sinus
d. they contain valves that help direct blood flow
e. the left often drains primarily the straight sinus (and great cerebral vein)
130. The cavernous dural venous sinus
   a. lies in the anterior cranial fossa
   b. contains part of the internal carotid artery
   c. contains the mandibular division of the trigeminal nerve (V3) in its wall
   d. does not receive venous blood from outside the skull
   e. lies in the tentorium cerebelli

131. The following statements concerning the falx cerebri are true EXCEPT
   a. it arises from the crista galli of the ethmoid bone
   b. it lies between the right and left cerebral hemispheres
   c. it contains the superior sagittal sinus
   d. it fuses with the tentorium cerebelli in the region of the inferior sagittal dural venous sinus
   e. it is a fold of dura matter

132. 5 pairs of muscles contribute to the structure of the soft palate. Which statement is incorrect?
   a. the fan shaped tendons of the veli palatini forms the palatal aponeurosis
   b. the tendons of the tensor veli palatini hook around the pterygoid hamulus on each side
   c. the levator veli palatini passes between the base of the skull and the superior fibers of the
      superior pharyngeal constrictors
   d. the palatoglossi form the anterior pillars of the tonsillar fossa
   e. the palatopharyngeus muscles attach to the hyoid.

133. The tissues of the hard and soft palate receive innervation that is described by all of the following
     except
     a. parasympathetic fibers arrive by way of the lesser petrosal nerve
     b. sympathetic fibers arrive by way of the deep petrosal nerve
     c. afferent neuron cell bodies are in the trigeminal ganglion
     d. the greater and lesser palatine nerves descend in the palatine canal
     e. the anterior portion of the hard palate is supplied by the nasopalatine nerves

134. Which of the following arteries does not accompany its correspondingly named nerve throughout
     most of its course?
     a. infraorbital
     b. greater palatine
     c. inferior alveolar
     d. posterior superior alveolar
     e. lingual

135. The calvaria
     a. is formed from cartilage in the embryo
     b. includes the zygomatic bones
     c. is lined externally by pericranium that is fused with (cannot be easily separated from) the
        aponeurotic layer of the scalp
     d. is lined internally by endocranium that is fused with the dural layer of cranial meninges
     e. transmits cranial nerves
136. Which of the brachial arch/cranial nerve relationships is correct? Ignore this question

137. Failure of the lateral palatine processes to fuse across the midline produces
   a. an oblique facial cleft
   b. an unclosed or defective nasolacrimal duct
   c. a simple midline cleft (true hare lip)
   d. a simple unilateral cleft lip
   e. a simple cleft of the secondary palate

138. A cleft involving the lip and dental arch (alveolar ridge) is produced by fusion failure between
   a. mandibular and maxillary processes
   b. medial nasal and maxillary processes
   c. lateral nasal and maxillary processes
   d. right and left maxillary processes
   e. right and left lateral palatine processes

139. The parotid duct opens into the ____ opposite the _____ tooth
   a. mouth proper ... 2nd lower premolar
   b. vestibule of mouth ... 2nd upper molar
   c. mouth proper ... 1st lower incisor
   d. mouth proper ... 3rd lower molar
   e. vestibule of mouth ... 3rd lower molar

140. The floor of the mouth includes
   a. sublingual fold
   b. frenulum of the tongue
   c. the whole tongue
   d. all the above
   e. a and b

141. The nerve supplying general sensation to the floor of the mouth proper is the
   a. buccal nerve
   b. glossopharyngeal
   c. lingual nerve
   d. inferior alveolar
   e. vagus nerve

142. The deciduous teeth lack this type of tooth
   a. incisor
   b. canine
   c. premolar
   d. molar
143. This muscle of the tongue is innervated by the vagus nerve
   a. palatopharyngeus
   b. palatoglossus
   c. styloglossus
   d. genioglossus
   e. hyoglossus

144. The foramen cecum of the tongue
   a. indicates the origin of the thyroid gland
   b. indicates the origin of the superior parathyroids
   c. is posterior to the lingual tonsil
   d. is the opening for the submandibular duct
   e. is the opening for the sublingual ducts

145. If the right genioglossus muscle is paralyzed, the patient’s tongue will deviate to this side when the tongue is protruded
   a. right
   b. left

146. All the pharyngeal muscles except the stylopharyngeus muscle receive their motor innervation by this nerve
   a. facial
   b. glossopharyngeal
   c. vagus
   d. trigeminal
   e. hypoglossal

147. The auditory tube opens directly into the
   a. nose
   b. nasopharynx
   c. oropharynx
   d. internal ear
   e. both b and d

