**Assessment Builder**

**Name:** Gross Anatomy Exam - April 29, 2002

**Description**

**Instructions:**
For the following questions, indicate the letter that corresponds to the SINGLE MOST APPROPRIATE ANSWER. During the exam do not re-size your browser or use the "arrow" or "delete" keys. BE SURE TO RECORD YOUR ANSWER ON THE ANSWER SHEET IMMEDIATELY AFTER YOU ANSWER A QUESTION ON THE COMPUTER SCREEN. Keep an eye on your elapsed time indicator in the lower left of your computer screen. You will not receive credit for any questions that you answer after the allotted time for the exam has elapsed.

**Question 1**

**Multiple Choice**

**Question:** 1. A 26-year-old man presents with a skin infection 4 cm. posterior to the top of the ear. He tells you that he was in his workshop when he stood up and scraped the area that became infected on a rusty nail that was projecting out from his workbench. The cut was fairly superficial, and stopped bleeding after a few minutes. Which of the following groups of lymph nodes will most likely be initially enlarged in this patient?

**Answer:**
A. Occipital  
B. Preauricular  
C. Parotid  
D. Submandibular  
E. Submental

**Question 2**

**Multiple Choice**

**Question:** During eye surgery, the physician asks a third-year medical student about the orbicularis oculi muscle. The student recalls that all of the following statements regarding this muscle are correct EXCEPT that it

**Answer:**
A. is involved in the blink response to irritation of the cornea.  
B. has a smooth muscle component that assists in raising the eyelid.  
C. receives its motor supply from the facial nerve.  
D. is derived from the second pharyngeal arch.  
E. is necessary to prevent drying of the conjunctiva over the eyeball.

4/29/2002
Question 3

Multiple Choice

Question: In a patient with Bell's palsy, all of the following muscles will be paralyzed EXCEPT for the

Answer:
A. levator labii superioris.
B. platysma.
C. masseter.
D. orbicularis oris.
E. buccinator.

Question 4

Multiple Choice

Question: During surgery to repair a dislocated temporomandibular joint, the surgeon encounters the buccal branch of the facial nerve. He recalls that this nerve innervates the

Answer:
A. skin lateral to the lip.
B. temporalis muscle.
C. skin of the chin.
D. buccinator muscle.
E. platysma muscle.

Question 5

Multiple Choice

Question: A 56-year-old man complains that he is unable to feel his lower eyelid when he touches it to put in his contact lens. Which of the following nerves may be damaged?

Answer:
A. Auriculotemporal
B. Mental
C. Buccal branch of the trigeminal
D. Maxillary division of the trigeminal
E. Ophthalmic division of the trigeminal

Question 6

Multiple Choice

Question: A 13-year-old boy arrives at the emergency department after being hit in the cheek with a baseball. Examination reveals that the blow has fractured the floor of the boy's orbit. All of the following are likely EXCEPT that

Answer:
A. the maxillary bone is fractured.
B. the periorbita is torn.
C. the lacrimal nerve is damaged.
D. the infraorbital nerve is damaged.
E. sensory innervation to the upper lip may be lost.
Multiple Choice

Question: A patient is bleeding profusely from a knife wound to the scalp. What layer of the scalp contains vessels that are the source of this bleeding?

Answer: 
A. Pericranium  
B. Aponeurosis  
C. Loose connective tissue  
D. Dense connective tissue  
E. Skin

Multiple Choice

Question: Your patient has thrombophlebitis (venous inflammation with clot formation) of the right cavernous sinus. You are concerned that the blood clot might spread DIRECTLY to any of the following dural sinuses EXCEPT for the

Answer: 
A. superior petrosal sinus.  
B. inferior petrosal sinus.  
C. sphenoparietal sinus  
D. straight sinus.  
E. intercavernous sinus.

Multiple Choice

Question: Dye was injected into the superior sagittal sinus in order to follow the normal drainage pattern of blood. Of the following, where would the dye first be detectable?

Answer: 
A. Cavernous sinus  
B. Inferior petrosal sinus  
C. Sphenoparietal sinus  
D. Transverse sinus  
E. Basilar sinus

Multiple Choice

Question: During an eye examination, you ask your patient to look in various directions to test all of the eye muscles. Select from the options below the location of the pupil (the direction you would ask your patient to look) if you are interested in testing for a functional right superior oblique muscle.

Primary Position

Lat. Med

4/29/2002
Question 11  

Multiple Choice  

4.2 Points  

Question: A 23-year-old baseball player received a severe blow to the head that resulted in fractures of the left orbit. The physician is concerned that some of the nerves in that area may be damaged. Which of the following is a correct match between nerve supply and function?