148. The tonsillar fossa
   a. lies posterior to the palatopharyngeal arch
   b. is also known as the piriform fossa
   c. has lymph drainage from its walls that enters the jugulodigastric node
   d. contains the pharyngeal tonsil because it is in the oral pharynx
   e. lies just superior to the pharyngeal isthmus

149. The only muscle of the soft palate that is not supplied by the vagus nerve’s pharyngeal branch is the
   a. musculus uvulae
   b. palatoglossus
   c. palatopharyngeus
   d. tensor veli palatini
e. levator veli palatini
150. The inferior meatus has this structure opening into it
a. maxillary sinus
b. sphenoid sinus
c. posterior ethmoidal sinuses
d. middle ethmoidal sinuses
e. nasolacrimal duct

151. The muscle that abducts the membranous (ligamentous) part of the vocal folds is the
a. transverse arytenoid
b. oblique arytenoid
c. lateral cricoarytenoid
d. posterior cricoarytenoid
e. aryepiglotticus

152. The artery supplying the inferior part of the larynx is a branch of the
a. internal carotid
b. ascending pharyngeal
c. ascending cervical
d. superior thyroid
e. inferior thyroid

153. The conjunctiva
a. lines the posterior aspect of the eyelids
b. covers the sclera of the anterior aspect of the eyeball
c. covers the cornea’s anterior surface when the eyelids are widely separated (eyes wide open)
d. all the above
e. a and b
154. If a person were unable to close the eyelids tightly due to nerve damage, the damaged nerve(s) would be the
   a. sympathetic fibers on the ophthalmic artery
   b. superior division of the oculomotor
   c. inferior division of the oculomotor
   d. facial
   e. trigeminal

155. The cell bodies of postganglionic parasympathetic axons supplying the lacrimal gland are in the
   a. geniculate ganglion
   b. pterygopalatine ganglion
   c. otic ganglion
   d. trigeminal ganglion
   e. ciliary ganglion

156. The olfactory mucous membrane of the nose
   a. is on the roof of the nasal cavity
   b. is on the upper part of the nasal septum and the superior conchae
   c. contains nerve cell bodies
   d. all the above
   e. a and b

157. General sensation from the anterior part of the nasal cavity above the vestibule is carried by branches of the
   a. olfactory nerve
   b. infraorbital nerve
   c. anterior ethmoidal nerve
   d. nasopalatine nerve
   e. zygomatic nerve

158. This artery has branches that supply most of the blood to the anterior part of the nasal cavity
   a. sphenopalatine
   b. facial artery
   c. anterior ethmoidal artery
   d. descending palatine artery
   e. infraorbital

159. The maxillary sinus mucous membrane is supplied by this/these nerves
   a. anterior and middle superior alveolar
   b. posterior superior alveolar
   c. infraorbital
   d. all the above
   e. only a and c

160. The vestibular ligament of the larynx is the lower margin of the
   a. median thyrohyoid ligament
b. lateral thyrohyoid ligament
c. cricothyroid ligament
d. conus elasticus
e. quadrangular membrane

161. All the intrinsic muscles of the larynx except the cricothyroid are supplied by the ______ nerve
a. superior laryngeal
b. recurrent laryngeal
c. external laryngeal
d. internal laryngeal
e. pharyngeal plexus

The third branch of the trigeminal nerve (V3) leaves the middle cranial fossa by way of:
foramen rotundum
foramen spinosum
foramen ovale
jugular foramen
e. none of the above

The otic ganglion contains synapses of preganglionic fibers with post ganglionic fibers of:
the chorda tympani nerve
to the mylohyoid muscle
tensor tympani nerve
glossopharyngeal nerve
none of the above
Taste sensations from the anterior 2/3 of the tongue travel through a branch of the:
seventh cranial nerve
glossopharyngeal nerve
V-2
cranial nerve 11
mental nerve

The order in which the three branches of the facial nerve come off within the petrous portion of the temporal bone is as follows:
lesser petrosal, greater petrosal, nerve to the stapedius muscle
greater petrosal, nerve to the stapedius muscle, chorda tympani
greater petrosal, nerve to the stapedius muscle, chorda tympani, greater petrosal
tympanic nerve (of Jacobsen), greater petrosal, chorda tympani

Which of the following pairs of muscles rotate the eye medially on its anterior-posterior axis (intort):
superior rectus and inferior rectus
superior oblique and inferior oblique
medial rectus and lateral rectus
inferior rectus and inferior oblique
superior rectus and superior oblique

The cranial nerve that innervates the mucosa of the tympanic cavity is the:
trigeminal
facial
glossopharyngeal
vagus
auditory

The pyramid of the middle ear (tympanic cavity) encloses the stapedius muscle
indicates where the chorda tympani nerve enters the tympanic cavity
is formed by the basal turn of the cochlea
is on the medial wall of the tympanic cavity
contains mastoid air cells

The foot plate or base of the stapes attaches to the ______ by way of the annular ligament:
head of the malleus
margin of the fenestra cochleae
margin of the fenestra vestibuli
margin of the aditus
processus cochleariformis

The following structure is part of the bony labyrinth of the internal ear:
semicircular duct
cochlear duct
utricle
saccule
vestibule

The glands of the mucous membranes of the nose and palate receive their parasympathetic postganglionic innervation from the:
- pterygopalatine ganglion
- otic ganglion
- geniculate ganglion
- trigeminal ganglion
- submandibular ganglion

The lymphatic drainage of the maxillary teeth usually goes first to this group of nodes:
- sublingual
- parotid
- submandibular
- retropharyngeal
- jugulodigastric

The vertebral column:
- has 8 cervical vertebrae
- has 5 lumbar vertebrae
- has 4 curvatures at birth
- is described as scoliosis when lumbar curvature is exaggerated
- has an intervertebral disc between the articular processes

174. The muscle(s) that produce(s) intorsion of the cornea is (are) the
a. superior rectus and superior oblique
b. superior rectus and inferior rectus
c. superior oblique and inferior oblique
d. superior rectus and inferior oblique
e. only the inferior oblique

175. The smooth muscle of the upper eyelid is important in maintaining an open eye. Which of the following might be damaged if the patient can not keep his upper lid elevated due to paralysis of the smooth muscle that attaches to the superior tarsal plate?
   a. short ciliary nerves or the nerve to the inferior oblique muscle
   b. oculomotor nerve- specifically, the portion from the Edinger-Westphal nucleus
   c. facial nerve
   d. trigeminal ganglion
   e. superior cervical sympathetic ganglion

176. A large mass in the posterior portion of the tongue which is not a tumor might be the
   a. thyroid gland
   b. submandibular gland
   c. sublingual gland
   d. parotid gland
   e. parathyroid gland
177. The depressions on each side of the median glossoepiglottic fold are the
   a. periform sinuses
   b. pharyngeal recesses
   c. ventricles
   d. valleculae
   e. saccules

178. The thyrohyoid membrane is pierced by this artery
   a. inferior thyroid
   b. superior thyroid
   c. inferior laryngeal
   d. superior laryngeal
   e. internal laryngeal

179. The upper free edge of this membrane forms the vocal ligament
   a. quadrangular
   b. thyrohyoid
   c. cricothyroid
   d. hyoepiglottic
   e. aryepiglottic

180. The muscle that is most important for narrowing the anterior part of the rima glottidis is the
   a. thyroarytenoid
   b. cricothyroid
   c. oblique arytenoid
   d. transverse arytenoid
   e. lateral cricoarytenoid

181. All the muscles of the larynx are innervated by the branches of the recurrent laryngeal nerve except for this muscle
   a. cricothyroid
   b. thyroarytenoid
   c. vocalis
   d. posterior cricoarytenoid
   e. transverse arytenoid

182. The following muscle is an elevator of the larynx
   a. omohyoid
   b. sternothyroid
   c. thyrohyoid
   d. digastric
   e. aryepiglottic
183. When a physician asks a patient to say “ah”, the movement of the soft palate indicates that this cranial nerve is functioning
   a. trigeminal
   b. facial
   c. glossopharyngeal
   d. vagus
   e. hypoglossus

184. The lymphatic drainage of the larynx first goes to this group of nodes
   a. submandibular
   b. submental
   c. superficial cervical
   d. deep cervical
   e. retropharyngeal

185. The following structures on the left side of the root of the neck usually pass between the subclavian artery and the subclavian vein (or brachiocephalic vein)
   a. anterior scalene
   b. phrenic nerve
   c. vagus nerve
   d. all of the above
   e. both a and b but not c

186. On the right side of the root of the neck the costocervical trunk usually arises from the
   a. first part of the subclavian artery
   b. second part of the subclavian artery
   c. third part of the subclavian artery
   d. brachiocephalic artery
   e. arch of the aorta

187. On the left side of the root of the neck the thoracic duct turns laterally to pass between these two structures
   a. phrenic nerve and the prevertebral fascia
   b. anterior and middle scalene muscles
   c. anterior primary rami of C8 and T1
   d. vagus nerve and common carotid artery
   e. common carotid artery and vertebral artery

188. The following lymph node(s) would be classified as belonging to the terminal group of nodes (deep cervical nodes)
   a. jugulo-digastric
   b. jugulo-omohyoid
   c. retropharyngeal
   d. all of the above
   e. a and b, but not c
189. The muscle of the orbit that attaches to the eyeball and does not arise from the common tendinous ring is the
   a. inferior rectus
   b. superior rectus
   c. superior oblique
   d. medial rectus
   e. lateral rectus