Answer:
A. Oculomotor nerve / motor to the superior tarsal muscle
B. Short ciliary nerves / entirely sensory from the eyeball
C. Frontal nerve / sensory from the forehead
D. Nasociliary nerve / parasympathetic innervation to the superior tarsal muscle
E. Lacrimal nerve / motor to the orbicularis oculi muscle

Question 12  

Multiple Choice  

4.2 Points  

Question: The orbit is made up of 7 bones. Identify the one that is labeled by the letter X in the picture below
Multiple Choice

Question: Which of the following structures would be damaged by a tumor located in the optic canal?

Answer:
- Oculomotor nerve
- Ophthalmic nerve
- Ophthalmic vein
- Ophthalmic artery
- Abducens nerve

Multiple Choice

Question: All of the following muscles are innervated by the oculomotor nerve EXCEPT for the

Answer:
- levator palpebrae superioris.
- lateral rectus.
- inferior oblique.
- superior rectus.
- medial rectus.

Multiple Choice

Question: A physician is demonstrating the location of (an) important structure with the tips of his index and third (middle) fingers. This structure is (includes) the
Answer:  
A. occipital lymph nodes.  
B. levator labii superioris muscle.  
C. facial artery.  
D. the auriculotemporal nerve.  
E. zygomatic branches of the facial nerve.

Question: The injection site shown below is useful in anesthesia for repair of a large jagged wound (from broken glass, etc) of the
Multiple Choice

Question: A 36-year-old woman received a deep cut on the face in the area shown below by the red line. The medical student who cleaned her wound in the Emergency Department feared that there might be injury to structures deep to the skin laceration, including any of the following EXCEPT for

Answer:
A. forehead.
B. zygomatic area of the face.
C. skin covering the parotid gland.
D. upper lip.
E. mental region.
Answer: 
A. the masseter muscle. 
B. the parotid gland. 
C. branches of the facial nerve. 
D. the parotid duct. 
E. the zygomaticus major muscle.

Question 18 Multiple Choice

Question: A 55-year-old man sustained a skull fracture that passed through the internal auditory meatus, damaging structures which pass through it. You would expect that this man would have diminished motor innervation to muscles which participate in all of the following actions EXCEPT for

Answer: 
A. smiling. 
B. raising the eyebrow. 
C. kissing. 
D. raising the upper eyelid. 
E. winking.

Question 19 Multiple Choice

Question: A 3-year-old girl fell from her tricycle onto the sidewalk, cutting the skin on her chin. Pain from this injury would travel in nerve fibers which pass through all of the following structures or spaces EXCEPT for the

Answer: 
A. trigeminal ganglion. 
B. mandibular division of the trigeminal nerve. 
C. foramen ovale. 
D. anterior cranial fossa. 
E. mental nerve.

Question 20 Multiple Choice

Question: A 9-year-old boy fell on a small stick which entered the orbit and passed posteriorly through the superior orbital fissure, but outside of the common tendinous ring. Damage limited to nerves which pass outside of the ring would result in all of the following EXCEPT for

Answer: 
A. decreased lacrimal gland secretion. 
B. decreased sensory innervation of the cornea. 
C. inability, in a clinical examination, to move the adducted eye inferiorly. 
D. decreased sensory innervation of the forehead.
Question 21

Multiple Choice

Question: A procedure to repair an arteriovenous fistula in the cavernous sinus interrupted the nerve plexus surrounding the artery in the sinus. All of the following statements about this nerve plexus are correct EXCEPT that

Answer: A. Interruption of its fibers can result in ptosis of the upper eyelid.
B. Interruption of its fibers can result in pupillary constriction.
C. Interruption of its fibers can result in loss of innervation to the lateral rectus muscle.
D. Its fibers are from neurons whose cell bodies are in the superior cervical ganglion.

Question 22

Multiple Choice

Question: Based on formation of the face and palate, which of the following locations would you LEAST expect a facial/palatal cleft to form?

Answer: A. The midline of the hard palate
B. The groove between the inner corner of the eye and the nose
C. A groove extending posteriorly from the corner of the mouth
D. The lateral border of the philtrum
E. The midline of the upper lip

Question 23

Multiple Choice

Question: You assist in the delivery of a newborn that has micrognathia (small jaw). You suspect that this defect is due to insufficient development of which of the following pharyngeal arches?

Answer: A. 1st
B. 2nd
C. 3rd
D. 4th
E. 6th

Question 24

Multiple Choice

Question: Absence of the lens is described as

Answer: A. glaucoma.
B. aniridia.
C. microphthalmia
D. synophthalmia
E. aphakia.

Answers: 1a2b3c4d5d6c7d8d9d10f11c12d13d14b15c16d17e18d19e20b21c22e23a24e