190. If the cornea is in an abducted position and the person then moves the cornea upwards (elevates), the muscle that would be the most effective for elevating the eyeball is the
   a. superior rectus
   b. superior oblique
   c. inferior rectus
   d. inferior oblique
   e. levator palpebrae superioris

191. If all extraocular muscles were paralyzed except for the inferior oblique muscle, the cornea would be in this position
   a. adducted and elevated
   b. abducted and elevated
   c. adducted and depressed
   d. abducted and depressed

192. When removing the thyroid gland the most easily damaged structure that the surgeon needs to avoid ligating or cutting is the
   a. recurrent laryngeal artery
   b. inferior thyroid artery
   c. superior thyroid artery
   d. vertebral artery
   e. thoracic duct

193. The conjunctiva
   a. covers the deep surface of the eyelid
   b. is a potential sac that is open at the palpebral fissure
   c. is pierced by ducts draining from the lacrimal gland
   d. all of the above
   e. a and b, not c

194. The parasympathetic ganglion that sends postganglionic fibers to the lacrimal gland is the
   a. lacrimal
   b. ciliary
   c. pterygopalatine
   d. otic
   e. trigeminal
195. The following nerves enter the orbit through the superior orbital fissure
   a. nasociliary, frontal and lacrimal branches of the trigeminal nerve
   b. abducens, oculomotor, and optic
   c. zygomatic and maxillary
   d. all the above
   e. both a and b, not c

196. The skin on the medial part of the external nose is supplied mainly by the external nasal nerve which is a branch of the
   a. infratrochlear nerve
   b. infraorbital nerve
   c. supratrochlear nerve
   d. zygomaticofacial nerve
   e. anterior ethmoidal nerve

197. Lymph drainage from the lateral parts of the eyelids goes first to this group of lymph nodes
   a. parotid
   b. buccal
   c. submandibular
   d. occipital
   e. none of the above because there are no lymph vessels in the eyelids

198. The structure that lies just below the floor of the tympanic cavity is the
   a. internal jugular vein
   b. internal carotid artery
   c. facial nerve
   d. chorda tympani nerve
   e. tensor tympani muscle

199. The oval window opens into this portion of the internal ear
   a. scala vestibuli
   b. scala tympani
   c. cochlear duct
   d. utricle
   e. saccule

200. The auditory tube
   a. is cartilaginous throughout its length
   b. opens on the posterior wall of the tympanic cavity
   c. opens into the mastoid antrum
   d. lies in a canal that opens into the middle ear just above the opening for the tensor tympani muscle
   e. connects the middle ear with the nasopharynx

201. The superior alveolar nerves
   a. arise from the maxillary division of the trigeminal nerve
   b. provide sensory innervation to the upper teeth
c. provide sensory innervation to the maxillary sinuses  
d. a and b  
e. all of the above

202. The sphenoid sinuses  
a. are in the bone directly beneath the pituitary gland  
b. drain into the middle nasal meatus  
c. drain the pterygopalatine fossa via the splenopalatine foramen  
d. are not connected directly to the nasal cavity  
e. a and b above

203. The following sinuses drain into these spaces respectively  
a. frontal sinus - superior meatus  
b. posterior ethmoidal air spaces - sphenoethmoidal recess  
c. maxillary sinus - middle meatus  
d. anterior ethmoidal air spaces - inferior meatus  
e. a and c above

204. The following statement(s) is/are true of the vessels of the nasal and palatine mucosa  
a. they exhibit extensive anastomosis  
b. the sphenopalatine artery runs on the nasal septum and anastomoses with the greater palatine artery in the incisive foramen  
c. the greater and lesser palatine arteries are terminal branches of the maxillary artery  
d. the sphenopalatine artery passes through the inferior orbital fissure to reach the nasal septum  
e. all the above

205. The pterygopalatine ganglion  
a. is a parasympathetic ganglion  
b. provides postganglionic fibers that distribute with branches of the maxillary division of the trigeminal nerve  
c. receives preganglionic parasympathetic fibers from IX  
d. a and b  
e. all the above

206. The true statement concerning nerve supply to the nasal cavity is  
a. general sensory nerve fibers have their cell bodies in the geniculate ganglion  
b. postganglionic parasympathetic nerve fibers have their cell bodies in the pterygopalatine ganglion  
c. postganglionic sympathetic nerve fibers have their cell bodies in the otic ganglion  
d. general sensation from the anterior superior part of the nasal cavity is by nasal branches of the maxillary nerve  
e. general sensation from the posterior inferior part of the nasal cavity is by ethmoidal nerves

207. If epistaxis (serious nose bleeds) could not be controlled by packing the nasal cavity with gauze, and if the source of the bleeding appeared to be in the posterior part of the nasal cavity, then ligating this artery would stop the bleeding
a. septal branch of superior labial artery  
b. nasal branch of infraorbital artery  
c. superior nasal branch of ophthalmic artery  
d. sphenopalatine artery  
e. anterior ethmoidal artery
208. Destruction of nerve cell bodies found in the pterygopalatine fossa would result in which of the following?
   a. constricted pupils
   b. dilated pupils
   c. dry eye
   d. loss of taste in the anterior 2/3 of the tongue
   e. dry mouth

209. Which statement concerning the nasal cavity is true?
   a. when the middle conchae is raised, a rounded elevation called the torus tubarius is visible
   b. the sphenopalatine foramen permits the neurovascular structures to pass between the pterygopalatine fossa and the nasal cavity
   c. the sphenoethmoidal recess is located inferior to the superior conchae
   d. the frontal recess is located inferior to the inferior meatus
   e. the nasolacrimal duct opens into the middle meatus

210. Which statement concerning the paranasal sinuses is true?
   a. the frontal sinuses open into the superior meatus
   b. the paranasal sinuses closest to the hypophyseal fossa are the posterior ethmoidal cells
   c. the middle ethmoid air cells drain into the hiatus semilunaris
   d. the maxillary sinus drains into the inferior meatus
   e. general sensation is carried in fibers of the ophthalmic and maxillary nerve

211. Retraction of the tongue is produced mainly by contraction of these two muscles
   a. right and left genioglossus
   b. styloglossus and hyoglossus
c. palatoglossus and genioglossus
d. palatoglossus and stylopharyngeus
e. palatoglossus and palatopharyngeus

212. The vocal ligament is the thickened upper margin of the lateral portion of the
a. quadrangular membrane
b. hyoepiglottic ligament
c. thyroepiglottic
d. thyrohyoid ligament
e. cricothyroid ligament

213. The muscle(s) of the orbit that move(s) the eyeball so that the cornea is in a depressed position that is neither adducted nor abducted is (are)
a. inferior rectus
b. inferior oblique
c. superior oblique
d. inferior rectus and inferior oblique
e. inferior rectus and superior oblique
214. The motor nerve that enters the orbit above and lateral to the common tendinous ring (annulus) is the
a. superior division of the oculomotor
b. inferior division of the oculomotor
c. trochlear
d. abducens
e. frontal

215. If a patient is asked to elevate his cornea when the eye is in an adducted position, he would use this muscle to perform the requested movement
a. superior rectus
b. inferior rectus
c. levator palpebrae superioris
d. inferior oblique
e. superior oblique

216. If a person has a drooping right eyelid and the superior division of the oculomotor nerve is normal, the person could have a lesion in the
a. superior cervical sympathetic ganglion
b. optic nerve
c. abducent nerve
d. trochlear nerve
e. long and short ciliary nerves

217. The patient’s left cornea is in an abducted and depressed position and the right cornea appears to be in the normal position. What nerve is injured on the left side?
a. oculomotor
b. trochlear
c. abducens
d. nasociliary
e. frontal

218. The nerve of the mouth that lies just medial to the roots of the third mandibular molar teeth is the
a. lingual
b. hypoglossal
c. vagus
d. glossopharyngeal
e. nerve to the geniohyoid muscle

219. The pyramid of the middle ear contains the
a. stapedius muscle
b. tensor tympani muscle
c. first turn of the cochlea (basal turn)
d. chorda tympani nerve
e. lateral semicircular canal
220. The following part(s) of the internal ear is/are filled with perilymph
   a. saccule
   b. utricle
   c. cochlear duct
   d. vestibule
   e. semicircular ducts

221. The structure that occupies the fenestra vestibuli is the
   a. facial nerve
   b. base of the stapes
   c. stapedius muscle
   d. tensor tympani muscle
   e. geniculate muscle

222. The first group of lymph nodes to receive lymph from the tip of the tongue is the
   a. retroauricular
   b. submental
   c. submandibular
   d. anterior cervical
   e. retropharyngeal

223. The lymphatic drainage from the medial portion of the upper lip goes first to this group of regional nodes
   a. submental
   b. submandibular
   c. anterior cervical
d. jugulodigastric  
e. superficial cervical  

224. In the root of the neck the subclavian artery and subclavian vein are separated by the  
a. anterior scalene muscle  
b. trunks of the brachial plexus  
c. middle scalene muscle  
d. all the above  
e. a and b not c  

225. The muscles that extort the cornea of the eyeball are  
a. inferior rectus and superior oblique  
b. inferior rectus and inferior oblique  
c. superior rectus and inferior oblique  
d. superior rectus and superior oblique  
e. superior oblique and inferior oblique  

226. The skin over the angle of the mandible and over most of the parotid gland is supplied by which cutaneous nerve(s)?  
a. buccal and mandibular branches of facial nerve  
b. auriculotemporal nerve  
c. great auricular nerve  
d. lesser occipital nerve  
e. greater occipital nerve  

227. The medial pterygoid muscle  
a. originates from the medial pterygoid plate of the sphenoid bone  
b. inserts to the medial surface of the neck of the mandible  
c. has the lingual nerve passing forward on its deep surface  
d. elevates the mandible  
e. is innervated by the anterior division of the mandibular nerve  

228. The superior root of the ansa cervicalis is formed directly by a branch of the  
a. ventral primary ramus of C1  
b. dorsal primary ramus of C2  
c. dorsal primary ramus of C3  
d. hypoglossal  
e. none of the above  

229. The external jugular vein usually begins (is formed by the union of 2 veins) just  
a. posterior to the neck of the mandible  
b. posterior to the angle of the mandible  
c. posterior to the middle third of the sternocleidomastoid muscle  
d. just superior to the middle third of the clavicle  
e. posterior to the mastoid process of the temporal bone
230. Lymph draining from the cervical portion of the esophagus goes first to this group of nodes
   a. pretracheal
   b. paratracheal
   c. retropharyngeal
   d. deep cervical
   e. submandibular

231. The two inferior parathyroid glands are sometimes found in the thorax
   a. true
   b. false

232. The spinal accessory nerve passes through the posterior cervical triangle
   a. superficial to the platysma muscle
   b. in the superficial cervical fascia
   c. between the investing fascia and the prevertebral fascia
   d. within the carotid sheath
   e. deep to the prevertebral fascia

233. The isthmus of the thyroid gland lies directly anterior to the
   a. thyrohyoid membrane
   b. lamina of the thyroid cartilage
   c. cricothyroid ligament
   d. 2, 3, 4 tracheal rings
   e. body of the hyoid bone
234. The ansa cervicalis is found in this triangle of the neck
   a. occipital
   b. supraclavicular
   c. digastric
   d. carotid
   e. muscular

235. The layer of cervical fascia which forms a fascial sheath for the parotid gland is the
   a. prevertebral
   b. pretracheal
   c. investing
   d. retropharyngeal
   e. superficial

236. The external jugular vein is formed just behind the angle of the mandible by the union of the
   a. facial vein and anterior division of the retromandibular vein
   b. facial vein and posterior division of the retromandibular vein
   c. occipital vein and superficial temporal vein
   d. posterior auricular vein and the posterior division of the retromandibular vein
   e. posterior auricular and maxillary veins

237. The platysma muscle is innervated by this motor nerve
   a. ansa cervicalis
   b. transverse cervical
   c. supraclavicular
   d. facial
   e. mylohyoid

238. The mastoid process of the temporal bone is usually well developed in a newborn infant
   a. true
   b. false

239. The cell whose plasma membrane forms the myelin sheath of axons in the central nervous system is
   this cell
      ignore this question  [oligodendocytes]

240. The rough endoplasmic reticulum of nerve cell bodies is grouped in clumps called
   a. nissl bodies
   b. neurofilaments
   c. neurofibrils
   d. golgi apparati
   e. synaptic vessels
241. The posterior part of the nose receives a great portion of its arterial supply from this artery
   a. infraorbital
   b. facial
   c. superior labial
   d. sphenopalatine
   e. ophthalmic

242. Which tooth of ten receives innervation from both the posterior superior alveolar and the middle superior alveolar nerves?
   a. 1st maxillary premolar
   b. 2nd maxillary premolar
   c. 1st maxillary molar
   d. 2nd maxillary molar
   e. 3rd maxillary molar

243. Lymph drainage from the whole vestibule of the nose goes first to this group of nodes
   a. submental
   b. submandibular
   c. parotid
   d. retropharyngeal
   e. superficial cervical

244. Which of the following muscles cannot be found in the floor of the posterior triangle of the neck?
   a. scalenus medius
   b. scalenus anterior
   c. teres minor
   d. levator scapulae

245. With regard to the spinal accessory nerve, choose the best statement
   a. no fibers of this nerve branch from it before it crosses the posterior triangle of the neck
   b. the spinal accessory nerve is strictly a sensory nerve
   c. the spinal accessory nerve enters the cranial cavity through the foramen magnum
   d. the spinal accessory nerve enters the cranial cavity through the foramen rotundum
246. The facial nerve, or a branch of it
a. supplies, by its buccal branch, sensory innervation to the inside of the cheek
b. supplies, through preganglionic fibers of the chorda tympani, the submandibular region
c. innervates the levator labii superioris
d. is the source of the lesser superficial petrosal nerve

247. Which statement concerning the facial nerve is incorrect?
a. the facial nerve may also be called cranial nerve VII
b. the main portion of the facial nerve leaves the facial canal by way of the stylomastoid foramen
c. part of the facial nerve leaves the facial canal as the lesser petrosal nerve
d. the facial nerve sends the greater petrosal nerve to the pterygopalatine ganglion by way of the vidian canal
248. The tubercle on the posterior arch of the atlas is the origin of which of the following muscles?
   a. rectus capitis posterior major
   b. obliquus capitis inferior
   c. rectus capitis posterior minor
   d. levator scapulae

249. Located within, or running through the pterygopalatine ganglion are
   a. some sensory fibers of V-3
   b. synapses of pre- and post-ganglionic nerve fibers that are parasympathetic in function
   c. some preganglionic sympathetic fibers from the superior cervical ganglion

250. Nerve fibers making up the sympathetic plexus on the branches of the common carotid artery are composed of
   a. preganglionic sympathetic fibers
   b. fibers from the pterygopalatine ganglion
   c. postganglionic fibers from the cervical ganglion
   d. some fibers of the trigeminal (V) cranial nerve

K-TYPE QUESTIONS
   a. 1, 2, and 3 are correct
   b. 1 and 3 are correct
   c. 2 and 4 are correct
   d. 4 is correct
   f. all are correct

251. Structures passing through the stylomastoid foramen include
   1. the chorda typani
   2. the lesser petrosal nerve
   3. the hypoglossal nerve
   4. the main motor portion of the facial nerve

252. Motions of the head include nodding (as in the affirmative) and turning the head from side to side (as in the negative)
   1. nodding the head involves the atlanto-axial joint
   2. turning the head side to side involves the atlanto-occipital joints
   3. the dens is part of the atlas
   4. the atlas is able to rotate around the dens

253. Which of the following muscles is/are innervated by the pharyngeal plexus?
   1. middle constrictor
   2. tensor veli palatini
   3. salpingopharyngeus
   4. internal (medial) pterygoid
254. Choose the best response
1. Autonomic motor nerves always contain a two neuron chain
2. Nerves III, V, VII, IX, and X contain parasympathetic preganglionic fibers where they are leaving the brain
3. The pterygopalatine ganglion has some sensory nerve fibers running through it
4. The optic nerve (II) contains parasympathetic fibers

255. Choose the best response
1. The facial nerve, as it descends through the facial canal is entirely motor in function
2. The facial nerve leaves the skull through the stylomastoid foramen
3. The foramen spinosum is so called because it is near the styloid process
4. The zygomatic bone articulates with 4 other bones in the skull

256. The following is/are true
1. Intervertebral disks are found between all cervical vertebrae
2. Intervertebral disks are found between all thoracic vertebrae
3. Intervertebral disks are found between all sacral vertebrae
4. Herniation of an intervertebral disk usually occurs on the posterior side of the disk

257. All synovial joints possess
1. A synovial lining
2. A joint space
3. A joint capsule
4. An articular disk

258. The following strap muscles of the neck are innervated by the ansa cervicalis
1. Omohyoid
2. Sternohyoid
3. Sternothyroid
4. Thyrohyoid

259. The internal jugular vein directly receives the following tributaries
1. Facial vein (common facial vein)
2. Superficial temporal vein
3. Inferior petrosal sinus
4. Superior petrosal sinus

260. At the level of C5 or C6 the carotid sheath contains
1. The internal jugular vein
2. Common carotid artery
3. Vagus nerve
4. Sympathetic trunk

261. The following statement(s) is/are correct
1. The lingual artery usually passes deep to the posterior border of the hyoglossus muscle
2. The facial vein passes deep to the submandibular veins
3. the submandibular duct lies lateral to the hyoglossus muscle in the floor of the mouth
4. the mylohyoid nerve lies on the superior surface of the mylohyoid muscle

262. The cerebrospinal fluid is normally found in the
1. epidural space
2. subarachnoid space
3. subdural space
4. ventricles of the vein

263. The cranial nerve(s) attaching to the medulla is/are
1. hypoglossal
2. glossopharyngeal
3. vagus
4. facial

264. Which statements is/are correct?
1. the crista galli is a part of the ethmoid bone
2. the perpendicular plate of the ethmoid bone lies directly behind the vomer
3. the crista galli lies above the perpendicular plate of the ethmoid bone
4. the squamous part of the temporal bone lies directly behind and articulates with the lesser wing of the sphenoid

265. Which statements is/are correct?
1. the anterior clinoid processes are parts of the lesser wing of the sphenoid bone
2. the anterior end of the falx cerebri lies just in front of the crista galli
3. the posterior clinoid processes are connected to the tentorium cerebelli
4. of the meningeal arteries the middle meningeal artery supplies the greatest territory

266. Which statements is/are correct?
1. the chorda tympani hitches a ride on the inferior alveolar nerve
2. the superior alveolar nerves are branches of the infraorbital nerve or of the maxillary nerve
3. the styloglossus muscle is attached to the lingula of the mandible
4. cranial nerve IX contains some taste fibers

267. Which statements is/are correct?
1. the masseter muscle is innervated by a branch of V-3
2. the internal (medial) pterygoid muscle arises from the medial pterygoid plate
3. the styloglossus muscle serves in retracting the tongue
4. all muscles whose names end in -glossus are innervated by cranial nerve XII

268. Which statement is/are correct?
1. the posterior ethmoidal nerve is a branch of the nasociliary nerve
2. the lacrimal nerve lies medial to the frontal nerve
3. the external nasal nerve is a continuation or a branch of the nasociliary nerve
4. the greater occipital nerve is a branch of the ansa cervicalis

269. The carotid sheath and its contents may be safely retracted as a unit during surgical procedures of the neck. The contents of the carotid sheath include all the following structures EXCEPT:
   a. common carotid artery
   b. internal carotid artery
   c. internal jugular vein
   d. sympathetic trunk
   e. vagus nerve

270. Which of the following is NOT formed from the cervical plexus?
   a. greater occipital nerve
   b. ansa cervicalis
   c. supraclavicular nerve
   d. transverse cervical nerve
   e. greater auricular nerve

271. The retromandibular vein is formed by the junction of the maxillary vein and the:
   a. facial vein
   b. middle temporal vein
   c. transverse facial vein
   d. posterior auricular vein
   e. superficial temporal vein

272. The pterygomandibular raphe is an essentially vertical line of connective tissue indicating the plane of interconnection of the buccinator and the:
   a. palatoglossal muscle
b. palatopharyngeal muscle
c. superior pharyngeal constrictor muscle
d. middle pharyngeal constrictor muscle
e. inferior pharyngeal constrictor muscle

273. The following veins and/or dural venous sinuses may drain directly into the cavernous sinus except:
   a. ophthalmic veins
   b. superior petrosal sinus
   c. superior sagittal sinus
   d. pterygoid plexus of veins
   e. inferior petrosal sinus

274. The following statements are true of the transverse sinuses except:
   a. They drain into sigmoid sinuses.
   b. The right often drains primarily the superior sagittal sinus.
   c. The confluence of sinuses joins these with the straight sinus.
   d. They contain valves that help direct the blood flow.
   e. The left often drains primarily the straight sinus (& great cerebral vein)

275. The following statements concerning the falx cerebri are true EXCEPT:
   a. It arises from the crista galli of the ethmoid bone.
   b. It lies between the right and left cerebral hemispheres.
   c. It contains the superior sagittal sinus.
   d. It fuses with the tentorium cerebelli in the region of the inferior sagittal dural venous sinus.
   e. It is a fold of dura mater.

276. Five pairs of muscles contribute to the structure of the soft palate. Which statement is incorrect?
   a. The fan shaped tendons of the tensor veli palatini forms the palatal aponeurosis.
   b. The tendons of the tensor veli palatini hook around the pterygoid hamulus on each side.
   c. The levator veli palatini passes between the base of the skull and the superior fibers of the superior pharyngeal constrictors.
   d. The palatoglossi form the anterior pillars of the tonsillar fossa.
   e. The palatopharyngeus muscles attach to the hyoid bone.

277. The tissues of the hard and soft palate receive innervation that is described by all of the following except:
   a. parasympathetic fibers arrive by way of the lesser petrosal nerve
   b. sympathetic fibers arrive by way of the deep petrosal nerve
   c. afferent neuron cell bodies are in the trigeminal ganglion
   d. the greater and lesser palatine nerves descend in the palatine canal
   e. the anterior portion of the hard palate is supplied by the nasopalatine nerves

278. Which of the following arteries does not accompany its corresponding named nerve throughout most of its course?
   a. infraorbital
   b. greater palatine
BY MYHAMMAD RAMZAN UL REHMAN

HEAD AND NECK ANATOMY MCQS

279. Failure of the lateral palatine processes to fuse across the midline produces:
   a. an oblique facial cleft
   b. an unclosed or defective nasolacrimal duct
   c. a simple midline cleft (true hare lip)
   d. a simple unilateral cleft lip
   e. a simple cleft of the secondary palate

280. A cleft involving the lip and dental arch (alveolar ridge) is produced by fusion failure between the:
   a. mandibular and maxillary processes
   b. median (medial) nasal and maxillary processes
   c. lateral nasal and maxillary processes
   d. right and left maxillary processes
   e. right and left lateral palatine processes

Answers

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